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Built on trust.

46 Nelson Street Rezoning

Environmental Assessment Statement

Address: 46 Nelson Street, Brooklyn, New York 11231

Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of 23, 29, and 31

CEQR Reference: 25DCP059K

ULURP Reference: 250094ZMK and N250095ZRK

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

Prepared for:
46 Nelson LLC

Prepared by:
GZA GeoEnvironmental



Date Submitted:
February 14, 2025

GZA GeoEnvironmental
55 Lane Road | Fairfield, NJ 07004
104 West 29th St, 10th Fl | New York, NY 10001
www.gza.com | GZA LinkedIn

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EAS SHORT FORM

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* 46 Nelson Street Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) 25DCP059K	BSA REFERENCE NUMBER (if applicable)
ULURP REFERENCE NUMBER (if applicable) 250094ZMK and N250095ZRK	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY New York City Department of City Planning			NAME OF APPLICANT 46 Nelson LLC		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, AICP, Director of EARD			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Amber Kartalyan - GZA GeoEnvironmental		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 55 Lane Road		
CITY New York	STATE NY	ZIP 10271	CITY Fairfield	STATE NJ	ZIP 07004
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 201-757-3561	EMAIL amber.kartalyan@gza.com	

5. *Project Description*

The "Applicant," 46 Nelson LLC, seeks a Zoning Map Amendment from M1-1 to M1-2A/R7A and M1-2A/R6A that would affect a portion of Block 526 in the Red Hook neighborhood of Brooklyn Community District "CD" 6. The "Affected Area" consists of Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31, bounded by Nelson Street to the north, Hicks Street to the west, Henry Street and Hamilton Avenue to the east, and Huntington Street to the south. In addition, the Affected Area is located just west of the Gowanus Expressway and just south of the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway (BQE). In total, the Affected Area comprises approximately 43,447 SF of area, 20,000 SF of which is controlled by the Applicant.

The Zoning Map Amendment would rezone Block 526, Lot 1 (a rectangular corner lot of approximately 20,000 square feet with frontages on Nelson Street, Hicks Street, and Huntington Street) from an M1-1 zoning district to a MX (M1-2A/R7A) zoning district and Block 526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 (a rectangular area of approximately of 23,447 square feet bounded in part by Nelson Street, Henry Street, and Huntington Street) from an M1-1 zoning district to an MX (M1-2A/R6A) zoning district. The Applicant also proposes a Zoning Text Amendment to Appendix F (Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas) to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. In addition, a Zoning Text Amendment is proposed to modify the New York City Zoning Resolution (ZR) Article XII, Chapter 3 to add R6A and R7A pairings to the MX-5 Designated Residence Districts. The Zoning Map Amendment and Zoning Text Amendments constitute the "Proposed Actions".

The Proposed Actions are sought to facilitate the Applicant's development of 46 Nelson Street, located on Block 526, Lot 1 ("Projected Development Site 1"). The "Proposed Development" involves the construction of a single 7-story plus cellar 125,168 Gross Square Foot "GSF" (100,188-Zoning Square Foot "ZSF", 5.01-FAR) mixed residential and commercial building. The building would contain approximately 17,188 GSF (17,188 ZSF, 0.86 FAR) of ground floor local retail use, 89,440 GSF (83,000 ZSF, 4.15 FAR) of residential uses on the upper floors, and 18,540 SF of parking, storage and mechanicals in the cellar. The Proposed Development would result in 108 dwelling units, 25-30% (27-32 units) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. The Applicant intends to pursue MIH Option 1, which would result in 27 affordable units at an average of 60% AMI. Per ZR 25-222 the

development would waive out of parking requirements. In the Outer Transit Zone, R7A zoning generally requires parking for 15% of market rate units and 0% of income-restricted units. However, the parking requirement is waived when 15 or fewer spaces would be required. While not required under zoning, a below-grade parking garage would contain 42 residential accessory parking spaces. The building would rise to a building height and base height of 76 feet. One curb cut would be proposed along Huntington Street providing access to the below-grade parking.

The environmental assessment examines the incremental differences between the Reasonable Worst Case Development Scenario (RWCDS) of the future without the project in place (Future No-Action Condition) and the future with the Proposed Actions (Future With-Action Condition). The RWCDS under Future With-Action Conditions is as follows:

Projected Development Site 1 (Applicant-owned Block 526, Lot 1) would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses, 17,876 GSF (17,118 ZSF, 0.86 FAR) of local retail, and 18,540 GSF of parking, storage, and mechanicals in the cellar. There would be approximately 108 dwelling units, 25-30% (27-32 units) of which would be affordable at an average of 60-80% AMI pursuant to MIH Option 1 or 2. For the purposes of Early Childhood Programs analysis, 20% of residential floor area (22 units) is assumed to be affordable at or below 60% AMI. The building would have 11 stories and rise to 115 feet. The cellar would contain approximately 42 parking spaces (as proposed by the Applicant), while no parking would be required. One curb cut would be proposed along Huntington Street providing access to the below grade parking.

Potential Development Site 1 (Block 526, Lots 13 and 14) would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses on the upper floors. There would be approximately 19 dwelling units (assuming 850 SF per DU on average), 25-30% (5-6 units) of which would be affordable at an average of 60-80% AMI pursuant to MIH Option 1 or 2, depending on the option selected. For the purposes of Early Childhood Programs analysis, 20% of residential floor area (4 units) is assumed to be affordable at or below 60% AMI. No parking would be provided. The building would have 9 stories and rise to 95 feet. No new curb cuts would be provided.

Projected development sites are analyzed for both site-specific and density-related effects, whereas potential development sites are only analyzed for site-specific effects.

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

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 6	STREET ADDRESS 46 Nelson Street
TAX BLOCK(S) AND LOT(S) Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of 23, 29 and 31		ZIP CODE 11231

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The Affected Area is bounded by Nelson Street to the north, Hicks Street to the west, Henry Street and Hamilton Avenue to the east, and Huntington Street to the south.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1	ZONING SECTIONAL MAP NUMBER 16a

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 (1) a Zoning Map Amendment to map an M1-2A/R7A and M1-2A/R6A zoning district in the Affected Area currently zoned as M1-1 (2) Zoning Text Amendment to Appendix F to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area; (3) Zoning Text Amendment to modify the New York City Zoning Resolution (ZR) Article XII, Chapter 3 to add R6A and R7A pairings to the MX-5 Designated Residence Districts.

***Board of Standards and Appeals*:** ☐ YES ☒ NO

☐ VARIANCE (use)

☐ VARIANCE (bulk)

☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

☐ LEGISLATION
☐ 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.): 43,447
Roads, buildings, and other paved surfaces (sq. ft.): 43,447
Waterbody area (sq. ft) and type:
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): 125,856
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 125,856
HEIGHT OF EACH BUILDING (ft.): 115
NUMBER OF STORIES OF EACH BUILDING: 11

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: 20,000
The total square feet not owned or controlled by the applicant: 23,447

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: 20,000 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 200,000 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 20,000 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.)	89,440	17,876		-16,000
Type (*e.g.,* retail, office, school)	108 units	local retail		

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 245 NUMBER OF ADDITIONAL WORKERS: 42

Provide a brief explanation of how these numbers were determined: Assumes 2.27 residents per household for Brooklyn Community District 6, 1 employee per 1,000 gsf for industrial, 1 employee per 333.3 GSF for retail and 1 employee per 25 DU

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

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

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2028

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 20

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: 18 months for technical review/environmental review, 7 months for the ULURP process, and 20 months for construction are assumed for the Applicant-owned Projected Development Site 1 (Block 526, Lot 1).

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

☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Institutional, parking, and transportation and utility

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 Section 2.1		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form. See attached		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Early Childhood Programs:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees?	☒	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		

	YES	NO
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☒	☐
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. See Section 2.4		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Protection Plan Project Tracking Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure?	☐	☒
(c) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(d) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in the Hazardous Materials Appendix (including nonconforming uses)?	☒	☐
(e) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☐	☒
(f) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(g) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(h) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(i) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☐	☒
(j) Based on the Phase I Assessment, is a Phase II Investigation needed? See Section 2.6	☐	☒
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☐
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☐
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒

	YES	NO
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 8,665		
○ 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): 15,198,626.80		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☒
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☒
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop, or Citywide Ferry Service landing?	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See Section 2.8	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☒
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a		

	YES	NO
preliminary analysis, if necessary. No significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise; accordingly a public health analysis is not warranted.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. See Section 2.10		
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 Section 2.11		

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
Amber Kartalyan	2/14/2025

SIGNATURE Amber Kartalyan

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.

Figure 1.1-1: Site Location Map

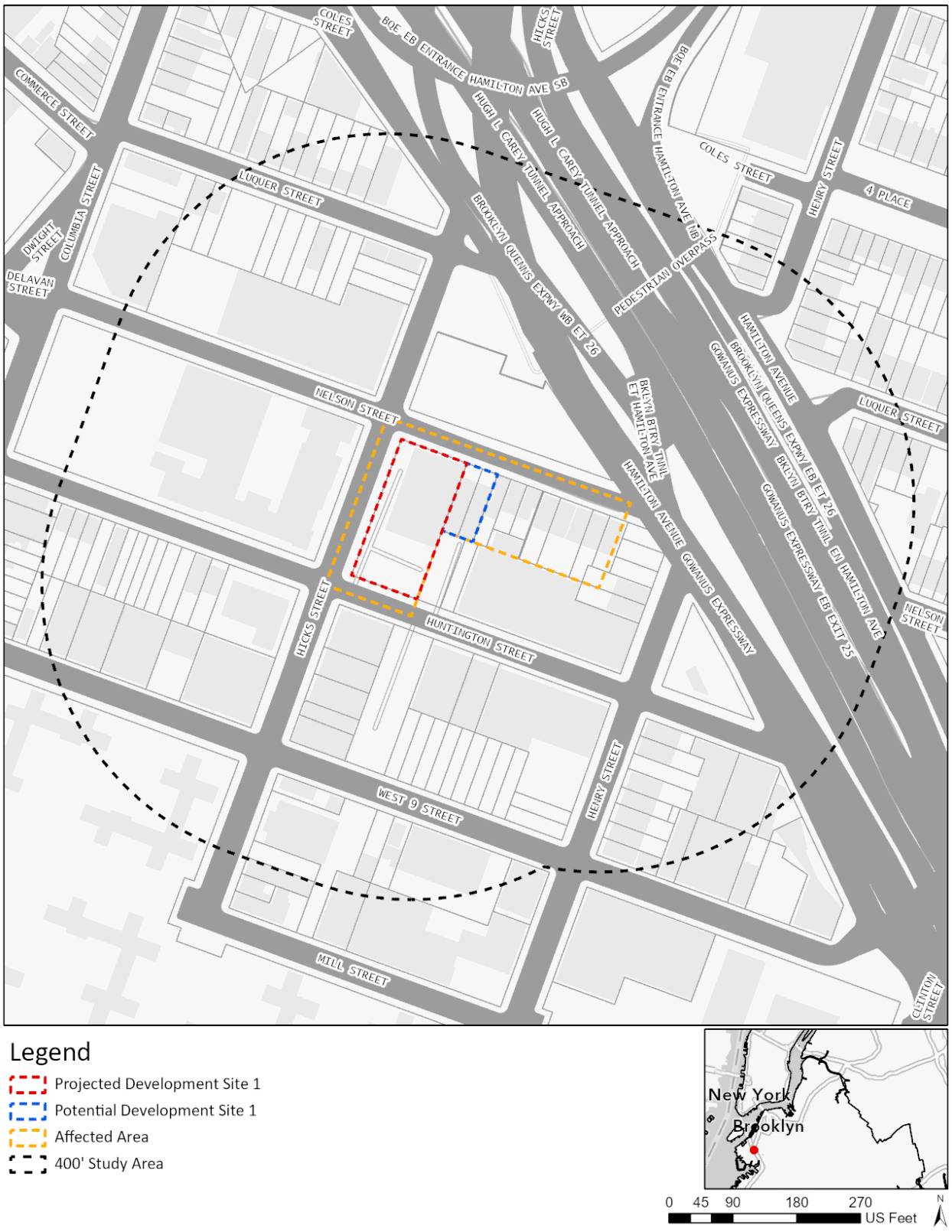


Figure 1.1-2: Existing Land Use Map

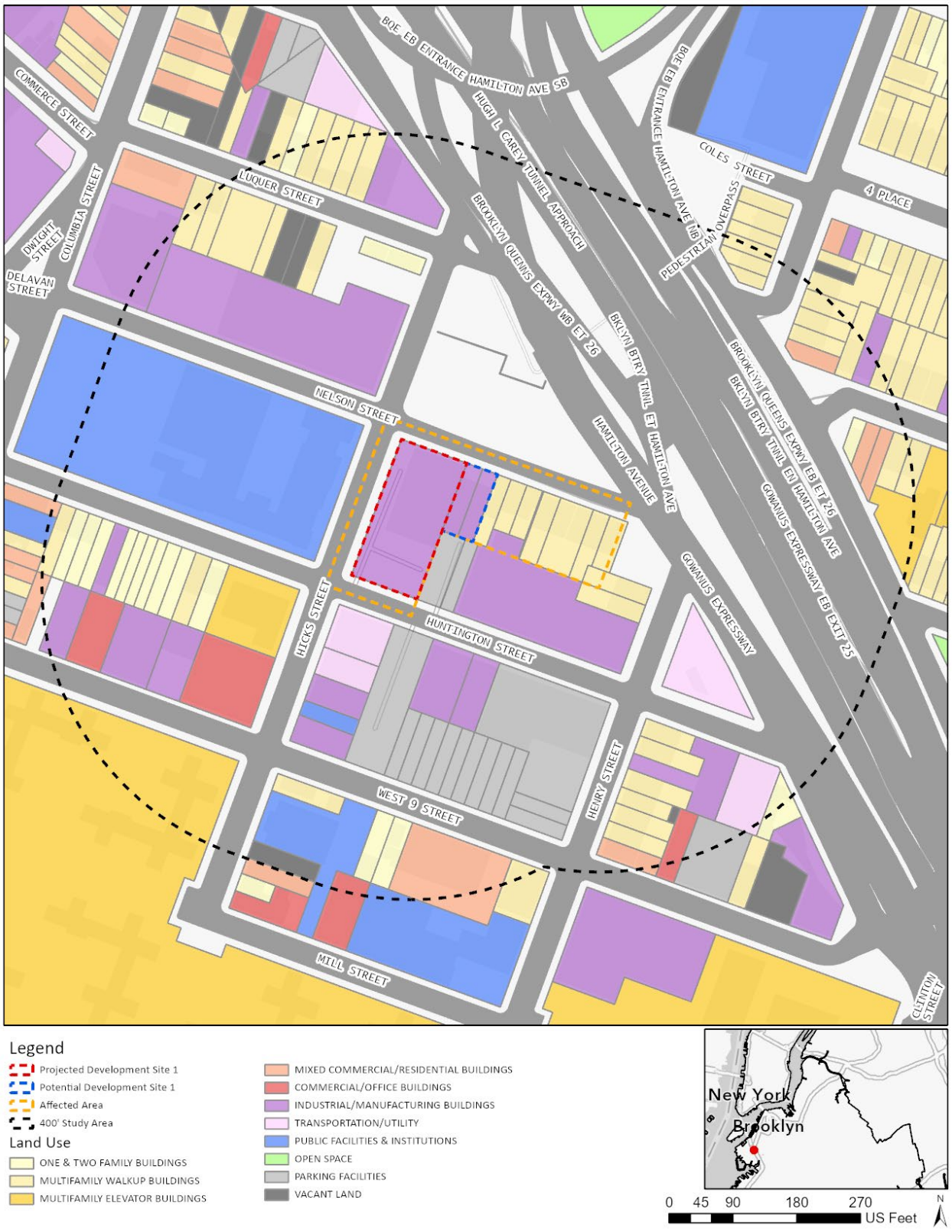


Figure 1.1-3: Zoning Sectional Map

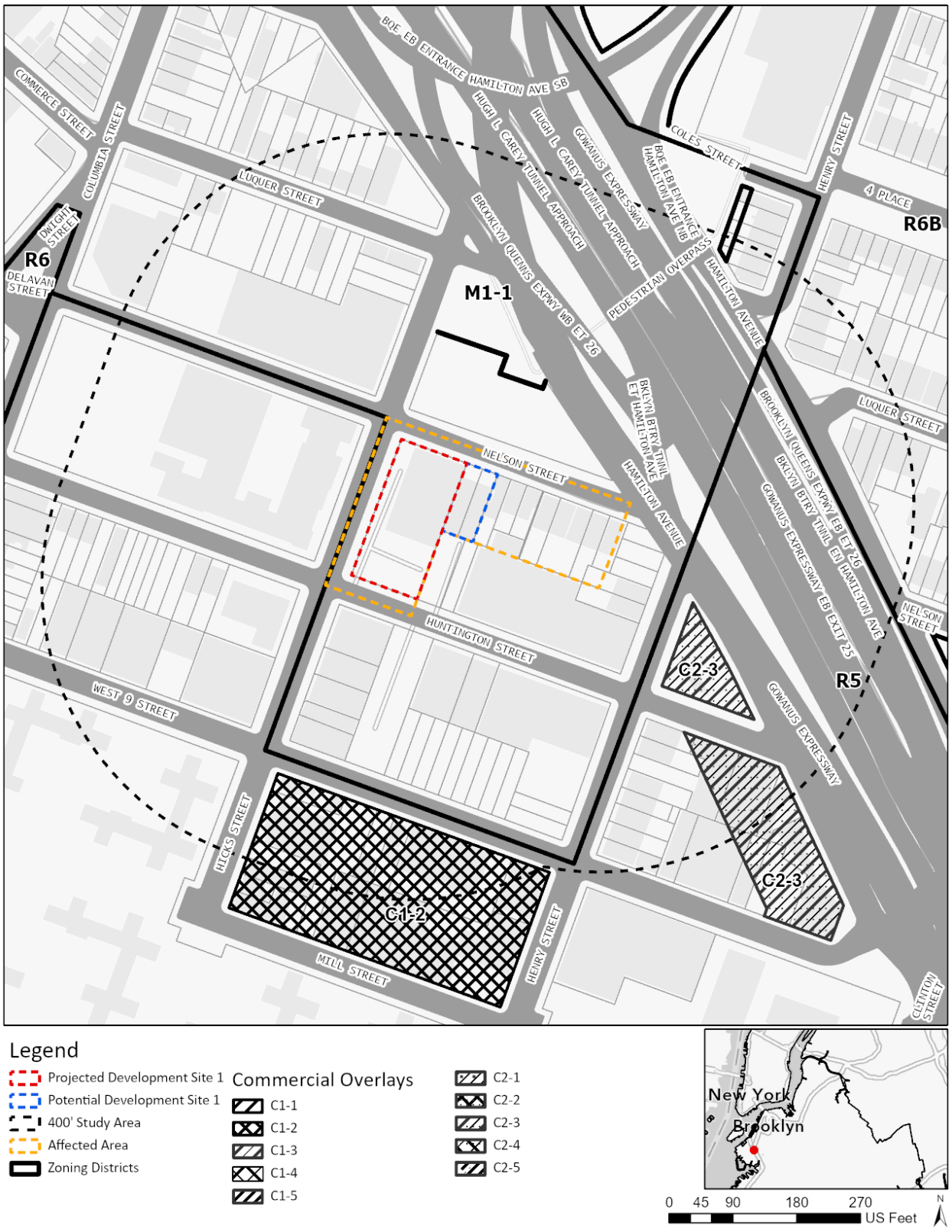
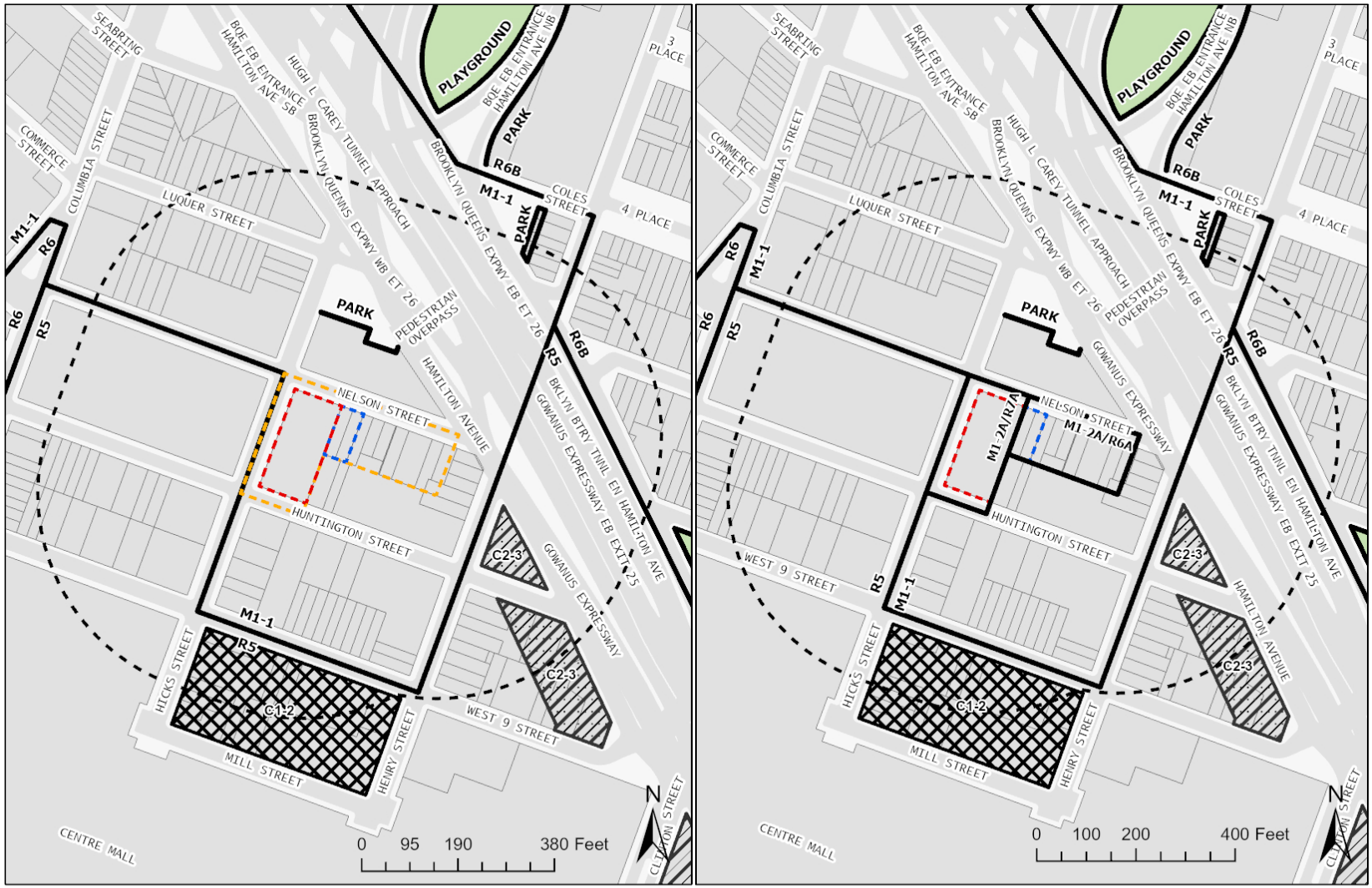


Figure 1.1-4: Zoning Change Map



Existing Zoning District

Proposed Zoning District

Figure 1.1-5: Tax Map

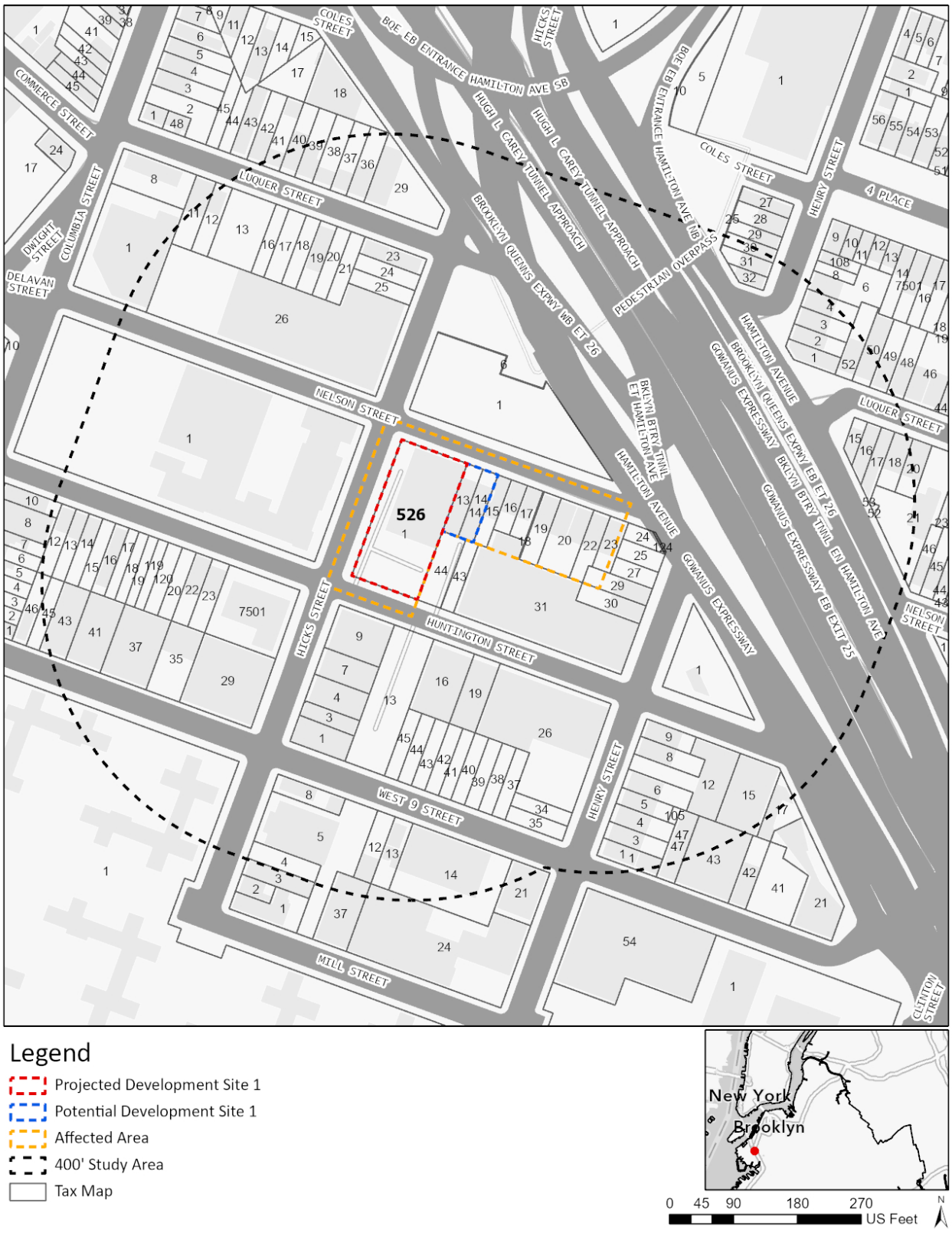
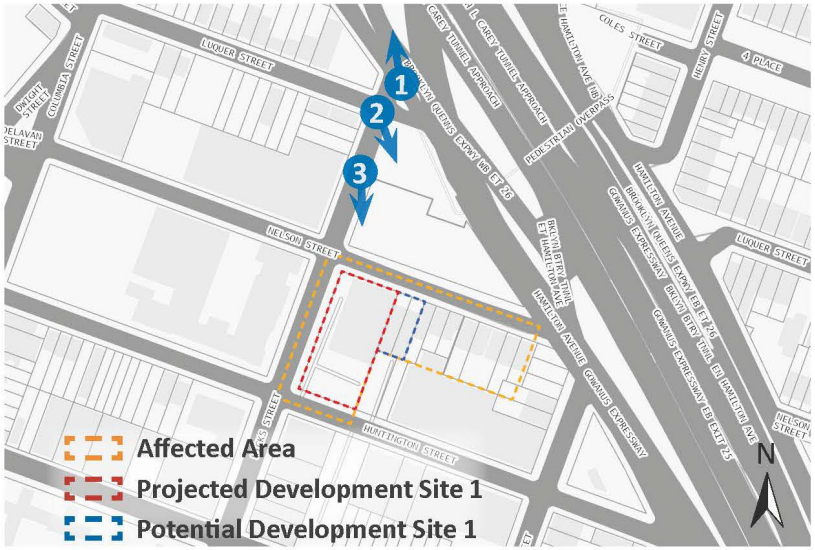


Figure 1.1-6: Site/Area Photos



1 View of Brooklyn Queens Expressway from Hicks Street facing north



Project Site Photo Key



2 View of Hicks Street facing southeast

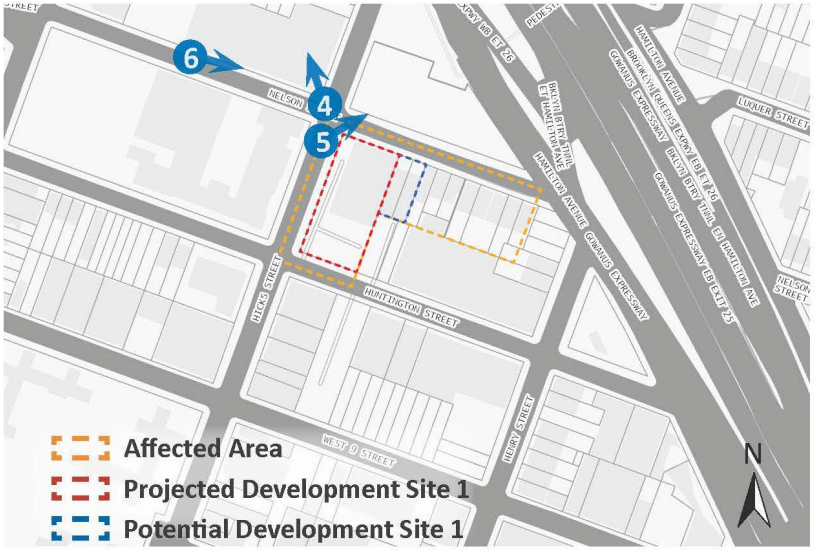


3 View of Hicks Street facing south

Figure 1.1-7: Site/Area Photos



4 View of intersection of Nelson Street and Hicks Street facing northwest



Project Site Photo Key



5 View of intersection of Nelson Street and Hicks Street facing northeast

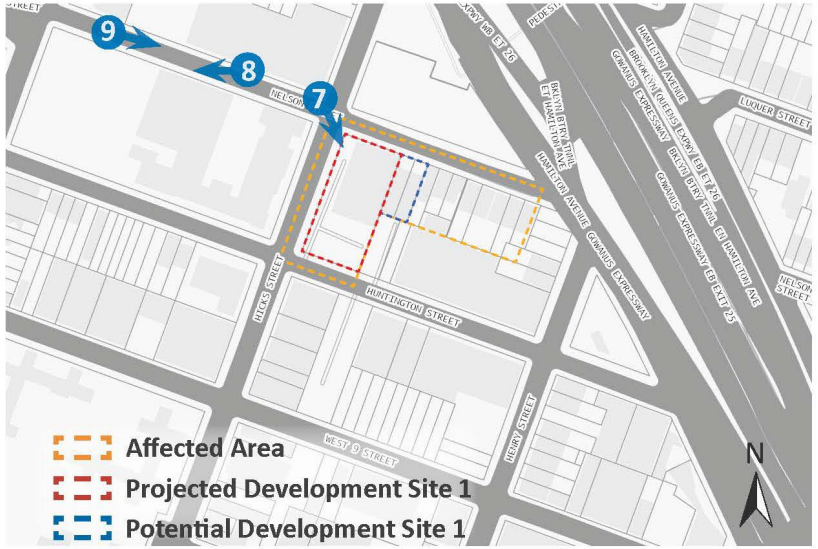


6 View of Nelson Street facing east

Figure 1.1-8: Site/Area Photos



7 View of Projected Development Site 1 from intersection of Nelson Street and Hicks Street facing southeast



Project Site Photo Key



8 View of Nelson Street facing west

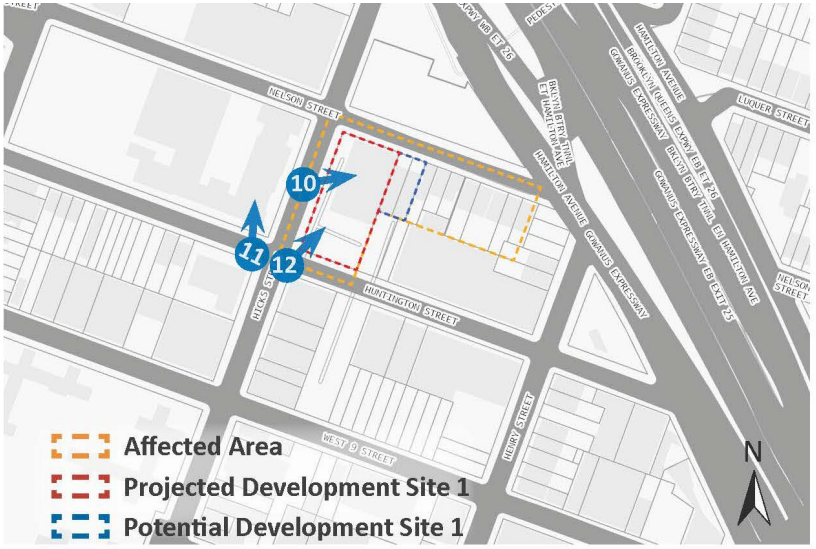


9 View of Nelson Street facing east

Figure 1.1-9: Site/Area Photos



10 View of Projected Development Site 1 from Hicks Street facing northeast



Project Site Photo Key



11 View of intersection of Nelson Street and Huntington Street facing northwest

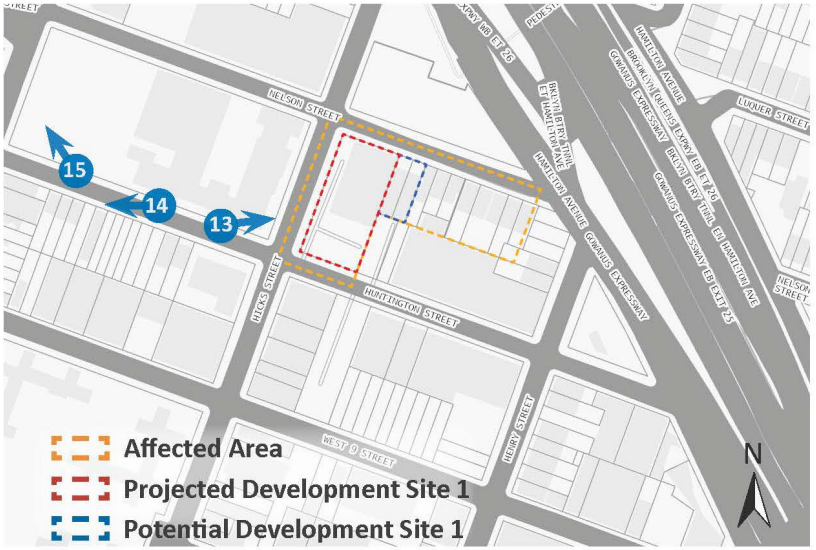


12 View of Projected Development Site 1 from intersection of Nelson Street and Huntington Street facing northeast

Figure 1.1-10: Site/Area Photos



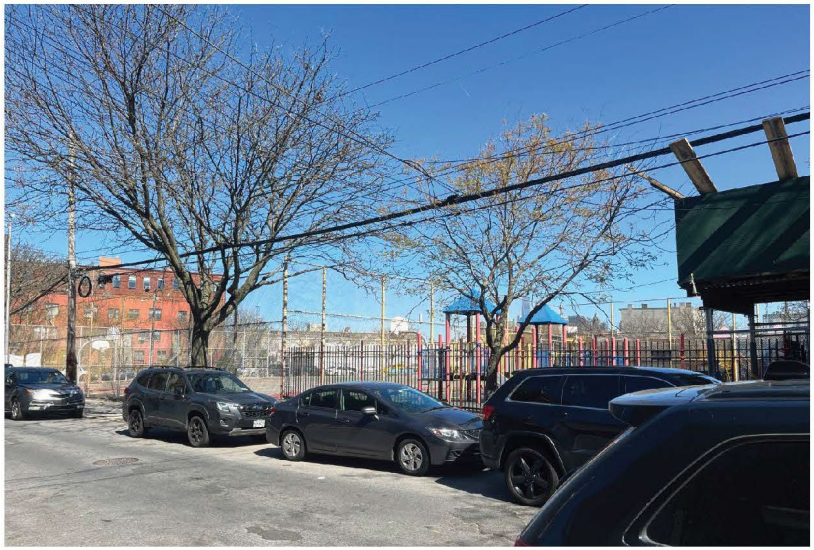
13 View of Huntington Street facing northeast



Project Site Photo Key



14 View of Huntington Street facing southwest



15 View of Huntington Street facing northwest

Figure 1.1-11: Site/Area Photos



16 View of Hicks Street facing northeast



Project Site Photo Key



17 View from Hicks Street facing southwest

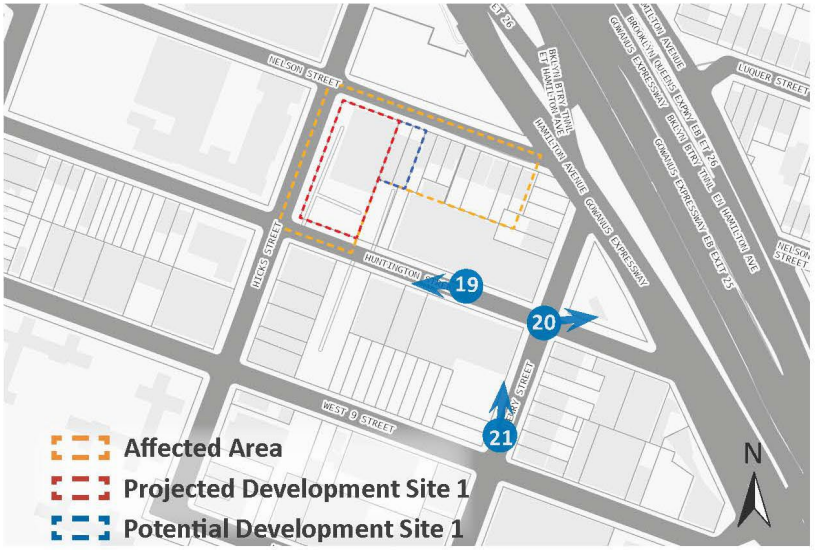


18 View of Projected Development Site 1 from Huntington Street facing northeast

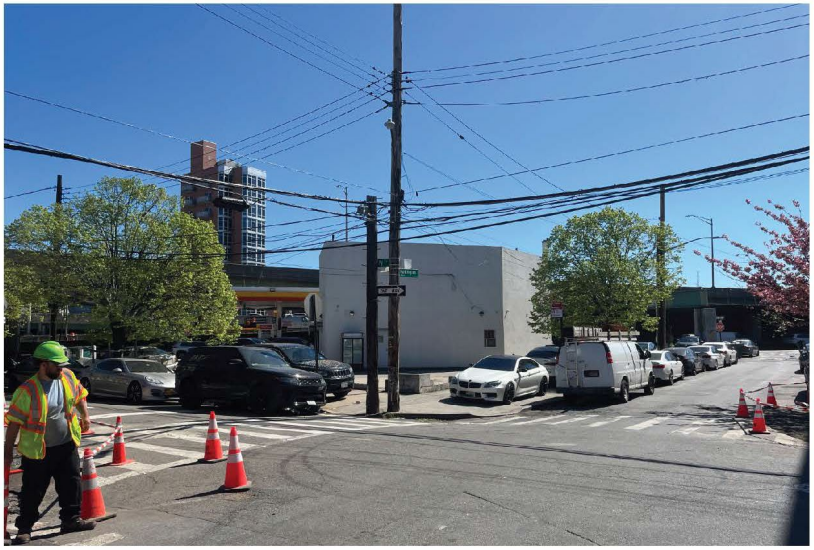
Figure 1.1-12: Site/Area Photos



19 View of Huntington Street facing west



Project Site Photo Key



20 View of intersection of Henry Street and Huntington Street facing east



21 View of Henry Street facing north

Figure 1.1-13: Site/Area Photos



22 View of Henry Street facing northwest



Project Site Photo Key



23 View of Potential Development Site 1 from Nelson Street facing southeast



24 View from Nelson Street facing west

1 PROJECT DESCRIPTION

1.1 Introduction

The "Applicant," 46 Nelson LLC, seeks a Zoning Map Amendment from M1-1 to M1-2A/R7A and M1-2A/R6A that would affect a portion of Block 526 in the Red Hook neighborhood of Brooklyn Community District "CD" 6. The "Affected Area" consists of Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29, and 31 bounded by Nelson Street to the north, Hicks Street to the west, Henry Street and Hamilton Avenue to the east, and Huntington Street to the south. In addition, the Affected Area is located just west of the Gowanus Expressway and just south of the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway (BQE). The Affected Area comprises approximately 43,447 SF of area, 20,000 SF of which is controlled by the Applicant.

The Zoning Map Amendment would rezone Block 526, Lot 1 (a rectangular corner lot of approximately 20,000 square feet with frontages on Nelson Street, Hicks Street, and Huntington Street) from an M1-1 zoning district to a MX (M1-2A/R7A) zoning district and Block 526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 (a rectangular area of approximately of 23,447 square feet bounded in part by Nelson Street, Henry Street, and Huntington Street) from an M1-1 zoning district to an MX (M1-2A/R6A) zoning district. The Applicant also proposes a Zoning Text Amendment to Appendix F (Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas) to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. In addition, a Zoning Text Amendment is proposed to modify the New York City Zoning Resolution (ZR) Article XII, Chapter 3 to add R6A and R7A pairings to the MX-5 Designated Residence Districts. The Zoning Map Amendment and Zoning Text Amendments constitute the "Proposed Actions".

The Proposed Actions are sought to facilitate the Applicant's development of 46 Nelson Street, located on Block 526, Lot 1 ("Projected Development Site 1"). The "Proposed Development" involves the construction of a single 7-story plus cellar 125,168 Gross Square Foot "GSF" (100,188-Zoning Square Foot "ZSF", 5.01-FAR) mixed residential and commercial building. The building would contain approximately 17,188 GSF (17,188 ZSF, 0.86 FAR) of ground floor local retail use, 89,440 GSF (83,000 ZSF, 4.15 FAR) of residential uses on the upper floors, and 18,540 SF of parking, storage and mechanicals in the cellar. The Proposed Development would result in 108 dwelling units, 25-30% (27-32 units) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. The Applicant intends to pursue MIH Option 1, which would result in 27 affordable units at an average of 60% AMI. The building would rise to a building height and base height of 76 feet. In the Outer Transit Zone, R7A zoning generally requires parking for 15% of market rate units and 0% of income-restricted units. However, the parking requirement is waived when 15 or fewer spaces would be required. Per ZR 25-222 the development would waive out of parking requirements. While not required under zoning, a below-grade parking garage would contain 42 residential accessory parking spaces. One

curb cut would be proposed along Huntington Street providing access to the below-grade parking.

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

1.2 Background and Site History

The Affected Area was initially mapped M1-1 with the enactment of the zoning ordinance in 1961 and has not been rezoned since then. The residential uses within the Affected Area were constructed prior to the enactment of the zoning ordinance, and are legal nonconforming uses.

There are several records of Certificates of Occupancy (COs) for existing buildings within the Affected Area:

Lot 1:

- A 1935 CO permitted 3 two-family dwellings on the second through fourth floors on the front of the block and stone, sales and storage of kerosene on the rear of the block.
- A 1947 CO permitted storage of acetylene, oxygen tanks, and miscellaneous marine equipment.
- A 1957 CO (approximately – date not listed) permitted a first-floor gasoline service station and used car sales.
- A 1963 CO permitted a first-floor salesroom, storage parts area, shop area for the repair of mechanical material handling equipment, welding room and offices, as well as 18 parking stalls and two loading berths.
- A 1965 CO permitted a UG IX(A) warehouse with first-floor loading and unloading as well as parking for six cars.
- A 1983 CO permitted a first-floor machine shop, toilets, offices, seventeen enclosed parking spaces and second-floor offices and toilets.

Lot 15:

- A 1983 CO permitted a ground-floor machine shop, toilets, offices 17 enclosed parking spaces, and second-floor offices and toilets.

Lot 20:

- A 1949 CO permitted two family dwellings on the first through fourth floors, respectively, for a total of 8 family dwellings.

Lot 22

- A 2000 CO permitted storage and boiler room in the cellar and two apartments on the first through fourth floors, respectively, for a total of 8 apartments.

Lot 23:

- A 1949 CO permitted two family dwellings on the first through fourth floors, respectively, for a total of 8 family dwellings.

Lot 29:

- A 1939 CO permitted two family dwellings on the first through fourth floors, respectively, for a total of 8 family dwellings.

Lot 31:

- A 1927 CO permitted a first-story factory.

There are no records of certificates of occupancy for Lots 13, 14, 16, 17, and 18. There are no existing e-designations, historic, or other designations within the Affected Area. There is one rezoning in the Surrounding Area (within 400 feet of the Affected Area): Carroll Gardens and Columbia Street Rezoning (ULURP No. C090462ZMK, CEQR No. 09DCP083K, effective October 28, 2009), which rezoned 86 blocks in the Carroll Gardens/Columbia Street from R6 to R6A, R6B, and R7A zoning districts, indicative of the area's trend toward contextual residential zoning districts. The rezoning included neighborhoods characterized by three- and four-story row houses and four- and five-story multi-family apartment buildings. The rezoning permitted new development and modest expansions at a height and scale consistent with the built context of the neighborhood by supporting and promoting local retail corridors while protecting the neighborhood's residential character.

1.3 Description of the Surrounding Area

The Affected Area is located within the Red Hook neighborhood of Brooklyn, CD 6. The area is bounded by Nelson Street to the north, Hicks Street to the west, Huntington Street to the south, and Henry Street and Hamilton Avenue to the east. In addition, the Affected Area is located just west of the Gowanus Expressway, which runs south through Brooklyn and connects to the Prospect Expressway. The Affected Area is also located just south of the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway (BQE), which run north through Brooklyn.

Nelson Street is a 50-foot-wide one-way local roadway with one moving lane of traffic and curbside parking; east of Hicks Street, Nelson Street is an eastbound roadway, and west of Hicks Street is a westbound roadway. Hicks Street is a 60-foot-wide one-way local roadway with one moving lane of traffic northbound and curbside parking. Huntington Street is a 50-foot-wide one-way local roadway with one moving lane of traffic eastbound and curbside parking. Henry Street

is a 60-foot-wide one-way local roadway with one moving lane of traffic southbound and curbside parking.

The Affected Area is situated within a changing and transitional area between residential, manufacturing, and community facility uses. Existing land uses within a 400-foot buffer around the Affected Area ("the Surrounding Area") consist of a varied mix of manufacturing/industrial, commercial, multi-family elevator and walk-up buildings, one-and two-family residences, mixed commercial and residential buildings, transportation and utility uses, public facilities and institutions, parking facilities, and vacant land.

Residential 1- and 2-family and multi-family buildings are located generally throughout the Surrounding Area. The Red Hook East and Red Hook West public housing complexes are located south of the Affected Area, bounded by West 9th, Lorraine, Dwight, and Clinton streets. There are several manufacturing buildings located in the Surrounding Area including, auto, sheet metal, electrical contractor, and film production businesses. There is a supermarket and a fast-food restaurant located two blocks south of the Affected Area on Hicks Street. The Red Hook Initiative, a community-based nonprofit organization, is located just south of the Affected Area on Block 535. Several contiguous parking lots used for School Bus parking are located south of the Affected Area on Block 535. Summit Academy Charter School and the Red Hook Neighborhood School, PS 676 are located just west of the Affected Area on Block 525, and PAVE Academy Charter School is located two blocks south of the Affected Area on Block 539. There are also several houses of worship located in the Surrounding Area.

Built form in the Surrounding Area varies by use. Residential buildings generally consist of 2-3 story one and two-family residential buildings, 2-4 story multifamily walk-up buildings, and 6-11-story multi-family elevator buildings. The one-and-two-family and multi-family walk-up buildings are primarily traditionally oriented, attached or semi-detached, with brick or stone façades. Mixed commercial and residential buildings are 2-4 stories tall, and commercial/office buildings, all located south of Huntington Street, are 1-3 stories tall. Public facilities/institutional buildings are located south and east of the Affected Area and range from 1-3 stories. Lastly, transportation/utility and manufacturing/industrial buildings are predominantly 1-2 stories in height.

The Affected Area is within an M1-1 zoning district that covers in full both the Subject Block and the block directly south of the Subject Block (Block 535) and is bounded by West 9th Street at its southern limit and Henry Street to the east. The district generally extends north of the subject block, bounded by Van Brunt and Columbia streets to the west, and through the Carroll Gardens and Cobble Hill neighborhoods. To the east of the Subject Block is an R5 zoning district that generally covers the area east of Henry Street and Columbia Street, south of the BQE/Gowanus Expressway and West 9th Street, and west of Hicks Street. Within this R5 zoning district, a C2-3 commercial overlay is mapped along Hamilton Avenue, and a C1-2 commercial overlay is mapped along West 9th Street. Lastly, an R6B zoning district, established as part of the Carroll Gardens and Columbia Street Rezoning (ULURP No. C090462ZMK, CEQR No. 09DCP083K, effective October 28,

2009), is located to the northeast of the Subject Block, extending over the area generally north of the BQE/Gowanus Expressway.

The area is located in the Outer Transit Zone, and is well-served by transit. The Affected Area is within one-half mile from the Smith/9th Street MTA subway station serving the F and G trains and 0.2 miles west of the B57 and B61 bus stop at Mill and Clinton Streets.

1.4 Description of the Affected Area

The Proposed Actions would affect Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29, and 31 (The Affected Area) in the Red Hook neighborhood of Brooklyn Community District 6. The Affected Area is located within an M1-1 zoning district and is bounded by Nelson Street to the north, Hicks Street to the west, Henry Street and Hamilton Avenue to the east, and Huntington Street to the south. The Affected Area contains approximately 43,447 SF of lot area within Block 526.

Projected Development Site 1: Applicant-Controlled Block 526, Lot 1

The Applicant-Owned Development Site (Projected Development Site 1) is located at 46 Nelson Street (Block 526, Lot 1). Lot 1 is a 20,000-SF corner lot with frontages on Nelson Street, Hicks Street, and Huntington Street. The lot is currently improved with a 1-story, 16,000 GSF (15,385 ZSF, 0.77 FAR) manufacturing/equipment supplier building constructed in 1964.

Potential Development Site 1: Non-Applicant Controlled Block 526, Lots 13 and 14

- Lot 13 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) coffee business. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.
- Lot 14 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) moving company. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.

Other Non-Applicant Controlled Lots

The other lots in the Affected Area are Block 526, Lots 15, 16, 17, 18, 19, 20, 22, and part of 23, 29, and 31 and are all independently owned.

- Lot 15 is a 2,233-SF rectangular lot with frontage on Nelson Street. The lot is currently improved with an existing 4-story, 6,540 GSF (6,112 ZSF, 2.74 FAR) multi-family walk-up building constructed in 1920 and altered in 1997.
- Lot 16 is a 1,567-SF rectangular lot with frontage on Nelson Street. The lot is currently improved with an existing 3-story, 2,583 GSF (2,414 ZSF, 1.54 FAR) multi-family walk-up building constructed in 1899.

- Lot 17 is a 1,652-SF rectangular lot with frontage on Nelson Street. The lot is currently improved with an existing 3-story, 2,250 GSF (2,103 ZSF, 1.27 FAR) multi-family walk-up building constructed in 1899 and improved in 2004.
- Lot 18 is a 167-SF rectangular sliver of vacant land.
- Lot 19 is a 2,550-SF rectangular lot with frontage on Nelson Street. The lot is currently improved with an existing 4-story, 5,100 GSF (4,766 ZSF, 1.87 FAR) multi-family walk-up building constructed in 1925 and improved in 1982.
- Lot 20 is a 4,950-SF rectangular lot with frontage on Nelson Street. The lot is currently improved with an existing 4-story, 10,200 GSF (9,533 ZSF, 1.93 FAR) multi-family walk-up building constructed in 1931 and altered in 1989 and 1999.
- Lot 22 is a 2,375-SF irregularly shaped lot with frontage on Nelson Street. The lot is currently improved with an existing 4-story, 5,100 GSF (4,766 ZSF, 2.01 FAR) multi-family walk-up building constructed in 1920.
- Lot 23 (p/o) is a 1,875-SF rectangular lot with frontage on Nelson Street. The lot is currently improved with an existing 4-story, 5,100 GSF (4,766 ZSF, 2.54 FAR) multi-family walk-up building constructed in 1931 and improved in 1988. Approximately 1,538 sf of lot 23 is within the Affected Area.
- Lot 29 (p/o) is a 2,388-SF rectangular lot with frontage on Henry Street. The lot is currently improved with an existing 4-story, 5,000 GSF (4,673 ZSF, 1.96 FAR) multi-family walk-up building constructed in 1928. The rear portion (approximately 638 SF) of this lot is located in the Affected Area.
- Lot 31 (p/o) is a 23,650-SF irregularly shaped lot with frontage on Huntington Street (mostly) and Henry Street. The lot is currently improved with a 2-story, 28,627 GSF (27,526 ZSF, 1.16 FAR) electric manufacturing building constructed in 1985. An approximately 1,266 SF portion of the lot, within the interior portion of the block, would be located in the Affected Area.

1.5 Description of the Proposed Project

The "Proposed Development" involves the development of a single 7-story plus cellar 125,168 GSF (100,188 ZSF, 5.01-FAR) mixed residential and commercial building on the Applicant-controlled Block 526, Lot 1 (Projected Development Site 1). The building would contain approximately 17,188 GSF (17,188 ZSF, 0.86 FAR) of ground floor local retail, 89,440 GSF (83,000 ZSF, 4.15 FAR) of residential uses on the upper floors, and 18,540 GSF of parking, storage and mechanicals in the cellar. The Proposed Development would result in 108 dwelling units, 25-30% (27-32 units) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. The Applicant intends to pursue MIH Option 1, which would

result in 27 affordable units at an average of 60% AMI. The building would rise to a building height and base height of 76 feet.

In the Outer Transit Zone, R7A zoning generally requires parking for 15% of market rate units and 0% of income-restricted units. However, the parking requirement is waived when 15 or fewer spaces would be required. Per ZR Section 25-222 the development would waive out of parking requirements. While not required under zoning, a below-grade parking garage would contain 42 residential accessory parking spaces. One curb cut would be proposed along Huntington Street providing access to the below-grade parking.

1.6 Action(s) Necessary to Facilitate the Project

The actions necessary to facilitate the construction of the Proposed Development are approvals of:

(1) Zoning Map Amendment to map an M1-2A/R7A and M1-2A/R6A zoning district in the Affected Area currently zoned as M1-1

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

(3) Zoning Text Amendment to modify the New York City Zoning Resolution (ZR) Article XII, Chapter 3 to add R6A and R7A pairings to the MX-5 Designated Residence Districts.

1.7 Purpose and Need

The proposed rezoning from an M1-1 district to M1-2A/R7A and M1-2A/R6A zoning districts would facilitate development within the Affected Area that would not otherwise be possible under the existing M1-1 zoning regulations, with no residential uses allowed. The Proposed Actions would allow new residential and commercial uses to come into the area and would bring into conformance the existing legal non-conforming residential uses present within the Affected Area, while also maintaining conformance of the current manufacturing/commercial uses within the Affected Area.

The proposed M1-2A/R7A and M1-2A/R6A zoning districts would be compatible with the contextual residential districts mapped within the Carroll Gardens and Columbia Street rezoning to the north. Further, the M1-2A zoning under the new Zoning for Economic Opportunity Growth Districts would permit commercial and manufacturing uses at an FAR that is appropriate for the R6A and R7A zoning districts and consistent with a heavily mixed-use area. The proposed rezoning to M1-2A/R7A and M1-2A/R7A zoning districts would provide opportunities for mid-rise mixed-use building construction and help induce the development of underutilized lots within the Affected Area.

Additionally, the proposed Zoning Text Amendment to Appendix F to add a Mandatory Inclusionary Housing (MIH) would allow for residential growth, furthering the development of

affordable housing in an area supported by transit, recreational facilities, and supportive commercial and community facility uses. Therefore, the Proposed Actions would be supportive of the City's housing goals as identified in Housing New York 2.0, Where We Live NYC, Get Stuff Built, and Housing Our Neighbors: A Blueprint for Housing and Homelessness.

1.8 Analysis Framework

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

Reasonable Worst-Case Development Scenario

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

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

Pursuant to *2021 CEQR Technical Manual* methodology, sites may be considered 'soft' if they are built to substantially less than the maximum permitted floor area ratio and are of a sufficient size or could be assembled into a parcel of sufficient size, to support a feasible development. Sites that have recently been developed or redeveloped are considered less likely to be soft, due to the significant recent investment in the current use.

Build Year

A build year of 2028 is anticipated for the Proposed Project. This is based on a projected 18-month CEQR review period, a 7-month ULURP process, 6 months of design development and permitting, and a 20-month single-phase construction schedule for the Applicant-owned Projected Development Site.

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

Projected Development Site 1 (Applicant-owned Block 526, Lot 1):

There are no records of building work permits submitted by the Applicant. Further, redevelopment is not considered likely in the No-Action Scenario because of the bulk permitted under the current M1-1 district (1.00 commercial and manufacturing; 2.40 community facility) and significant parking requirement (1 space per 300 sf of uses). Therefore, it is conservatively assumed that under the No-Action Scenario, existing conditions would continue on Projected Development Site 1.

Potential Development Site 1 (Block 526, Lots 13 and 14):

There are no records of building work permits on the DOB website. Further, redevelopment is not considered likely in the No-Action Scenario because of the bulk permitted under the current M1-1 district (1.00 commercial and manufacturing; 2.40 community facility) and significant parking requirement (1 space per 300 sf of uses). Therefore, it is conservatively assumed that under the No-Action Scenario, existing conditions would continue on the non-Applicant-owned Potential Development Site 1.

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

Projected Development Site 1 – (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 (Applicant-owned Block 526, Lot 1) would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses, 17,876 GSF (17,118 ZSF, 0.86 FAR) of ground floor local retail, and 18,540 GSF of parking, storage, and mechanicals in the cellar. There would be approximately 108 dwelling units, 25-30% (27-32 units) of which would be affordable at an average of 60-80% AMI pursuant to MIH Option 1 or 2. For the purposes of Early Childhood Programs analysis, 20% of residential floor area (22 units) is assumed to be affordable at or below 60% AMI. The building would have 11 stories and rise to 115 feet. The cellar would contain approximately 42 parking spaces (as proposed by the Applicant), while no parking would be required per ZR Section 25-222. One curb cut would be proposed along Huntington Street providing access to the below grade parking.

The RWCDS follows the Applicant's proposal in terms of the proposed uses, FAR, number of dwelling units, and number of parking stalls. However, the RWCDS assumes the maximum permitted building height (115') under the proposed zoning district. In addition, the RWCDS

assumes a slightly higher zoning and gross square footage than is proposed by the Applicant. The Projected Development Site is within the Outer Transit Zone, where parking is required for 15% of market-rate dwelling units, and no parking is required for income-restricted units. No parking is required when 15 or fewer spaces would be mandated by zoning per ZR 25-222. As the Applicant's proposed parking stalls are greater than the required 12 spaces for 15% of market-rate units, which would be waved per ZR Section 25-222, the Applicant's proposed parking is assumed. 25% of all units are assumed to be permanently affordable. A 10-foot mechanical bulkhead with the Projected Development built at 100% lot coverage and no setback would be assumed for a conservative shadows analysis under CEQR.

Potential Development Site 1 – (Block 526, Lots 13 and 14; Non-Applicant Lots)

Potential Development Site 1 (Block 526, Lots 13 and 14) would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses on the upper floors. There would be approximately 19 dwelling units (assuming 850 SF per DU on average), 25-30% (5-6 units) of which would be affordable at an average of 60-80% AMI pursuant to MIH Option 1 or 2, depending on the option selected. For the purposes of Early Childhood Programs analysis, 20% of residential floor area (4 units) is assumed to be affordable at or below 60% AMI. No parking would be provided. The building would have 9 stories and rise to 95 feet. No new curb cuts would be provided.

For Potential Development Site 1, the RWCDS assumes mixed residential and commercial development with the maximum permitted FAR (3.9) and building height (95') under the proposed zoning district. A 10-foot mechanical bulkhead with the Potential Development built at 100% lot coverage and no setback would be assumed for a conservative shadows analysis under CEQR. The average dwelling unit size is assumed to be 850 GSF; 25% of all units are assumed to be permanently affordable. Under the proposed zoning, parking would be waived per ZR Section 25-222 due to the small number of parking spaces required (under 15 spaces).

As noted above in Section 1.4, Lot 13 is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) coffee business. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC. Lot 14 is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) moving company. Both lots have one owner and feature a total of 4,466 SF of lot area combined. The common ownership and the low FAR constitute the rationale for the selection of the lots. However, as the lot area is under 4,466 SF combined, and both lots are occupied by long-standing businesses, these lots were identified as a Potential Development Site.

The other lots within the Affected Area (Other Affected Sites) not projected to redevelop include Block 526, Lots 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31.

All other Lots within the Affected Area are under separate ownership. In addition, all other Lots within the Affected Area are under 5,000 SF in lot area, except for Lot 31 where an approximately

1,266 SF portion of the lot, within the interior portion of the block falls within the Affected Area. As this portion of the lot comprises a small portion of the 23,650-SF of total lot area, has no street frontage, and contains portions of the existing on-site building, it would not be induced to develop. Accordingly, these lots do not pass the soft site criteria established by the *2021 CEQR Technical Manual, Chapter 2*. While Lot 20 is a larger lot with approximately 4,950 SF of lot area, the building on this lot was constructed in 1931 and has 16 units, which indicates that it would be subject to rent regulations. Further, the owner is identified as Nelson Luquer HDFC, an affordable housing provider. Therefore, redevelopment of all other lots within the Affected Area is not anticipated.

The Projected, Potential, and Other Affected Sites are shown in **Figure 1.1-1**. The RWCDS Existing, No-Action, and With-Action Scenarios at the Projected Development Site under the proposed zoning are shown below in **Table 1.8-1**. The RWCDS increment of Analysis on the Projected Development Site within the Affected Area is presented in **Table 1.8-2**. Because only Projected Development Sites are considered in the increment between the No-Action and With-Action, the Potential Development Site and Other Affected Sites will not be considered in the analysis of density-related aspects of the environmental review (open space and traffic).

Table 1.8-1: RWCDS Analysis Framework - Existing, No-Action, and With-Action Conditions

Site Info				Existing Condition									No-Action Condition									With-Action Condition								
Site ID	Block	Lot	Lot Area	Zoning	MF (gsf)	Com. (gsf)	CF (gsf)	Res. (gsf)	Parking (gsf)	Total gsf	Afford. DU	Total DU	Zoning	MF (gsf)	Com. (gsf)	CF (gsf)	Res. (gsf)	Parking (gsf)	Total gsf	Afford. DU	Total DU	Zoning	MF (gsf)	Com. (gsf)	CF (gsf)	Res. (gsf)	Parking (gsf)	Total gsf	Afford. DU	Total DU
Projected Site 1	526	1	20,000	M1-1	16,000	0	0	0	0	16,000	0	0	M1-1	16,000	0	0	0	0	16,000	0	0	M1-2A/R7A	0	17,876	0	89,440	18,540	125,856	27	108
Total			20,000	-	**16,000**	**0**	**0**	**0**	**0**	**16,000**	**0**	**0**	-	**16,000**	**0**	**0**	**0**	**0**	**16,000**	**0**	**0**	-	**0**	**17,876**	**0**	**89,440**	**18,540**	**125,856**	**27**	**108**

DU = Dwelling Units
gsf = gross square feet
Res. = Residential
Com. = Commercial
MF = Manufacturing
CF = Community Facility
Afford. = Affordable

Table 1.8-2: RWCDS Incremental Analysis Table

Use	No-Action Condition	With-Action Condition	Increment
Commercial GSF	0	17,876	17,876
Manufacturing GSF	16,000	0	-16,000
Community Facility GSF	0	0	0
Residential GSF	0	89,440	89,440
Total GSF	16,000	125,856	109,856
Residential Dus	0	108	108
Residents[1]	0	245	245
Workers[2]	16	58	42

1. Assumes 2.27 residents per household - 2020 American Community Survey for Brooklyn CD 6

2. Industrial Workers: Assumes 1 employee per 1,000 GSF; Commercial Retail Workers: Assumes 1 employee per 333.3 GSF; Residential Workers: Assumes 1 employee per 25 DU

2 ENVIRONMENTAL REVIEW

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

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

- Land Use, Zoning, and Public Policy
- Open Space
- Shadows
- Historic and Cultural Resources
- Urban Design and Visual Resources
- Hazardous Materials
- Transportation
- Air Quality
- Noise
- Public Health
    - No significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise; accordingly, a public health analysis is not warranted.
- Neighborhood Character
- Construction

2.1 Land Use, Zoning, and Public Policy

The *2021 CEQR Technical Manual* recommends procedures for the analysis of land use, zoning, and public policy to ascertain the impacts of a project on the Study Area. The *2021 CEQR Technical Manual* suggests that a land use, zoning, and public policy study area should generally extend 400 feet from the Project Site (the "Surrounding Area" or "Study Area"). This section considers existing conditions, development trends, zoning, and public policies in relation to the Affected Area and the Study Area, as well as the larger area in which the Proposed Actions may have an effect. Because the Proposed Actions would affect land use, would change the zoning in the Affected Area, and are within an area governed by public policies, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

Methodology

Existing land uses were determined by reference to the New York City Zoning and Land Use (Zola) database and PLUTOTM 23v2 shapefiles. These uses were then confirmed through site visits. The evaluation of lots within the 400-foot Study Area was performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No-Action and Future With-Action Conditions. Public Policy research was performed through an evaluation of New York City Department of City Planning (NYCDCP) and other city agencies' programs and documentation.

2.1.1 Land Use

DCP's Primary Land Use Tax Lot Output (PLUTO) database provides data on the following land use types: one- and two-family residential buildings, multi-family walk-up residential buildings, multi-family elevator residential buildings, mixed residential and commercial buildings, commercial and office buildings, industrial and manufacturing, transportation and utility, public facilities and institutions, open space and outdoor recreation, parking and loading facilities, and vacant land. Existing land uses within approximately 400 feet of the Affected Area are presented in **Figure 1.1-2**.

Existing Conditions

Land Use Study Area

As shown in **Figure 1.1-2** and stated in **Section 1.3**, Residential 1- and 2-family and multi-family buildings are located generally throughout the Surrounding Area. The Red Hook East and Red Hook West public housing complexes are located south of the Affected Area, bounded by West 9th, Lorraine, Dwight, and Clinton streets. There are several manufacturing buildings located in the Surrounding Area including, auto, sheet metal, electrical contractor, and film production businesses. There is a supermarket and a fast-food restaurant located two blocks south of the Affected Area on Hicks Street. The Red Hook Initiative, a community-based nonprofit organization, is located just south of the Affected Area on Block 535. Several contiguous parking

lots used for School Bus parking are located south of the Affected Area on Block 535. Summit Academy Charter School and the Red Hook Neighborhood School, PS 676 are located just west of the Affected Area on Block 525, and PAVE Academy Charter School is located two blocks south of the Affected Area on Block 539. There are also several houses of worship located in the Surrounding Area.

Built form in the Surrounding Area varies by use. Residential buildings generally consist of 2-3 story one and two-family residential buildings, 2-4 story multifamily walk-up buildings, and 6-11-story multi-family elevator buildings. The one and two-family and multi-family walk-up buildings are primarily traditionally oriented, attached or semi-detached, with brick or stone façades. Mixed commercial and residential buildings are 2-4 stories tall, and commercial/office buildings, all located south of Huntington Street, are 1-3 stories tall. Public facilities/institutional buildings are located south and east of the Affected Area and range from 1-3 stories. Lastly, transportation/utility and manufacturing/industrial buildings are predominantly 1-2 stories in height.

Affected Area

A full breakdown of each lot within the Affected Area can be found in **Section 1.4**.

Projected Development Site 1: Applicant-Controlled Block 526, Lot 1

The Applicant-Owned Development Site (Projected Development Site 1) is located at 46 Nelson Street (Block 526, Lot 1). Lot 1 is a 20,000-SF corner lot with frontages on Nelson Street, Hicks Street, and Huntington Street. The lot is currently improved with a 1-story, 16,000 GSF (15,385 ZSF, 0.77 FAR) manufacturing/equipment supplier building constructed in 1964.

Potential Development Site 1: Non-Applicant Controlled Block 526, Lots 13 and 14

- Lot 13 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) coffee business. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.
- Lot 14 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) moving company. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.

Future No-Action Condition

Land Use Study Area

There is one active construction permit in the Surrounding Area. A new 3-story residential building is under construction at 20 Luquer Street Block 520, tentative Lot 16 (former lots 13 and 16), approved as part of a variance from the NYC Board of Standards and Appeals (Cal No. 175-05BZ) pursuant to ZR Section 72-21. This building would contain 12 dwelling units and 20,643 gross square feet.

Affected Area

Within the Affected Area, existing conditions are expected to remain the same within the No-Action Condition. The residential lots (15, 16, 17, 19, 20, 22, 23 and 29) within the Affected Area would continue to be legal, non-conforming uses within the existing M1-1 zoning district.

Future With-Action Condition

Land Use Study Area

With the exception of the development anticipated within the Affected Area, land use and development patterns in the Study Area are anticipated to remain unchanged in the future with the Proposed Actions. Any new development in the Study Area would be consistent with the underlying zoning regulations.

Affected Area

Projected Development Site 1 – (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses, 17,876 GSF (17,118 ZSF, 0.86 FAR) of ground floor local retail, and 18,540 GSF of parking, storage, and utilities in the cellar. There would be approximately 108 dwelling units, 25-30% (27-32 units) of which would be affordable at an average of 60-80% AMI pursuant to MIH Option 1 or 2. The building would have 11 stories and rise to 115 feet. While no parking would be required, the cellar would contain approximately 42 parking spaces. One curb cut would be proposed along Huntington Street providing access to the below-grade parking.

Potential Development Site 1 – (Block 526, Lots 13 and 14; Non-Applicant Lots)

Potential Development Site 1 (Block 526, Lots 13 and 14) would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses on the upper floors. There would be approximately 19 dwelling units, 25-30% (5-6 units) of which would be affordable at an average of 60-80% AMI pursuant to MIH Option 1 or 2, depending on the option selected. No parking would be provided. The building would have 9 stories and rise to 95 feet. No new curb cuts would be provided.

The other lots within the Affected Area (Other Affected Sites) not projected to redevelop include Block 526, Lots 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31.

Conclusion

The proposed rezoning from an M1-1 district to M1-2A/R7A and M1-2A/R6A zoning districts would facilitate development within the Affected Area that would not otherwise be possible

under the existing M1-1 zoning regulations, with no residential uses allowed. The Proposed Actions would allow new residential and commercial uses to come into the area and would bring into conformance the existing legal non-conforming residential uses present within the Affected Area, while also maintaining conformance of the current manufacturing/commercial uses within the Affected Area. The Proposed Actions would introduce a land use mix that is compatible with surrounding uses, and would not alter or accelerate development patterns in the area. Therefore, there would be no adverse impacts on land use as a result of the Proposed Actions, and further analysis is not required.

2.1.2 Zoning

The New York City Zoning Resolution dictates the use, density, and bulk of developments within New York City. The city has three basic zoning district classifications – residential (R), commercial (C), and manufacturing (M). These classifications are further divided into low, medium, and high-density districts. In addition to the three main zoning district categories, a property may also be located in a Special Purpose District that serves a diverse range of planning goals specific to the areas where the special district is mapped. Special purpose districts are generally created where area-wide conditions warrant modification of some generally applicable zoning provisions.

The Zoning Map Amendment would rezone Block 526, Lot 1 (a rectangular corner lot of approximately 20,000 square feet with frontages on Nelson Street, Hicks Street, and Huntington Street) from an M1-1 zoning district to a MX (M1-2A/R7A) zoning district and Block 526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 (a rectangular area of approximately of 23,447 square feet bounded in part by Nelson Street, Henry Street, and Huntington Street) from an M1-1 zoning district to an MX (M1-2A/R6A) zoning district. Existing zoning districts within approximately 400 feet of the Affected Area are presented in **Figure 1.1-3**.

Existing Conditions

Zoning Study Area

The zoning districts within 400 feet of the Affected Area are M1-1, R6B, R5, and C1-2 and C2-3 commercial overlays mapped over the R5 zoning district, as illustrated in **Table 2.1-1**.

M1-1

M1 districts are often developed with multistory lofts, one- or two-story warehouses characterized by loading bays, serving as a buffer between M2 or M3 districts of intensive industrial uses and adjacent residential or commercial districts. These districts are designed for a wide range of manufacturing and related uses which can conform to a high level of performance standards. M1 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities.

Permitted uses in M1-1 districts are as follows: UG I, III(B) and IV-X. M1-1 districts permit a FAR of 1.0 for permitted commercial and manufacturing uses, and 2.40 for permitted community

facility uses. M1-1 districts are subject to parking requirements based on the type of use, size of an establishment, and location. Building heights are regulated by a sky exposure plane beginning at 30 feet (or two stories) above the street line. For community facility building, the maximum height of a front wall shall be 35 feet or three stories, whichever is less, and the height above the street line shall be 35 feet. In M1-1 zoning districts, the required off-street parking varies by use and transit zone designation.

R5

R5 districts are low-density non-contextual zoning districts intended for neighborhoods with an assortment of housing types at densities higher than those found in R4 districts and are often transition districts between medium and lower density areas. These districts also include community facilities and open uses which serve the residents of these districts or benefit from a residential environment. R5 districts permit the following Use Groups: UGs I, II, III(A), III(B), IV(B), IV(C).

R5 districts permit a minimum lot width of 30 feet and a minimum lot area of 2,850 square feet. The maximum residential FAR is 1.50 for standard zoning lots, and 2.0 FAR for qualifying residential sites[1] and community facility use. To ensure compatibility with the neighborhood scale, the maximum street wall height of a new building for standard zoning lots is 35 feet, and the maximum building height is 45 feet. For qualifying residential sites and senior housing, a maximum base height of 45 feet and a maximum building height of 55 feet is permitted. Above the permitted base height, a setback of 15 feet (for narrow streets) or 10 feet (for wide streets) is required from the street wall of the building.

The front yard of a new home must be at least 10 feet deep. For qualifying residential sites with a lot width of at least 150 feet, and for corner lots the front yard depth may be reduced by five feet, except that a front yard shall be no shallower than 5 feet. New single or two-family detached homes must have two side yards totaling at least five feet, but there is no minimum width requirement for either one. R5 districts also permit semi-detached and zero lot line buildings which are set along a side lot line, and require one side yard at least five feet wide, subject to certain modifications per ZR Section 23-33. For all other residences, no side yards are required, subject to certain modifications per ZR Section 23-33. The minimum required rear yard depth is 20-30 feet, subject to modifications pursuant to ZR Section 23-343.

Parking requirements vary depending on the use and transit zone designation. In the Inner Transit Zone, off-street parking space is required for 85% of standard market dwelling units within multiple dwellings, while no parking is required for income restricted housing or qualifying senior

[1] Qualifying residential sites generally consist of (a) lots in the Greater Transit Zone that are 5,000 SF or greater on a wide street or the short end of a block, (b) lots in the Greater Transit Zone that include a building with community facility space as of December 5, 2024, (c) lots located outside of the Greater Transit Zone that have a minimum lot area of at least 5,000 square feet and include a building with community facility space as of December 5, 2024 or (d) lots located in an R3-2, R4, R5 or R5B District containing qualifying senior housing.

units and can be waived if 1 space is required. The R5 district within the Secondary Study Area of 46 Nelson Street is fully within the Outer Transit Zone. In the Outer Transit Zone, parking is required for 35% of all standard market-rate dwelling units, while no parking is required for income-restricted housing or qualifying senior units. Parking can be waived if 10 spaces or fewer are required. Beyond the Greater Transit Zone, parking is required for 50% of market-rate dwelling units, 25% of affordable dwelling units, and 10% of qualifying senior units; here, parking can be waived if fewer than 5 spaces are required. For qualifying residential sites parking is waived where the number of dwelling units is 75 or less. Further, no parking is required for zoning lots existing on December 5, 2024, where the lot width is 25 feet or less.

R6B

R6B is a contextual district widely mapped in built-up, medium-density areas, with a lower-scale built form than R6A. These districts are designed to provide for residential buildings, and also include community facilities and open uses which serve the residents of these districts or benefit from a residential environment. R6B districts permit the following Use Groups: UGs I, II, III(A), III(B), IV(B), IV(C).

For single or two-family detached and zero lot line buildings, R6B districts require a minimum lot width of 25 feet and a minimum lot area of 2,375 square feet. All other buildings require a minimum lot width of 18 feet and a minimum lot area of 1,700 square feet. There are no front yard requirements in R6 districts. New single or two-family detached homes must have two side yards, each within a minimum of at least five feet. For all other residences, no side yards are required. However, if any open area extending along a side lot line is provided at any level, it shall have a minimum width of five feet, measured perpendicular to the side lot line. The minimum required rear yard depth is 20-30 feet, subject to certain modifications pursuant to ZR Section 23-343.

The maximum FAR in R6B districts is 2.0 for standard residences and community facility use. For buildings participating in the UAP program, a maximum residential FAR of 2.40 (for qualifying affordable or senior housing) is permitted, so long as any residential floor area exceeding the standard FAR is permanently income-restricted to an average of 60% AMI. The minimum base height is 30 feet. The maximum base height is 45 feet, and the maximum building height is 55 feet (for standard residences). The maximum base height is 45 feet, and the maximum building height is 65 feet (for qualifying affordable or senior housing).

Where a zoning lot located in an R6 through R12 District abuts a zoning lot located within an R1 through R5 District, the height of a building within a transition area measured parallel to the district boundary shall not exceed the maximum heights outlined in ZR Section 23-443, depending on the zoning district adjacency, the adjacent zoning lot condition, and the width of the zoning lot.

Parking requirements vary depending on the use and transit zone designation. In the Inner Transit Zone, off-street parking is required for 50% of standard market-rate dwelling units within

multiple dwellings, while no parking is required for income-restricted housing or qualifying senior units, and can be waived if 5 spaces or fewer are required. In the Outer Transit Zone, parking is required for 25% of all standard market dwelling units, while no parking is required for income-restricted housing or qualifying senior units, and can be waived if 15 spaces or fewer are required. Beyond the Greater Transit Zone, parking is required for 50% of market-rate dwelling units, 25% of affordable dwelling units, and 10% of qualifying senior units; here, parking can be waived if fewer than 10 spaces are required. Further, no parking is required for zoning lots existing on December 5, 2024, where the lot width is 25 feet or less in the Outer Transit Zone/Beyond the Greater Transit Zone.

A small part of the Secondary Study Area – to the north of Hamilton Avenue – is within the Inner Transit Zone. Per ZR 25-211, there are no residential parking requirements for new residential developments in any zoning district within the Inner Transit Zone.

C1-2 Commercial Overlay

C1 districts are commercial overlays mapped within residential districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. Unless otherwise indicated on the zoning maps, the depth of overlay districts ranges from 100 to 200 feet.

Overlay districts differ from other commercial districts in that residential bulk is governed by the residence district within which the overlay is mapped. All other commercial districts that permit residential use are assigned a specific residential district equivalent. The maximum commercial or community facility floor area ratio (FAR) is also determined by the residence district, per Section 33-121 of the NYC Zoning Resolution. For this location, the C1-2 overlay is mapped over an R5 zoning district, where:

- The maximum FAR for a zoning lot containing only commercial use, only community facility use, or both commercial and community facility uses is 2.0 FAR.
    - The maximum FAR for a zoning lot containing only community facility uses or both commercial and community facility uses, may be increased to 2.4 provided that:

        (a) on interior lots, a front yard not less than 30 feet in depth is provided

        (b) on corner lots, two front yards, each not less than 20 feet in depth, are provided; or

        (c) on through lots, a front yard not less than 30 feet in depth is provided along each front lot line.

- The maximum height of a front wall and the required front setback of a building or other structure shall be determined by the Residence District within which such Commercial District is mapped with the following exceptions:
    - In accordance with the provisions of Section 32-42 (Location Within Buildings), no commercial building or portion thereof occupied by non-residential uses listed under Use Groups VI through X shall exceed in height 30 feet or two stories, whichever is less.
    - For community facility buildings or buildings used for both community facility use and commercial use, the maximum height of a front wall shall be 35 feet or three stories, whichever is less, and the height above street line shall be 35 feet.
- The residential bulk remains subject to the R5 zoning regulations, which govern setbacks, yard requirements, and other dimensional controls.
- On qualifying residential sites located on any zoning lot or portion of a zoning lot in any commercial district in which such building is permitted and subject to the individual maximum floor area ratios for commercial, community facility and residential uses, the maximum permitted floor area for a zoning lot with buildings containing residential and non-residential uses is 2.5 FAR within the Greater Transit Zone, and 2.5 FAR outside of the Greater Transit Zone.

Parking for commercial and community facility use varies depending on the use, size, and transit zone designation.

C2-3 Commercial Overlay

C2 districts are commercial overlays mapped within residential districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants, and beauty parlors. Unless otherwise indicated on the zoning maps, the depth of overlay districts ranges from 100 to 200 feet.

Overlay districts differ from other commercial districts in that residential bulk is governed by the residence district within which the overlay is mapped. All other commercial districts that permit residential use are assigned a specific residential district equivalent.

The maximum commercial or community facility floor area ratio (FAR) is also determined by the residence district, per Section 33-121 of the NYC Zoning Resolution. For this location, the C2-3 overlay is mapped over an R5 zoning district, where:

- The maximum FAR for a zoning lot containing only commercial use, only community facility use, or both commercial and community facility uses is 2.0 FAR.

- The maximum FAR for a zoning lot containing only community facility uses or both commercial and community facility uses, may be increased to 2.4 provided that:

  (a) on interior lots, a front yard not less than 30 feet in depth is provided

  (b) on corner lots, two front yards, each not less than 20 feet in depth, are provided; or

  (c) on through lots, a front yard not less than 30 feet in depth is provided along each front lot line.

- The maximum height of a front wall and the required front setback of a building or other structure shall be determined by the Residence District within which such Commercial District is mapped with the following exceptions:
  - In accordance with the provisions of Section 32-42 (Location Within Buildings), no commercial building or portion thereof occupied by non-residential uses listed under Use Groups VI through X shall exceed in height 30 feet or two stories, whichever is less.
  - For community facility buildings or buildings used for both community facility use and commercial use, the maximum height of a front wall shall be 35 feet or three stories, whichever is less, and the height above street line shall be 35 feet.
- The residential bulk remains subject to the R5 zoning regulations, which govern setbacks, yard requirements, and other dimensional controls.
- On qualifying residential sites located on any zoning lot or portion of a zoning lot in any commercial district in which such building is permitted and subject to the individual maximum floor area ratios for commercial, community facility and residential uses, the maximum permitted floor area for a zoning lot with buildings containing residential and non-residential uses is 2.5 FAR within the Greater Transit Zone, and 2.5 FAR outside of the Greater Transit Zone.
- Since the C2-3 overlay in the Secondary Study Area is within a R1-R5 district, extends continuously over at least two entire adjacent block frontages and has no more than 50% of zoning lots developed with single- or two-family residences as of 12/5/2024, it facilitates development according to qualifying residential sites rules. In a R5 district, residential FAR increases to 2.00, height increases to 55', and total FAR between residential, commercial, and community facility uses increases to 2.50.

Parking for commercial and community facility use varies depending on the use, size, and transit zone designation.

Affected Area

The Affected Area is zoned M1-1, which permits the following Use Groups at 1.00 FAR for manufacturing use (UG X), 1.00 FAR for commercial use (UG IV-IX) and 2.4 FAR for community facility use (UG I, III):

- UG I - agriculture and open uses
    - Sand, gravel, or clay pits are permitted by special permit.
- UG III(B) - community facilities without sleeping accommodations
    - Includes the following uses under 3B: Houses of worship, health institutions and facilities, and museums.
    - Schools, parish houses, seminaries and philanthropic or non-profit institutions (excluding ambulatory diagnostic or treatment health care facilities) without sleeping accommodations, community centers, libraries, non-commercial recreation centers, and welfare centers are permitted by special permit.
- UG IV(A) - public service facilities
- UG IV(B) - utility infrastructure
    - Radio or television towers, sewage disposal plants, airports, bus stations, heliports, railroad passenger stations, and seaplane bases are permitted by special permit.
- UG IV(C) - renewable energy and green infrastructure
- UG V - transient accommodations
- UG VI - retail trade and service establishments
- UG VII - offices and laboratories
- UG VIII - recreation, entertainment and assembly spaces
    - Drive-in theaters and racetracks are permitted by special permit.
- UG IX(A) - general storage
    - Exclude micro-distribution facilities, which are not permitted.
- UG IX(B) - specialized storage
- UG IX (C) - vehicle storage
- UG X - production uses

Table 2.1-1: Existing Zoning Districts in the Surrounding Area[2]

Zoning District	Type and Use Group[3]	Floor Area Ratio (FAR)	Parking
M1-1	Light Manufacturing UG I, III(B), IV(A), IV(B), IV(C), V, VI, VII, VIII, IX(A), IX(B), IX(C), X	1.0 FAR – Manufacturing 1.0 FAR - Commercial 2.4 FAR - Community Facility	Varies by use, size of establishment, and TZ designation
R5	Residential UG I, II, III(A), III(B), IV(B), IV(C)	1.5 FAR – Residential (Standard) 2.0 FAR – Residential (Qualifying) 2.0 FAR – Community Facility	Inner TZ: 85% of standard DU within multiple dwellings Outer TZ: 35% of standard DU Beyond Greater TZ: 50% of standard DU; 25% of affordable DU; 10% of qualifying senior units In the Outer TZ/Beyond the Greater TZ: Qualifying residential sites: Parking waived for developments with 75 units or fewer Small lots (25 feet or less in width): No parking required for lots existing as of December 5, 2024 Non-residential varies by use and size of establishment, and TZ designation
R6B	Contextual Residential UG I, II, III(A), III(B), IV(B), IV(C)	2.0 FAR – Residential (Standard) 2.4 FAR – Residential (Qualifying Affordable or Senior) 2.0 FAR – Community Facility	Inner TZ: 50% of standard DU within multiple dwellings Outer TZ: 25% of standard DU Beyond Greater TZ: 50% of standard DU; 25% of affordable DU; 10% of qualifying senior units In the Outer TZ/Beyond the Greater TZ: Qualifying residential sites: Parking waived for developments with 75 units or fewer Small lots (25 feet or less in width): No parking required for lots existing as of December 5, 2024 Non-residential varies by use and size of establishment, and TZ designation
C1-2 Commercial Overlay	Local Commercial UG I, II, III(A), III(B), IV(A), IV(B), IV(C), V, VI, VII, VIII, IX(A), IX(C), X	2.00 FAR – Commercial Use 2.00 FAR – Commercial and Community Facility Use 2.00 FAR – Community Facility Use 2.5 FAR – Buildings on qualifying residential sites containing residential and non-residential uses	Varies by use, size of establishment, and TZ designation
C2-3 Commercial Overlay	Local Commercial UG I, II, III(A), III(B), IV(A), IV(B), IV(C), V, VI, VII, VIII, IX(A), IX(C), X	2.00 FAR – Commercial Use 2.00 FAR – Commercial and Community Facility Use 2.00 FAR – Community Facility Use 2.5 FAR – Buildings on qualifying residential sites containing residential and non-residential uses	Varies by use, size of establishment, and TZ designation

DU = Dwelling Unit; TZ = Transit Zone

[2] NYC Zoning Resolution

[3] Commercial Use: Any use listed in the following use groups depending on the district type (Commercial Districts – IV, V, VI, VII, VIII, IX, X; Manufacturing Districts – IV, V, VI, VII, VIII, IX). Community Facility Use: Any use listed in the following use groups depending on the district type (Residence Districts – I, III, IV; Commercial Districts – I, III; Manufacturing Districts - I, III). Manufacturing Use: Any use listed in the following use groups depending on the district type (Manufacturing Districts – X). Residential use: any use listed in Use Group II.

*There may be some exclusions within each use group, but use groups are listed where the majority of uses are permitted for the corresponding zoning district

Future No-Action Condition

Zoning Study Area and Affected Area

No changes to zoning would occur in the future without the Proposed Actions in the Affected Area. Existing zoning patterns would remain, and the Affected Area would continue to be subject to M1-1 zoning regulations.

Future With-Action Condition

Zoning Study Area

Zoning changes would only occur in the Affected Area in the future with the Proposed Actions.

Affected Area – M1-2A/R6A and M1-2A/R7A

The Zoning Map Amendment would rezone Block 526, Lot 1 (a rectangular corner lot of approximately 20,000 square feet with frontages on Nelson Street, Hicks Street, and Huntington Street) from an M1-1 zoning district to a MX (M1-2A/R7A) zoning district and Block 526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 (a rectangular area of approximately of 23,447 square feet bounded in part by Nelson Street, Henry Street, and Huntington Street) from an M1-1 zoning district to an MX (M1-2A/R6A) zoning district. The Applicant also proposes a Zoning Text Amendment to Appendix F (Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas) to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. In addition, a Zoning Text Amendment is proposed to modify the New York City Zoning Resolution (ZR) Article XII, Chapter 3 to add R6A and R7A pairings to the MX-5 Designated Residence Districts. The Zoning Map Amendment and Zoning Text Amendments constitute the Proposed Actions.

The proposed M1-2A/R7A district would permit a maximum of 5.01 FAR for residential use (MIH area), 3.0 FAR for commercial uses, and 4.0 for community facility uses. The maximum building height is 115 feet after a setback from the base height of up to 85 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street. The Projected Development Site (which would be zoned M1-2A/R7A) fronts narrow streets, therefore, a 15’ setback is required. Within the Outer Transit Zone, off-street parking is required for 15 percent of the market-rate residential dwelling units, and is not required for income-restricted housing units. Parking can be waived if fewer than 15 spaces are required.

The proposed M1-2A/R6A district would permit a maximum of 3.9 FAR for residential use (MIH area), 3.0 FAR for commercial use, and 3.0 FAR for community facility uses. The maximum building height within the R6A zoning district is 95 feet after a setback from the base height of up to 65 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street. The Potential Development Site (which would be zoned M1-2A/R6A) fronts narrow streets, therefore, a 15’ setback is required. Within the Outer Transit Zone, off-street parking is required for 25 percent of the market-rate residential dwelling

units, and is not required for income-restricted housing units. Parking can be waived if fewer than 15 spaces are required.

Conclusion

In comparison with the existing M1-1 zoning districts mapped in the Affected Area currently, the proposed M1-2A/R7A and M1-2A/R6A zoning districts would permit residential uses and would allow new commercial uses to come into the area and would bring into conformance the existing legal non-conforming residential uses present within the Affected Area, while also maintaining conformance of the current manufacturing/commercial uses within the Affected Area.

The proposed M1-2A/R7A and M1-2A/R6A zoning districts would be compatible with the contextual residential districts mapped within the Carroll Gardens and Columbia Street rezoning to the north. Further, the M1-2A zoning under the new Zoning for Economic Opportunity Growth Districts would permit commercial and manufacturing uses at an FAR that is appropriate for the R6A and R7A zoning districts and consistent with a heavily mixed-use area. The proposed rezoning to M1-2A/R7A and M1-2A/R7A zoning districts would provide opportunities for mid-rise mixed-use building construction and help induce the development of underutilized lots within the Affected Area. Moreover, the proposed Zoning Text Amendment to Appendix F to add Mandatory Inclusionary Housing (MIH) would facilitate the development of new permanently affordable housing. Therefore, no significant adverse impacts are anticipated to zoning, and further analysis is not required.

2.1.3 Public Policy

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

The Affected Area is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The Affected Area is located within a designated FRESH-eligible area but would not include any FRESH programming.

The Proposed Actions include a Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Community District 6, Brooklyn, to establish the Affected Area as an MIH Area. As a result, an analysis of the Proposed Development's alignment with Housing New York is warranted.

In addition, an evaluation of the Proposed Actions consistency with "Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery" is provided below.

Lastly, the Affected Area is located in the Coastal Zone, which requires an assessment for consistency with the Waterfront Revitalization Program (WRP).

The relevant public policies analyzed in this section include:

- Housing New York 2.0
- Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery
- Waterfront Revitalization Program

Existing Conditions

Housing New York 2.0

Facilitated by the Department of Housing Preservation and Development (HPD), Housing New York 2.0 is the City's plan to build or preserve 300,000 affordable homes by 2026. The plan outlines a comprehensive set of policies and programs to address the city's affordable housing crisis and retain the diversity and vitality of its neighborhoods.

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

Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery aims to accelerate job creation and make communities more resilient to future environmental and public health emergencies, financially stronger, and more connected. It contains five main strategies, including:

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

Waterfront Revitalization Program

Because the Affected Area is located within the boundaries of the New York City Coastal Zone and is subject to CEQR discretionary review procedures, the Proposed Actions must be reviewed and assessed for consistency with the policies and conditions outlined in the New York City Waterfront Revitalization Program (WRP). The WRP establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation and public use of the waterfront, while minimizing any potential conflicts among these objectives.

Future No-Action Condition

No changes to *Housing New York 2.0, Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery,* or the *WRP* are anticipated under Future No-Action Conditions.

Future With-Action Condition

Housing New York 2.0

The Proposed Actions support the goal of Housing New York 2.0 to provide 100,000 more affordable homes by 2026, in addition to the 200,000 affordable homes provided by 2022 under the original Housing New York Plan. The Proposed Actions would establish an MIH area over the Affected Area and facilitate the development of 108 dwelling units, 25-30% (27-32 units) of which would be affordable at an average of 60-80% AMI pursuant to MIH Option 1 or Option 2. The affordable units would foster diverse and livable neighborhoods and preserve the affordability and quality of the housing stock.

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

The Proposed Actions would facilitate the development of commercial space to be occupied by local retail, while preserving manufacturing uses. Since the Proposed Actions would facilitate new commercial uses on the ground floor of Projected Development Site 1, they contribute to Strategy 1. Restart our city's economic engines and reactivate the public realm by strengthening corridors where New Yorkers live, work, and play and reviving the city's vitality and dynamism by activating public spaces. In addition, the Proposed Actions would generate new quality jobs and support the Strategy 4 of "Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery" aiming to connect New Yorkers to quality jobs and in-demand skills. The Proposed Actions would permit the development of multiple kinds of businesses including commercial office, retail, and manufacturing, which would attract a diverse range of job opportunities and skill sets to the area. Lastly, the Proposed Actions would facilitate the development of affordable housing and increase opportunities for low-cost housing in the neighborhood. Therefore, the Proposed Actions are aligned with the Strategy 5. Plan and build for inclusive growth now and in the future.

Waterfront Revitalization Program

The Affected Area is located in the Coastal Zone. Accordingly, an assessment for consistency with the WRP was conducted. The Proposed Actions would place a new mixed residential and community facility use in a FEMA-designated "Shaded Zone X" within the 0.2 percent annual chance floodplain (500-year flood zone), with a base flood elevation (BFE) of eleven (11) feet, as per the 2015 FEMA Preliminary Flood Insurance Rate Maps (PFIRM) nearest 1% flood zone.

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

Conclusion

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

2.2 Open Space

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

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

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

- Parks operated or managed by City, State, or federal governments and include neighborhood and regional parks, beaches, pools, golf courses, boardwalks, playgrounds, ballfields, and recreational facilities that are available to the public at no cost or through a nominal fee, such as NYC Parks recreation centers and golf courses;
- Open Space designated through regulatory approvals (e.g., zoning), including large-scale permits that prescribe publicly accessible Open Space, such as public plazas;
- Outdoor schoolyards, if available to the public during non-school hours;
- Publicly-accessible institutional campuses;
- Promenades and esplanades;
- Designated greenways, as shown on the NYC Bike Map, and defined as multi-use pathways for non-motorized recreation and transportation along natural or other linear spaces, such as rail and highway rights-of-way, river corridors, and waterfront spaces;
- Landscaped medians or malls with seating;
- Housing complex grounds, if publicly accessible;
- Nature preserves, if publicly accessible;
- Gardens, if publicly accessible;
- Church yards (with seating) or cemeteries, if publicly-accessible for passive recreation;
- Waterfront piers used for recreation.

Direct Effects

Direct effects on open space are addressed in the sections for those specific technical areas where warranted. Construction impacts to open space are not anticipated as there would be no physical loss of public open space, no change in existing open space so that it no longer serves the same user population, would not limit public access, and would not increase noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness. An assessment of the effects of the Proposed Actions related to shadows on open space resources is provided in **Section 2.3: Shadows**.

Indirect Effects

Pursuant to the *2021 CEQR Technical Manual*, the threshold for assessment of the potential for indirect impacts is 200 new residents or 500 additional employees. As indicated in **Table 1.8-2** and discussed in **Section 1.8,** the Future With-Action Condition at the Affected Area is projected to generate 245 new incremental residents. Accordingly, a preliminary residential Open Space assessment for indirect effects is warranted. The Future With-Action Condition is projected to result in an increase of 42 employees in the Affected Area, as discussed in **Section 1.8**. Accordingly, a preliminary commercial Open Space assessment for indirect effects is not warranted.

Methodology

According to the guidelines of the *2021 CEQR Technical Manual* for analysis of residential development, census tracts with at least half of their geographic area within a one-half-mile radius of the Affected Area comprise the Open Space Study Area. Using current population figures, an open space ratio is calculated for both the future no-action and future with-action conditions, expressed as the amount of open space acreage per 1,000 user population. Typically, a comparison is made to the city's planning goal of 2.50 acres per 1,000 residents.

In addition to field surveys, information from the NYC Department of City Planning's Community District Needs Statements and Housing Database, NYC Department of Buildings data, NYC Parks Department website, and U.S. Census data were utilized in preparing the Open Space analysis.

2.2.1 Preliminary Residential Open Space Assessment for Indirect Effects

As previously discussed, the Proposed Actions are projected to result in the incremental development of 108 new dwelling units within the Affected Area. Assuming an average household size of 2.27 persons within Brooklyn, Community District 6 (based on 2020 United States Decennial Census Data), the incremental residential population increase in the Affected Area would be approximately 245 persons. Therefore, an assessment of indirect residential effects on public open space resources is warranted. The Proposed Actions would introduce fewer than 500 additional employees. As such, the preliminary assessment addresses the residential population introduced by the Proposed Actions.

2.2.1.1 Study Area Definition

In accordance with the guidelines established in the City's *2021 CEQR Technical Manual*, the Open Space Study Area is defined to analyze both the nearby open spaces and the population using those open space resources. It is generally defined by a reasonable walking distance that users would travel to reach local open spaces and recreational areas. Pursuant to the *2021 CEQR Technical Manual*, the Open Space Study Area includes all U.S. Census Tracts that have 50 percent or more of their area within a half-mile radius of the Affected Area for residential users. As shown in **Figure 2.2-1**, the Census Tracts with 50% or more of their area within the 1/2-mile Study Area are Brooklyn Tracts 51, 59, 63, 65, 77, and 85.

Existing Condition Residential Population

Based on census tract-level population data provided in the 2020 United States Decennial Census, the 1/2-mile Study Area had a total population of 24,231 persons. According to the Project-Level DCP Housing Database, sixty-eight (68) building permits have been completed within the six Census Tracts comprising the Study Area since January 1, 2020. These permits ultimately resulted in 39 net residential dwelling units, which multiplied by the average household size (2.27) for Brooklyn Community District 6 (2020 ACS), came out to 89 additional residents. As such, the Study Area population under Existing Conditions is estimated to be 24,320 persons.

Future No-Action Condition

A review of active major construction projects[4] and approved BSA applications and ULURP actions was undertaken to determine known developments within the 1/2-mile Study Area. Based on this review, there are 22 active permits for alteration and/or demolition of existing buildings and construction of new buildings, 7 active permits of which would add additional residential dwelling units, resulting in a net gain of 992 residential dwelling units by the 2028 Project Build Year. Overall, the No-Action construction projects are projected to add an additional 2,252 persons to the 1/2-mile study area population, using the same 2.27 residents per household figure above, for a total of 26,571 persons in the Future No-Action Condition (see **Table 2.2-1** below).

[4] https://nycdob.github.io/DOB_Dashboards/layouts/two-and-one/Active_ConstructionTM_withGraphs, Accessed April 2, 2024

Table 2.2-1: No-Action Developments with Additional Residential Units within Census Tracts 51, 65, 59, 63, 77, 85

Address	Permit Type	Job Type	Incremental DU	Proposed Stories
33 4 STREET BROOKLYN	Support of Excavation	New Building	82	8
117 LUQUER STREET Brooklyn	NB	NB	1	4
420 COURT STREET BROOKLYN	Support of Excavation	ALT-CO - New Building with Existing Elements to Remain	4	6
477 SMITH STREET BROOKLYN	Support of Excavation	New Building	496	22
475 SMITH STREET BROOKLYN	Support of Excavation	New Building	70	4
463 SMITH STREET BROOKLYN	Support of Excavation	New Building	333	22
78 1 PLACE BROOKLYN	Support of Excavation	New Building	6	6

Future With-Action Condition

Compared to No-Action Conditions, the Proposed Actions would introduce 108 more dwelling units. Assuming an average household size of 2.27 persons, there would be 245 incremental residents resulting from the Proposed Actions. The Future With-Action population, then, would be 26,817 residents as shown below in **Table 2.2-2**.

Table 2.2-2: Existing, No-Action, and With-Action Populations[5]

Existing	No-Action	With-Action
24,320	26,571	26,817

2.2.1.2 Open Space Resources

There are seven (7) Open Space resources with regular open access to the public within the Study Area identified in **Table 2.2-3**. There are 13.63 acres of Open Space resources in the Study Area—10.20 are considered active, and 3.43 are considered passive based on a review of open space site plans and the NYC Parks Department website. The location of these resources, as well as community gardens present in the Study Area, are shown in **Figure 2.2-1**. Community gardens are not considered Open Space resources under many circumstances given their small size and limited public accessibility; therefore, community gardens are not included in the analysis.

Existing Condition

The Study Area has 13.63 acres of Open Space and an existing residential population of 24,320. The Open Space Ratio (OSR) under existing conditions is 0.561 acres per thousand residents, which is below the citywide average of 1.5 acres per thousand residents and reflects the shortfall of Open Spaces within the Study Area.

Future No-Action Condition

In the future, without the Proposed Actions, the population within the Study Area in the 2028 build year is projected to be 26,571 persons. As no new Open Spaces are planned within this Study Area by the 2028 build year, the existing conditions, with a total of 13.63 acres of Open Space serving the Study Area, would remain unchanged in the Future No-Action Condition. As such, the OSR under the Future No-Action Condition would be 0.513, which is also below the citywide average of 1.5 acres per thousand residents.

[5] Existing = 2020 American Community Survey plus completed DUs since January 1st 2020; No-Action = Existing plus 2,252 residents; With-Action = No-Action plus 245 additional residents from the Projected Development

Future With-Action Condition

The Proposed Actions would result in an increase in the Future No-Action population of 245 residents by the 2028 build year, resulting in a total Future With-Action Condition population of 26,817 persons within the Study Area. The Proposed Actions would not facilitate the development of any new publicly accessible Open Spaces within the Affected Area. Accordingly, the Future No-Action Condition total of 13.63 acres of Open Space serving the Study Area would remain unchanged in the Future With-Action Condition. As such, the OSR under the Future With-Action Condition would be 0.508 acres per 1,000 residents.

The decrease in the OSR from 0.513 in the Future No-Action Condition to 0.508 in the Future With-Action Condition constitutes a 0.91 percent decrease in the Study Area's OSR. Pursuant to the *2021 CEQR Technical Manual*, when the OSR range falls between 0.51 and 1, a maximum decrease of two percent in the Open Space Ratio between the Future No-Action and Future With-Action Conditions does not require further analysis. As the projected OSR decrease of 0.91 percent under the Future With-Action Condition is below the 2 percent threshold, the Proposed Actions do not warrant a detailed analysis of Open Space.

Figure 2.2-1: Open Space Study Area Boundary, Census Tracts, and Open Spaces

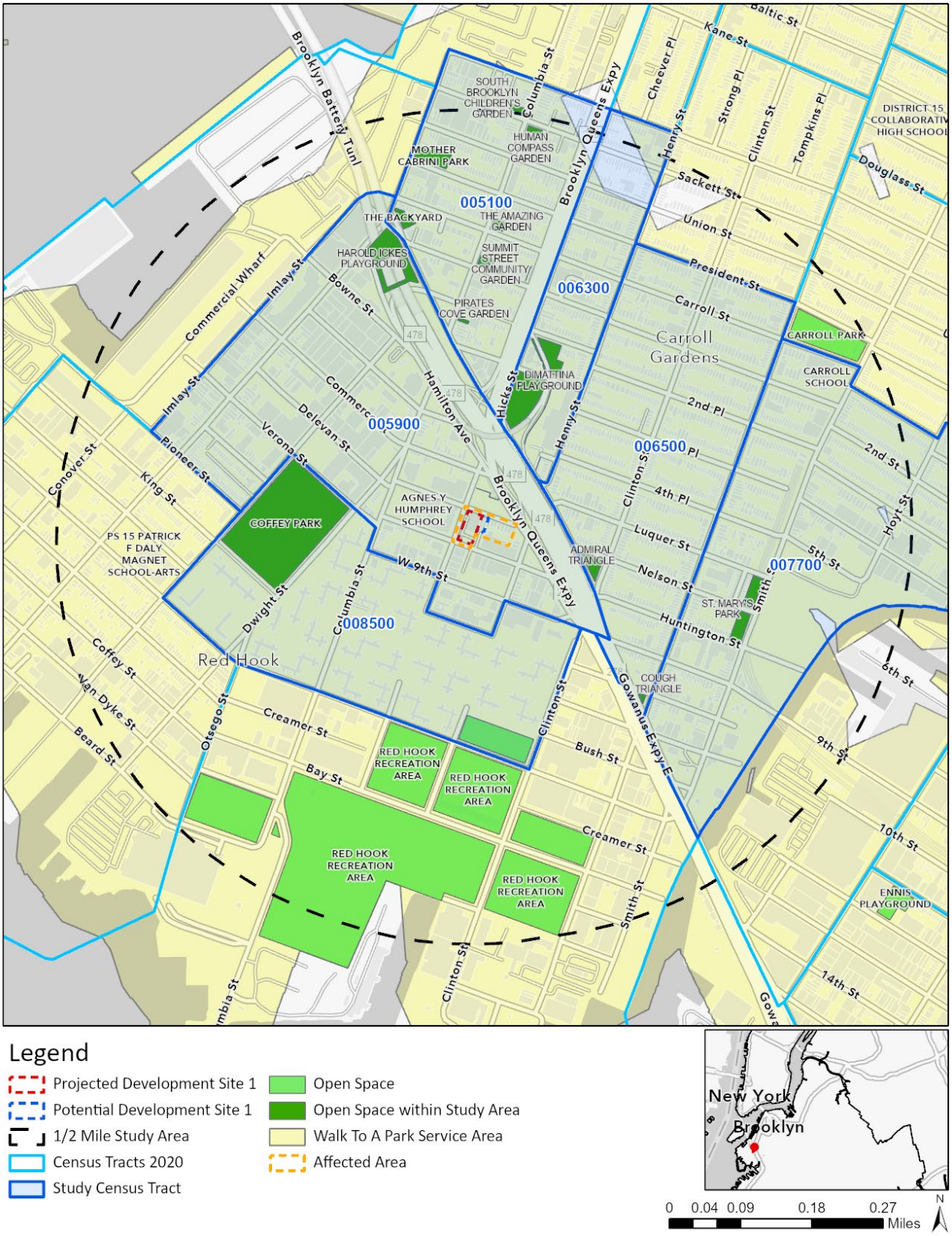


Table 2.2-3: Study Area Open Space Resources

Name	Park ID Number	Property Type	Responsible Agency	Acreage	% Active	% Passive	Total Active	Total Passive	Features
Coffey Park	B077	Neighborhood Park	NYC DPR	8.27	75%	25%	6.20	2.07	BC, HC, PG, PR, SS, DFA, BA, WFHS, Be
Mother Cabrini Park	B390	Playground	NYC DPR	0.47	75%	25%	0.35	0.12	PG, SS, Be
Cough Triangle	B210C	Triangle/Plaza	NYC DPR	0.03	0%	100%	0.00	0.03	Be
Dimattina Playground	B223A	Park Group	NYC DPR	1.9	75%	25%	1.43	0.48	DFA, PG, PR, SS, Be, BF
Harold Ickes Playground	B210H	Playground	NYC DPR	1.82	75%	25%	1.37	0.46	SP
St. Mary's Park	B118	Park Group	NYC DPR	0.712	75%	25%	0.53	0.18	BC, FE, PG, SP; Be
Admiral Triangle	B210F	Playground	NYC DPR	0.43	75%	25%	0.32	0.11	PG, SS, Be
Totals				**13.63**	**-**	**-**	**10.20**	**3.43**	**-**

SS = Spray Showers; Pg = Playgrounds; Bi = Bicycling; BC = Basketball Courts; BA = BBQ Area; FE = Fitness Equipment; Ba = Bathrooms; Be = Benches; HC = Handball Courts; GW = Greenway; CG = Community Garden; VB = Volley Ball; BF = Baseball Fields; FF = Football Fields; DFA = Dog Friendly Areas; IP = Indoor Pools; ML = Media Labs; WFHS = Wifi Hot Spots; SF = Soccer Fields; RC = Recreation Centers; RT = Running Tracks; PR = Public Restrooms; SP = Skate Park

2.2.1.3 NYC Parks Walk to a Park Initiative

New York City, as part of the OneNYC 2050 Building a Strong and Fair City plan, has put forth a goal for 85 percent of New York City residents living within walking distance of a park by 2030. To help the City reach this goal, NYC Parks has a Walk to a Park initiative that focuses on increasing access to parks and open space in areas of the City where residents live further than walking distance to a park. Areas outside of Walk to a Park Service Areas are considered "walk gaps" – i.e., areas of the city that are not within walking distance to a park.

As part of the preliminary assessment for Open Space, a project should be reviewed to determine if it is located in an area of the city within a Walk to a Park Service Area. Project sites that are located outside of a Walk to a Park Service Area (i.e., located in a known walk gap areas) suggests there is a need for a detailed analysis to be performed to determine if the project may further exacerbate a condition of residents living in areas of the city with inadequate park access, potentially leading to a significant impact. While the focus of the Walk to a Park initiative is on residents living within walking distance of a park, projects that create a non-residential population (e.g., new workers) should also review if the project is located within a known walk gap and assess if the project would generate a new non-residential population within areas of the City with inadequate access to open space resources.

As shown in **Figure 2.2-1** above, the entirety of the Affected Area is within a Walk to a Park service area, and is therefore not identified as a walk gap area. Therefore, no further analysis is needed.

2.2.2 Conclusion

The Future With-Action Condition would result in the development of 108 additional dwelling units over the Future No-Action Condition, projected to generate an additional population of 245 new residents. This would result in a decrease of the OSR within the Study Area from 0.513 acres per 1,000 residents in the Future No-Action Condition to 0.508 in the Future With-Action Condition, or a decrease of approximately 0.91 percent. Pursuant to the *2021 CEQR Technical Manual*, an OSR range between 0.51 and 1 can tolerate up to a two percent decrease in the OSR between the Future No-Action and Future With-Action Condition without warranting additional analyses. Further, the Affected Area is within a Walk to a Park service area, indicating all future projected residents are within a reasonable walking distance of public Open Spaces. Therefore, the Proposed Actions would not result in a significant adverse impact on Open Space within the Study Area, and further analysis is not warranted.

2.3 Shadows

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

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

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

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

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

Analysis Framework

Future No-Action Condition

Projected Development Site 1 (Applicant-owned Block 526, Lot 1):

There are no records of building work permits submitted by the Applicant. Further, redevelopment is not considered likely in the No-Action Scenario because of the bulk permitted under the current M1-1 district (1.00 commercial and manufacturing; 2.40 community facility) and significant parking requirement (1 space per 300 sf of uses). Therefore, it is conservatively assumed that under the No-Action Scenario, existing conditions would continue on Projected Development Site 1.

Potential Development Site 1 (Block 526, Lots 13 and 14):

There are no records of building work permits on the DOB website. Further, redevelopment is not considered likely in the No-Action Scenario because of the bulk permitted under the current M1-1 district (1.00 commercial and manufacturing; 2.40 community facility) and significant parking requirement (1 space per 300 sf of uses). Therefore, it is conservatively assumed that under the No-Action Scenario, existing conditions would continue on the non-Applicant-owned Potential Development Site 1.

Future With-Action Condition

Projected Development Site 1 – (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 (Applicant-owned Block 526, Lot 1) would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building. The building would have 11 stories and rise to 115 feet.

Potential Development Site 1 – (Block 526, Lots 13 and 14; Non-Applicant Lots)

Potential Development Site 1 (Block 526, Lots 13 and 14) would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building. The building would have 9 stories and rise to 95 feet.

10-foot mechanical bulkheads with the Projected and Potential Developments built at 100% lot coverage and no setbacks were assumed for a conservative shadows analysis under CEQR.

The Projected and Potential Site would induce development greater than 50 feet in height. Accordingly, a shadows analysis was conducted pursuant to the *2021 CEQR Technical Manual* to

determine whether shadows resulting from the Projected and Potential Development could reach any sunlight-sensitive resources.

2.3.1 Preliminary Assessment

Methodology

This preliminary analysis of shadows follows the guidelines set forth in the *2021 CEQR Technical Manual* for a preliminary assessment (Section 310). According to the *2021 CEQR Technical Manual*, a preliminary shadow assessment includes the development of a base map showing the site location in relation to any sunlight-sensitive resources as per guidelines provided in the *2021 CEQR Technical Manual*. Following these guidelines, the longest shadow Study Area is determined, and a Tier 1 screening assessment is conducted to determine if any sunlight-sensitive resources fall within the Study Area. If no resources are identified, no further analysis would be required. If a sunlight-sensitive resource is in the study area, a Tier 2 screening assessment is warranted. Because of the path the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given Project Site. In New York City, this area lies between -108 and +108 degrees from true north. For a Tier 2 screening assessment, sunlight-sensitive resources within the triangular area cannot be shaded by new Projected Development Sites, and are screened out. The complementing portion to the north within the longest Shadow Study Area is the area that can be shaded by the proposed project. If the Tier 2 screening shows that sunlight-sensitive resources are within an angle of 108 degrees from true north at the Project Site's southernmost point, a Tier 3 screening assessment is required.

2.3.1.1 Tier 1 Shadow Screening Assessment

A CEQR Tier 1 screening assessment identifies a study area based on the With-Action building height and the longest shadow a structure can cast, which in New York City is 4.3 times its height. If a sunlight-sensitive resource is in the study area, a Tier 2 screening assessment is warranted.

Under Future With-Action Conditions, Projected Development Site 1 would be developed with a new building rising to a height of 115' plus an additional 10' to the rooftop bulkhead. Potential Development Site 1 would be developed with a new building rising to a height of 95' plus an additional 10' to the rooftop bulkhead. The longest action-induced shadow would be approximately 457.5 feet (4.3 x 125 feet) in length for Projected Development Site 1 and approximately 451.5 feet (4.3 x 105 feet) in length for Potential Development Site 1.

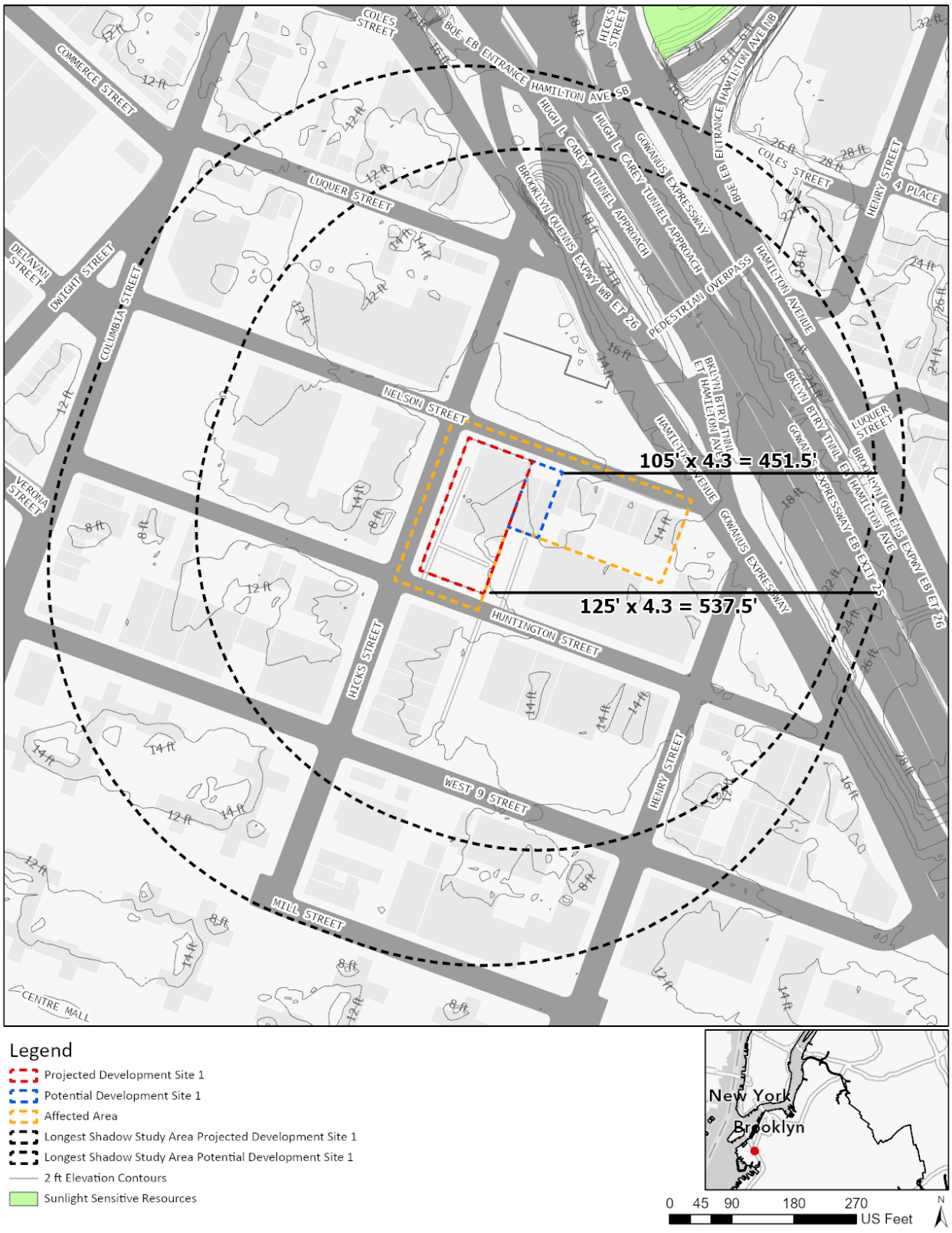
The first step in a shadow analysis is to determine if there are any sunlight-sensitive resources located within the length of the longest action-induced shadow areas for Projected Development Site 1 and Potential Development Site 1.

As **Figure 2.3-1** shows below, there are no sunlight-sensitive resources within the longest Shadow Study Area.

2.3.2 Conclusion

Based on the Tier 1 Shadows Screening, there are no sunlight-sensitive resources within the longest Shadow Study Area. Therefore, no adverse impact is expected on the Open Space Utilization of any sunlight-sensitive resources is anticipated, and no further analysis is warranted.

Figure 2.3-1: Tier 1 Shadow Screening Assessment



2.4 Historic and Cultural Resources

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

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

Methodology

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

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

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

2.4.1 Architectural Resources

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

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

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

Construction resulting in ground disturbance, including construction of temporary roads and access facilities, grading, and landscaping.
Below-ground construction, such as excavation or installation of utilities.
Physical destruction, demolition, damage, alteration or neglect of all or part of a historic property.
Changes to the architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features.
Isolation of the property from, or alteration of, its setting or visual relationship with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor.
Introduction of incompatible visual, audible, or atmospheric elements to a resource's setting.
Replication of aspects of the resource so as to create a false historical appearance.
Elimination or screening of publicly accessible views of the resource.
Construction-related impacts such as falling objects, vibration, dewatering, flooding, subsidence, or collapse.
Introduction of significant new shadows, or significant lengthening of the duration of existing shadows, over a historic landscape or a historic structure to the extent that the architectural details that distinguish that resource as significant are obscured.

Direct Impacts

Historic resources could be directly affected by physical destruction, demolition, damage, alteration, or neglect of all or part of a historic resource. For example, alterations, such as the

addition of a new wing to a historic building could result in significant adverse impacts, depending on the design. Direct impacts also include changes to an architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features.

NR-listed and eligible resources are given a measure of protection from the effects and impacts of projects sponsored, assisted, or approved by federal agencies under Section 106 of the National Historic Preservation Act. Although preservation is not mandated, federal agencies must attempt to avoid adverse impacts on such resources through a notice, review, and consultation process. S/NR-listed and eligible resources are similarly protected against impacts resulting from projects sponsored, assisted, or approved by State agencies under the State Historic Preservation Act. However, private owners of S/NR-listed and eligible resources using private funds can alter or demolish their properties without such a review process. Privately owned properties that are NYCLs, in LPC-designated historic districts, or pending designation as Landmarks by LPC are protected under the New York City Landmarks Law. The law requires LPC review and approval before any alteration or demolition occurs, regardless of whether the project is publicly or privately funded. Publicly owned resources are also subject to review and advisement by LPC before project implementation.

Construction Impacts

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

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

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

1. All buildings are provided some protection from accidental damage through New York City Department of Buildings (DOB) controls that govern the protection of any adjacent properties from construction activities, under Building Code Section 27-166 (C26-112.4). For all construction work, Building Code section 27-166 (C26-112.4) serves to protect buildings by requiring that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the code requirements.
2. The second protective measure applies only to designated NYCL and S/NR-listed historic buildings that are located within 90 linear feet of a proposed construction site. For these

structures, the DOB's Technical Policy and Procedure Notice (TPPN) #10/88 is applicable. The DOB's TPPN 10/88 supplements the standard building protections afforded by the Building Code C26-112.4 by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources (within 90 feet), and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

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

Indirect Impacts

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

2.4.1.1 Architectural Resources within the Study Area

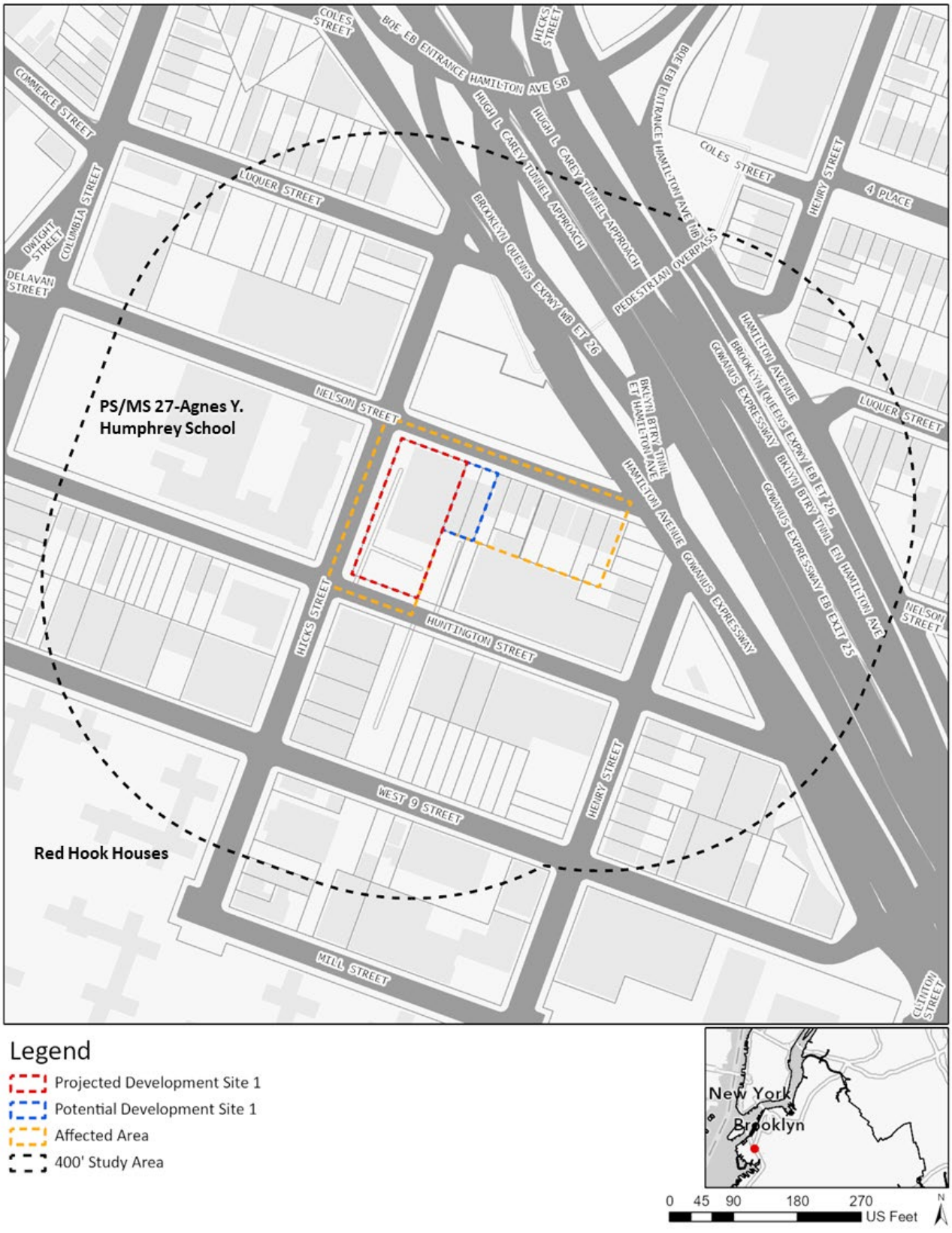
To determine whether the Proposed Actions have the potential to affect nearby off-site historic or architectural resources, the Study Area was screened for historic and architectural resources.

The LPC was contacted for their initial review of the project's potential to impact historic or architectural resources and by letter dated May 28, 2024, indicated that no properties within the Affected Area have architectural significance. However, the below-listed properties within radius of the Affected Area are S/NR eligible (see **Appendix A**).

- S/NR eligible PS/MS 27-Agnes Y. Humphrey School
- S/NR eligible Red Hook Houses East and West

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

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


COLES STREET
BQE EB ENTRANCE HAMILTON AVE SB
HICKS STREET
BQE EB ENTRANCE HAMILTON AVE NB
COMMERCE STREET
HUGH L CAREY TUNNEL APPROACH
HUGH L CAREY TUNNEL APPROACH
COLES STREET
HENRY STREET
4 PLACE
LUQUER STREET
DWIGHT STREET
COLUMBIA STREET
BROOKLYN QUEENS EXPWY WB ET 26
PEDESTRIAN OVERPASS
DELAVAN STREET
HAMILTON AVENUE
GOWANUS EXPRESSWAY
BROOKLYN QUEENS EXPWY EB ET 26
LUQUER STREET
PS/MS 27-Agnes Y. Humphrey School
NELSON STREET
BKLYN BTRY TUNL ET HAMILTON AVE
HAMILTON AVENUE
GOWANUS EXPRESSWAY
BKLYN BTRY TUNL EB HAMILTON AVE
GOWANUS EXPRESSWAY EB EXIT 25
NELSON STREET
HICKS STREET
HUNTINGTON STREET
HENRY STREET
WEST 9 STREET
Red Hook Houses
MILL STREET
CLINTON STREET
Legend
Projected Development Site 1
Potential Development Site 1
Affected Area
400' Study Area
New York
Brooklyn
0 45 90 180 270
US Feet
N

Existing Condition

According to the LPC letter dated May 28, 2024, no properties within the Affected Area have architectural significance. However, the LPC has identified two S/NR-eligible architectural resources within the Study Area:

- PS/MS 27-Agnes Y. Humphrey School (now Red Hook Neighborhood School and Summit Academy Charter School 6-12[T]) is located at 401 Columbia Street and consists of three major blocks dating to 1890, 1939-1940, and 1951-1952 with subsequent minor alterations. The earliest portion of the building, designed by architect James W. Naughton, is located on the northeast corner of the block bounded by Nelson Street to the north, Hicks Street to the east, Huntington Street to the south, and Columbia Street to the west. This portion of the building features a brick façade and many of the Eclectic Romanesque features typical for an 1890s grammar school. The first major expansion in 1939-1940 included the construction of a three-story brick and stone building that faces Huntington Street, subsequently connected to the 1890 block. This section is similar to "Type M" schools designed by architect Walter C. Martin, with Neoclassical Revival features. In 1955, the northwest corner of the school complex was constructed. This section, designed by architect John Ambrose Thompson, is typical of many post-war schools where the massing appears low and spread out, with fewer ornamental details. However, this section was designed to visually connect with the earlier buildings through the use of red brick, paired 4/4 windows, stone belt courses, and stylized brick quoins.

  The nearest portion of the school is located approximately 67 feet west of the nearest edge of Projected Development Site 1, and approximately 165 feet west of the nearest edge of Potential Development Site 1.

- The Red Hook Houses consist of two connected public housing complexes (East and West) managed by the New York City Housing Authority (NYCHA). The buildings, designed by architect Alfred Easton Poor, were constructed in 1939-1940 and consist of multiple 6-story elevator buildings of brick façades.

  The nearest building within the Red Hook House complex is located approximately 340 feet southwest of the nearest edge of Projected Development Site 1 and 468 feet southwest of the nearest edge of Potential Development Site 1.

Future No-Action Condition

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

Future With-Action Condition

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

Direct impacts

In the future, with the Proposed Actions, it is expected that the existing Architectural Resources within the Study Area would be the same as the existing conditions. There are no existing Architectural Resources within the Affected Area (LPC letter dated May 28, 2024). As such, no direct impacts on architectural resources are anticipated.

Construction impacts

S/NR eligible PS/MS 27-Agnes Y. Humphrey School

- Projected Development Site 1 (Applicant-owned Block 526, Lot 1):

  Projected Development Site 1 is within 90 feet of S/NR eligible PS/MS 27-Agnes Y. Humphrey School (now Red Hook Neighborhood School and Summit Academy Charter School) at 401 Columbia Street. The school is located approximately 67 feet west of the nearest edge of Projected Development Site 1, separated by Hicks Street. To mitigate any possible construction impact on S/NR-listed properties within a 90-foot radius, a special protective measure TPPN #10/8 applies. TPPN #10/88 requires a monitoring program to reduce the likelihood of construction damage to adjacent NYCLs and NR-listed properties (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed. As such, no construction impacts from Projected Development Site 1 to S/NR eligible PS/MS 27-Agnes Y. Humphrey School are anticipated.

- Potential Development Site 1 (Block 526, Lots 13 and 14; Non-Applicant Lots):

  The nearest edge of Potential Development Site 1 is located 165 feet east of the closet portion of PS/MS 27-Agnes Y. Humphrey School (now Red Hook Neighborhood School and Summit Academy Charter School). The school is buffered from Potential Development Site 1 by Hicks Street, and by Projected Development Site 1. Accordingly, Potential Development Site 1 would not introduce adverse construction-related impacts to S/NR eligible PS/MS 27-Agnes Y. Humphrey School from ground-borne construction period vibrations, falling debris, and/or collapse. Therefore, significant adverse impacts to this resource are not expected, and further analysis is not warranted.

S/NR eligible Red Hook Houses

- Projected Development Site 1 (Applicant-owned Block 526, Lot 1):

  The nearest building within the Red Hook House complex is located approximately 340 feet southwest of the nearest edge of Projected Development Site 1. The Red Hook Housing Complex is buffered from Projected Development Site 1 by Huntington Street, Hicks Street, and West 9th Street as is further buffered by adjacent intervening buildings on Block 535. Accordingly, Projected Development Site 1 would not introduce adverse construction-related impacts to S/NR eligible Red Hook Houses from ground-borne construction period vibrations, falling debris, and/or collapse. Therefore, significant adverse impacts from Projected Development Site 1 on this resource are not expected, and further analysis is not warranted.

- Potential Development Site 1 (Block 526, Lots 13 and 14; Non-Applicant Lots):

  The nearest building within the Red Hook House complex is located approximately 468 feet southwest of the nearest edge of Potential Development Site 1. The Red Hook Housing Complex is buffered from Potential Development Site 1 by Huntington Street, Hicks Street, and West 9th Street as is further buffered by adjacent intervening buildings on Block 535. Accordingly, Potential Development Site 1 would not introduce adverse construction-related impacts to S/NR-eligible Red Hook Houses from ground-borne construction period vibrations, falling debris, and/or collapse. Therefore, significant adverse impacts from Potential Development Site 1 on this resource are not expected, and further analysis is not warranted.

Indirect impacts

The Proposed Actions would not introduce any incompatible visual, audible, or atmospheric elements to the settings of the identified historic resources. Publicly accessible views of the identified historic architectural resources would not be blocked, because the new development would occur on existing blocks and lots. In addition, none of the identified historic resources feature sunlight-sensitive physical characteristics based on the *CEQR Technical Manual*:

- The buildings do not contain design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements.
- The buildings are not distinguished by elaborate, highly carved ornamentation.
- The buildings do not have stained glass windows.
- The buildings do not contain exterior materials and color that depend on direct sunlight for visual character.
- The buildings do not include a historic landscape, such as scenic landmarks including vegetation recognized as a historic feature of the landscape.

- The buildings do not include features where the effect of direct sunlight is described as playing a significant role in the structure's significance as a historic landmark.

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

The Development of the Projected and Potential Development Sites would also not pose any changes to the setting or context of historic resources. Therefore, no significant indirect impacts on architectural resources would occur as a result of the Proposed Actions, and further analysis is not warranted.

2.4.2 Archaeological Resources

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

The Proposed Actions would result in new in-ground construction on the Projected and Potential Development Sites. As noted, the LPC was contacted for their initial review of the project's potential to impact nearby cultural or archaeological resources, and a response was received on May 28, 2024 (see **Appendix A**). The LPC has indicated that no cultural resource of archaeological significance is associated with the Projected or Potential Development Sites. Therefore, significant adverse impacts on archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

2.4.3 Conclusion

According to the *CEQR Technical Manual*, significant adverse impacts to historic and cultural resources could potentially result if a Proposed Action affects those characteristics that make a resource eligible for LPC designation or S/NR listing. The LPC was contacted for their initial review of the project's potential to impact historic or architectural resources and indicated that no properties within the Affected Area have architectural significance (see **Appendix A**). However, S/NR eligible PS/MS 27-Agnes Y. Humphrey School and S/NR eligible Red Hook Houses East and West are within radius of the Affected Area. Therefore, the possible direct, indirect, and construction-related impacts on historic and cultural resources have been assessed:

- Direct Impact Analysis addressed the possibility of historic resources to be directly affected by physical destruction, demolition, damage, alteration, or neglect of all or part of a historic resource. Since there are no existing Architectural Resources within the Affected Area, no direct impacts on architectural resources would occur.

- Construction Impact Analysis considered the possibility of physical damage to any architectural or archaeological resources identified in the project's historic and cultural resources assessment. Based on the assessment above, only Projected Development Site 1 is within 90 feet of one of the eligible architectural resources (S/NR eligible PS/MS 27-Agnes Y. Humphrey School). To mitigate any possible construction impact on S/NR-listed properties within a 90-foot radius, a special protective measure TPPN #10/8 applies. In addition, all identified architectural resources are buffered from the Projected and Potential Development Sites by intersections. Therefore, no significant adverse impacts related to construction would occur because of the Proposed Actions.
- Indirect Impact Analysis considers visual and contextual impacts on historic resources. Since publicly accessible views of the historic architectural resources would not be blocked and none of the identified historic resources feature sunlight-sensitive physical characteristics, no significant indirect impacts on architectural resources would occur as a result of the Proposed Actions.

The Proposed Actions would result in new in-ground construction on the Projected and Potential Development Sites. By letter dated May 28, 2024 (see **Appendix A**), the LPC has indicated that no archaeological significance is associated with the properties within the Affected Area. Therefore, no significant adverse impacts on archaeological resources would occur because of the Proposed Actions.

2.5 Urban Design and Visual Resources

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

Methodology

In accordance with the *2021 CEQR Technical Manual* guidelines, the following preliminary urban design assessment considers a 400-foot radius study area where the Proposed Actions would be most likely to influence the built environment. The purpose of the preliminary assessment is to determine whether any physical changes proposed by the project would significantly impact elements of urban design, the following information, if known, is included in a preliminary assessment:

- A concise narrative of the existing project area and conditions under the future No-Action and With-Action conditions.
- If view corridors exist within the study area, a concise narrative describing the proposed project as it relates to visual resources should be provided. The narrative should include, as appropriate, information regarding the project's proximity to the visual resource(s), orientation, height, bulk, etc.
- An area map showing the context of the study area as described in Section 311, including major uses and view corridors, vehicular and pedestrian access, open spaces, community facilities, public transit corridors, bike paths and any other elements of urban design that affect the pedestrian experience of the project study area, as applicable.
- Ground-level photographs of the site area with immediate context.
- A three-dimensional representation of the future With-Action and No-Action (if relevant) condition.
- Known developments that are underway or approved as part of some other land use action.

If the preliminary assessment determines that a change to the pedestrian experience is minimal and unlikely to disturb the vitality, walkability or the visual character of the area, then no further assessment is necessary. However, if it shows that changes to the pedestrian environment are

significant enough to require greater explanation and further study, a detailed analysis may be appropriate.

2.5.1 Preliminary Assessment

The proposed rezoning of the Affected Area from M1-1 to MX (M1-2A/R7A) and MX (M1-2A/R6A) would alter permitted use, bulk, and height within the Affected Area. Therefore, further analysis is warranted. Within the Study Area, there are no existing publicly accessible view corridors, and there would be no significant adverse effects on visual resources as a result of the Proposed Actions. The differences between existing and proposed zoning, with regard to those aspects of zoning affecting urban design, are presented in the following **Table 2.5-1**.

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

	No-Action	**With-Action**	
Zoning	M1-1	MX (M1-2A/R7A)	MX (M1-2A/R6A)
Permitted Uses	Man, Com, CF	Man, Com, Res, CF	Man., Com., Res., CF
Maximum FAR	Manu. and Com.: 1.00 CF: 2.40	Com: 3.00 Res (MIH): 5.01 CF: 4.00 Man: 3.00	Com: 3.00 Res (MIH): 3.90 CF: 3.00 Man: 3.00
Maximum Height	Sky Exposure Plane	Base Height: 85 feet	Base Height: 65 feet
		Building Height: 115 feet	Building Height: 95 feet
Lot Coverage (corner lot)	N/A	100%	100%
Lot Coverage (interior lot or through lot)	N/A	100%	100%

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

Existing Conditions

Affected Area

The Proposed Actions would affect Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 (The Affected Area) in the Red Hook neighborhood of Brooklyn Community District 6. The Affected Area is located within an M1-1 zoning district and is bounded by Nelson Street to the north, Hicks Street to the west, Henry Street and Hamilton Avenue to the east, and

Huntington Street to the south. In addition, the Affected Area is located just west of the Gowanus Expressway, which runs south through Brooklyn and connects to the Prospect Expressway. The Affected Area is also located just south of the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway (BQE), which run north through Brooklyn. The Affected Area contains approximately 43,447 SF of lot area within Block 526, 20,000 SF of which the Applicant controls.

The Affected Area includes one Applicant-owned Projected Development Site (Block 526, Lot 1). Non-applicant-owned lots within the Affected Area include Block 526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29, and 31. Among the above-mentioned non-applicant-owned lots, one Potential Development Site (Block 526, Lots 13 and 14) has been identified:

Projected Development Site 1

The Applicant-Owned Development Site (Projected Development Site 1) is located at 46 Nelson Street (Block 526, Lot 1). Lot 1 is a 20,000-SF corner lot with frontages on Nelson Street, Hicks Street, and Huntington Street. The lot is currently improved with a 1-story, 16,000 GSF (15,385 ZSF, 0.77 FAR) manufacturing/equipment supplier building constructed in 1964.

Potential Development Site 1

Potential Development Site 1 includes Block 526, Lots 13 and 14.

- Lot 13 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) coffee business. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.
- Lot 14 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) moving company. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.

Study Area

The Affected Area is situated within a changing and transitional area between residential, manufacturing and community facility uses. Existing land uses within a 400-foot buffer around the Affected Area ("the Study Area" or "the Surrounding Area") consist of a varied mix of manufacturing/industrial, commercial, multi-family elevator and walk-up buildings, one-and two-family residences, mixed commercial and residential buildings, transportation and utility uses, public facilities and institutions, parking facilities, and vacant land.

Residential 1- and 2-family and multi-family buildings are located generally throughout the Surrounding Area. The Red Hook East and Red Hook West public housing complexes are located south of the Affected Area, bounded by West 9th, Lorraine, Dwight, and Clinton streets. There are several manufacturing buildings located in the Surrounding Area including, auto, sheet metal, electrical contractor, and film production businesses. There is a supermarket and a fast-food

restaurant located two blocks south of the Affected Area on Hicks Street. The Red Hook Initiative, a community-based nonprofit organization, is located just south of the Affected Area on Block 535. Several contiguous parking lots used for School Bus parking are located south of the Affected Area on Block 535. Summit Academy Charter School and the Red Hook Neighborhood School, PS 676 are located just west of the Affected Area on Block 525, and PAVE Academy Charter School is located two blocks south of the Affected Area on Block 539. There are also several houses of worship located in the Surrounding Area.

Built form in the Surrounding Area varies by use. Residential buildings generally consist of 2-3 story one and two-family residential buildings, 2-4 story multifamily walk-up buildings, and 6-11-story multi-family elevator buildings. The one-and two-family and multi-family walk-up buildings are primarily traditionally oriented, attached or semi-detached, with brick or stone façades. Mixed commercial and residential buildings are 2-4 stories tall, and commercial/office buildings, all located south of Huntington Street, are 1-3 stories tall. Public facilities/institutional buildings are located south and east of the Affected Area and range from 1-3 stories. Lastly, transportation/utility and manufacturing/industrial buildings are predominantly 1-2 stories in height.

The Study Area features a regular traffic grid, except where the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway (BQE), located along the eastern and northern portions of the Study Area, results in irregularly shaped blocks. Within the Study Area, Hamilton Avenue, which intersects with both Nelson Street and Henry Street, serves as a principal arterial roadway and a major commercial corridor. The area is located in the Outer Transit Zone and is well-served by transit. The Affected Area is within one-half mile from the Smith/9th Street MTA subway station serving the F and G trains and 0.2 miles west of the B57 and B61 bus stop at Mill and Clinton Streets.

The sidewalks surrounding the Affected Area exhibit varying conditions. The sidewalks surrounding the Subject Block along Nelson Street are in fair condition, with 15-foot-wide sidewalks along the north side of the road, and 10- to 15-foot-wide sidewalks along the south side of the road. On this segment of Nelson Street, street trees are more concentrated along the north side of the road and adequate street lighting is provided. The sidewalks surrounding the Subject Block along Hicks Street are in good to fair condition, with 15-foot-wide sidewalks along the east side of the road, and 10- to 15-foot-wide sidewalks along the west side of the road; the sidewalks along the west side of the road were recently reconstructed. On this segment of Hicks Street, street trees are more concentrated along the east side of the road and adequate street lighting is provided. The sidewalks surrounding the Subject Block along Huntington Street are in fair condition, with 10- to 12-foot-wide sidewalks along the north side of the road, and 10- to 12-foot-wide sidewalks along the south side of the road. On this segment of Huntington Street, street trees are absent on the south side of the road and limited on the north side of the road, while adequate street lighting is provided. The sidewalks surrounding the Subject Block along

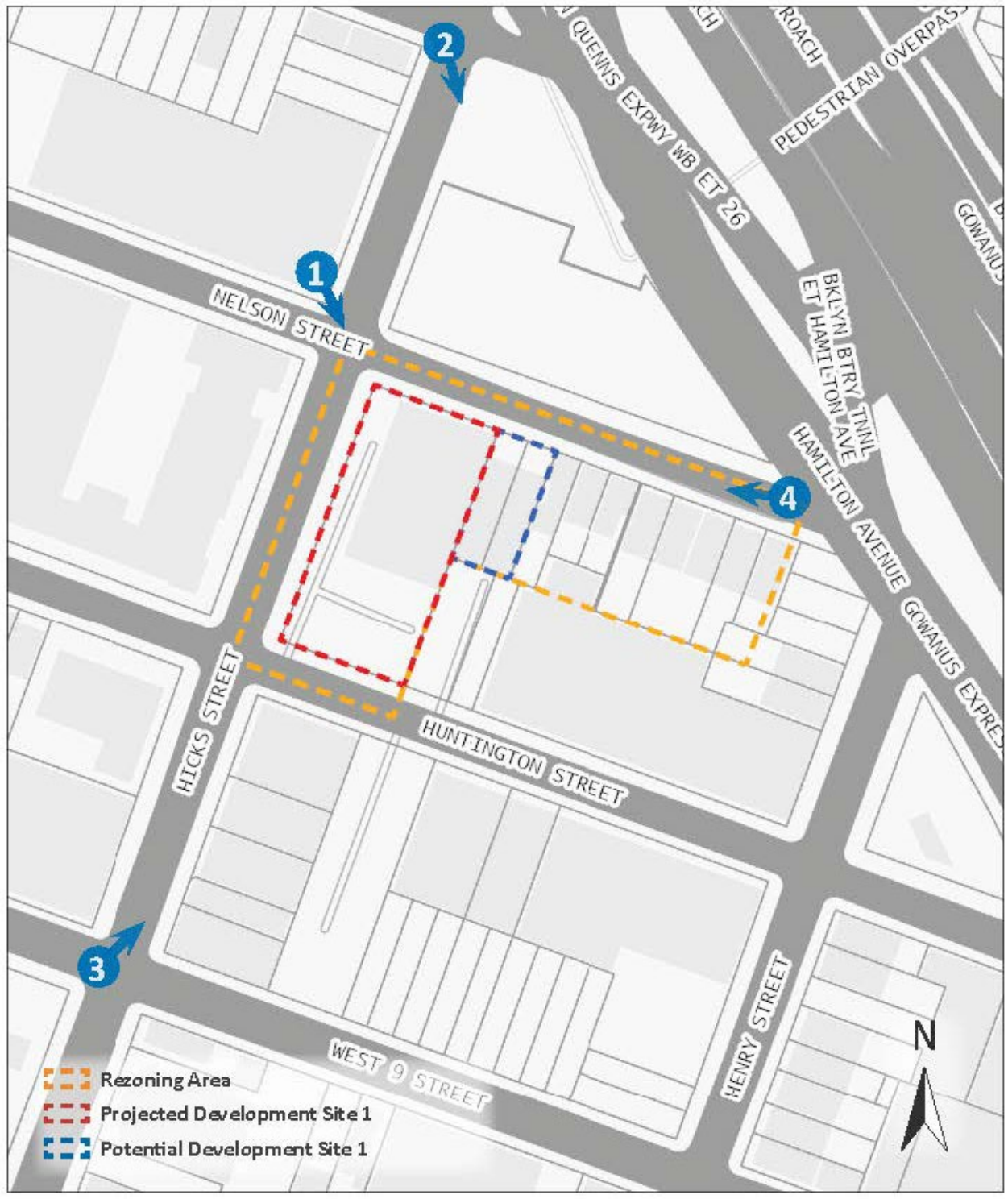
Henry Street are in good condition, with 15-foot-wide sidewalks along the west and east side of the road, and adequate street trees and street lighting provided.

As detailed below, the intersections surrounding the Subject Block are predominantly stop-controlled, with the exception of Hamilton Avenue and Henry Street, where an uncontrolled right turn can be made.

- Nelson Street and Hamilton Avenue: The intersection of Nelson Street and Hamilton Avenue is a T-intersection, where vehicles can make a right turn onto Hamilton Avenue from Nelson Street. The Nelson Street approach is stop-controlled and features a high-visibility crosswalk for pedestrians. While the crossing lacks updated ADA-compliant pedestrian ramps, the NYC Department of Transportation (NYC DOT) pedestrian ramp website shows planned improvements to these corners.
- Henry Street and Hamilton Avenue: The intersection of Henry Street and Hamilton Avenue is a T-intersection, where vehicles can make an uncontrolled right turn onto Henry Street. While the Henry Street approach along the uncontrolled leg of this intersection features a high-visibility crosswalk, the crossing lacks updated ADA-compliant pedestrian ramps. However, the NYC DOT pedestrian ramp website shows planned improvements to these corners.
- Nelson Street and Hicks Street: The intersection of Nelson Street and Hicks Street is a cross-intersection with four legs. All approaches to this intersection are stop-controlled, and all legs of the intersection feature high-visibility crosswalks and ADA-compliant pedestrian ramps.
- Huntington Street and Hicks Street: The intersection of Huntington Street and Hicks Street is a cross-intersection with four legs. All approaches to this intersection are stop-controlled, and all legs of the intersection feature high-visibility crosswalks. All corners of this intersection, except the northeast corner quadrant, feature ADA-compliant pedestrian ramps. However, the NYC DOT pedestrian ramp website shows planned improvements to this corner.
- Henry Street and Huntington Street: The intersection of Henry Street and Huntington Street is a cross-intersection with four legs. All approaches to this intersection are stop-controlled, and all legs of the intersection feature high-visibility crosswalks. While all four corner quadrants lack updated ADA-compliant pedestrian ramps, the NYC Department of Transportation (NYC DOT) pedestrian ramp website shows planned improvements to all corner quadrants.

A photo key for all images is shown below in **Figure 2.5-1**. These ground-level photographs of the site area under the existing conditions are shown in **Figure 2.5-2** to **Figure 2.5-5** below.

Figure 2.5-1: Urban Design Study Area – Photomontage Locations



Project Site Photo Key

Figure 2.5-2: Urban Design Massing View 1. Existing Conditions



1 Looking southeast toward the intersection of Hicks Street and Nelson Street.

Figure 2.5-3: Urban Design Massing View 2. Existing Conditions



2 Looking southeast along Hicks Street towards Projected Site 1 and Potential SIte 1.

Figure 2.5-4: Urban Design Massing View 3. Existing Conditions



3 Looking northeast toward the intersection of Hicks Street and West 9th Street

Figure 2.5-5: Urban Design Massing View 4. Existing Conditions



4 Looking west along Nelson Street towards Projected Site 1 and Potential SIte 1.

Future No-Action Condition

Affected Area

Redevelopment within the Affected Area is not considered likely in the Future No-Action Condition due to the bulk and uses permitted under the current M1-1 district (1.00 FAR industrial, 1.00 FAR commercial, and 2.4 FAR community facility). In addition, there are no records of building work permits submitted on the DOB website for Projected Development Site 1 or Potential Development Site 1. Therefore, it is conservatively assumed that under future conditions absent the Proposed Actions, existing conditions would remain within the Affected Area.

Study Area

No significant changes to the area's urban character are anticipated under future No-Action Conditions. There is one active construction permit in the Surrounding Area. A new 3-story residential building is under construction at 20 Luquer Street Block 520, tentative Lot 16 (former lots 13 and 16), approved as part of a variance from the NYC Board of Standards and Appeals (Cal No. 175-05BZ) pursuant to Zoning Resolution Section 72-21. This building would contain 12 dwelling units and 20,643 gross square feet. In the future, without the Proposed Actions, it is expected that while tenants within surrounding Study Area buildings may change, the overall use of these buildings would remain the same. Any new development within the Study Area, with the exception of the construction at 20 Luquer Street, would be governed by the underlying as-of-right zoning regulations.

Pedestrian activity within the Study Area under Future No-Action Conditions would not experience dramatic changes compared to existing conditions. The sidewalks, street trees, and lighting would be expected to generally remain in existing condition.

The Urban Design massing views in the 2028 build year No-Action Condition are shown in **Figure 2.5-6** to **Figure 2.5-9** below.

Future With-Action Condition

Affected Area

As detailed below, in addition to the Applicant-owned Projected Development Site, one Potential Development Site has been identified within the Affected Area, which may be developed under Future With-Action Conditions, but has been determined to have less development potential than the Projected Development Site.

The proposed M1-2A/R7A district would permit a maximum of 5.01 FAR for residential use (MIH area), 3.0 FAR for commercial uses, and 4.0 for community facility uses. The maximum building height is 115 feet after a setback from the base height of up to 85 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street. The Projected Development Site (which would be zoned M1-2A/R7A) fronts narrow

streets, therefore, a 15' setback is required. Within the Outer Transit Zone, off-street parking is required for 15 percent of the market-rate residential dwelling units, and is not required for income-restricted housing units. Parking can be waived if fewer than 15 spaces are required.

The proposed M1-2A/R6A district would permit a maximum of 3.9 FAR for residential use (MIH area), 3.0 FAR for commercial use, and 3.0 FAR for community facility uses. The maximum building height within the R6A zoning district is 95 feet after a setback from the base height of up to 65 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street. The Potential Development Site (which would be zoned M1-2A/R6A) fronts narrow streets, therefore, a 15' setback is required. Within the Outer Transit Zone, off-street parking is required for 25 percent of the market-rate residential dwelling units, and is not required for income-restricted housing units. Parking can be waived if fewer than 15 spaces are required.

Under Future With-Action Conditions, Projected Development Site 1 (Applicant-owned Block 526, Lot 1) would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses and 108 dwelling units, 17,876 GSF (17,118 ZSF, 0.86 FAR) of local retail, and 18,540 GSF of parking, storage, and utilities in the cellar. The building would have 11 stories and rise to 115 feet. The cellar would contain approximately 42 parking spaces, with access provided via one curb cut along Huntington Street.

Potential Development Site 1 (Block 526, Lots 13 and 14) would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses with 19 dwelling units on the upper floors. The building would have 9 stories and rise to 95 feet. No new curb cuts or parking would be provided.

Urban Design Study Area

The Proposed Actions would only affect the Affected Area. The Proposed Actions would introduce development that is larger in scale than the existing surrounding buildings. However, the density and uses permitted by the Proposed Actions would be appropriate for the location and consistent with the recent land use trends in the Surrounding Area.

The proposed M1-2A/R7A and M1-2A/R6A zoning districts would be compatible with the contextual residential districts mapped within the Carroll Gardens and Columbia Street rezoning to the north. Further, the M1-2A zoning under the new Zoning for Economic Opportunity Growth Districts would permit commercial and manufacturing uses at an FAR that is appropriate for the R6A and R7A zoning districts and consistent with a heavily mixed-use area. The proposed rezoning to M1-2A/R7A and M1-2A/R6A zoning districts would provide opportunities for mid-rise mixed-use building construction and help induce the development of underutilized lots within the Affected Area.

The Proposed Actions would allow new residential and commercial uses to come into the area and would bring into conformance the existing legal non-conforming residential uses present within the Affected Area, while also maintaining conformance of the current manufacturing/commercial uses. The development effectuated by the Proposed Actions would improve the pedestrian experience by renovating sidewalks and providing ground-floor local retail along Hicks Street, Nelson Street, and Huntington Street. In addition, the increased density and mixed-use development facilitated by the Proposed Actions is contextually appropriate due to the Affected Area's proximity to Hamilton Avenue, a major commercial corridor, and the elevated Gowanus Expressway and the Brooklyn-Queens Expressway (BQE).

The Urban Design Massing Views under the Future With-Action Condition in comparison to the Future No-Action Condition are shown below in **Figure 2.5-6** to **Figure 2.5-9**. Projected Development Site 1 is shown in red and Potential Development Site 1 is shown in blue.

2.5.2 Conclusion

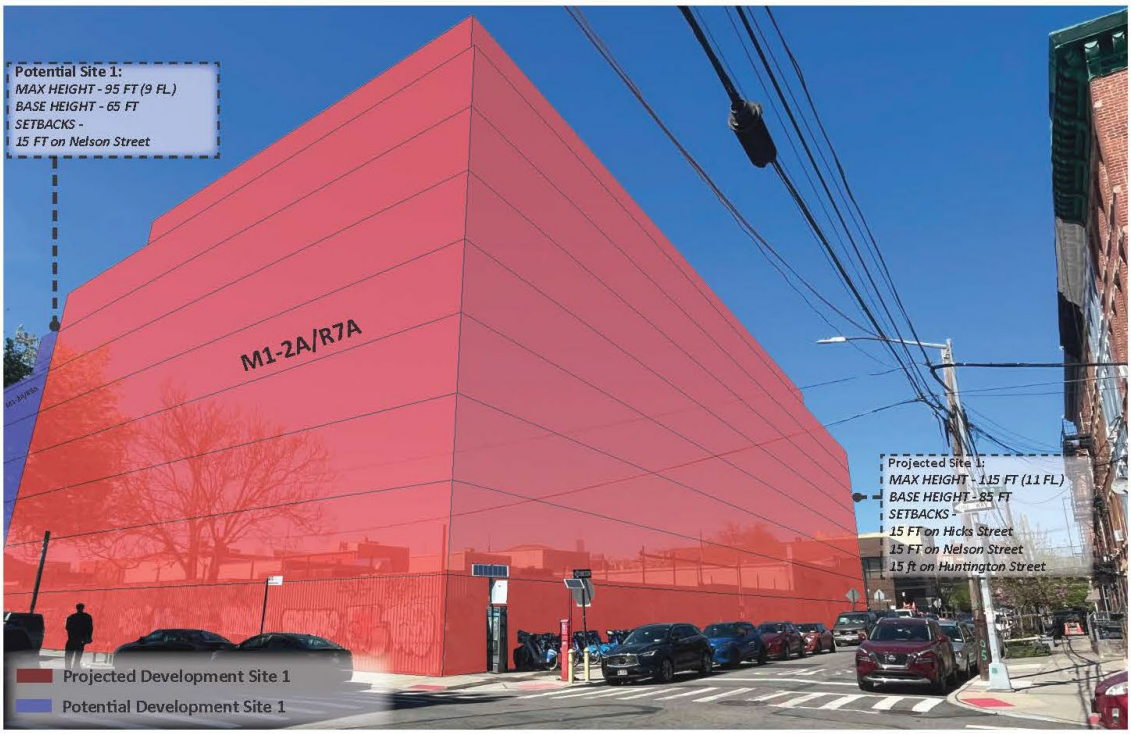
The development facilitated by the Proposed Actions would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood. It would not adversely impact or significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or visual character of the area. Instead, the mixed-use residential development with ground-floor commercial uses would improve the pedestrian experience and increase the vitality of the area. Therefore, the Proposed Actions would not result in any significant adverse impacts on urban design, and a detailed analysis is not warranted.

Figure 2.5-6: Massing View 1. Illustrative Comparison of No-Action and With-Action Conditions

No-Action Condition



With-Action Condition



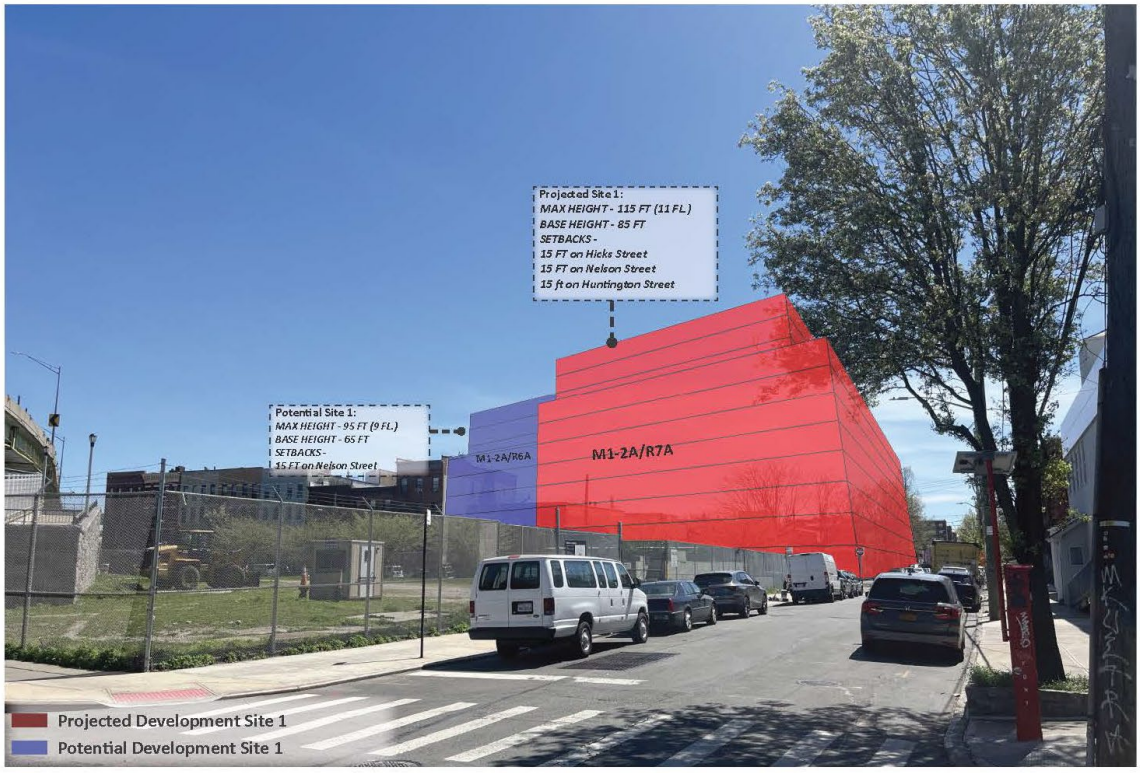
1 Looking southeast toward the intersection of Hicks Street and Nelson Street.

Figure 2.5-7: Massing View 2. Illustrative Comparison of No-Action and With-Action Conditions

No-Action Condition



With-Action Condition



2 Looking southeast along Hicks Street towards Projected Site 1 and Potential SIte 1.

Figure 2.5-8: Massing View 3. Illustrative Comparison of No-Action and With-Action Conditions

No-Action Condition



With-Action Condition



3 Looking northeast toward the intersection of Hicks Street and West 9th Street

Figure 2.5-9: Massing View 4. Illustrative Comparison of No-Action and With-Action Conditions

No-Action Condition



With-Action Condition



4 Looking west along Nelson Street towards Projected Site 1 and Potential SIte 1.

2.6 Hazardous Materials

According to the *2021 CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when: (a) hazardous material exists on a site, (b) an action would increase pathways to their exposure, or (c) an action would introduce new activities or processes using hazardous materials.

Methodology

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

ASTM Definitions:

- **Recognized Environmental Condition (REC)** - (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment
- **Historical Recognized Environmental Condition (HREC)** - A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).
- **Controlled Recognized Environmental Condition (CREC)** - A recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority…with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls….” This term applies to a site that has reached regulatory closure with the implementation of an engineering control, such as an impermeable cap, an institutional control, such as a deed restriction or activity and use limitation (AUL), and/or other property use limitation.

- **A Vapor Encroachment Condition (VEC)** - The presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property.
- **Business Environmental Risks (BER)** - A risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily limited to those environmental issues required to be investigated [under ASTM E1527-21]. BERs may involve one or more of the non-scope considerations outlined in ASTM E1527-21 including, but not necessarily limited to, asbestos-containing building materials, lead paint, lead and arsenic in drinking water, radon, wetlands, cultural and historical resources, regulatory compliance, industrial hygiene, health and safety, indoor air quality, and mold.
- **De Minimis Conditions** - A condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. ASTM E1527-21 does not consider de minimis conditions to be RECs.

Analysis Framework

Existing Condition

Projected Development Site 1

The Applicant-Owned Development Site (Projected Development Site 1) is located at 46 Nelson Street (Block 526, Lot 1). Lot 1 is a 20,000-SF corner lot with frontages on Nelson Street, Hicks Street, and Huntington Street. The lot is currently improved with a 1-story, 16,000 GSF (15,385 ZSF, 0.77 FAR) manufacturing/equipment supplier building constructed in 1964.

Potential Development Site 1

Potential Development Site 1 includes Block 526, Lots 13 and 14. Lot 13 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) coffee business. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC. Lot 14 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) moving company. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.

Future No-Action Condition

It is assumed that under the No-Action Scenario, existing conditions would continue on both Projected Development Site 1 and Potential Development Site 1.

Future With-Action Condition

Projected Development Site 1

Projected Development Site 1 (Applicant-owned Block 526, Lot 1) would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses, 17,876 GSF (17,118 ZSF, 0.86 FAR) of local retail, and 18,540 GSF of parking, storage, and utilities in the cellar. The building would have 11 stories and rise to 115 feet.

Potential Development Site 1

Potential Development Site 1 (Block 526, Lots 13 and 14) would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses on the upper floors. The building would have 9 stories and rise to 95 feet. No new curb cuts would be provided.

2.6.1 Phase I Environmental Site Assessment

The purpose of a Phase I ESA is to determine whether any type of environmental hazard exists within or adjacent to the project site. Environmental hazards may include, but are not limited to, hazardous/toxic wastes or raw chemicals stored, dumped, or spilled on the site, underground and above ground storage of petroleum or hazardous materials; asbestos within the building materials/structures; and identification of potential off-site sources of hazardous waste contamination, such as industrial facilities adjacent to the subject property.

GZA GeoEnvironmental has prepared a Phase I Environmental Site Assessment on April 16, 2024, in conformance with the scope and limitations of ASTM Practice E 1527-21 (*See* **Appendix D**). The following conditions were observed:

- Recognized Environmental Condition (RECs): In GZA's opinion, the Phase I ESA revealed no evidence of RECs in connection with the Subject Property
- Historical Recognized Environmental Condition (HRECs): In GZA's opinion, the Phase I ESA revealed no evidence of HRECs in connection with the Subject Property.
- Controlled Recognized Environmental Condition (CRECs): In GZA's opinion, the Phase I ESA revealed no evidence of CRECs in connection with the Subject Property.
- *De Minimis* Conditions: In GZA's opinion, the Phase I ESA revealed no evidence of De Minimis Conditions in connection with the Subject Property.
- Significant Data Gaps: In GZA's opinion, this Phase I ESA revealed one data gap which has the potential to affect the ability to identify RECs, CRECs, or HRECs at the Subject Property. City Directory listings state that the building on the Subject Property was a Goodyear

Truck Tire Center in 1976. No other historic records or database searches have yielded any other information of a tire service center at the Subject Property. The lack of additional information or detail regarding the potential Goodyear Truck Tire Center is considered a data gap for the Subject Property.

- Business Environmental Risks (BERs)
    - According to historic mapping and records, the Subject Property contained numerous structures from the early 1900s through 1964 with unknown heating sources. Evidence of former or inactive heating oil tanks were not observed; however, the historical heating source(s) (AST/UST) were not identified as part of this Phase I ESA. If heating oil tanks are identified or discovered during any demolition or development stages of Proposed Actions, GZA recommends they be assessed and removed in accordance with local and state requirements. Additionally, the former structures may have had basements that were filled in with unknown fill during demolition.
    - Historic mapping and records identified several automotive repair and fueling operations in the surrounding area of the Subject Property. While no open spill cases or releases were identified from these sites, the potential for releases from the nearby auto repair and fueling facilities are considered a BER.
    - GZA identified potential evidence of asbestos-containing material in the floor tiles located in the storage room on the north side of the building.
    - A suspected oil stain was observed on the floor of the building with no identified release to the environment. The suspected oil stain is considered a BER.

Based on the findings of the Phase I ESA, potential VECs have been ruled out. Therefore, the Subject Property under the Proposed Action is not anticipated to have the potential for adverse impacts related to hazardous materials and no further investigation is required.

2.6.2 Conclusion

Based on the findings and conclusions of Phase I ESA, the Proposed Actions would not result in the potential for significant adverse impact related to Hazardous Materials. Therefore, no further investigation is warranted at this time.

2.7 Transportation

Pursuant to *2021 CEQR Technical Manual* methodology, a transportation assessment may be necessary when a proposed action would alter the transportation network by closing, opening, or realigning an element of the transportation system such as a roadway, pedestrian way, or transit route, or if it would generate new trips on the transportation network. The objective of the transportation analyses is to determine whether a proposed project may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists and vehicles), on- and off-street parking, or goods movement.

This chapter assesses the potential for project-generated vehicle, transit, and pedestrian trips to affect the local transportation network.

Analysis Framework

Future No-Action Condition

Projected Development Site 1 – (Applicant-owned Block 526, Lot 1):

The Applicant-Owned Development Site (Projected Development Site 1) is located at 46 Nelson Street (Block 526, Lot 1). Projected Development Site 1 is a 20,000-SF corner lot with frontages on Nelson Street, Hicks Street, and Huntington Street. The lot is currently improved with a 1-story, 16,000 GSF (15,385 ZSF, 0.77 FAR) manufacturing/equipment supplier building constructed in 1964. Existing conditions are expected to remain in the future No-Action Condition.

Future With-Action Condition

Projected Development Site 1 – (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses, 17,876 GSF (17,118 ZSF, 0.86 FAR) of ground floor local retail use, and 18,540 GSF of parking, storage, and utilities in the cellar. There would be approximately 108 dwelling units. The cellar would contain approximately 42 parking spaces (as proposed by the Applicant), while no parking would be required per ZR Section 25-222. One curb cut would be proposed along Huntington Street providing access to the below-grade parking.

The incremental change in land use at Projected Development Site 1 from the future No-Action Condition to the future With-Action Condition is detailed below in **Table 2.7-1**.

Table 2.7-1: Increment Summary Table

Site	Land Use	Existing		No-Action		With-Action	
		gsf	DU	gsf	DU	gsf	DU
Site 1	Local Retail (UG 6)	0	-	0	-	17,876	-
	Residential (UG 2)	-	0	-	0	-	108
	Light Industrial	16,000	-	16,000	-	-16,000	-

2.7.1 Preliminary Assessment

Based on the Affected Area's location, it is within Traffic Zone 3. According to Table 16-1 of the *2021 CEQR Technical Manual*. In this zone, a residential development of fewer than 200 residential units, 15,000 square feet of local retail, or 25,000 square feet of community facility space, or an average below 1.00 of any of the above, typically does not warrant further assessment of the potential for adverse effects on Transportation. Incremental development under the Proposed Actions, compared to No-Action conditions, would consist of 108 more residential dwelling units (0.54 average) and an increase of 17,876 GSF of local retail space (1.19 average), which results in an average of 1.73 for the Proposed Actions. Therefore, a Level 1 Trip Generation Screening is required.

2.7.1.1 Level 1 Trip Generation Screening Assessment

Methodology

The *2021 CEQR Technical Manual* states that a preliminary Level 1 Trip Generation Screening Assessment should be prepared to determine whether a quantified analysis of any technical areas of the transportation system is necessary. Except in unusual circumstances, a further quantified analysis would typically not be needed for a technical area if the Proposed Development would result in fewer than the following increments:

- 50 peak-hour vehicle trips;
- 200 peak-hour subway/rail or bus transit riders (or 50 bus trips in a single direction on a single route during a peak hour);
- 50 CWFS Ferry Trips; or
- 200 peak hour pedestrian trips.

The *CEQR Technical Manual* also states that if the threshold for traffic is surpassed, a parking assessment may also be warranted. The above thresholds for the pedestrian element assessment do not apply to new or expanded schools, for which detailed pedestrian analyses are typically required. These analyses should concentrate on the safety and operations of pedestrian elements (i.e., intersections with a high number of pedestrian accidents, uncontrolled pedestrian crossing(s), narrow sidewalks, non-ADA-compliant pedestrian ramps, etc.) along key access routes to/from the school.

Transportation Planning Assumptions

As **Table 2.7-2** shows, the assumption of the travel factors is determined based on the listed data sources below. **Table 2.7-3** shows the incremental project-generated person trips, vehicular trips, and pedestrian trips based on the travel factors in **Table 2.7-2**.

Local Retail

The daily trip generation, temporal distribution, directional splits, modal splits, truck trip generation, truck temporal distribution, and truck directional splits were taken from the *2021 CEQR Technical Manual*. The auto and taxi vehicle occupancy rates were based on the East New York FEIS.

Residential

The daily trip generation, temporal distribution, truck trip generation, truck temporal distribution, and truck directional splits were taken from the *2021 CEQR Technical Manual*. The modal splits and auto occupancy were taken from 2015 – 2019 ACS data for Brooklyn Census Tracts 51, 53, 59, 63, 65, and 85. Taxi occupancy was taken from the East New York FEIS.

Light Industrial

The AM, PM and Saturday MD peak hour modal splits were taken from Reverse Journey to Work CTPP 2012-2016 census data for Brooklyn Census Tracts 51, 53, 59, 63, 65 and 85. All other inputs are taken from the East New York FEIS.

Table 2.7-2: Transportation Demand Factors

	Residential		Local Retail		Light Industrial	
Trip Generation	(1)		(1)		(3)	
Weekday	8.18		329		14.7	
Saturday	9.08		358		2.2	
	per dwelling unit		per 1,000 sf		per 1,000 sf	
Temporal Distribution	(1)		(1)		(3)	
AM	9.3%		4.8%		13.2%	
MD	5.6%		8.0%		11.0%	
PM	8.5%		10.9%		14.2%	
Sat MD	8.4%		11.7%		10.7%	
Modal Splits	(2) All hours		(1) All hours		(4) AM/PM/SAT	(3) MD
Auto	14.5%		11.0%		55.2%	2.0%
Taxi	1.9%		0.0%		0.6%	3.0%
Bus	5.0%		2.0%		7.1%	6.0%
Subway	56.7%		3.0%		21.5%	6.0%
Walk/Other	21.9%		84.0%		15.6%	83.0%
In/Out Splits	In (1)	Out (1)	In (1)	Out (1)	In (3)	Out (3)
AM	22%	78%	52%	48%	88%	12%
MD	50%	50%	50%	50%	50%	50%
PM	62%	38%	50%	50%	12%	88%
Sat MD	55%	45%	50%	50%	47%	53%
Vehicle Occupancy	(2) (3)		(3)		(3)	
Auto	1.13		2.00		1.20	
Taxi	1.30		2.00		1.20	
Truck Trip Generation	(1) per DU		(1) per 1000 sf		(3) per 1000 sf	
Weekday	0.06		0.35		0.67	
Saturday	0.02		0.04		0.67	
Temporal Distribution	(1)		(1)		(3)	
AM	12.0%		8.0%		14.0%	
MD	9.0%		11.0%		9.0%	
PM	2.0%		2.0%		1.0%	
Saturday	9.0%		11.0%		0.0%	
In/Out Splits	In	Out	In	Out	In	Out
AM/MD/PM/Sat	50%	50%	50%	50%	50%	50%

1 = 2021 CEQR Technical Manual
2 = JTW ACS 2015-2019 Brooklyn Census Tracts 51, 53, 59, 63, 65, and 85
3 = East New York Rezoning FEIS
4 = RJTW CTPP 2012-2016 Brooklyn Census Tracts 51, 53, 59, 63, 65, and 85

Table 2.7-3: Total Project Generated Trip-Ends

	Residential		Local Retail (1)(2)		Light Industrial		Total		
Size (gsf)	108 Du		17,876 gsf		-16,000 gsf				
Peak Hour Trips									
AM	82		282		-31		333		
MD	49		470		-26		494		
PM	75		641		-33		683		
Sat MD	82		749		-4		827		
Person Trips									
AM	In	Out	In	Out	In	Out	In	Out	In/Out Total
Auto	3	9	16	15	-15	-2	4	22	26
Taxi	0	1	0	0	0	0	0	1	1
Bus	1	3	3	10	-2	0	2	13	15
Subway	10	36	4	11	-6	-1	9	47	55
Walk/Other	4	14	118	109	-4	-1	118	123	241
Total	18	64	142	145	-27	-4	133	206	338
MD	In	Out	In	Out	In	Out	In	Out	In/Out Total
Auto	4	4	26	26	0	0	29	29	58
Taxi	0	0	0	0	0	0	0	0	0
Bus	1	1	5	5	-1	-1	5	5	10
Subway	14	14	7	7	-1	-1	20	20	41
Walk/Other (1)	5	5	196	198	-11	-11	190	192	383
Total	25	25	233	235	-13	-13	245	247	492
PM	In	Out	In	Out	In	Out	In	Out	In/Out Total
Auto	7	4	35	35	-2	-16	40	23	63
Taxi	1	1	0	0	0	0	1	0	1
Bus	2	1	6	6	0	-2	8	6	14
Subway	26	16	10	10	-1	-6	35	19	55
Walk/Other (1)	10	6	267	267	-1	-5	276	268	544
Total	47	29	318	318	-4	-29	360	317	677
Saturday	In	Out	In	Out	In	Out	In	Out	In/Out Total
Auto	7	5	41	41	-1	-1	47	45	92
Taxi	1	1	0	0	0	0	1	1	2
Bus	2	2	7	7	0	0	10	9	19
Subway	26	21	11	11	0	0	37	32	68
Walk/Other (1)	10	8	311	311	0	0	321	319	640
Total	45	37	371	371	-2	-2	415	406	821
Vehicle Trips									
AM	In	Out	In	Out	In	Out	In	Out	In/Out Total
Auto (2)	2	8	5	5	-13	-2	-6	11	5
Taxi	0	1	0	0	0	0	0	1	1
Taxi Balanced	1	1	0	0	0	0	1	1	2
Truck	0	0	0	0	-1	-1	-1	-1	-2
Total	3	9	5	5	-14	-3	-6	11	5
MD	In	Out	In	Out	In	Out	In	Out	In/Out Total
Auto (2)	3	3	11	11	0	0	14	14	28
Taxi	0	0	0	0	0	0	0	0	0
Taxi Balanced	0	0	0	0	0	0	0	0	0
Truck	0	0	0	0	0	0	0	0	0
Total	3	3	11	11	0	0	14	14	28
PM	In	Out	In	Out	In	Out	In	Out	In/Out Total
Auto (2)	6	4	15	15	-2	-14	19	5	24
Taxi	1	0	0	0	0	0	1	0	1
Taxi Balanced	1	1	0	0	0	0	1	1	2
Truck	0	0	0	0	0	0	0	0	0
Total	7	5	15	15	-2	-14	20	6	26
Saturday	In	Out	In	Out	In	Out	In	Out	In/Out Total
Auto (2)	6	5	18	18	-1	-1	23	22	45
Taxi	1	1	0	0	0	0	1	1	2
Taxi Balanced	2	2	0	0	0	0	2	2	4
Truck	0	0	0	0	0	0	0	0	0
Total	8	7	18	18	-1	-1	25	24	49

Notes:

(1) Assumes 4%, 1%, 1%, and 1% linked trip credit for local retail walk trips during the AM, MD, PM, and Saturday peak hours, respectively.

(2) Assumes 33%, 12%, 14%, and 12% linked trip credit for local retail auto trips during the AM, MD, PM, and Saturday peak hours, respectively.

Trip Generation Summary

The *2021 CEQR Technical Manual* provides a methodology for evaluating the potential impacts of a Proposed Project on the transportation system. In accordance with the *2021 CEQR Technical Manual*, a Level 1 Screening Assessment includes a trip generation analysis to determine whether the project would result in more than 50 vehicle trip-ends, 200 subway/rail or bus transit riders, 50 CWFS ferry trips, or 200 pedestrian trip-ends in a peak hour.

The incremental project-generated trip ends determined based on the Level 1 Trip Generation Screening are summarized below in **Table 2.7-4**.

Traffic

As shown in **Table 2.7-4**, the Proposed Project would generate fewer than 50 vehicle trips during all identified peak hours. Therefore, further analysis of vehicular trips is not warranted.

Subway

As shown in **Table 2.7-4**, the Proposed Project would generate fewer than 200 subway trips during all identified peak hours. Therefore, further transit analysis is not warranted.

Bus

As shown in **Table 2.7-4**, the Proposed Project would generate fewer than 200 MTA bus trips during all identified peak hours. Therefore, further transit analysis is not warranted.

Pedestrian

As shown in **Table 2.7-4**, the Proposed Project would generate greater than 200 combined pedestrian trip ends (including pedestrians walking to / from subway stations and bus stops as well as walk-only trips) during all identified peak hours and therefore a Level 2 screening assessment of pedestrian trips is warranted.

Table 2.7-4: Project Generated Trip Ends Summary

Peak Hour	AM Peak Hour	Midday Peak Hour	PM Peak Hour	Saturday Peak Hour
Total Walk-Only Trip-Ends	241	383	544	640
Total Subway Trip-Ends	55	41	55	68
Total MTA Bus Trip-Ends	15	10	14	19
Total Pedestrian Trip-Ends	311	434	613	727
Total Vehicular Trip-Ends	5	28	26	49
Highlighted cells denote trips in exceedance of 200 pedestrians or 50 vehicles per peak hour				

2.7.1.2 Level 2 Screening Assessment

Methodology

A Level 2 Screening Assessment assigns project-generated vehicular and pedestrian trips to specific intersections, bus routes, subway lines, CWFS ferry routes, or parking facilities. If the results of the analysis concludes that the Proposed Action(s) would result in intersections with 50 or more vehicle trips, pedestrian elements with 200 or more pedestrian trips, 50 or more bus trips in a single direction on a single route, 25 or more passenger ferry trips in a single direction on a single route, 50 or more passengers at a ferry landing, or 200 or more passengers at a subway

Pedestrians

As discussed above, incremental pedestrian trips resulting from the proposed project (including pedestrians walking to and from area subway stations and bus stops) would exceed the CEQR Level-1 screening threshold during all four peak hours. As such, a Level 2 Trip Assignment was prepared for the Weekday AM, Midday, PM and Saturday Midday peak hours.

Site Access and Egress Assumptions

Projected Development Site 1 proposes a single lobby for the residential use, and two separate entrances for the commercial use along Hicks Street. In addition, a third entrance for the commercial use is proposed along Nelson Street. Pedestrians were assigned to specific frontages based on the land use in which the trips were derived, and entrance/exit locations.

Origin and Destination Assumptions

MTA Bus Trips

The location of bus stops, the bus lines that serve each stop, the route each line covers, and the connections these lines allow for, were considered and applied to bus riders traveling to and from the Projected Development Site. There are two bus lines (B57 and B61) that are accessible to users in the area. The B57, which provides service between Gowanus and Maspeth has stops on Clinton Street and Garnet Street, while the B61, which provides service between Downtown Brooklyn and Park Slope, has its nearest stops along Van Brunt Street in proximity to the affected area. Project generated pedestrian trips to and from area bus stops were distributed to the shortest routes between the proposed building entrances and the nearest bus stops.

Subway Trips

All subway users are expected to utilize the Smith/9th Street MTA subway station serving the F and G trains. Project generated pedestrians were assigned to the shortest routes between the proposed building and the Smith/9th Street Station.

Walk-Only Trips

Residential walk only trips were distributed evenly throughout the network and local retail walk only trips were distributed based on population density data. The specific entrances/exits pedestrians would use based and their trip purpose, as well as the specifics of the street network surrounding the sites were considered.

Conclusion

The Level 2 screening analysis for pedestrians indicates that more than 200 pedestrian trips are expected at the crosswalks, sidewalks, and corners listed below during one or more peak analysis hours. As a result, and in accordance with the *2021 CEQR Technical Manual*, a detailed quantitative analysis is required for these pedestrian elements.

- Sidewalks
    - Hicks Street between Nelson Street and Huntington Street (East Side)
    - Hicks Street between Nelson Street and Luquer St (East Side)
    - Luquer Street between Hicks Street and Hamilton Avenue (South Side)
    - Hamilton Avenue between Luquer St and Nelson Street (West Side)
    - Hamilton Avenue pedestrian Bridge
    - Coles Street west of Henry Street (North Side)
- Corners
    - Coles Street and Henry Street (NW)

It should be noted that the corners and crosswalks listed below also exceed the 200-pedestrian trips analysis threshold during one or more peak hours. However, they are all located at unsignalized intersections and are therefore not included in the detailed pedestrian level of service analysis.

Hicks Street and Luquer Street

- Southeast Corner

Hicks Street and Nelson Street

- Northeast Corner
- Southeast Corner
- East Crosswalk

Hicks Street and Huntington Street

- Northeast Corner

2.7.2 Detailed Pedestrian Analysis

Pending

2.8 Air Quality

When assessing the potential for air quality significant impacts, the *2021 CEQR Technical Manual* seeks to determine a Proposed Action's effect on ambient air quality, or the quality of the surrounding air. Ambient air can be affected by motor vehicles, referred to as "mobile sources," or by fixed facilities, referred to as "stationary sources." This can occur during operation and/or construction of a project being proposed. The pollutants of concern include six criteria pollutants, which are the most common pollutants, and hazardous air pollutants (HAPs), air toxics or toxic air pollutants known as noncriteria pollutants.

Methodology

The *2021 CEQR Technical Manual* generally recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., roadways, parking lots, garages). The *CEQR Technical Manual* generally recommends assessments when new stationary sources of pollutants are created, when a new use might be affected by existing stationary sources, or when stationary sources are added near existing sources and the combined dispersion of emissions would impact surrounding areas.

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered.

Pollutants of Concern

The Clean Air Act (CAA) is a comprehensive federal law that regulates all sources of air emissions. The CAA requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants that are common in outdoor air, considered harmful to public health and the environment, and that come from numerous and diverse sources. The EPA has identified six key pollutants considered harmful to public health and the environment. In addition, national and state regulations identified numerous other pollutants, primarily due to industrial activities.

- Carbon monoxide (CO) is a colorless, odorless gas, which is primarily formed by incomplete combustion of carbon-containing fuels and by photochemical reactions in the atmosphere. Nationally, particularly in urban areas, the majority of CO emissions to ambient air come from mobile sources. The majority of these on-road CO emissions are derived from gasoline

powered vehicles.[6] Because CO disperses quickly, its concentrations may vary greatly over relatively short distances. Elevated concentrations are usually limited to locations near congested intersections and along heavily traveled and congested roadways.

- Nitrogen oxides (NOx) are emitted from both mobile and stationary sources. Nitric Oxide (NO) accounts for approximately 90% of the total oxidized nitrogen emitted. In the atmosphere, and in the presence of sunlight, NO reacts with radicals and ozone (O_3) to form mainly nitrogen dioxide (NO_2).[7] Ground-level ozone is formed when volatile organic compounds (VOCs), also known as hydrocarbons, and nitrogen oxides (NOx) interact in the presence of sunlight. Because the reactions are slow and occur as the pollutants are transported downwind, elevated ozone levels are often found many miles from the sources of the precursor pollutants.

  The zone of elevated NO_2 concentration from vehicular emission extends away from the roadway. Therefore, the effects of NOx (NO and NO_2) emissions from mobile sources are generally examined on a regional basis. The Proposed Action would not substantially increase the vehicle mile traveled or stationary source emissions at a regional scale. Therefore, mesoscale (regional) analysis for ozone precursor is not required. The Proposed Action would include stationary fuel combustion sources (boiler(s) for heating and hot water). Therefore, the proposed project's effects on local NO_2 concentration were evaluated.

- Airborne particulate matter (PM) is a mixture of substances suspended in air as small liquid and/or solid particles. In contrast to the other criteria pollutants, PM does not have a unique chemical composition. These individual particles range in size from less than 0.01 µm to more than 10 µm. $PM_{2.5}$ is the abbreviation for fine PM with a diameter smaller than 2.5 microns. PM_{10} refers to particulates with a diameter less than or equal to 10 micrometers. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye.

  PM sources are both primary and secondary in nature. Primary sources are specific sources, such as particles produced by mechanical abrasion. Secondary PM sources originate from gas-phase chemical compounds that condensate with certain gasses or when different gasses react with each other. These small particles might then coagulate with other particles to form larger particles. Sulfur oxides, nitrogen oxides, and volatile organic compounds (VOC) are examples of PM precursors.[8] The burning of fossil fuels can produce both primary and secondary PM. $PM_{2.5}$ is extremely persistent in the atmosphere and has the ability to reach

[6] EPA. *Integrated Science Assessment (ISA) for Carbon Monoxide (Final Report, Jan 2010)*. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-09/019F, 2010

[7] EPA. *Integrated Science Assessment (ISA) for Oxide of Nitrogen – Health Criteria (Final Report, Jan 2010)*. U.S. Environmental Protection Agency, Washington, DC, EPA/ EPA/600/R-15/068, 2016

[8] EPA. *Integrated Science Assessment (ISA) for Particulate Matter (Final Report, Dec 2019)*. U.S. Environmental Protection Agency, Washington, DC, EPA EPA/600/R-19/188, 2019

the lower regions of the respiratory tract, delivering with it other compounds that adsorb to the surfaces of the particles.

Anthropogenic sources of PM are prevalent in many activities. Common sources include fuel combustion, such as in boilers or vehicular engines, industrial processes, such as spray painting or sanding of wood, and construction activities. Fugitive road dust that gets airborne when vehicles traverse roadways is also a common source.

- Fossil fuel combustion is the main anthropogenic source of primary SO_2. The amount of SO_2 emitted is directly related to the amount of sulfur in the fuel. Therefore, fuels with low sulfur content produce little SO_2. Beginning in 2006, the EPA began to phase in more stringent regulations to lower the amount of sulfur in diesel fuel to 15 parts per million (ppm). This fuel is known as ultra-low sulfur diesel (ULSD). SO_2 is also a precursor for the formation of $PM_{2.5}$. As such, controlling SO_2 emissions controls $PM_{2.5}$ concentrations.

  The amount of SO_2 emitted from on-road vehicles is not significant. Therefore, mobile source analysis for SO_2 is not required. The developments could potentially include stationary fuel combustion sources (boiler(s) for heating and hot water), where fuel oil No. 2 is burned. Therefore, effects on local SO_2 concentration were examined.

- Emissions of lead (Pb) have dropped substantially over the past 40 years as a result of phasing out of Pb as an anti-knock agent in gasoline for on-road vehicles, and later from enhanced controls of the metal processing industry.[9] The Proposed Action is unlikely to result in lead emission. Therefore, no analysis is required.

- Noncriteria pollutants, also referred to as toxic air pollutants or air toxics, are mainly associated with industrial sources. The CAA identifies 187 HAPs to be regulated by the EPA (currently there are 185 HAP), where the EPA regulates their emissions. These are substances that cause or may cause cancer or other serious health effects. In addition, the New York State Department of Environmental Conservation (NYSDEC) identified numerous other pollutants (also noncriteria pollutants) of various toxicities for which the EPA has no established standards.

Applicable Standards/Guidelines

Criteria Pollutants

As required by the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for the most common air pollutants (six 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

[9] EPA. *Integrated Science Assessment (ISA) for Lead (Final Report, Jul 2013)*. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-10/075F, 2013

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 (CAA), 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.

Significant adverse air quality impact related to criteria pollutants accounts for existing pollutant concentrations in the ambient air (background concentrations). Background concentrations from the nearest New York State Department of Environmental Conservation (NYSDEC) federally-mandated monitoring station(s) (2019 annual report, prior to COVID-19 effect on pollutant background concentrations) were applied in the analysis. **Table 2.8-1** shows the primary NAAQS and background concentrations of the pollutant(s) that a detailed analysis was conducted for.

Table 2.8-1: Background Concentration at the NYSDEC Nearest Monitoring Station

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
$PM_{2.5}$	24-Hour	35 µg/m^3	17.8 µg/m^3	JHS 126
	Annual	9.0 µg/m^3	7.6 µg/m^3	
PM_{10}	24-Hour	150 µg/m^3	43 µg/m^3	Division Street
CO	1-Hour	35 ppm	1.87 ppm	CCNY
	8-Hour	9 ppm	1.30 ppm	

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply $PM_{2.5}$ and CO significant impact criteria (based on concentration increments). The *CEQR Technical Manual de minimis* criteria set allowable incremental increases in CO and $PM_{2.5}$ concentrations that would result as a consequence of a proposed project. CO criteria set the minimum change in 8-hour average concentration that constitutes a significant environmental impact. Significant increases in CO concentrations in New York City are:

- An increase of 0.5 parts per million (ppm) or more in the maximum 8-hour average CO concentration at a location where the predicted No-Action 8-hour concentration is equal to 8 ppm or between 8 ppm and 9 ppm; or
- An increase of more than half the difference between baseline (i.e., No-Action) concentrations and the 8-hour standard, when No-Action concentrations are below 8 ppm.

$PM_{2.5}$ significant impact concentrations are evaluated as follows:

- 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 µg/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).

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

Noncriteria Pollutants and New York State Standards

Noncriteria pollutants include hundreds of toxic pollutants, ranging from high to low toxicities. High-toxicity contaminants include potential human carcinogens, such as 188 hazardous air pollutants (HAPs). Moderate-toxicity contaminants may consist of animal carcinogens and other substances, posing a health risk to humans. Low-toxicity contaminants generally include contaminants that are of primary concern as irritants. The NYSDEC has established guidelines for the maximum allowable concentration of noncriteria air contaminants. The maximum permissible guidelines set maximum 1-hour and annual averaging time concentrations published (February 12, 2021 publication) in the DAR-1 Annual and Short-term Guideline Concentration (AGC/SGC Table). In addition, DAR-1 also includes standards for pollutants cumulative risk assessment.

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

Analysis Framework

Future No-Action Condition

Projected Development Site 1 (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 is located at 46 Nelson Street (Block 526, Lot 1). Lot 1 is a 20,000-SF corner lot with frontages on Nelson Street, Hicks Street, and Huntington Street. The lot is currently improved with a 1-story, 16,000 GSF (15,385 ZSF, 0.77 FAR) manufacturing/equipment supplier building constructed in 1964. It is conservatively assumed that under the Future No-Action Scenario, existing conditions would continue on Projected Development Site 1.

Potential Development Site 1 (Block 526, Lots 13 and 14):

- Lot 13 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) coffee business.
- Lot 14 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) moving company.

It is conservatively assumed that under the Future No-Action Scenario, existing conditions would continue on the non-Applicant-owned Potential Development Site 1.

Future With-Action Condition

Projected Development Site 1 – (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses, 17,876 GSF (17,118 ZSF, 0.86 FAR) of ground floor local retail, and 18,540 GSF of parking, storage, and utilities in the cellar. There would be approximately 108 dwelling units. The building would have 11 stories and rise to 115 feet. The cellar parking would contain approximately 42 parking spaces. One curb cut would be proposed along Huntington Street providing access to the below-grade parking.

Potential Development Site 1 – (Block 526, Lots 13 and 14; Non-Applicant Lots)

Potential Development Site 1 would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses on the upper floors. There would be approximately 19 dwelling units. No parking would be provided. The building would have 9 stories and rise to 95 feet. No new curb cuts would be provided.

2.8.1 Mobile Sources

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

- Projects that would result in the placement of operable windows, balconies, air intakes or intake vents generally within 200 feet of an atypical source of vehicular pollutants.
- Projects that would result in the creation of a fully or partially covered roadway, would exacerbate traffic conditions on such a roadway, or would add new uses near such a roadway.
- Projects that would generate peak hour auto traffic or divert existing peak hour traffic of 170 or more auto trips in this area of the City.
- Projects that would generate peak hour heavy-duty diesel vehicle traffic or its equivalent in vehicular emissions resulting from 12 or more heavy-duty diesel vehicles (HDDVs) for paved roads with average daily traffic of fewer than 5,000 vehicles, 19 or more HDDVs for collector roads, 23 or more HDDVs for principal and minor arterials, or 23 or more HDDVs for expressways and limited-access roads.

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

Preliminary Screening

The Proposed Actions would not result in the creation of a covered roadway or affect any covered roadway. Peak hour trip generation is below the 170-car threshold, as per the transportation section, as potentially warranting further assessment. The project would not create a new sensitive receptor adjacent to large parking facilities. The project would not result in the creation of a new parking facility with an increment of 85 or more parking spaces.

The Proposed Actions would result in operable windows or air intakes within 200 feet of an atypical roadway. The Affected Area is located just west of the Gowanus Expressway and just south of the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway (BQE). Accordingly, an analysis to determine if the Proposed Actions would result in significant adverse impacts associated with the adjacency to this roadway is presented below.

A preliminary screening was conducted to determine if the project would generate HDDV traffic or its equivalent in vehicular emissions exceeding the *CEQR Technical Manual* threshold of more than 12 – 23 per hour depending on the road type. The intersections where the highest concentrations of peak-hour project-generated automobiles and trucks are anticipated to traverse, and their respective New York State Department of Transportation Functional Classifications, include the following:

1. Huntington Street (local road) and Hicks Street (local road)
2. Huntington Street (local road) and Henry Street (local road)
3. Hamilton Avenue (principal arterial) and Huntington Street (local road)
4. West 9th Street (minor arterial) and Hicks Street (local road)
5. West 9th Street (minor arterial) and Henry Street (local road)
6. West 9th Street (minor arterial) and Hamilton Avenue (principal arterial)

Using the worksheet provided in the *2021 CEQR Technical Manual*, project-generated auto and truck trips were screened at the surrounding Study Area intersections referenced above, based on the incremental project-generated vehicle assignments for the Saturday MD Peak hour (the highest peak hour for vehicle trips). Based on guidance from the Department of City Planning

(DCP) on similar projects, all autos were assumed to be LDGT1 class vehicles. **Table 2.8-2** shows the project-generated Auto and Truck Trips at each Study Area intersection and the results of the *CEQR Technical Manual* Equivalent Truck Calculation. As shown below, all study intersections pass the HDDV screening. Therefore, no further analysis is warranted.

Table 2.8-2: HDDV Screen

Intersection ID	Intersection	Threshold EQU Truck Minor Road	Threshold EQU Truck Major Road	Sat MD					
				Total Vehicles Major Road	Total Vehicles Minor Road	Total Trucks Major Road	Total Trucks Minor Road	E-Trucks Ratio	Pass/Fail
1	Huntington St and Hicks St	12	12	21.0	4.0	0.0	0.0	0.97	Pass
2	Huntington St and Henry St	12	12	0.0	24.0	0.0	0.0	0.93	Pass
3	Hamilton Ave and Huntington St	12	23	7.0	23.0	0.0	0.0	0.90	Pass
4	Hicks St and West 9th St	12	23	22.0	0.0	0.0	0.0	0.04	Pass
5	Henry St and West 9th St	12	23	21.0	1.0	0.0	0.0	0.08	Pass
6	Hamilton Ave and West 9th St	23	23	14.0	31.0	0.0	0.0	0.09	Pass

2.8.1.1 A-Typical Roadway Detailed Analysis

According to the *2021 CEQR Technical Manual*, projects that would result in new sensitive uses within 200 feet of an atypical roadway(s) may result in significant adverse mobile source air quality impacts.

Projected Development Site 1 and Potential Development Site 1 are located within 200 feet from the Gowanus Expressway (I-278) northbound traveling lanes fork to the Brooklyn-Queens Expressway (BQE) and the Hugh L. Carey Tunnel, and the BQE and Hugh L. Carey Tunnel southbound lanes merge into the Gowanus Expressway. Projected Development Site 1 is located approximately 164 feet away from the nearest segment of these roadways, and Potential Development Site 1 is located approximately 134 feet from the nearest segment of these roadways.

The A-typical roadway analysis references the previously approved 150 Mill Street rezoning EAS (CEQR No. 22DCP016K), as the same roadways were evaluated, and the Projected Development Site evaluated as part of the 150 Mill Street rezoning was directly adjacent to these roadways.

Significant impact concentrations for atypical roadway analysis were evaluated as follows:

- 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.
- A CO increase of more than half the difference between baseline (i.e., No-Action) concentrations and the 8-hour standard, when No-Action concentrations are below 8 ppm.
- The NAAQS for 1-hour CO and annual $PM_{2.5}$.

Mobile source effect on air quality is associated with vehicular-related emissions and the pollutants' dispersion. Emissions of vehicular mechanical components (exhaust, crank case, break ware, and tire wear) were generated with the EPA's MOVES. Fugitive road dust emissions were added to estimate total particulate matter emissions. The pollutants' concentrations at sensitive receptors were modeled with the EPA's CAL3QHCR Gaussian dispersion model.

Next to the Projected Development Site, the Gowanus Expressway (I-278) northbound traveling lanes fork to the Brooklyn-Queens Expressway (BQE) and the Hugh L. Carey Tunnel, and the BQE and Hugh L. Carey Tunnel southbound lanes merge into the Gowanus Expressway. The highway is approximately 45 feet above grade near the Projected Development Site.[10] Elevation points at the highway, approximately 1,000 feet in each direction from the Projected Development Site, were used to calculate the highway's gradient. This included the Gowanus Expressway, the BQE, and the Hugh L. Carey Tunnel roadway.

[10] https://data.cityofnewyork.us/Transportation/Elevation-points/szwg-xci6

Hourly traffic counts and vehicle classifications at the Gowanus Expressway were obtained from the NYSDOT for station 020015. Hourly traffic counts and vehicle classifications at the Hugh L. Carey Tunnel roadway were obtained from the *2016 NYC Bridge Traffic Volumes* Report. Traffic on the BQE segment(s) was derived from the other roadways traffic. In addition, the NYSDEC county database was used to further characterize the type of vehicles. e.g., intercity bus, transit bus, and school bus. Vehicle speeds were obtained from UBER Movement for periods of the weekday.[11] A Tier 1 approach, using the peak-hour traffic, was used to predict the 24-hour $PM_{2.5}$. Annual $PM_{2.5}$ was predicted by applying the weighted average emission per period of the day (early morning, AM, midday, PM, and evening).

The EPA's MOVES2014b emission factor algorithm was used to compile the CO and $PM_{2.5}$ emission factors. MOVES can be used to calculate emission rates of criteria air pollutants, greenhouse gas emissions, and some hazardous air pollutants for both on-road motor vehicles and non-road equipment. MOVES models calculate emissions at the national, county, and project levels by use of databases and by specifying the characteristics (Run Specification) of the scenario that is modeled. The MOVES model was run at the project scale, where inspection/maintenance, fuel data (fuel properties, distribution, and engine technology), age distribution, and meteorology, were all obtained from the NYSDEC for the borough of Brooklyn (traffic conditions were discussed above). Links (roadway segments) in MOVES for the expressway(s) specified lengths of 1,000 feet. The links' gradients were accounted for in the MOVES model.

Peak hour emission factors, corresponding to the maximum hourly traffic, were compiled for each season. The greatest emission, for each pollutant independently, were used in the dispersion analyses. Annual particulate emission factors were compiled for the five periods of the day (early morning, AM, Midday, PM, and evening) during the month of January, when maximum emission was predicted. Dust generated by vehicles traveling on paved roadways were added to estimate total particulate matter emissions for the short-term analysis (annual fugitive dust emission is negligible, based on similar types of analyses under CEQR. A silt loading factor of 0.015 g/m^2 (for expressways) was applied, based on the *CEQR Technical Manual*. In addition, a conservative assumption of "dry" road condition was used for the short-term calculation (precipitation reduced silt loading).

Dispersion analysis was conducted using the EPA's CAL3QHCR dispersion model version 13196. All models specified settling and deposition velocities of 0-meter per second, 60-minute averaging time, and urban surface roughness of 108-centimeter, which is generally the most conservative. 1-hour CO concentration was predicted using the emulate CAL3QHC meteorology data, specifying 10-deg incremental wind vector direction, 1-meter per second wind speed, natural stability, and 285.5 Kelvin, and 1,000-meter mixing height. $PM_{2.5}$ concentrations were predicted with model-ready meteorology data, obtained from the DCP. The Gowanus Expressway and the BQE were modeled as above-grade bridge type roadways. The Hugh L. Carey Tunnel

[11] https://movement.uber.com/?lang=en-US

roadway included at grade roadway north of Henry Street, fill between Henry and West 9th Street, and bridge otherwise. Elevation point data[12] were used to determine the links height above grade.

A persistence factor of 0.7 was applied to the 1-hour CO concentration to predict the 8-hour CO concentration. Receptors at the Projected Development Site were placed around the lot outer perimeter from ground level to rooftop height in spaced intervals.

The predicted concentrations of the 24-hour $PM_{2.5}$ and CO 8-hour were evaluated with the NYC Guideline (*de minimis*); the annual $PM_{2.5}$ and 1-hour CO predicted concentrations were added to the background concentrations, and results were evaluated with the NAAQS. Table 2.8-3 shows the dispersion analysis results.

Table 2.8-3: A-typical Roadway Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration	Background Concentration	Evaluated Concentration	Threshold Concentration	Threshold Standard
$PM_{2.5}$ 24-hour	3.60 µg/m^3	N.A.	**3.60 µg/m^3**	**7.90 µg/m^3**	*de minimis*
$PM_{2.5}$ Annual	0.68 µg/m^3	9.1	**9.8 µg/m^3**	**12 µg/m^3**	NAAQS
CO 1-hour	0.49 ppm	1.99	**2.48 ppm**	**35 ppm**	NAAQS
CO 8-hour	0.34 ppm	N.A.	**0.34 ppm**	**3.75 ppm**	*de minimis*

2.8.1.2 Mobile Sources Conclusion

As seen in **Table 2.8-3**, the 24-hour $PM_{2.5}$ and 8-hour CO concentrations do not exceed the *de minimis,* and the annual $PM_{2.5}$ and 1-hour CO concentrations are within the NAAQS. Therefore, no significant adverse air quality impacts were predicted at the Projected Development Site from the emissions associated with the vehicular traffic on the Gowanus Expressway, and as such, there is no reason to believe that the emissions generated at the nearby highway road segment(s) would result in significant adverse air quality impacts.

2.8.2 Stationary Sources

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

- New stationary sources of pollutants are created (e.g., emission stacks for industrial plants, hospitals, and other large institutional uses).

[12] https://data.cityofnewyork.us/Transportation/Elevation-points/szwg-xci6

- Certain new uses near existing (or planned future) emissions stacks are introduced that may affect the use.
- Structures near such stacks are introduced so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected.
- Fossil fuels (fuel oil or natural gas) for heating/hot water, ventilation, and air conditioning systems are used.
- Large emission sources are created (e.g., solid waste or medical-waste incinerators, cogeneration facilities, asphalt/concrete plants, or power-generating plants, etc.).
- New sensitive uses are located near a large emission source.
- Medical, chemical, or research labs are created or result in new uses being located near them.
- Operation of manufacturing or processing facilities is created.
- New sensitive uses created within 400 feet of manufacturing or processing facilities.
- New uses created within 400 feet of a stack associated with commercial, institutional, or residential developments (and the height of the new structures would be similar to or greater than the height of the emission stack).
- Potentially significant odors are created.
- New uses near an odor-producing facility are created.
- "Non-point" sources that could result in fugitive dust are created.
- New uses near nonpoint sources are created.
- A generic or programmatic action is introduced that would change or create a stationary source or that would expose new populations to such a station.

2.8.2.1 Heating and Hot Water

Preliminary Screening

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, and the building's use and the square footage of the development that would be served by the system, both of which affect the amount of fossil fuel consumed. The *2021 CEQR Technical Manual* screening assessment is based on these factors. In addition, the CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. A detailed analysis is required if the screening assessment fails.

The *2021 CEQR Technical Manual* Figure 17-2 nomograph was used for the screening assessment. This stationary source screen is a generic screen for heat and hot water systems. The nomograph depicts the size of the development versus the distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. The roof heights of buildings in the area were obtained from the NYC Building Footprint database[13] or the New York City Department of Building (DOB) database for newly constructed buildings.

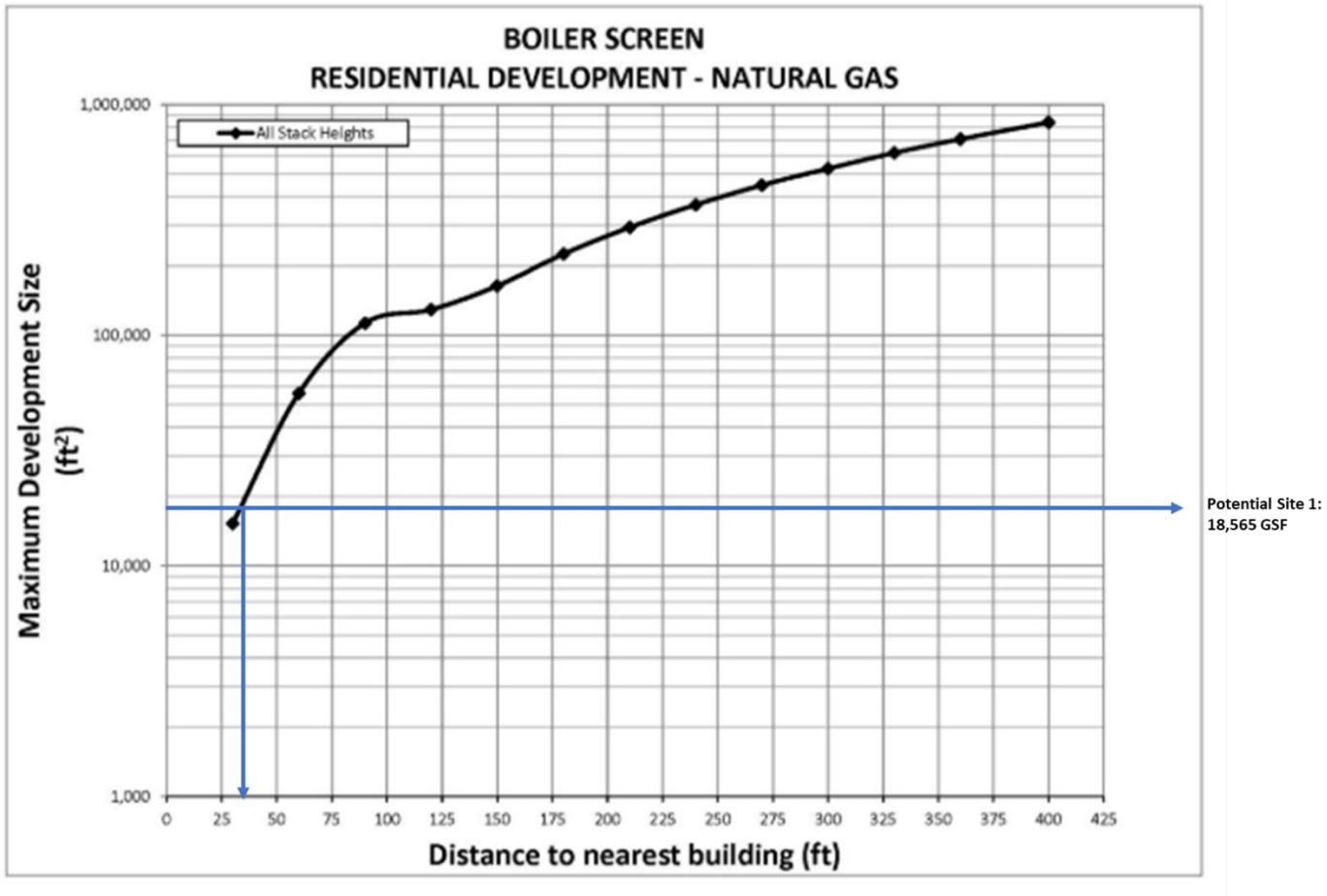
Based on information provided by the Applicant, electric power would be utilized for Projected Development Site 1 HVAC and hot water systems. However, as Potential Development Site 1 is not applicant-owned, screening analyses were conducted.

Project-on-Existing

For the project-on-existing screening analysis, the project increment building was analyzed as a single 18,565 GSF building, which is the floor area of Potential Development Site 1. A height of 95 feet was assumed, which is the Potential Development Site 1 proposed building height. **Figure 2.8-1** (Error! Reference source not found.based on Figure 17-2 of the *CEQR Technical Manual*) shows the project-on-existing screening analysis.

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

Figure 2.8-1: Potential Development Site 1 – Project on Existing Minimum Screening Nomograph



As seen in Error! Reference source not found. the project increment buildings gsf intersects the curve for HVAC system(s) at a distance of 33 feet.

There are no existing buildings similar or greater in height within 33 feet of Potential Development Site 1. Therefore, Potential Development Site 1 passes the HVAC screening analysis on existing land use and a detailed project on existing analysis is not required for this building.

Project-on-Project

Potential Development Site 1 would be directly adjacent to Projected Development Site 1.

Under With-Action Conditions, Projected Development Site 1 would be 115 feet tall and Potential Development Site 1 would be 95 feet tall. Accordingly, a detailed analysis is required for the Potential Development Site 1 on Projected Development Site 1.

Detailed HVAC Analysis

Pollutant concentrations were predicted with AERMOD. AERMOD MPI version 23132 executable was used in the dispersion analysis. Lakes Environmental, Inc. adjusted the EPA AERMOD source code (version 23132) and recompiled the model to parallelize the processing of receptors, reducing run-time significantly. The AERMOD model incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources and simple and complex terrain. The model was run with the regulatory default option, where applicable. AERMOD was run for both downwash effect options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled.

The analysis used five consecutive years of meteorological data (2017-2021) from NYSDEC. According to the NYSDEC, due to nationwide helium shortage, a fair amount of 2022 upper air data was missing, and therefore, 2017-2021 meteorology data should be used (the large gap affected 2023 meteorology data as well). Meteorology surface data is from LaGuardia Airport, and upper air data is from Brookhaven station, New York. The meteorological data provided hour by-hour wind speeds and directions, stability states, and temperature inversion elevations over the five years. Population in New York City was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

Natural gas was assumed to be the type of fossil fuel, if any, used in the Potential Development Site 1. Grid-electric power would be utilized for Projected Development Site 1 HVAC system(s). As determined in the analysis, Potential Development Site 1 natural gas-fired HVAC system(s) must be fitted with low-NOx (30 ppm or less) burners. The pollutants of concern for natural gas-fueled boilers are NO_2 and $PM_{2.5}$. The HVAC system's total energy capacity was calculated based on the developments' gsf and an energy consumption rate of 60.3 thousand Btu per gsf [14] (natural gas consumption rate of 59.1 ft3 per gsf per year, using a natural gas heating value of 1,020 Btu per ft3). All fuel was assumed to be consumed during the 100-day heating season (2,400 hours). PM2.5 emissions were calculated using emission factors for small external combustion boilers published in the EPA AP-42 manual. The low-NOx (30 ppm) system(s) nitrogen oxides ("NOx") emissions were calculated based on an emission factor from the New York City Department of City Planning (DCP). **Table 2.8-4** shows the Potential Development Site 1 HVAC system(s) pollutant emission rates.

[14] Energy Information Administration (2022). "Table US1. Total Energy Consumption, Expenditures, and Intensities, 2005 Part 1: Housing Unit Characteristics and Energy Usage Indicators." 2005 Residential Energy Consumption Survey: Energy Consumption and Expenditures Tables.

Table 2.8-4: HVAC Systems Short-term and Annual Emission Rates

Site	Floor Area (gsf)	HVAC System Specs.	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
Potential Development Site 1	18,565	Natural gas	NO_2	2.14E-03	5.86E-04
			$PM_{2.5}$	4.38E-04	1.20E-04

The Potential Development Site 1 stack exit temperature was based on a low-NOx boiler specification.[15] The boiler stack was placed 3 feet above the roofline and as close as possible to the receiving building. If a significant adverse air quality impact was predicted, the stack(s) was raised or set back further from the receiving building.

The Projected Development Site 1 and Potential Development Site 1 were modeled as buildings that cover their entire footprint and raise to their RWCDS height. Receptors were placed around the Projected Development Site 1 envelope from the ground floor to rooftop height in spaced intervals. The map application in Urchin Tracking Module (UTM) coordinates (zone 18), built into Lakes Environmental, Inc.'s commercial application of AERMOD (AERMOD View), was used to spatially locate buildings. Existing buildings in the area maximum roof heights were based on the New York City Building Footprint database, and satellite imagery was used to determine lower building sections heights. The U.S. Geological Service (USGS) National Elevation Dataset (NED) 1/3 arc-second resolution (GeoTIFF dataset), the terrain data set recommended by the EPA for use in the United States for regulatory purposes, was used to process the base elevation of buildings. The base elevation of receptors and sources was set to the base elevation of their buildings.

The model was run twice, with the building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. NO_2 concentration was predicted using a tier 1 approach. The NO_2 modeled concentrations were added to the background concentrations, and the result was evaluated with the NAAQS. $PM_{2.5}$ modeled concentrations were evaluated with the *de minimis* for stationary source. The HVAC dispersion analysis results are shown in **Table 2.8-5**. As seen in **Table 2.8-5**, the future ambient NO_2 concentrations (1-hour or annual) are within the NAAQS, and the $PM_{2.5}$ increment concentrations do not exceed the *de minimis*.

[15] Aerco. "Benchmark 1500 and 2000." aerco.com/products/hvac-hot-water-solutions/boilers/benchmark/benchmark-1500-and-2000#jl_439b2059-2f3c-46ca-a4d6-2e2f0d0af485

Table 2.8-5: HVAC System(s) Dispersion Analysis Results

Pollutant	Maximum Modeled (Increment) Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
1-hour NO_2	55.29	103.59	158.9	188	NAAQS
Annual NO_2	0.66	26.8	27.4	100	NAAQS
24-hour $PM_{2.5}$	2.44	17.8	2.44	8.60	*de minimis*
Annual $PM_{2.5}$	0.13	7.6	0.13	0.3	*de minimis*

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

Proposed E-Designation

Based on the analysis, the following (E) Designations (E-XXX) would be required as part of the Proposed Actions:

Block 526, Lot 1 (Projected Development Site 1): Any new residential or commercial development on the above-referenced property must exclusively use grid-electric power for the heating, ventilating, and air conditioning (HVAC) system.

Block 526, Lots 13 and 14 (Potential 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 the heating, ventilating, and air conditioning (HVAC) system and must be fitted with low NOx (30 ppm) burners, ensure that the hot water equipment stack is located at the building's highest level and at a minimum of 98 feet above grade, and that the stack is located at least 25 feet from the eastern lot line of Block 526, Lot 1 to avoid any potential significant adverse air quality impacts.

2.8.2.2 Industrial Emissions

Preliminary Screening

The Proposed Actions would introduce a sensitive land use into the area. Accordingly, a preliminary screening was conducted to determine if there are any potential sources of industrial process emissions that could affect project occupants. Industrial sources were identified through a site visit within a 400-foot study area and the DEP CATS, EPA Envirofacts ICIS-AIR and the Toxics Release Inventory (TRI), and NYSDEC databases searches.

400-Foot Study Area

The Affected Area is located within an M1-1 zoning district, and the surrounding area consists of a varied mix of manufacturing/industrial, commercial, multi-family elevator and walk-up buildings, one-and two-family residences, mixed commercial and residential buildings, transportation and utility uses, public facilities and institutions, parking facilities, and vacant land.

The 400-foot radius was screened for potential sources of industrial emissions and is shown below in **Figure** 2.8-2 and **Table 2.8-6**. The preliminary screening of the 400-foot study area included a review of NYC DEP, NYC DEC, and USEPA[16] Air Quality Permits issued within 400 feet of the Affected Area, as well as a field observation, conducted on October 16th, 2024, and desktop review to affirm the uses present at each site (within 400 feet of the Projected Development Site 1 or Potential Development Site 1) to identify any potential manufacturing processing emission source.

As shown in **Figure** 2.8-2 below, sixty-two (62) non-residential sites were evaluated as part of the initial industrial source screening. As shown in **Table 2.8-6** and further discussed below, eleven (11) sites were identified for further screening or analysis.

[16] Sources of information reviewed included the USEPA's Envirofacts database[1], EPA, Envirofacts Data Warehouse, http://oaspub.epa.gov/enviro/ef_home2.air

Figure 2.8-2: Industrial Emissions Screening – 400-Foot Study Area

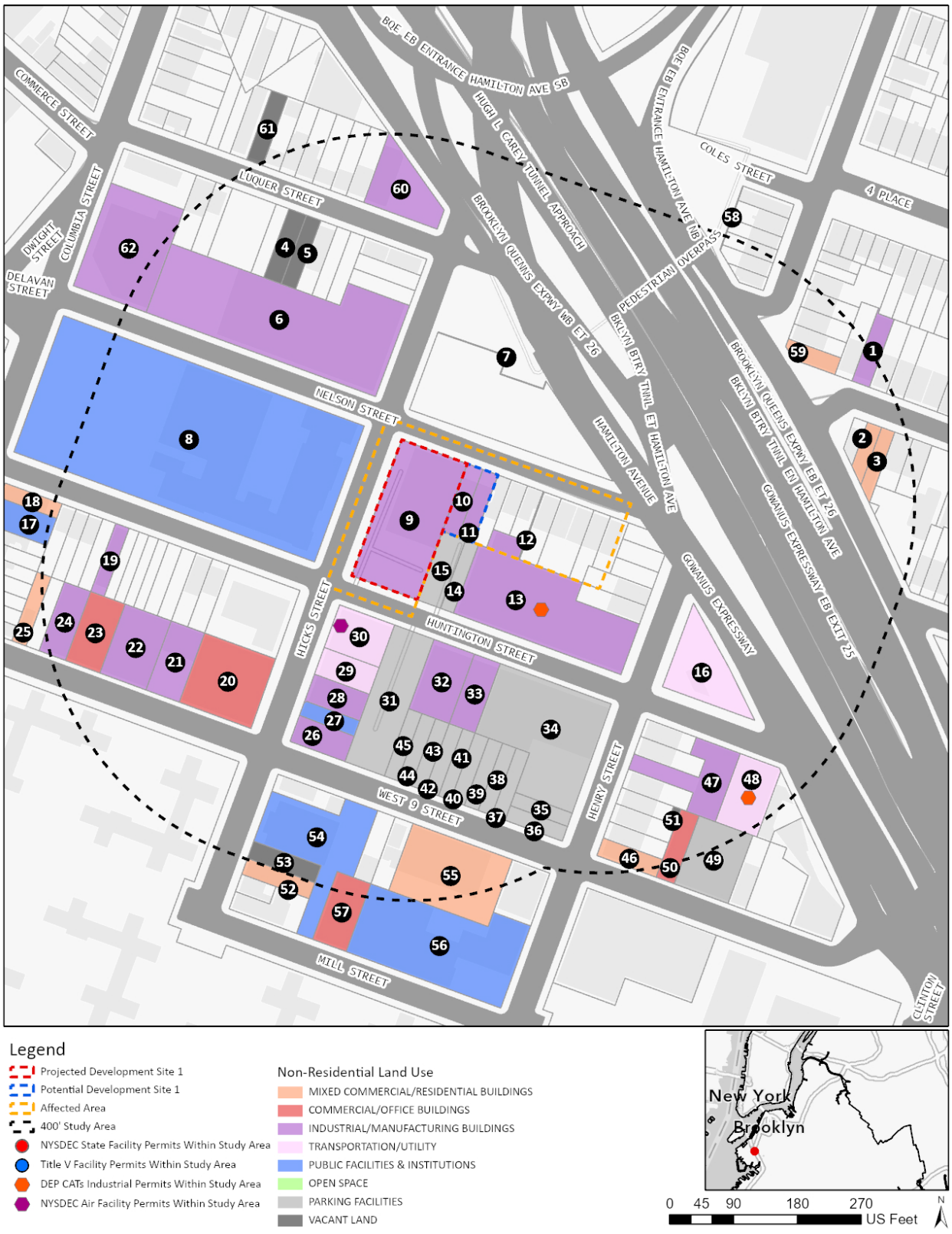


Table 2.8-6: Industrial Screening Results 400-foot Study Area – Sites Identified for Further Screening or Analysis

Site ID	Block	Lot	Address	Land Use	Owner Name	Active Industrial Permit	Expired Industrial Permit	Active Permit Facility Name/Owner Name	Expired Permit Facility Name/Owner Name	Expiration	Current Use	Notes
6	520	26	712 Hicks St	Industrial & Manufacturing	700 Hicks Realty, LLC	N/A	N/A	N/A	N/A	N/A	Audi Brooklyn Services	Automotive repair services facility
13	526	31	696 Henry St	Industrial & Manufacturing	Tabijo Realty LLC	N/A	PA023681	N/A	B & A MARINE CO INC	6/19/2014	First Quality Electric, Mind The Gap, RG Glass Creations/Carvart	B&amp is no longer in operation
						N/A	PB027905	N/A	B & A MARINE CO., INC	8/22/2014		
22	534	37	23 West 9 St	Industrial & Manufacturing	Y & M Equities LLC	N/A	N/A	N/A	N/A	N/A	ABC Cabinet NYC and vacant space	Cabinet manufacturer - unpermitted (Detailed Analysis)
24	534	43	13 West 9 St	Industrial & Manufacturing	Ejg Realty Associates, LLC	N/A	N/A	N/A	N/A	N/A	Petrillo Iron Works	Iron Works – unpermitted (Detailed Analysis)
29	535	7	757 Hicks St	Transportation/Utility	Luis Pastoriza	N/A	N/A	N/A	N/A	N/A	Red Hook Performance Inc	These properties operate under the same business ownership, providing auto mechanics and auto body repair services. In addition, there is an Air Facility Registration (DEC ID 2-6102-00604) registered to Red Hook Performance Inc (Detailed Analysis)
30	535	9	749 Hicks St	Transportation/Utility	Luis Pastoriza	N/A	N/A	N/A	N/A	N/A		
32	535	16	62 Huntington St	Industrial & Manufacturing	Silverstone 66 Realty LLC	N/A	N/A	N/A	N/A	N/A	S Silver Stone Sheet Metal	Sheet metal fabrication (Detailed Analysis)
33	535	19	68 Huntington St	Industrial & Manufacturing	Silverstone 68 Realty LLC	N/A	N/A	N/A	N/A	N/A		
34	535	26	80 Huntington St	Parking Facilities	L & S Holding Of New York LLC	N/A	N/A	N/A	N/A	N/A	South Brooklyn Auto Body	Auto body repair activity was observed on site during the fieldwork and South Brooklyn Auto Body indicated in a phone call (GZA call on 6/27/24) that they do collision repair and auto spraying onsite (Detailed Analysis)
48	536	15	102 Huntington St	Transportation/Utility	Huntington St Holding LLC	N/A	PW006319	N/A	Certified Auto Repair/Shlomo Chkifati	11/8/2020	Meisterwerkstatt Auto (347) 844-9006	Permit for Auto Spraying registered to former auto repair no longer in operation. GZA contacted Meisterwerkstatt on 6/27/24 and they indicated they do collision repair or auto spraying on-site – Greater than 400 feet from either Development Site
62	520	1	387 Columbia St	Industrial & Manufacturing	Hellenic Equities LLC	N/A	N/A	N/A	N/A	N/A	Nu Tone Productions	Counters, Cabinetry & Mill Work – Greater than 400 feet from either Development Site

Site ID corresponds to **Figure 2.8-2** above
Sites Highlighted in yellow indicate facilities where detailed analysis is warranted
Sites Highlighted in blue indicate facilities where further screening is warranted to determine if detailed analysis is required

Site 6: 712 Hicks Street (Block 520, Lot 6)

According to NYC's Zoning and Land Use Map (ZoLa), this property is owned by 700 Hicks Realty LLC and is classified as a Factory and Industrial Building – Light Manufacturing. The site is located approximately 70 feet northwest of the Affected Area and is occupied by Audi Brooklyn Services automotive repair services. There are no active or expired industrial air quality permits at this location. The facility was screened out of detailed analysis.

Site 13: 696 Henry Street (Block 526, Lot 31)

According to NYC's Zoning and Land Use Map (ZoLa), this property is owned by Tabijo Realty LLC and is classified as a Warehouse. The site is located on the Subject Block, east of Projected Development Site 1 and Potential Development Site 1. The Site has two NYC DEP industrial processing permits. Permits PA023681 and PB027905, registered to B& A Marine Co Inc., expired in 2014. B&amp is no longer in operation (the Department of State, Division of Corporations data shows that the B & A Marine Co. Inc. dissolved on 3/7/2023). The site is occupied by First Quality Electric (an electric contractor office and warehouse), Mind The Gap (a film production company), and RG Glass Creation/Carvart Glass, a joint employer according to the National Labor Relation Board Case No. 02-CA-085897 (business specializes in glass walls, partitions, windows, etc.). No emission source was identified during the fieldwork and the uses at the building were screened out.

Site 22: 23 West 9th Street (Block 534, Lot 37)

According to NYC's Zoning and Land Use Map (ZoLa), this property is owned by Y & M Equities LLC and is classified as a Factory and Industrial Building – Light Manufacturing. There are no active or expired industrial air quality permits at this location. The site is located approximately 260 feet southwest of the Affected Area and is occupied by ABC Cabinet NYC (western section of the building) and a vacant section (eastern side of the building). The ABC Cabinet NYC is a small woodworking facility, identified as a cabinet manufacturing operation based on the business Facebook page. The ABC Cabinet NYC facility was included in the air toxics analysis.

Site 24: 13 West 9th Street (Block 534, Lot 43)

According to NYC's Zoning and Land Use Map (ZoLa), this property is owned by Ejg Realty Associates, LLC and is classified as a Factory and Industrial Building – Miscellaneous. The site is located approximately 360 feet southwest of the Affected Area and is occupied by Petrillo Iron Works, an ironworks facility. There are no active or expired industrial air quality permits at this location. However, a detailed analysis of this facility is warranted to evaluate the potential emissions associated with ironworks processing.

Sites 29 and 30: 749-757 Hicks Street (Block 535, Lots 7 and 9)

According to NYC's Zoning and Land Use Map (ZoLa), these properties are owned by Luis Pastoriza and are classified as Auto Body/Collision or Auto Repair Buildings. The facility has a New York

State (NYS) Department of Motor Vehicle (DMV) license (No. 7084982) for a repair shop. The facility also has a NYSDEC Air Facility Registration Certificate (Registration ID: 2-6102-00604/00001, expiration date not applicable) for top and body repair and paint shops activity. The site is located approximately 45 feet south of the Affected Area. According to the owner/manager of the facility (information received during the fieldwork observation), the auto body repair and auto mechanic businesses at the two sites (Sites 29 and 30) operate under the same business owner (Red Hook Performance, Inc.). Site 30 was observed as an auto mechanic facility, while Site 29 was observed as the auto body repair facility. A spray booth was observed at the southeast section of the building. Accordingly, the facility was included in the air toxics analysis.

Sites 32 and 33: 62 and 68 Huntington Street (Block 535, Lots 16 and 19)

According to NYC's Zoning and Land Use Map (ZoLa), these properties are owned by Silverstone 66 Realty LLC and are classified as a Factory and Industrial Buildings – Light Manufacturing. Site 32 is located approximately 70 feet southeast of Projected Development Site 1, and 100 feet south of Potential Development Site 1. Site 32 located approximately 113 feet southeast of Projected Development Site 1, and 160 feet southeast of Potential Development Site 1. The sites are occupied by Silverstone Sheet Metal, a sheet metal fabrication facility. There are no active or expired industrial air quality permits at this location. While emissions from sheet metal fabrication are unlikely, as a conservative measure emissions similar to ironworks processing was assumed, and the facility was included in the air toxics analysis.

Site 34: 80 Huntington Street (Block 535, Lot 26)

According to NYC's Zoning and Land Use Map (ZoLa), this property is owned by L & S Holding Of New York LLC and is classified as a Parking Garage. The site is located approximately 150 feet southeast of Projected Development Site 1, and 180 feet southeast of Potential Development Site 1. The site is occupied by South Brooklyn Auto Body, Inc. There are no active or expired industrial air quality permits at this location. However, the facility has a NYS DMV license (No. 7096391) for repair shop body (RSB), wholesale dealer (DLW), and transporter (TRS). However, GZA contacted South Brooklyn Auto Body on June 27th 2024 and they indicated auto spraying is conducted onsite. Auto body repair activity was also observed during the fieldwork study. A stack was observed at the facility southeast section of the building, and an office and open space at the front section of the building facing Huntington Street. The facility was included in the air toxics analysis.

Site 48: 102 Huntington Street (Block 536, Lot 15)

According to NYC's Zoning and Land Use Map (ZoLa), this property is owned by Huntington St Holding LLC and is classed as an Auto Body/Collision or Auto Repair Building. The site is located approximately 500 feet southeast of Projected Development Site 1, and 480 feet southeast of Potential Development Site 1. The Site has a NYC DEP permit for a spray booth area registered to Certified Auto Repair, which expired in November of 2020. Certified Auto Repair is no longer in

operation. The site is currently occupied by Meisterwerkstatt, an auto repair shop. GZA contacted Meisterwerkstatt on June 27th, 2024 and they indicated they do collision repair or auto spraying on-site. However, this site is greater than 400 feet from both Development Sites. Therefore, no further analysis of this facility is warranted.

Site 62: 387 Columbia Street (Block 520, Lot 1)

According to NYC's Zoning and Land Use Map (ZoLa), this property is owned by Hellenic Equities LLC and is classed as a Factory and Industrial Building – Light Manufacturing. The site is located approximately 405 feet northwest of Projected Development Site 1 and 500 feet northwest of Potential Development Site 1. The site is currently occupied by NuTone Productions, which specializes in counters, cabinetry & mill work. However, this site is greater than 400 feet from both Development Sites. Therefore, no further analysis of this facility is warranted.

1,000-Foot Study Area

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

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

Air Toxics Analysis

As identified above, five (5) manufacturing processing emission sources were identified within 400 feet of the Projected Development Site 1 or Potential Development Site 1: The ABC Cabinet NYC facility (Site 22), a woodworking facility at 23 West 9th Street (Block 534, Lot 37), Petrillo Iron Works (Site 24), an ironworks facility at 13 West 9th Street (Block 534, Lot 43), Silverstone Sheet Metal (Sites 32 and 33), a potential ironworks facility at 62 and 68 Huntington Street (Block 535, Lots 16 and 19),Red Hook Performance, Inc. facility (Sites 29 and 30), an auto body repair facility (also providing auto mechanic service) at 749-757 Hicks Street (Block 535, Lots 7 and 9), and South Brooklyn Auto Body, Inc. facility (Site 34), an auto body repair facility 80 Huntington Street (Block 535, Lot 26).

Red Hook Performance, Inc.

Emissions from the Red Hook Performance, Inc. auto body repair activity is from auto body spray-painting. The facility has a NYSDEC Air Facility Registration Certificate (Registration ID: 2-6102-00604/00001). Emissions from spray-painting processing comprise of solids, which are

particulate, and solvents, which are volatile organic compounds (VOCs). The solids bind to the sprayed article, giving it the desire look and color. However, some of the sprayed solids are over-sprayed and could be emitted to the outside air if not captured. The VOCs evaporate during the spraying activity and while the coating substance dries. One-hour emission was based on a maximum coating compound consumption rate of 0.5 gallons per hour (4 hours per day activity rate). The annual coating compound consumption rate was based on 200 per year activity rate. The Red Hook Performance, Inc. particulate and VOC emissions were calculated based on an as-applied coating compound weight of 10 pounds per gallon, comprising 5 pounds solids and 5 pounds VOC content by weight. All the VOC in the as-applied coating compound was assumed to be emitted to the outside air. A 65 percent transfer efficiency was used to derive the amount of overspray solids emitted to the outside air. The Red Hook Performance, Inc. emission profile (estimated total particulate and VOC emissions, as well as the processing operation activity rate), are shown in **Table 2.8-7**. The processing operation's daily activity rate was used to calculate the 24-hour average emission.

The chemicals that make up the VOC group were derived from the chemical composition listed in the DEP permit PW001217, registered to Alex's Auto Body, and DEP permit PW003321, registered to the New Honeywell Auto facility. The DEP permits PW001217 and PW003321 are comprehensive DEP certificates that include basecoats, clearcoats, reducer, and thinner (as applied coating compound). As many of the chemicals are specified in both DEP permits, each chemical's maximum percent weight was used to derive one chemical composition database (rather than treat each DEP permit as a database). This approach yielded a VOC chemical composition with a total percent weight of 147 percent. The noncriteria pollutants emission rates are shown in **Table 2.8-8**.

Particulate emissions in **Table 2.8-7** comprise PM, PM_{10}, and $PM_{2.5}$ combined. A particle size distribution of 28.6% and 46.7% for $PM_{2.5}$ and PM_{10} published in the EPA AP-42 Manual[17] for automobile and light-duty truck surface coating operations, respectively, was applied in the analysis. The processing operation's daily activity rate was used to calculate the 24-hour average emission. $PM_{2.5}$ and PM_{10} emission rates are shown in **Table 2.8-9** through **Table 2.8-12**.

South Brooklyn Auto Body, Inc.

Emissions from the South Brooklyn Auto Body, Inc. auto body repair activity is from auto body spray-painting. The facility has no NYSDEC or DEP processing permit. The emission profile of the Red Hook Performance, Inc. facility was applied for the South Brooklyn Auto Body, Inc.'s spray-painting processing. The South Brooklyn Auto Body, Inc.'s emission profile is shown in **Table 2.8-7**, its noncriteria pollutants emission rates in **Table 2.8-8**, and its $PM_{2.5}$ and PM_{10} emission rates in **Table 2.8-9** through **Table 2.8-12**.

[17] EPA. "APPENDIX B.1, Particle Size Distribution Data and Sized Emission Factors for Selected Sources." *AP-42: Compilation of Air Emissions Factors from Stationary Sources*, EPA, B.1-12.

ABC Cabinet NYC

No DEP or NYSDEC air emission permits or registrations were found on file for the ABC Cabinet NYC facility/business. However, emissions associated with woodworking processing, including spray-painting, are likely.

Emission from the operation of woodworking equipment was derived from the DEP permit PB033815 registered to the Two Seven, Inc., a large woodworking facility (significantly larger), at 221 McKibbin Street, Brooklyn. There are eight pieces of woodworking equipment, including 3 sanders and 3 saws, associated with DEP permit PB033815. While the DEP permit PB033815 lists a filter with 99 percent control measure efficiency, the analysis assumed no filter control measure. An 8 hour per day activity rate was used to derive the average 24-hour emission. The woodworking equipment emission profile is shown in **Table 2.8-7**. A particle size distribution, based on the EPA AP-42 Appendix B-1-48, was used to derive $PM_{2.5}$ and PM_{10} emissions. $PM_{2.5}$ and PM_{10} emission rates are shown in **Table 2.8-9** through **Table 2.8-12**.

Emissions from the spray-painting of woodworking articles is similar to emissions from auto body parts, comprising of particulates and solvents. One-hour emission was based on a maximum coating compound consumption rate of 0.5 gallons per hour during a 4-hour per day activity rate. The annual coating compound consumption rate was based on 150 days per year activity rate as the ABC Cabinet NYC is a small facility. Solid and VOC contents of five pounds per gallon were used to derive emissions. All the VOC in the as-applied coating compound was assumed to be emitted to the outside air. A 65 percent transfer efficiency was used to derive the amount of overspray solids emitted to the outside air, based on the DEP permit PB026315 registered to the Two Seven, Inc. facility. No filter control measure was applied in the analysis. The ABC Cabinet NYC emission profile associated with spray-painting is shown in **Table 2.8-7**. The processing operation's daily activity rate was used to calculate the 24-hour average emission. The particle size distribution of 28.6% and 46.7% for $PM_{2.5}$ and PM_{10}, respectively, used for the auto body facility was applied for the woodworking spray booth emissions. The chemicals (by percent weight) that make up the VOC group were derived from the DEP permit PB026315 registered to Two Seven, Inc. The noncriteria pollutants emission rates are shown in **Table 2.8-8**.

Petrillo Iron Works and Silverstone Sheet Metal

Nor Petrillo Iron Works or Silverstone Sheet Metal has DEP permit; therefore, emissions were based on the Kendi Iron Works' DEP permit PB39705. This DEP permit is for 4 stations of welding and metal fabrication. The contaminant associated with the operation is total particulate, with the New York State identification number NY149-00-0, which is particulate. According to the EPA AP-42 manual, most of the particulate matter produced by welding is submicron in size and, as such, all particulate was considered to be $PM_{2.5}$. An 8-hour per day, 250-day per year activity rate was used to derive the 24-hour average and annual emissions. Emission profile associated with the ironworks processing at the Petrillo Iron Works or Silverstone Sheet Metal facilities are shown in **Table 2.8-7**.

Table 2.8-7: Emission Profile at the Manufacturing Processing Facilities Within 400 feet of the Projected Development Site 1 or Potential Development Site 1

Source	PM Total Emission (lb/hr)	VOC Max Emission (lb/hr)	Activity Rate (hr/day)	PM Total Emission (lb/yr)	VOC Emission (lb/yr)	Activity Rate (day/yr)	Coating Compound Consumption Rate	
							1-Hour	Annual
RHP - Spray P.	0.175	2.50	4	140	2000	200	0.50	400
SBAB - Spary P.	0.175	2.50	4	140	2000	200	0.50	400
ABC C. NYC - Spary P.	0.175	2.50	4	105	1500	150	0.50	300
ABC C. NYC - WoodW	0.100		8	200		250		
SSM	0.002		8	4		250		
PIW	0.002		8	4		250		

Notes:

1. RHP - Spray P. emission source: Red Hook Performance, Inc. spray-painting.
2. SBAB - Spary P. emission source: South Brooklyn Auto Body, Inc. spray-painting.
3. ABC C. NYC - Spary P. emission source: ABC Cabinet NYC spray-painting.
4. ABC C. NYC - WoodW emission source: ABC Cabinet NYC woodworking processing.
5. SSM emission source: Silverstone Sheet Metal welding.
6. PIW emission source: Petrillo Iron Works welding.

Table 2.8-8: VOC Emissions from Spray-Painting at the South Brooklyn Auto Body Facility and ABC Cabinet NYC

Contaminant name	CAS No.	Red Hook Performance, Inc.			South Brooklyn Auto Body, Inc.			ABC Cabinet NYC		
		Percent Weight	1-Hour Max Emission (g/s)	Annual Average Emission (g/s)	Percent Weight	1-Hour Max Emission (g/s)	Annual Average Emission (g/s)	Percent Weight	1-Hour Max Emission (g/s)	Annual Average Emission (g/s)
Methanol ***	67-56-1	5.68%	1.79E-02	1.64E-03	5.68%	1.79E-02	1.64E-03	0.11%	3.33E-04	2.28E-05
Isopropyl Alcohol	67-63-0	1.43%	4.51E-03	4.12E-04	1.43%	4.51E-03	4.12E-04			
Acetone	67-64-1	16.99%	5.36E-02	4.89E-03	16.99%	5.36E-02	4.89E-03			
Butanol-1	71-63-3	1.36%	4.27E-03	3.90E-04	1.36%	4.27E-03	3.90E-04			
Methyl Ethyl Ketone	78-93-3	7.42%	2.34E-02	2.14E-03	7.42%	2.34E-02	2.14E-03	7.89%	2.49E-02	1.70E-03
Butyl Benyzl Phthalate ***	85-68-7	0.80%	2.51E-03	2.29E-04	0.80%	2.51E-03	2.29E-04			
Trimethylbenzene, 1,2,4-	95-63-6	1.48%	4.68E-03	4.27E-04	1.48%	4.68E-03	4.27E-04			
Ethylbezene ***	100-41-4	2.95%	9.29E-03	8.48E-04	2.95%	9.29E-03	8.48E-04	12.80%	4.04E-02	2.76E-03
Propylbenzene, N-	103-65-1	6.96%	2.19E-02	2.00E-03	6.96%	2.19E-02	2.00E-03			
Methyl Isobutyl Ketone ***	108-10-1	3.42%	1.08E-02	9.86E-04	3.42%	1.08E-02	9.86E-04			
Methoxypropylacetate	108-65-6	5.17%	1.63E-02	1.49E-03	5.17%	1.63E-02	1.49E-03	5.48%	1.73E-02	1.18E-03
Trimethylbenzene, 1,3,5-	108-67-8	0.36%	1.12E-03	1.02E-04	0.36%	1.12E-03	1.02E-04			
Methylcyclohexane	108-87-2	2.15%	6.77E-03	6.18E-04	2.15%	6.77E-03	6.18E-04			
Toluene ***	108-88-3	21.61%	6.81E-02	6.22E-03	21.61%	6.81E-02	6.22E-03	5.52%	1.74E-02	1.19E-03
Isopropyl Acetate	110-19-0	2.65%	8.37E-03	7.64E-04	2.65%	8.37E-03	7.64E-04	13.27%	4.18E-02	2.87E-03
Methyl Amyl Ketone	110-43-0	0.24%	7.52E-04	6.87E-05	0.24%	7.52E-04	6.87E-05			
Butoxyethyl Acetate ***	112-07-2	0.64%	2.00E-03	1.83E-04	0.64%	2.00E-03	1.83E-04			
Diacetone Alcohol	123-42-2							1.54%	4.85E-03	3.32E-04
N-Butyl Acetate	123-86-4	36.28%	1.14E-01	1.04E-02	36.28%	1.14E-01	1.04E-02	5.42%	1.71E-02	1.17E-03
Heptane. N-	142-82-5	6.21%	1.96E-02	1.79E-03	6.21%	1.96E-02	1.79E-03			
Toulene-2,4-Diisocyanate	584-84-9							0.03%	8.34E-05	5.71E-06
Ethyl 3-Ethoxypropionate	763-69-9	1.24%	3.91E-03	3.57E-04	1.24%	3.91E-03	3.57E-04			
Xylenes ***	1330-20-7	11.37%	3.58E-02	3.27E-03	11.37%	3.58E-02	3.27E-03	54.43%	1.72E-01	1.18E-02
Ligroine	8032-32-4	5.73%	1.81E-02	1.65E-03	5.73%	1.81E-02	1.65E-03			
2-(2H-Benzotriazol-2-yl)-4,6-Ditertpentylphenol	25973-55-1	0.48%	1.50E-03	1.37E-04	0.48%	1.50E-03	1.37E-04			
Solvent Naphtha Aliphatic	64742-89-8	0.95%	3.01E-03	2.75E-04	0.95%	3.01E-03	2.75E-04			
Solvent Naphtha Light	64742-95-6	2.96%	9.35E-03	8.54E-04	2.96%	9.35E-03	8.54E-04			

Notes:

*** indicates a hazardous air pollutant or potential carcinogen.

Industrial Source Dispersion Analysis

The *CEQR Technical Manual* Industrial Source Screen methodology was used to predict pollutant concentrations. The *CEQR Technical Manual* Industrial Source Screen methodology can be used to predict a pollutant concentration emitted from a single source at various distances (from 30 to 400 feet). A distance less than or equal to the actual distance between the emission point(s) and the Projected Development Site 1 or Potential Development Site 1 (the nearest development site) was applied in the analysis. **Table 2.8-9** shows the noncriteria pollutants' 1-hour dispersion analysis results by emission source and cumulative concentration.

Table 2.8-9: Noncriteria Pollutants 1-Hour Dispersion Analysis Result

Contaminant name	CAS No.	1-Hour Concentration (µg/m3)				SGC (µg/m3)
		Red Hook Performance, Inc.	South Brooklyn Auto Body, Inc.	ABC Cabinet NYC	Total	
Methanol ***	67-56-1	140.7	46.5	0.5	187.7	33000.0
Isopropyl Alcohol	67-63-0	35.5	11.7		47.2	98000.0
Acetone	67-64-1	420.9	139.2		560.1	180000.0
Butanol-1	71-63-3	33.6	11.1		44.7	---
Methyl Ethyl Ketone	78-93-3	183.7	60.8	36.1	280.5	13000.0
Butyl Benyzl Phthalate ***	85-68-7	19.7	6.5		26.3	---
Trimethylbenzene, 1,2,4-	95-63-6	36.7	12.2		48.9	---
Ethylbezene ***	100-41-4	73.0	24.1	58.5	155.6	---
Propylbenzene, N-	103-65-1	172.3	57.0		229.3	54000.0
Methyl Isobutyl Ketone ***	108-10-1	84.8	28.1		112.8	31000.0
Methoxypropylacetate	108-65-6	128.1	42.4	25.0	195.6	36850.0
Trimethylbenzene, 1,3,5-	108-67-8	8.8	2.9		11.7	---
Methylcyclohexane	108-87-2	53.2	17.6		70.8	---
Toluene ***	108-88-3	535.4	177.1	25.2	737.7	37000.0
Isopropyl Acetate	110-19-0	65.8	21.8	60.6	148.2	71300.0
Methyl Amyl Ketone	110-43-0	5.9	2.0		7.9	---
Butoxyethyl Acetate ***	112-07-2	15.7	5.2		20.9	---
Diacetone Alcohol	123-42-2			7.0	7.0	---
N-Butyl Acetate	123-86-4	898.8	297.3	24.8	1220.8	71300.0
Heptane. N-	142-82-5	153.7	50.8		204.6	210000.0
Toulene-2,4-Diisocyanate	584-84-9			0.1	0.1	210000.0
Ethyl 3-Ethoxypropionate	763-69-9	30.7	10.2		40.8	140.0
Xylenes ***	1330-20-7	281.6	93.1	248.6	623.4	22000.0
Ligroine	8032-32-4	142.0	47.0		189.0	---
2-(2H-Benzotriazol-2-yl)-4,6-	25973-55-1	11.8	3.9		15.7	---
Solvent Naphtha Aliphatic	64742-89-8	23.6	7.8		31.5	---
Solvent Naphtha Light	64742-95-6	73.4	24.3		97.7	---

Notes:
*** indicates a hazardous air pollutant or potential carcinogen.

Table 2.8-10 shows the noncriteria pollutants' annual dispersion analysis results by emission source and each contaminant's cumulative concentration.

Table 2.8-10: Noncriteria Pollutants Annual Dispersion Analysis Result

Contaminant name	CAS No.	Annual Concentration (µg/m3)				AGC (µg/m3)
		Red Hook Performance, Inc.	South Brooklyn Auto Body, Inc.	ABC Cabinet NYC	Total	
Methanol ***	67-56-1	0.6	0.2	0.002	0.8	4000.0
Isopropyl Alcohol	67-63-0	0.16	0.06		0.21	7000.0
Acetone	67-64-1	1.8	0.7		2.5	30000.0
Butanol-1	71-63-3	0.15	0.05		0.20	---
Methyl Ethyl Ketone	78-93-3	0.8	0.3	0.1	1.2	5000.0
Butyl Benyzl Phthalate ***	85-68-7	0.09	0.03		0.12	0.42
Trimethylbenzene, 1,2,4-	95-63-6	0.16	0.06		0.22	60.0
Ethylbezene ***	100-41-4	0.32	0.1	0.2	0.6	1000.00
Propylbenzene, N-	103-65-1	0.8	0.3		1.0	1000.0
Methyl Isobutyl Ketone ***	108-10-1	0.37	0.1		0.51	3000.0
Methoxypropylacetate	108-65-6	0.56	0.2	0.1	0.9	2000.0
Trimethylbenzene, 1,3,5-	108-67-8	0.039	0.01		0.053	60
Methylcyclohexane	108-87-2	0.23	0.1		0.32	3800.0
Toluene ***	108-88-3	2.4	0.9	0.1	3.3	5000.0
Isopropyl Acetate	110-19-0	0.29	0.1	0.2	0.6	565.0
Methyl Amyl Ketone	110-43-0	0.026	0.01		0.035	550.0
Butoxyethyl Acetate ***	112-07-2	0.07	0.03		0.09	310.0
Diacetone Alcohol	123-42-2			0.02	0.02	570.0
N-Butyl Acetate	123-86-4	3.9	1.4	0.1	5.5	565.0
Heptane. N-	142-82-5	0.7	0.2		0.9	3900.0
Toulene-2,4-Diisocyanate	584-84-9			0.0004	0.0004	3900.0
Ethyl 3-Ethoxypropionate	763-69-9	0.13	0.05		0.18	64.0
Xylenes ***	1330-20-7	1.2	0.5	0.9	2.6	100.0
Ligroine	8032-32-4	0.6	0.2		0.9	900.0
2-(2H-Benzotriazol-2-yl)-4,6-	25973-55-1	0.052	0.02		0.07	---
Solvent Naphtha Aliphatic	64742-89-8	0.10	0.04		0.14	3200.0
Solvent Naphtha Light	64742-95-6	0.32	0.1		0.44	100.0
Notes: *** indicates a hazardous air pollutant or potential carcinogen.						

As seen in **Table 2.8-9** and **Table 2.8-10**, the noncriteria pollutant concentrations are within the SGC/AGC standard. In addition, the inhalation risk of carcinogen pollutants is 0.3 (less than 1), and the Hazardous Index is 0.03 (less than 1) for the non-carcinogenic pollutants.

The criteria pollutant concentrations are shown in **Table 2.8-11** through **Table 2.8-13**. Significant adverse air quality impact associated with the Proposed Actions due to existing manufacturing processing facilities within 400 feet of the Projected Development Site 1 or Potential Development Site 1 were evaluated with the National Ambient Air Quality Standard (NAAQS).

Table 2.8-11: 24-Hour $PM_{2.5}$ Dispersion Analysis Results

Source	PM Total Emission (lb/hr)	Activity Rate (hr/day)	Particle Size Distribution	24-Hour Average Emission (g/s)	Concentration (µg/m3)				
					Increment (Modeled)	Increment (Modeled) Total	Background	Ambient With-Action	NAAQS
RHP - Spray P.	0.175	4	28.6%	1.05E-03	3.03	6.38	17.8	24.2	35
SBAB - Spary P.	0.18	4	28.6%	1.05E-03	1.12				
ABC C. NYC - Spary P.	0.175	4	28.6%	1.05E-03	0.61				
ABC C. NYC - WoodW	0.100	8	29.5%	1.24E-03	0.72				
SSM	0.002	8	100.0%	8.41E-05	0.87				
PIW	0.002	8	100.0%	8.41E-05	0.04				

Notes:
1. RHP - Spray P. emission source: Red Hook Performance, Inc. spray-painting.
2. SBAB - Spary P. emission source: South Brooklyn Auto Body, Inc. spray-painting.
3. ABC C. NYC - Spary P. emission source: ABC Cabinet NYC spray-painting.
4. ABC C. NYC - WoodW emission source: ABC Cabinet NYC woodworking processing.
5. SSM emission source: Silverstone Sheet Metal welding.
6. PIW emission source: Petrillo Iron Works welding.

Table 2.8-12: Annual $PM_{2.5}$ Dispersion Analysis Results

Source	PM Total Emission (lb/yr)	Activity Rate (day/yr)	Particle Size Distribution	Annual Average Emission (g/s)	Concentration (µg/m3)				
					Increment (Modeled)	Increment (Modeled) Total	Background	Ambient With-Action	NAAQS
RHP - Spray P.	140	200	28.6%	5.76E-04	0.22	0.48	7.6	8.1	9.0
SBAB - Spary P.	140	200	28.6%	5.76E-04	0.08				
ABC C. NYC - Spary P.	105	150	28.6%	4.32E-04	0.03				
ABC C. NYC - WoodW	200	250	29.5%	8.49E-04	0.06				
SSM	4	250	100.0%	5.76E-05	0.08				
PIW	4	250	100.0%	5.76E-05	0.003				

Notes:
1. RHP - Spray P. emission source: Red Hook Performance, Inc. spray-painting.
2. SBAB - Spary P. emission source: South Brooklyn Auto Body, Inc. spray-painting.
3. ABC C. NYC - Spary P. emission source: ABC Cabinet NYC spray-painting.
4. ABC C. NYC - WoodW emission source: ABC Cabinet NYC woodworking processing.
5. SSM emission source: Silverstone Sheet Metal welding.
6. PIW emission source: Petrillo Iron Works welding.

Table 2.8-13: 24-Hour PM_{10} Dispersion Analysis Results

Source	PM Total Emission (lb/hr)	Activity Rate (hr/day)	Particle Size Distribution	24-Hour Average Emission (g/s)	Concentration (µg/m3)				
					Increment (Modeled)	Increment (Modeled) Total	Background	Ambient With-Action	NAAQS
RHP - Spray P.	0.175	4	46.7%	1.72E-03	4.94	9.96	43	53.0	150
SBAB - Spary P.	0.18	4	46.7%	1.72E-03	1.83				
ABC C. NYC - Spary P.	0.175	4	46.7%	1.72E-03	1.00				
ABC C. NYC - WoodW	0.100	8	52.9%	2.22E-03	1.29				
SSM	0.002	8	100.0%	8.41E-05	0.87				
PIW	0.002	8	100.0%	8.41E-05	0.04				

Notes:
1. RHP - Spray P. emission source: Red Hook Performance, Inc. spray-painting.
2. SBAB - Spary P. emission source: South Brooklyn Auto Body, Inc. spray-painting.
3. ABC C. NYC - Spary P. emission source: ABC Cabinet NYC spray-painting.
4. ABC C. NYC - WoodW emission source: ABC Cabinet NYC woodworking processing.
5. SSM emission source: Silverstone Sheet Metal welding.
6. PIW emission source: Petrillo Iron Works welding.

As shown in **Table 2.8-11** through **Table 2.8-13**, $PM_{2.5}$ and PM_{10} concentrations are within the NAAQS.

Conclusion

Predicted contaminants (criteria and noncriteria pollutants) concentrations at the Projected Development Site 1 or Potential Development Site 1 would not exceed the NAAQS or the SGC/AGC standard, and the noncriteria pollutants risk assessment (cancer risk and hazard index) is within the acceptable design values. Therefore, no significant adverse air quality impact is predicted in the future with the Proposed Actions from manufacturing processing facilities operating within 400 feet of the Projected Development Site 1 or Potential Development Site 1.

2.8.2.3 Stationary Sources Conclusion

As indicated above no significant adverse air quality impact was predicted from existing industrial sources in the area. Therefore, no significant adverse air quality impact is predicted in the future with the Proposed Actions from manufacturing processing facilities operating within 400 feet of Projected Development Site 1 or Potential Development Site 1. In addition, no large industrial emission sources were identified within the 1,000-foot Study Area. Based on the analysis above, conditions associated with the Proposed Actions HVAC systems would not result in any violations of the ambient air quality standards. To ensure that no impact would occur, an E-Designation with stack height restrictions should be placed on Projected Development Site 1 and Potential Development Site 1 as outlined above in **Section 2.8.2.1**. With these provisions in place, no significant adverse impact associated with stationary source air emissions is anticipated and no further analysis is warranted.

2.9 Noise

Introduction

This Noise Analysis was conducted to assess the potential for adverse noise impacts related to a proposed Zoning Map Amendment from M1-1 to M1-2A/R7A and M1-2A/R6A that would affect a portion of Block 526 in the Red Hook neighborhood of Brooklyn. The Affected Area consists of Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and, 31.

The Zoning Map Amendment would rezone Block 526, Lot 1 from an M1-1 zoning district to a MX (M1-2A/R7A) zoning district and Block 526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 from an M1-1 zoning district to an MX (M1-2A/R6A) zoning district. The Applicant also proposes a Zoning Text Amendment to Appendix F (Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas) to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. In addition, a Zoning Text Amendment is proposed to modify the New York City Zoning Resolution (ZR) Article XII, Chapter 3 to add R6A and R7A pairings to the MX-5 Designated Residence Districts. The Zoning Map Amendment and Zoning Text Amendments constitute the Proposed Actions.

The Affected Area is bounded by Nelson Street to the north, Hicks Street to the west, Huntington Street to the south, and Henry Street and Hamilton Avenue to the east. In addition, the Affected Area is located just west of the Gowanus Expressway, which runs south through Brooklyn and connects to the Prospect Expressway. The Affected Area is also located just south of the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway, which run north through Brooklyn.

Nelson Street is a 50-foot-wide one-way local roadway with one moving lane of traffic and curbside parking; east of Hicks Street, Nelson Street is an eastbound roadway, and west of Hicks Street is a westbound roadway. Hicks Street is a 60-foot-wide one-way local roadway with one moving lane of traffic northbound and curbside parking. Huntington Street is a 50-foot-wide one-way local roadway with one moving lane of traffic eastbound and curbside parking. Henry Street is a 60-foot-wide one-way local roadway with one moving lane of traffic southbound and curbside parking.

This noise analysis is limited to an assessment of ambient noise that could adversely affect building occupants of the proposed development, as well as an evaluation of the potential impact associated with project-generated Noise Passenger Car Equivalents (PCEs) on adjacent receptors.

Framework of Noise Analysis

Noise is defined as any unwanted sound, and sound is defined as any pressure variation that the human ear can detect. Humans can detect a large range of sound pressures, from 20 to 20 million micropascals, but only those air pressure variations occurring within a particular set of

frequencies are experienced as sound. Air pressure changes that occur between 20 and 20,000 times a second, stated as units of Hertz (Hz), are registered as sound.

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

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz) and are most sensitive to frequencies in the 1,000- to 5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common frequency weightings used are the A- and C-weightings. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighting is the most commonly used for environmental measurements, and sound levels measured using this weighting are denoted as dBA. The letter "A" indicates that the sound has been filtered to reduce the strength of very low and very high-frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high-frequency bands are significantly affected by C-weighting. **Table 2.9-1** notes the decibel levels of common noise sources.

Table 2.9-1: Noise Levels of Common Sources[18]

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

[18] Source: *2021 CEQR Technical Manual*

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

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

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law. In a large open area with no obstructive or reflective surfaces, it is a general rule that at distances greater than 50 feet, the SPL from a point source of noise drops off at a rate of 6 dB with each doubling of distance away from the source. For "line" sources, such as vehicles on a street, the SPL drops off at a rate of 3 dBA with each doubling of the distance from the source. Sound energy is absorbed in the air as a function of temperature, humidity, and the frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. The drop-off rate also will vary with both terrain conditions and the presence of obstructions in the sound propagation path.

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

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

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

Noise Standards and Guidelines

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the CEQR noise exposure guidelines for exterior noise levels. As shown in **Table 2.9-2** below, noise standards classify noise exposure into four categories based on noise level limits and land use, for vehicular traffic, rail, and aircraft noise sources: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable, Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior L_{10} noise levels of 45 dB(A) or below or interior Ldn noise levels of 40 dB(A) or below depending on the noise source, as shown below in **Table 2.9-3**.

The Proposed Actions would change the zoning in the Affected Area to a Special Mixed-Use District (MX) that allows manufacturing and residential uses. Zoning Resolution (ZR) Section 123-32-Environmental Conditions requires that all new dwelling units (Dus) in Special Mixed-Use Districts be provided with a minimum of 35 dBA window-wall attenuation to maintain an interior noise level of 45 dBA or less. The 35 dBA window-wall attenuation is for a closed-window condition; consequently, a means of alternate ventilation that does not degrade the acoustical performance of the building façade is required for all residential developments. However, it is possible to review and alter the minimum attenuation requirements via a process overseen by the New York City Mayor's Office of Environmental Remediation (OER), which could be undertaken at a later time.

Table 2.9-2: Noise Exposure Guidelines for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
1. Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA	----------DNL ≤ 60 dBA----------		----------60 < DNL ≤ 65 dBA----------		(I) 65 < DNL ≤ 75 dBA		---------- 75 dBA < DNL ----------
2. Hospital, nursing home		$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 65$ 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 comply with Impact Thresholds detailed in Section 410.

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

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

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

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

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

Table 2.9-3: Attenuation Values to Achieve Acceptable Interior Noise Levels

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

Note:

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

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

C. The required attenuation value is the difference between Lbuild and Linterior, using the appropriate noise descriptor Where:
Lbuild is the projected noise level under the build condition rounded up to the whole number
Linterior is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise)

2.9.1 Initial Impact Screening

Analysis Framework

Future No-Action Condition

Projected Development Site 1 (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 is located at 46 Nelson Street (Block 526, Lot 1). Lot 1 is a 20,000-SF corner lot with frontages on Nelson Street, Hicks Street, and Huntington Street. The lot is currently improved with a 1-story, 16,000 GSF (15,385 ZSF, 0.77 FAR) manufacturing/equipment supplier building constructed in 1964. It is conservatively assumed that under the Future No-Action Scenario, existing conditions would continue on Projected Development Site 1.

Potential Development Site 1 (Block 526, Lots 13 and 14):

- Lot 13 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) coffee business.
- Lot 14 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) moving company.

It is conservatively assumed that under the Future No-Action Scenario, existing conditions would continue on the non-Applicant-owned Potential Development Site 1.

Future With-Action Condition

Projected Development Site 1 – (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses, 17,876 GSF (17,118 ZSF, 0.86 FAR) of local retail, and 18,540 GSF of parking, storage, and utilities in the cellar. There would be approximately 108 dwelling units. The building would have 11 stories and rise to 115 feet. The cellar parking would contain approximately 42 parking spaces. One curb cut would be proposed along Huntington Street providing access to the below-grade parking.

Potential Development Site 1 – (Block 526, Lots 13 and 14; Non-Applicant Lots)

Potential Development Site 1 would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses on the upper floors. There would be approximately 19 dwelling units. No parking would be provided. The building would have 9 stories and rise to 95 feet. No new curb cuts would be provided.

Stationary Sources

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

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

the Proposed Actions would not result in any significant adverse noise impacts related to building mechanical equipment.

Mobile Sources

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

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

Vehicular traffic is the predominant source of noise in the area. Therefore, the noise analysis presented in this chapter focuses on the operational noise effects of the Proposed Actions to determine the level of building attenuation necessary to ensure that interior noise levels satisfy CEQR requirements.

As discussed above, the noise analysis presented in this chapter focuses on the operational noise effects of the Proposed Actions and consists of two parts:

- A Preliminary Noise Passenger Car Equivalent (PCE) Screening Analysis to determine whether project-generated traffic will increase Noise PCEs on adjacent roadways by greater than 100%.
- A determination of the level of attenuation necessary to ensure that interior noise levels satisfy City Environmental Quality Review (CEQR) requirements.

2.9.2 Noise Monitoring Results

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 for 20-minute periods. Noise Monitoring Location One (1) was located at the street level Hicks Street frontage of the Affected Area; Noise Monitoring Location Two (2) was located at the street level Nelson Street frontage of the Affected Area; and Noise Monitoring Location Three (3) was located on the rooftop of Projected Development Site 1 facing Nelson Street to capture noise associated with the Gowanus Expressway located east and northeast of the Affected Area. The noise monitoring locations are shown in **Figure 2.9-1** to **Figure 2.9-4** below.

Noise monitoring was conducted using a 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 around the Affected Area constitute a worst-case condition for noise in the Affected Area. Noise meter calibration certification and backup data are provided in **Appendix E**.

Figure 2.9-1: Noise Monitoring Locations



Figure 2.9-2: Location 1 – Noise Monitoring Location Photos (Hicks Street)



Figure 2.9-3: Location 2 – Noise Monitoring Location Photos (Nelson Street)



Figure 2.9-4: Location 3 – Noise Monitoring Location Photos (Projected Development Site 1 Rooftop)



Existing Conditions

Monitoring was conducted during typical midweek conditions, on Tuesday, April 16, 2024. The weather was dry and wind speeds were moderate during all monitoring periods. **Table 2.9-4** to **Table 2.9-6** below contain the results for the measurements taken at Location 1 to Location 3, respectively.

Table 2.9-4: Noise Levels in dBA at Location 1

Tuesday, April 16, 2024			
Time	**8:39 am – 8:59 am**	**12:52 pm – 1:12 pm**	**5:34 pm – 5:54 pm**
L_{max}	78.5	87.4	92.8
L_{10}	65.5	64.0	64.0
L_{eq}	64.6	62.7	65.7
L_{50}	64.5	62.0	60.5
L_{90}	63.5	60.5	59.5
L_{min}	61.0	58.3	55.3

Table 2.9-5: Noise Levels in dBA at Location 2

Tuesday, April 16, 2024			
Time	**8:18 am – 8:38 am**	**12:29 pm – 12:51 pm**	**5:13 pm – 5:33 pm**
L_{max}	89.0	81.1	85.5
L_{10}	75	70.5	69.5
L_{eq}	73.4	68.8	67.4
L_{50}	73.0	68.5	66.5
L_{90}	70.0	66.5	62.5
L_{min}	67.6	63.1	59.7

Table 2.9-6: Noise Levels in dBA at Location 3

Tuesday, April 16, 2024			
Time	**7:54 am – 8:14 am**	**12:02 pm – 12:22 pm**	**4:45 pm – 5:05 pm**
L_{max}	84.8	74.7	86.3
L_{10}	72.5	69.0	69.5
L_{eq}	71.4	67.5	68.2
L_{50}	71.0	67.0	68.0
L_{90}	70.0	65.5	66.0
L_{min}	68.0	62.7	62.9

The traffic volumes (vehicle counts) and vehicle classifications collected during peak vehicular travel periods [morning (AM), noon (MD), and evening (PM)] concurrent with noise monitoring

at Location 1 and Location 2 are shown below in **Table 2.9-7** and **Table 2.9-8**. Noise Monitoring Location 3 was located on the rooftop of Projected Development Site 1 to get a direct line of sight to the elevated Gowanus Expressway. The elevated roadway was too far to manually collect vehicle counts and classifications.

Table 2.9-7: Traffic Volumes and Vehicle Classifications Noise Location 1

	8:39 am – 8:59 am	12:52 pm – 1:12 pm	5:34 pm – 5:54 pm
Car/ Taxi	1	3	6
Van/Light Truck/SUV	15	8	5
Medium Truck	0	0	0
Heavy Truck	0	0	0
Bus	0	0	0

Table 2.9-8: Traffic Volumes and Vehicle Classifications Noise Location 2

	8:18 am – 8:38 am	12:29 pm – 12:51 pm	5:13 pm – 5:33 pm
Car/ Taxi	0	1	5
Van/Light Truck/SUV	7	1	5
Medium Truck	2	0	0
Heavy Truck	0	0	0
Bus	0	0	0

2.9.3 Preliminary Noise Passenger Car Equivalent (PCE) Screening Analysis

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

For Mobile Sources, an initial noise assessment may be appropriate if a proposed action would generate additional project-generated vehicular traffic in an area where roadways currently carry no or very low traffic volumes, or where a nearby receptor would potentially be impacted by high ambient noise levels. Receptors are generally the subject of most noise impact analyses. A noise-sensitive location (known as a "receptor") is usually defined as an area where human activity may be adversely affected when noise levels exceed predefined thresholds of acceptability or when noise levels increase by an amount exceeding predefined thresholds of change.

Automobile noise is a function of vehicle speed and engine noise. With changing gears, the noise levels tend to increase in a sawtooth kind of pattern as vehicular speed increases. The interaction of the road surface with the tires generates noise that increases with vehicle speed. At vehicular speeds below 30 miles per hour, the typical automobile noise spectrum is dominated by engine noise. At speeds higher than 30 miles per hour, the automobile noise signature is composed of a

combination of lower frequency engine noise and higher frequency tire noise. The engine and tire noise for vehicular speeds above 30 miles per hour are comparable in noise level. Noise generated by buses and heavy trucks is also composed of engine and tire noise, but tire noise tends to dominate the noise signature at vehicular speeds above 30 miles per hour in trucks and buses. Cargo load normally does not significantly affect noise levels because increased load usually results in decreased vehicular speed, and the effects cancel each other out. Because individual trucks and buses are noisier than individual automobiles, the concept of noise passenger car equivalents (PCEs) is used.

Pursuant to Section 332.1 of the *2021 CEQR Technical Manual*, the below values can be used to calculate vehicular noise using projections:

- Each Automobile or Light Truck: 1 Noise PCE
- Each Medium Truck: 13 Noise PCEs
- Each Bus: 18 Noise PCEs
- Each Heavy Truck: 47 Noise PCEs

A preliminary Noise PCE screening was conducted to determine if the Proposed Actions would result in an increase to existing Noise PCE values by 100 percent or more.

While vehicles are not anticipated to traverse directly past Noise Monitoring Location 1 (Hicks Street between Nelson Street and Huntington Street), the Noise PCE screening evaluates the project-generated vehicle volumes at the nearest bounding intersection to Noise Monitoring Location 1, where vehicles are anticipated to traverse (Huntington Street and Hicks Street). No project-generated incremental vehicles are anticipated to traverse past or near Noise Monitoring Location 2 (Nelson Street).

This screening conservatively considers the project-generated Noise PCE values during the worst-case peak hour for incremental project-generated vehicles under the With-Action Scenario (Saturday MD) at the intersection of Huntington Street and Hicks Street, compared to the Noise PCE values of AM, MD, and PM background traffic recorded at Noise Monitoring Location 1 (Hicks Street between Nelson Street and Huntington Street). The existing 20-minute traffic counts recorded concurrent with noise monitoring at this location were multiplied by 3 to reflect a one-hour period. A growth rate to the 2028 Build Year was applied to the calculated Existing PCEs at Location 1 to reflect traffic growth, and its associated noise. According to the *2021 CEQR Technical Manual*, Table 16-4, the annual background growth rate for Brooklyn is 0.25% from 1-5 years.

As shown below in **Table 2.9-9** and **Table 2.9-10**, the Proposed Actions would not increase No-Action Noise PCE values by greater than 100% at this location under the With-Action Scenario and no further analysis is warranted.

Table 2.9-9: Noise PCE Screening Location 1

Existing Vs. With-Action Noise PCE Value									
	AM Existing Vehicle Counts (1 hour)	AM Project Generated Vehicle Trips	With-Action AM Noise PCE Value	MD Existing Vehicle Counts (1 hour)	MD Project Generated Vehicle Trips	With-Action MD Noise PCE Value	PM Existing Vehicle Counts (1 hour)	PM Project Generated Vehicle Trips	With-Action PM Noise PCE Value
Car/Taxi	3	25	28	9	25	34	18	25	43
Van/Light Truck/SUV	45	0	45	24	0	24	15	0	15
Medium Truck	0	0	0	0	0	0	0	0	0
Heavy Truck	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Total Noise PCE	-	-	73	-	-	58	-	-	58

Notes:
*Saturday MD peak hour project-generated vehicle trips conservatively assumed for AM, MD, and PM peak hours
*Existing 20-minute vehicle counts multiplied by 3 to reflect peak hour equivalent

Table 2.9-10: Noise PCE Screening Results Location 1

Peak Hour	Existing	No Action	With Action	Increment	% Increase
AM Noise PCE	48	48	73	25	52%
MD Noise PCE	33	33	58	25	76%
PM Noise PCE	33	33	58	25	76%

2.9.4 Conclusion

The *2021 CEQR Technical Manual* sets external noise exposure standards, which are classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dB(A) or lower where vehicular traffic is the noise source. For a residential use such as what 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 80 dB(A) is identified as marginally unacceptable general external exposure.

The highest recorded L_{10} at Location 1 was 65.5 dB(A) during the morning period. The highest recorded L_{10} at Location 2 ground level was 75.0dB(A) during the morning period. Based on the field notes, there was construction nearby occurring during the morning and midday periods, causing the elevated readings. The construction was not occurring during the evening period, and the traffic volumes were higher. Therefore, the L_{10} of 69.5 during the evening period is the accurate noise reading. The highest recorded L_{10} at Location 3 was 72.5 dB(A) during the morning period. Based on the field notes, there was construction nearby occurring during the morning and midday periods, causing the elevated readings. The construction did not occur during the evening period. Therefore, the L_{10} of 69.5 during the evening period is the accurate noise reading. Based on the above, there would be no significant adverse impacts related to noise.

The Proposed Actions would change the zoning in the Affected Area to a Special Mixed-Use District (MX) that allows manufacturing and residential uses. Zoning Resolution (ZR) Section 123-32-Environmental Conditions requires that all new dwelling units (DUs) in Special Mixed-Use Districts be provided with a minimum of 35 dBA window-wall attenuation to maintain an interior noise level of 45 dBA or less. The 35 dBA window-wall attenuation is for a closed-window condition; consequently, a means of alternate ventilation that does not degrade the acoustical performance of the building façade is required for all residential developments. However, it is possible to review and alter the minimum attenuation requirements via a process overseen by the New York City Mayor's Office of Environmental Remediation (OER), which could be undertaken at a later time.

2.10 Neighborhood Character

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

2.10.1 Preliminary Assessment

Existing Conditions

Affected Area

The Affected Area consists of Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 in the Red Hook neighborhood of Brooklyn Community District 6. The Affected Area is located within an M1-1 zoning district and is bounded by Nelson Street to the north, Hicks Street to the west, Henry Street and Hamilton Avenue to the east, and Huntington Street to the south. The Affected Area contains approximately 43,447 SF of lot area within Block 526.

The Affected Area includes one Applicant-owned Projected Development Site (Block 526, Lot 1). Non-Applicant-owned lots within the Affected Area include Block 526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31. Among the above-mentioned non-Applicant owned lots, one Potential Development Site (Block 526, Lots 13 and 14) has been identified:

Projected Development Site 1

The Applicant-Owned Development Site (Projected Development Site 1) is located at 46 Nelson Street (Block 526, Lot 1). Lot 1 is a 20,000-SF corner lot with frontages on Nelson Street, Hicks Street, and Huntington Street. The lot is currently improved with a 1-story, 16,000 GSF (15,385 ZSF, 0.77 FAR) manufacturing/equipment supplier building constructed in 1964.

Potential Development Site 1

Potential Development Site 1 includes Block 526, Lots 13 and 14.

- Lot 13 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) coffee business. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.

- Lot 14 consists of a 2,233-SF rectangular lot fronting Nelson Street and is improved with a 2-story 2,233 GSF (2,147 ZSF, 0.96 FAR) moving company. The building was constructed in 2009 and is owned by Y.E.S. COM. PROPERTIES, LLC.

Study Area

The Affected Area is situated within a changing and transitional area between residential, manufacturing and community facility uses. Existing land uses within a 400-foot Study Area consist of a varied mix of manufacturing/industrial, commercial, multi-family elevator and walk-up buildings, one-and two-family residences, mixed commercial and residential buildings, transportation and utility uses, public facilities and institutions, parking facilities, and vacant land.

Residential 1- and 2-family and multi-family buildings are located generally throughout the Surrounding Area. The Red Hook East and Red Hook West public housing complexes are located south of the Affected Area, bounded by West 9th, Lorraine, Dwight, and Clinton streets. There are several manufacturing buildings located in the Surrounding Area including, auto, sheet metal, electrical contractor, and film production businesses. There is a supermarket and a fast-food restaurant located two blocks south of the Affected Area on Hicks Street. The Red Hook Initiative, a community-based nonprofit organization, is located just south of the Affected Area on Block 535. Several contiguous parking lots used for School Bus parking are located south of the Affected Area on Block 535. Summit Academy Charter School and the Red Hook Neighborhood School, PS 676 are located just west of the Affected Area on Block 525, and PAVE Academy Charter School is located two blocks south of the Affected Area on Block 539. There are also several houses of worship located in the Surrounding Area.

Built form in the Surrounding Area varies by use. Residential buildings generally consist of 2-3 story one and two-family residential buildings, 2-4 story multifamily walk-up buildings, and 6-11-story multi-family elevator buildings. The one- and-two-family and multi-family walk-up buildings are primarily traditionally oriented, attached or semi-detached, with brick or stone façades. Mixed commercial and residential buildings are 2-4 stories tall, and commercial/office buildings, all located south of Huntington Street, are 1-3 stories tall. Public facilities/institutional buildings are located south and east of the Affected Area and range from 1-3 stories. Lastly, transportation/utility and manufacturing/industrial buildings are predominantly 1-2 stories in height.

The Affected Area is within an M1-1 zoning district that covers in full both the Subject Block and the block directly south of the Subject Block (Block 535) and is bounded by West 9th Street at its southern limit and Henry Street to the east. The district generally extends north of the subject block, bounded by Van Brunt and Columbia streets to the west, and through the Carroll Gardens and Cobble Hill neighborhoods. To the east of the Subject Block is an R5 zoning district that generally covers the area east of Henry Street and Columbia Street, south of the BQE/Gowanus Expressway and West 9th Street, and west of Hicks Street. Within this R5 zoning district, a C2-3 commercial overlay is mapped along Hamilton Avenue, and a C1-2 commercial overlay is mapped

along West 9th Street. Lastly, an R6B zoning district, established as part of the Carroll Gardens and Columbia Street Rezoning (ULURP No. C090462ZMK, CEQR No. 09DCP083K, effective October 28, 2009), is located to the northeast of the Subject Block, extending over the area generally north of the BQE/Gowanus Expressway.

The Study Area features a regular traffic grid, except where the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway (BQE), located along the eastern and northern portions of the Study Area, results in irregularly shaped blocks. Within the Study Area, Hamilton Avenue, which intersects with both Nelson Street and Henry Street, serves as a principal arterial roadway and a major commercial corridor.

The area is located in the Outer Transit Zone and is well-served by transit. The Affected Area is within one-half mile from the Smith/9th Street MTA subway station serving the F and G trains and 0.2 miles west of the B57 and B61 bus stop at Mill and Clinton Streets.

Future No-Action Condition

Affected Area

Redevelopment within the Affected Area is not considered likely in the Future No-Action Condition due to the bulk and uses permitted under the current M1-1 district (1.00 FAR industrial, 1.00 FAR commercial, and 2.4 FAR community facility). In addition, there are no records of building work permits submitted on the DOB website for Projected Development Site 1 or Potential Development Site 1. Therefore, it is conservatively assumed that under future conditions absent the Proposed Actions, existing conditions would remain within the Affected Area.

Study Area

There is one active construction permit in the Surrounding Area. A new 3-story residential building is under construction at 20 Luquer Street Block 520, tentative Lot 16 (former lots 13 and 16), approved as part of a variance from the NYC Board of Standards and Appeals (Cal No. 175-05BZ) pursuant to Zoning Resolution Section 72-21. This building would contain 12 dwelling units and 20,643 gross square feet. In the future, without the Proposed Actions, it is expected that while tenants within surrounding Study Area buildings may change, the overall use of these buildings would remain the same. Any new development within the Study Area, with the exception of the construction at 20 Luquer Street, would be governed by the underlying as-of-right zoning regulations.

Future With-Action Condition

Affected Area

The proposed Zoning Map Amendment would rezone Block 526, Lot 1 (a rectangular corner lot of approximately 20,000 square feet with frontages on Nelson Street, Hicks Street, and Huntington Street) from an M1-1 zoning district to a MX (M1-2A/R7A) zoning district and Block

526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 (a rectangular area of approximately of 23,447 square feet bounded in part by Nelson Street, Henry Street, and Huntington Street) from an M1-1 zoning district to an MX (M1-2A/R6A) zoning district. The Applicant also proposes a Zoning Text Amendment to Appendix F (Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas) to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. In addition, a Zoning Text Amendment is proposed to modify the New York City Zoning Resolution (ZR) Article XII, Chapter 3 to add R6A and R7A pairings to the MX-5 Designated Residence Districts. The Zoning Map Amendment and Zoning Text Amendments constitute the Proposed Actions.

As detailed below, in addition to the Applicant-owned Projected Development Site, one Potential Development Site has been identified within the Affected Area, which may be developed under Future With-Action Conditions, but has been determined to have less development potential than the Projected Development Site.

Under Future With-Action Conditions, Projected Development Site 1 (Applicant-owned Block 526, Lot 1) would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses and 104 dwelling units, 17,876 GSF (17,118 ZSF, 0.86 FAR) of local retail, and 18,540 GSF of parking, storage, and utilities in the cellar. The building would have 11 stories and rise to 115 feet. The cellar would contain approximately 42 parking spaces, with access provided via one curb cut along Huntington Street.

Potential Development Site 1 (Block 526, Lots 13 and 14) would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses with 19 dwelling units on the upper floors. The building would have 9 stories and rise to 95 feet. No new curb cuts or parking would be provided.

In comparison with the existing M1-1 zoning districts mapped in the Affected Area currently, the proposed MX (M1-2A/R7A mixed-use) and MX (M1-2A/R6A mixed-use) would allow for larger bulks and higher building heights within the Affected Area, and would bring into conformance existing legal non-conforming residential uses present within the Affected Area, while also maintaining conformance of the current manufacturing/commercial uses.

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

- **Land Use, Zoning, and Public Policy:** The Proposed Actions would not adversely impact the neighborhood in terms of land use, zoning, or public policy. Though the proposed

rezoning would permit new residential use, and effectuate the development of manufacturing, commercial, and community facility uses at a higher density than that is currently allowed within the Study Area. The Proposed Actions would introduce a land use mix that is compatible with surrounding uses, and would not alter or accelerate development patterns in the area. The development effectuated as a result of the Proposed Actions would not conflict with public policies and plans for the Affected Area or Surrounding Area. The Proposed Actions would also not result in significant material changes to existing regulations or policy. Therefore, no potentially significant adverse impacts related to Land Use, Zoning, and Public Policy would occur as a result of the Proposed Actions.

- **Open Space:** The Future With-Action Condition would result in the development of 108 additional dwelling units over the Future No-Action Condition, projected to generate an additional population of 245 new residents. This would result in a decrease of the OSR within the Study Area from 0.513 acres per 1,000 residents in the Future No-Action Condition to 0.508 in the Future With-Action Conditions, or a decrease of approximately 0.91 percent. Pursuant to the *2021 CEQR Technical Manual*, an OSR range between 0.51 and 1 can tolerate up to a two percent decrease in the OSR between the Future No-Action and Future With-Action Condition without warranting additional analyses. Further, the Affected Area is within a Walk to a Park service area, indicating all future projected residents are within a reasonable walking distance of public Open Spaces. Therefore, the Proposed Actions would not result in a significant adverse impact on Open Space within the Study Area, and further analysis is not warranted.

- **Shadows:** Based on the Tier 1 Shadows Screening, there are no sunlight-sensitive resources within the longest Shadow Study Area. Therefore, no adverse impact is expected on the Open Space Utilization of any sunlight-sensitive resources is anticipated, and no further analysis is warranted.

- **Historic and Cultural Resources:** The LPC was contacted for their initial review of the project's potential to impact historic or architectural resources and indicated that no properties within the Affected Area have architectural significance (see Appendix A). However, S/NR eligible PS/MS 27-Agnes Y. Humphrey School and S/NR eligible Red Hook Houses East and West are within radius of the Affected Area. Since there are no existing Architectural Resources within the Affected Area, no direct impacts on architectural resources would occur. Only Projected Development Site 1 is within 90 feet of one of the eligible architectural resources (S/NR eligible PS/MS 27-Agnes Y. Humphrey School). To mitigate any possible construction impact on S/NR-listed properties within a 90-foot radius, a special protective measure TPPN #10/8 applies. In addition, all identified architectural resources are buffered from the Projected and Potential Development Sites by intersections. Therefore, no significant adverse impacts related to construction would occur because of the Proposed Actions. Since publicly accessible views of the historic

architectural resources would not be blocked and none of the identified historic resources feature sunlight-sensitive physical characteristics, no significant indirect impacts on architectural resources would occur as a result of the Proposed Actions. Lastly, the LPC has indicated that no archaeological significance is associated with the properties within the Affected Area. Therefore, no significant adverse impacts on archaeological or architectural resources would occur because of the Proposed Actions.

- **Urban Design and Visual Resources:** The development facilitated by the Proposed Actions would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood. It would not adversely impact or significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or visual character of the area. Instead, the mixed-use residential development with ground-floor commercial uses would improve the pedestrian experience and increase the vitality of the area. Therefore, the Proposed Actions would not result in any significant adverse impacts on urban design, and a detailed analysis is not warranted.
- **Transportation:** The Proposed Actions would not result in a development that would have significant adverse impact on transportation.
- **Noise:** Based on the results of the noise analysis, there would be no significant adverse impacts related to noise. The Proposed Actions would change the zoning in the Affected Area to a Special Mixed-Use District (MX) that allows manufacturing and residential uses. Zoning Resolution (ZR) Section 123-32-Environmental Conditions requires that all new dwelling units (DUs) in Special Mixed-Use Districts be provided with a minimum of 35 dBA window-wall attenuation to maintain an interior noise level of 45 dBA or less. The 35 dBA window-wall attenuation is for a closed-window condition; consequently, a means of alternate ventilation that does not degrade the acoustical performance of the building façade is required for all residential developments. However, it is possible to review and alter the minimum attenuation requirements via a process overseen by the New York City Mayor's Office of Environmental Remediation (OER), which could be undertaken at a later time.

Combination of Moderate Effects:

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

2.10.2 Conclusion

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

2.11 Construction

According to the *2021 CEQR Technical Manual*, construction impacts may be analyzed for any project that involves construction or could induce construction. For construction activities not related to in-ground disturbance, short-term construction generally does not warrant a detailed construction analysis. For example, the use of a property for construction staging activities is likely to only warrant analysis if this activity continues for a period of several years. Consideration of several factors, including the location and setting of the project in relation to other uses and intensity of construction activities are used to determine if a project's construction activities warrant analysis in one or more of the following technical areas:

- Transportation
- Air Quality or Noise
- Historic and Cultural Resources
- Hazardous Materials
- Natural Resources
- Open Space
- Socioeconomic Conditions
- Community Facilities
- Land Use and Public Policy
- Neighborhood Character
- Infrastructure

A preliminary construction analysis may be required because the proposed development would result in the following:

- Construction activities are considered long-term (Last longer than two years); or
- Short-term construction activities would directly affect a technical area, such as impeding the operation of a community facility.
- Result in the closing, narrowing, impeding of traffic, transit, or obstruction of pedestrian or vehicular routes in proximity to critical land uses.
- 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.
- 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.

Analysis Framework

Future No-Action Condition

In the Future No-Action Scenario, existing conditions would be expected to remain. No redevelopment or construction-related activities would be expected to occur.

Future With-Action Condition

Projected Development Site 1 – (Applicant-owned Block 526, Lot 1):

Projected Development Site 1 would be developed with a single 125,856 GSF (100,200 ZSF, 5.01 FAR) mixed residential and commercial building containing approximately 89,440 GSF (83,012 ZSF, 4.15 FAR) of residential uses, 17,876 GSF (17,118 ZSF, 0.86 FAR) of local retail use, and 18,540 GSF of parking, storage, and utilities in the cellar. There would be approximately 108 dwelling units. The building would have 11 stories and rise to 115 feet. The cellar parking would contain approximately 42 parking spaces. One curb cut would be proposed along Huntington Street providing access to the below-grade parking.

Potential Development Site 1 – (Block 526, Lots 13 and 14; Non-Applicant Lots)

Potential Development Site 1 would be assembled and developed with a single 18,565 GSF (17,417 ZSF, 3.90 FAR) mixed residential and commercial building containing approximately 2,499 GSF (2,403 ZSF, 0.54 FAR) of ground-floor commercial retail and 16,066 GSF (15,015 ZSF, 3.36 FAR) of residential uses on the upper floors. There would be approximately 19 dwelling units. No parking would be provided. The building would have 9 stories and rise to 95 feet. No new curb cuts would be provided.

Build Year

A build year of 2028 is anticipated for the Proposed Project. This is based on a projected 18-month CEQR review period, a 7-month ULURP process, 6 months of design development and permitting, and a 20-month single-phase construction schedule for the Applicant-owned Projected Development Site.

2.11.1 Preliminary Assessment

Historic and Cultural Resources

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

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

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

1. All buildings are provided some protection from accidental damage through New York City Department of Buildings (DOB) controls that govern the protection of any adjacent properties from construction activities, under Building Code Section 27-166 (C26-112.4). For all construction work, Building Code section 27-166 (C26-112.4) serves to protect buildings by requiring that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the code requirements.
2. The second protective measure applies only to designated NYCL and S/NR-listed historic buildings that are located within 90 linear feet of a proposed construction site. For these structures, the DOB's Technical Policy and Procedure Notice (TPPN) #10/88 is applicable. The DOB's TPPN 10/88 supplements the standard building protections afforded by the Building Code C26-112.4 by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources (within 90 feet), and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

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

The LPC has indicated two eligible architectural resources within the Study Area:

- S/NR eligible PS/MS 27-Agnes Y. Humphrey School
- S/NR eligible Red Hook Houses East and West

Therefore, an analysis of the potential impacts of the Proposed Actions on the identified architectural resources related to construction is warranted and is discussed below (see also **Section 2.4**).

S/NR eligible PS/MS 27-Agnes Y. Humphrey School (now Red Hook Neighborhood School and Summit Academy Charter School)

- Projected Development Site 1 (Applicant-owned Block 526, Lot 1):

  Projected Development Site 1 is within 90 feet of S/NR eligible PS/MS 27-Agnes Y. Humphrey School (now Red Hook Neighborhood School and Summit Academy Charter School) at 401 Columbia Street. The school is located approximately 67 feet west of the nearest edge of Projected Development Site 1, separated by Hicks Street. To mitigate any possible construction impact on S/NR-listed properties within a 90-foot radius, a special protective measure TPPN #10/8 applies. TPPN #10/88 requires a monitoring program to reduce the likelihood of construction damage to adjacent NYCLs and NR-listed properties (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed. As such, no construction impacts from Projected Development Site 1 to S/NR eligible PS/MS 27-Agnes Y. Humphrey School are anticipated.

- Potential Development Site 1 (Block 526, Lots 13 and 14; Non-Applicant Lots):

  The nearest edge of Potential Development Site 1 is located 165 feet east of the closet portion of PS/MS 27-Agnes Y. Humphrey School (now Red Hook Neighborhood School and Summit Academy Charter School). The school is buffered from Potential Development Site 1 by Hicks Street, and by Projected Development Site 1. Accordingly, Potential Development Site 1 would not introduce adverse construction-related impacts to S/NR eligible PS/MS 27-Agnes Y. Humphrey School from ground-borne construction period vibrations, falling debris, and/or collapse. Therefore, significant adverse impacts to this resource are not expected, and further analysis is not warranted.

S/NR eligible Red Hook Houses

- Projected Development Site 1 (Applicant-owned Block 526, Lot 1):

  The nearest building within the Red Hook House complex is located approximately 340 feet southwest of the nearest edge of Projected Development Site 1. The Red Hook Housing Complex is buffered from Projected Development Site 1 by Huntington Street, Hicks Street, and West 9th Street as is further buffered by adjacent intervening buildings on Block 535. Accordingly, Projected Development Site 1 would not introduce adverse construction-related impacts to S/NR eligible Red Hook Houses from ground-borne construction period vibrations, falling debris, and/or collapse. Therefore, significant

adverse impacts from Projected Development Site 1 on this resource are not expected, and further analysis is not warranted.

- Potential Development Site 1 (Block 526, Lots 13 and 14; Non-Applicant Lots):

  The nearest building within the Red Hook House complex is located approximately 468 feet southwest of the nearest edge of Potential Development Site 1. The Red Hook Housing Complex is buffered from Potential Development Site 1 by Huntington Street, Hicks Street, and West 9th Street as is further buffered by adjacent intervening buildings on Block 535. Accordingly, Potential Development Site 1 would not introduce adverse construction-related impacts to S/NR-eligible Red Hook Houses from ground-borne construction period vibrations, falling debris, and/or collapse. Therefore, significant adverse impacts from Potential Development Site 1 on this resource are not expected, and further analysis is not warranted.

2.11.2 Conclusion

As was discussed above, construction of the Development Sites would not be expected to result in significant adverse impacts. Construction activities would be performed subject to relevant EPA, DEP, DOT and DOB codes and regulations. With these construction controls and protective measures, no impacts to Transportation, Air Quality, Noise, or Historic and Cultural Resources would occur. Therefore, the Proposed Actions would not have any significant adverse construction impacts, and further analysis is not required.

APPENDIX A

AGENCY CORRESPONDENCE

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: 46 NELSON REZONING
Date Received: 5/14/2024

Properties with no Architectural or Archaeological significance:

1) 46 NELSON STREET, BBL: 3005260001
2) 56 NELSON STREET, BBL: 3005260013
3) 58 NELSON STREET, BBL: 3005260014

Comments:

S/NR ELIGIBLE PS/MS 27-AGNES Y. HUMPHREY SCHOOL, 401 COLUMBIA STREET AND RED HOOK HOUSES EAST AND WEST WITHIN RADIUS.

Gina Santucci

5/28/2024

SIGNATURE DATE

Gina Santucci, Environmental Review Coordinator

File Name: 37343_FSO_ALS_05282024.docx

APPENDIX B

ILLUSTRATIVE ARCHITECTURAL PLANS

46 NELSON STREET
RE-ZONING

PROPOSED NEW
7 STORY MIXED USE BUILDING

PROJECT NUMBER: 1907–NJ

CLIENT

ARIEL AKKAD
HH REALTY EQUITIES
302 5TH AVENUE
NEW YORK, NY 10001

DRAWING LIST

A–001.00	COVER PAGE
A–002.00	ZONING ANALYSIS, ZONING MAP & AND HEIGHT DIAGRAM
A–003.00	CELLAR PLAN
A–004.00	FIRST FLOOR PLAN
A–005.00	TYP. 2ND – 6TH FLOOR PLAN
A–006.00	7TH FLOOR PLAN
A–007.00	FLOOD ELEVATION DIAGRAM
A–008.00	STREET VIEW 1 (RENDERING)
A–009.00	STREET VIEW 2 (RENDERING)



ISOMETRIC MASSING DIAGRAM
N.T.S.

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ARCHITECTS, P.C.
143 TERRACE STREET
HAWORTH N.J. 07641
201.384.9555
N.J. R.A. LIC # 07976, 16378

PROPOSED NEW:
MIXED USE BUILDING
46 NELSON STREET
BROOKLYN, NY 11231

REVISIONS		
NO.	DESCRIPTION	DATE
1	ZONING STUDY	03.04.19
2	REVISED AS PER CITY PLANNING COMMENTS	05.09.24
3	REVISED AS PER CHO	01.02.25

NO.	TO WHOM:	DATE

ISSUES

DRAWN BY:	JOB NO.
NP	1907NJ
CHECKED BY:	DATE:
VF	11.10.21

DWG. TITLE :
COVER PAGE

DWG. NO.
A-1

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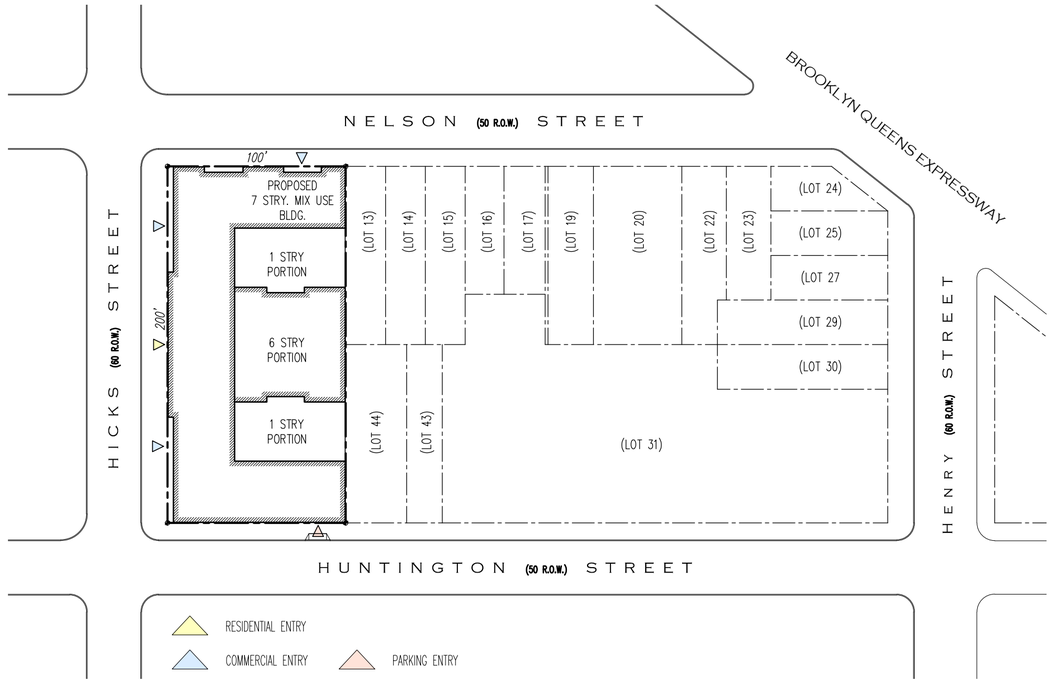
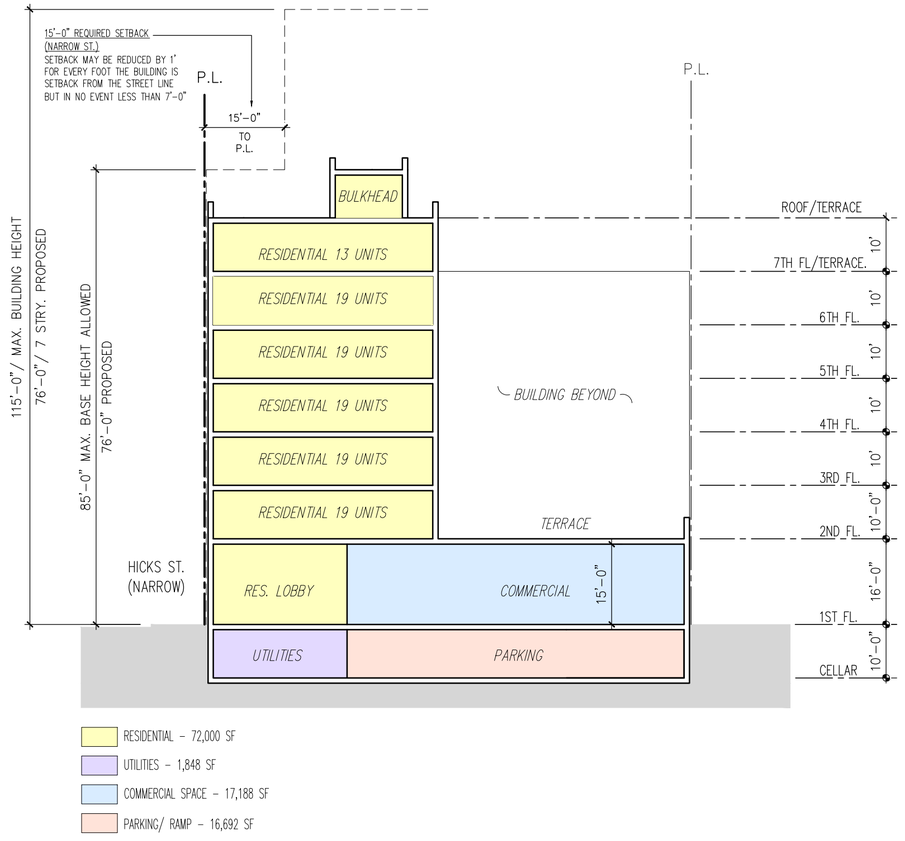
ZONING ANALYSIS

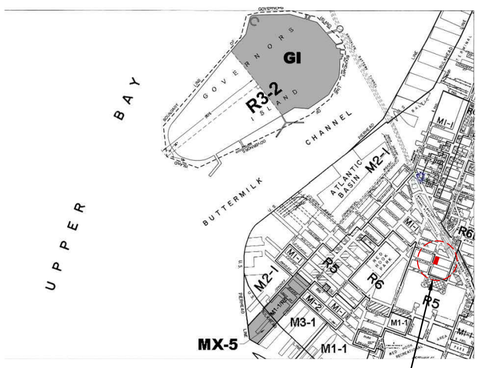
PREMISE:			
	46 NELSON ST. BROOKLYN, NY 11231	BLOCK: 526 LOTS: 1	MAP: 16A
		EXISTING	PROPOSED
ZONING DISTRICT:		M1-2A	*M1-2A / R7A (MX)*
LOT AREA(TYPICAL LOT):			
		20,000	20,000 SF
		REQUIRED/ MAX.	PROPOSED
USE REGULATIONS:			
Z.R. 22-00	PERMITTED USE GROUPS	*AS PERMITTED BY 22-00 & 42-10*	*II - RES., VI - RETAIL*
F.A.R REGULATIONS:			
Z.R. 23-22	RESIDENTIAL w/ QUALIFYING AFFORDABLE HOUSING	*5.01/ 100,200 SF*	*4.15 / 83,000 SF*
Z.R. 43-12	MANUFACTURING (M1-2A)	2.0/ 40,000 SF	0.86/ 17,188 SF
		TOTAL	*5.01/ 100,188 SF*
LOT COVERAGE:			
Z.R. 23-362	RESIDENTIAL		
	LOT COVERAGE FOR CORNER LOTS	100%/ 20,000 SF	*75.6%/ 15,130 SF*
DENSITY REGULATIONS:			
Z.R. 23-52	DENSITY FACTOR	*680 SF*	680 SF
	MAX DENSITY = MAX. RES. FLOOR AREA = 100,200 – 17,188 (COMM.) = 83,012 / 680	*83,012 / 680 = 122*	*108*
	*NOTE: FRACTIONS EQUAL TO OR GREATER THAN 3/4 SHALL COUNT AS 1 DWELLING UNIT		*81 (STANDARD) 27(I.H.U. 25 %)*
YARD REGULATIONS:			
Z.R. 23-322	FRONT YARD	*0'*	*0'*
Z.R. 23-334(b)	SIDE YARD	*0' OR 8' OPEN AREA*	0'
Z.R. 23-43(b)	REAR YARD WITHIN 100' OF CORNER	*0'*	*0'*
HEIGHT AND SETBACK REGULATIONS FOR QUALIFYING AFFORDABLE			
Z.R. 23-432	MIN. BASE HEIGHT (FT)	*40'*	*76'*
	MAX. BASE HEIGHT (FT)	*85'*	*76'*
	MAX. BUILDING HEIGHT (FT)	*115'*	*76'/ 7 STRY*
	SETBACK REGULATIONS *AT A HEIGHT NOT LOWER THAN THE MINIMUM BASE HEIGHT OR HIGHER THAN THE MAX. BASE HEIGHT, A SETBACK WITH A DEPTH OF AT LEAST 15'-0" SHALL BE PROVIDED FROM ANY STREET WALL FRONTING A NARROW STREET. 10'-0" FROM A WIDE STREET. SETBACK MAY BE REDUCED BY 1' FOR EVERY FOOT THE BUILDING IS SETBACK FROM THE S.L. BUT IN NO EVENT LESS THAN 7'*	15'	N/A
BALCONY REGULATIONS:			
Z.R. 23-132	BALCONIES 1. PROJECT NO MORE THAN 7' FROM THE WALL ITS PROJECTING FROM 2. BE UNENCLOSED IF PROJECTING OUTWARD, EXCEPT FOR PARAPET WALL NOT EXCEEDING 3'-8" IF RECESSED BE AT LEAST 33% OPEN 3. LOCATED @ THE 3RD STORY OR 20' ABOVE CURB LEVEL 4. HAVE AN AGGREGATE WIDTH OF NO MORE THAN 50% OF THE WIDTH OF THE BUILDING AT THE LEVEL IT PROJECTS FROM	7'–0" MAX PROJECTION 50' MAX WIDTH AGGREG.	100' TOTAL WIDTH @ 48" PROJECTION
		REQUIRED/ MAX.	PROPOSED
RESIDENTIAL PARKING REQUIREMENT IN OUTER TRANSIT ZONE			
Z.R. 25-222	STANDARD UNITS	*81 x 15 % = 12.15 OR 12*	*42*
	QUALIFYING RESIDENTIAL UNIT	*NONE REQ.*	
BICYCLE PARKING CALCULATIONS:			
Z.R. 25-811	RESIDENTIAL	*1 PER 2 DWELLING UNITS 108/ 2 = 54*	*54 SPACES IN THE CELLAR*
INCLUSIONARY HOUSING:			
	DWELLING UNITS		
	25 % OF STANDARD D.U. TO BE SET ASIDE FOR AS I.H. UNITS 108 x 25 % = 27	*27*	*27*



ZONING MAP
SCALE: 1" = 60'



HEIGHT DIAGRAM
SCALE: 3/32" = 1'–0"



ZONING MAP (23b)
N.T.S.



TAX MAP
N.T.S.

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ARCHITECTS, P.C.
143 TERRACE STREET
HAWORTH N.J. 07641
201.384.9555
N.J. R.A. LIC # 07976, 16378

PROPOSED NEW:
MIXED USE BUILDING
46 NELSON STREET
BROOKLYN, NY 11231

REVISIONS		
NO.	DESCRIPTION	DATE
1	ZONING STUDY	03.04.19
2	REVISED AS PER CITY PLANNING COMMENTS	05.09.24
3	REVISED AS PER CHO	01.02.25

NO.	TO WHOM:	DATE
ISSUES		

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CHECKED BY: VF	DATE: 11.10.21

DWG. TITLE :
ZONING ANALYSIS, ZONING MAP & HEIGHT DIAGRAM

DWG. NO.
A-2

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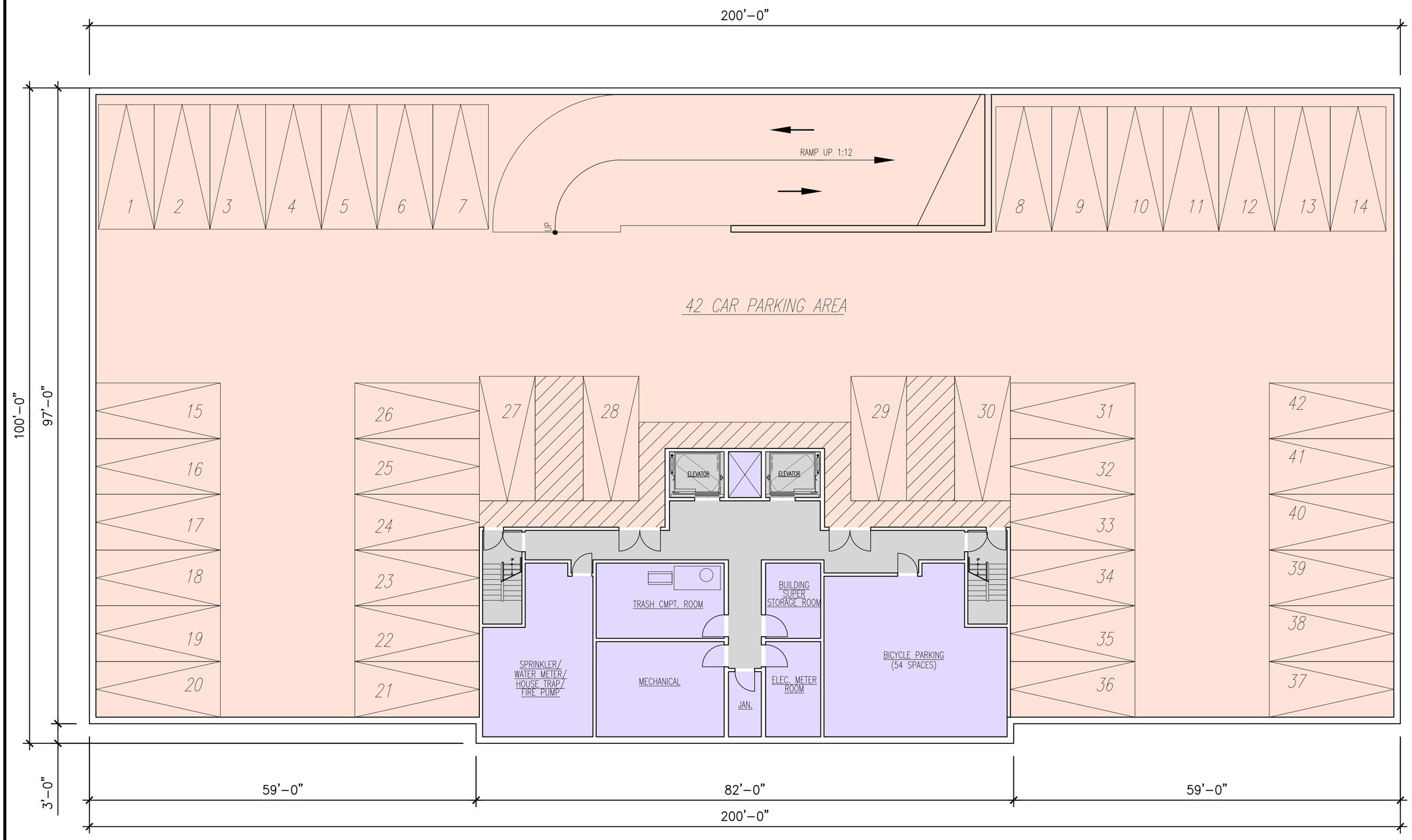

RESIDENTIAL
COMMERCIAL SPACE
COMMON SPACE
PARKING/ RAMP

CELLAR PLAN
SCALE: 3/32" = 1'–0"

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NP	1907NJ
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VF	11.10.21

DWG. TITLE :
CELLAR PLAN

DWG. NO.
A-3

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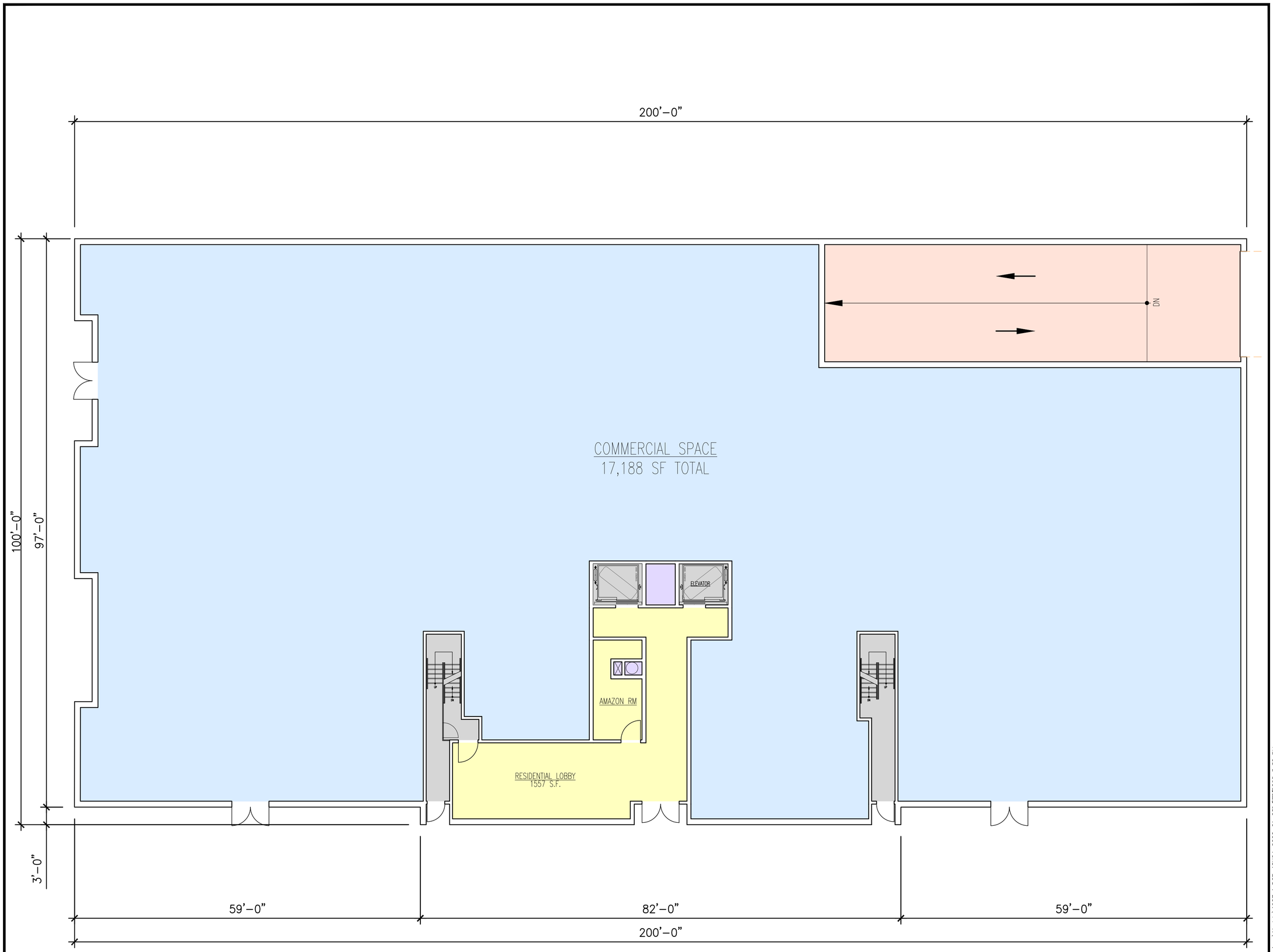

FIRST FLOOR PLAN
SCALE: 3/32" = 1'–0"

RESIDENTIAL
COMMON SPACE
COMMERCIAL SPACE
PARKING/ RAMP

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DWG. TITLE :
FIRST FLOOR PLAN

DWG. NO.
A-4

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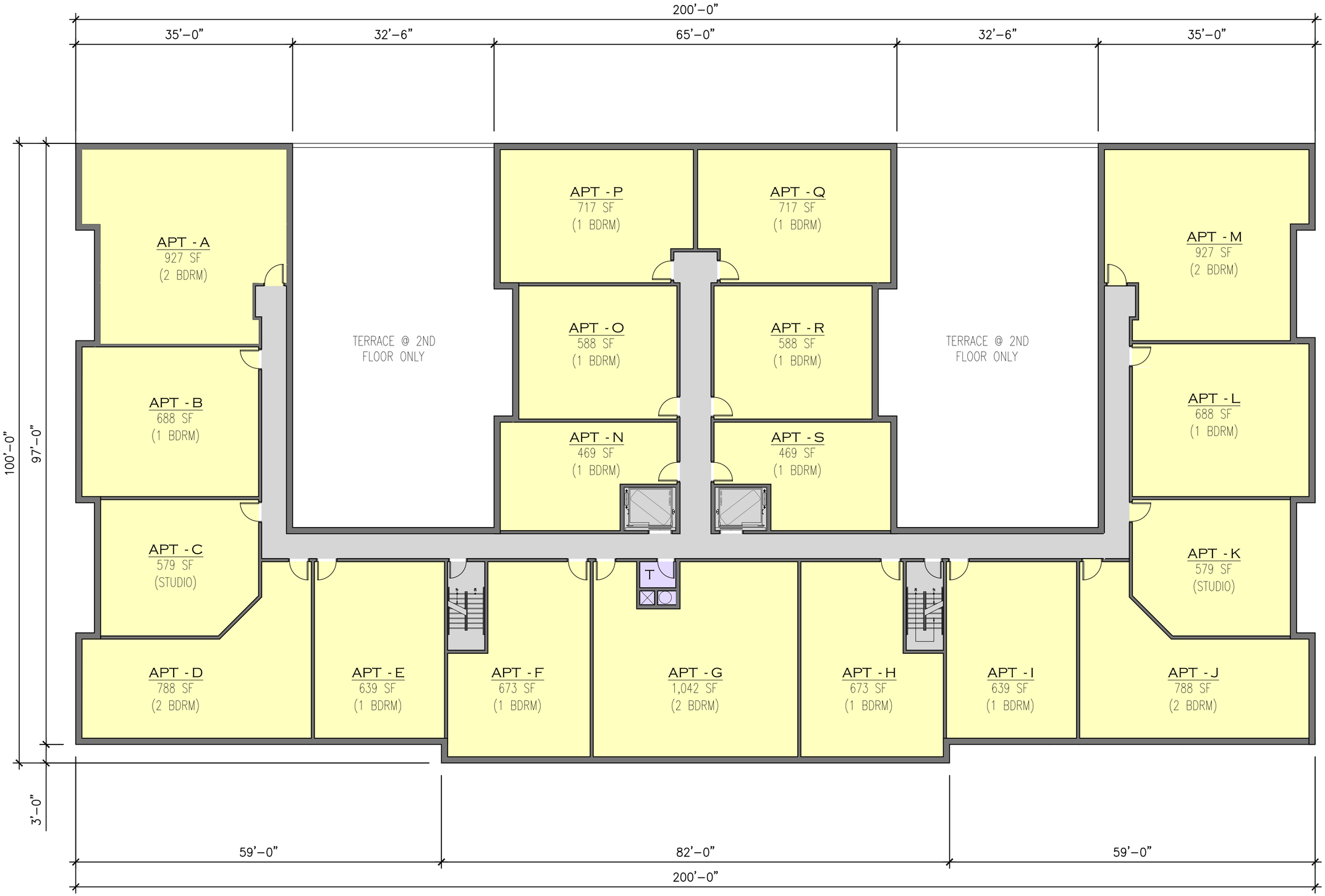

TYPICAL 2nd - 6th FLOOR PLAN

SCALE: 3/32" = 1'–0"

RESIDENTIAL
COMMERCIAL SPACE
COMMON SPACE
PARKING/ RAMP

UNITS BREAKDOWN PER FLOOR		
STUDIOS	=	2
1 BEDROOM	=	12
2 BEDROOM	=	5
TOTAL	=	19

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PROPOSED NEW:

MIXED USE BUILDING

46 NELSON STREET
BROOKLYN, NY 11231

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3	REVISED AS PER CHO	01.02.25

NO.	TO WHOM:	DATE

ISSUES

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DWG. TITLE :

TYPICAL 2-6 FLOOR PLAN

DWG. NO.

A-5

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7th FLOOR PLAN
SCALE: 3/32" = 1'–0"

RESIDENTIAL
COMMON SPACE
COMMERCIAL SPACE
PARKING/ RAMP

UNITS BREAKDOWN PER FLOOR		
STUDIOS	=	2
1 BEDROOM	=	6
2 BEDROOM	=	5
TOTAL	=	13

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46 NELSON STREET
BROOKLYN, NY 11231

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ISSUES		

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CHECKED BY: VF	DATE: 11.10.21

DWG. TITLE :
7TH FLOOR PLAN

DWG. NO.
A-6.

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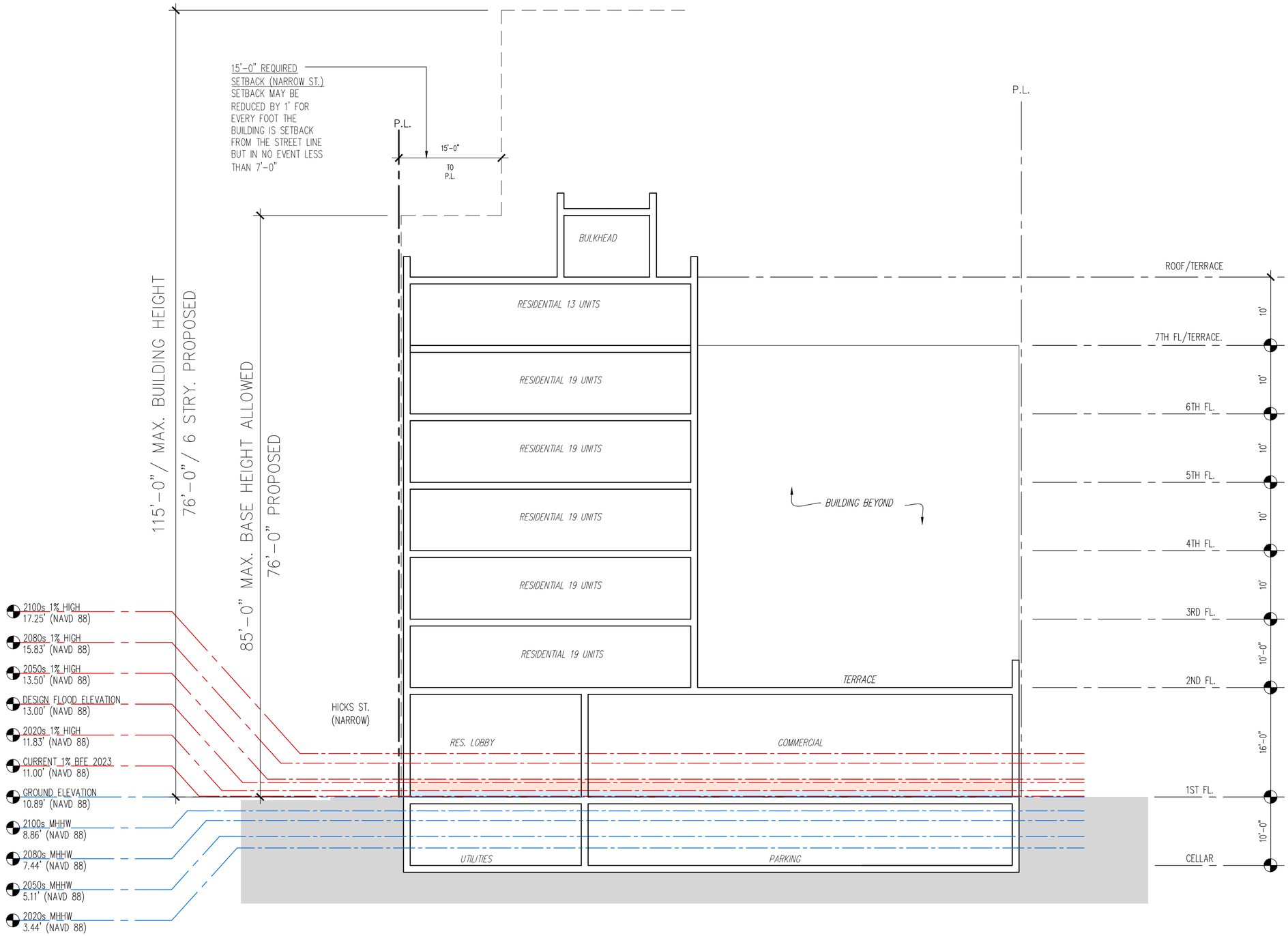

FLOOD ELEVATION DIAGRAM

SCALE: $\frac{3}{32}$" = 1'-0"

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VF	11.10.21

DWG. TITLE :
FLOOD ELEVATION DIAGRAM

DWG. NO.
A-7

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STREET VIEW #1 (RENDERING)
N.T.S.

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DWG. TITLE :
STREET VIEW #1 (RENDERING)

DWG. NO.
A-8

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STREET VIEW #2 (RENDERING)
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N.J. R.A. LIC # 07976, 16378

PROPOSED NEW:

MIXED USE BUILDING

46 NELSON STREET
BROOKLYN, NY 11231

NO.	REVISIONS DESCRIPTION	DATE
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NO.	TO WHOM:	DATE

ISSUES

DRAWN BY:	JOB NO.
NP	1907NJ
CHECKED BY:	DATE:
VF	11.10.21

DWG. TITLE :

STREET VIEW #2 (RENDERING)

DWG. NO.

A-9

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APPENDIX C

WRP CAF, POLICY RESPONSE, AND FLOOD EVALUATION WORKSHEET

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

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

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

Background Information	
Project Name	46 Nelson Street Rezoning
Location	46 Nelson Street, Brooklyn
Type(s)	☑ Residential, Commercial, Community Facility ☐ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facility ☐ Industrial Uses ☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater ☐ Coastal Protection
Description	The Applicant seeks a Zoning Map Amendment from M1-1 to M1-2A/R7A and M1-2A/R6A that would affect a portion of Block 526 in the Red Hook neighborhood of Brooklyn CD 6. The Affected Area consists of Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31. The Proposed Actions are sought to facilitate the Applicant's development of 46 Nelson Street, located on Block 526, Lot 1. The Proposed Development involves the development of a single 7-story plus cellar 125,168 GSF mixed residential and commercial building. The building would contain approximately 17,188 GSF of ground floor local, 89,440 GSF of residential uses on the upper floors, and 18,540 SF of parking, storage and mechanicals in the cellar.
Planned Completion Date	2028
Expected Project Lifespan	100 Years

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

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

Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	2.61	**2.61**	**NAVD88**	*The Battery Station Adjusted MHHW*
1% flood height	11.00	**11.00**	**NAVD88**	*2015 PFIRMs nearest 1%*
Design flood elevation	13.00	**13.00**	**NAVD88**	*BFE + 2'*
As relevant:				
0.2% flood height	-->			

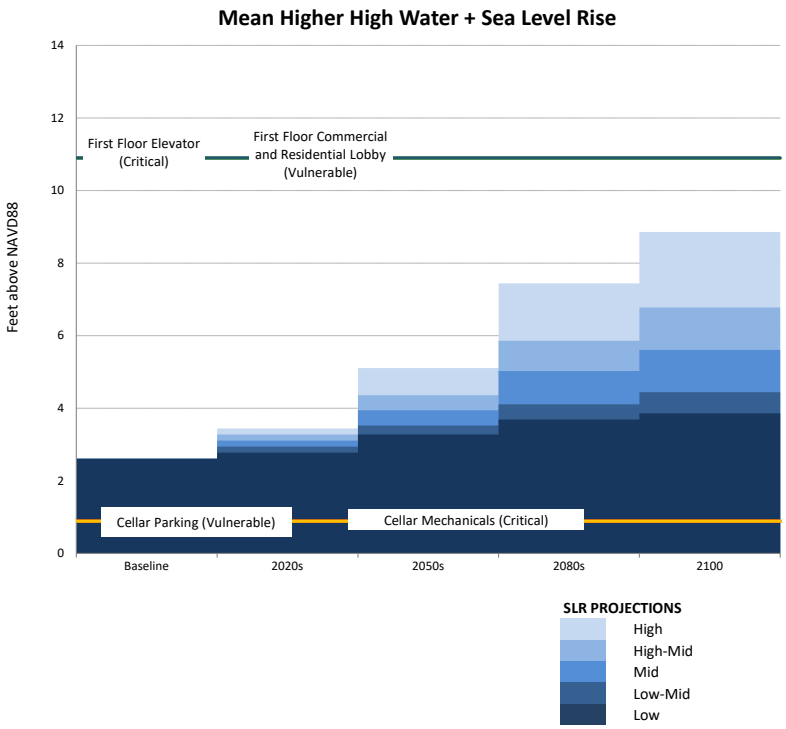
Data will be converted based on the following datums:

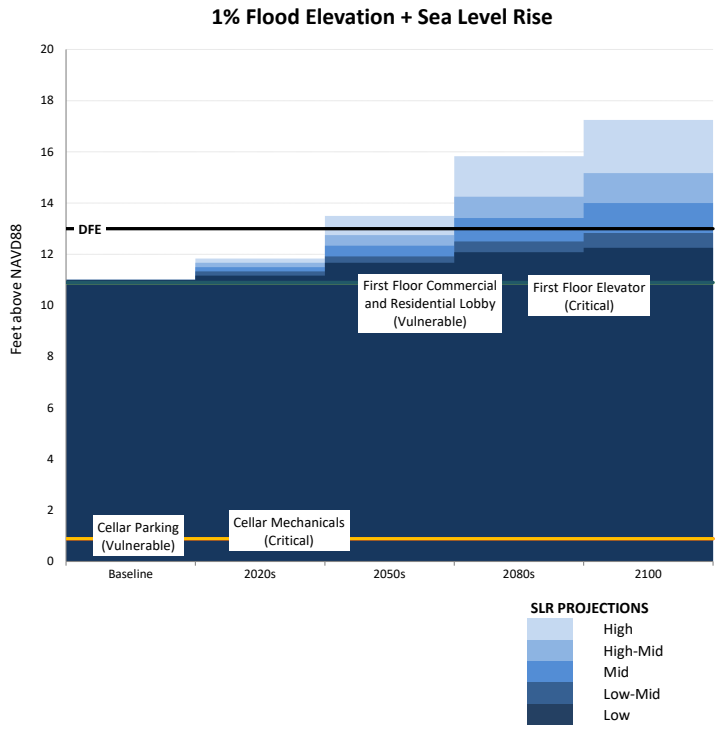
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

Describe key physical features of the project.

Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Cellar Parking (Vulnerable)	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	100 Years	0.9	Feet	NAVD88	*0.9*	*0.9*	*-1.7*	*#VALUE!*
Enclosed walls, flooring, electrical, vehicle parking									
Cellar Mechanicals (Critical)	☐ Vulnerable ☑ Critical ☐ Potentially Hazardous ☐ Other	100 Years	0.9	Feet	NAVD88	*0.9*	*0.9*	*-1.7*	*#VALUE!*
Mechanical Room, Electric meter room, gas meter room, sprinkler/water meter/fire pump room, trash compactor room, elevator pits									
First Floor Commercial and Residential Lobby	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	100 Years	10.9	Feet	NAVD88	*10.9*	*10.9*	*8.3*	*#VALUE!*
Enclosed walls, flooring, electrical									
First Floor Elevator (Critical)	☐ Vulnerable ☑ Critical ☐ Potentially Hazardous ☐ Other	100 Years	10.9	Feet	NAVD88	*10.9*	*10.9*	*8.3*	*#VALUE!*
Elevators									
	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
	☐ Vulnerable ☐ Critical ☑ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									

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





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

	SLR (in)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
2014	0	0	0	0	0
2020s	2	4	6	8	10
2050s	8	11	16	21	30
2080s	13	18	29	39	58
2100	15	22	36	50	75

MHHW+SLR (ft above NAVD88)

	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	2.61	2.61	2.61	2.61	2.61
2020s	2.78	2.94	3.11	3.28	3.44
2050s	3.28	3.53	3.94	4.36	5.11
2080s	3.69	4.11	5.03	5.86	7.44
2100	3.86	4.44	5.61	6.78	8.86

1%+SLR (ft above NAVD88)

	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	11.00	11.00	11.00	11.00	11.00
2020s	11.17	11.33	11.50	11.67	11.83
2050s	11.67	11.92	12.33	12.75	13.50
2080s	12.08	12.50	13.42	14.25	15.83
2100	12.25	12.83	14.00	15.17	17.25

0.2%+SLR (ft above NAVD88)

	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2020s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2050s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2080s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2100	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

	0	1
Cellar Parking (Vulnerable)	1	0.89
Cellar Mechanicals (Critical)	1	0.89
First Floor Commercial and Re	10.89	10.89
First Floor Elevator (Critical)	10.9	10.9
0	0	0
0	0	0
0	0	0
0	0	0
DFE	13.00	13.00

NOAA Tide Station Data

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

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

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-2001 tidal epoch.



Waterfront Revitalization Program Consistency Assessment

The Affected Area is located in the Coastal Zone. Accordingly, an assessment for consistency with the WRP was conducted. The Proposed Actions would place a new mixed residential and community facility use in a FEMA-designated "Shaded Zone X" within the 0.2 percent annual chance floodplain (500-year flood zone), with a base flood elevation (BFE) of eleven (11) feet, as per the 2015 FEMA Preliminary Flood Insurance Rate Maps (PFIRM) nearest 1% flood zone See **Figure C-1**.

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

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

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

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

Criteria that should be considered to determine areas appropriate for reuse through public and private actions include: compatibility with the continued functioning of the designated Special Natural Waterfront Areas, the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or Significant Maritime and Industrial Areas, where applicable; the absence of unique or significant natural features or, if present, the potential for compatible development; the presence of substantial vacant or underused land; proximity to existing residential or commercial uses; the potential for strengthening upland residential or commercial areas and for opening up the waterfront to the public; transportation access; the maritime and industrial jobs potentially displaced or created; and the new opportunities created by redevelopment. Public actions— such as property disposition, urban renewal plans, and infrastructure provision—should facilitate redevelopment of underused property to promote housing and economic development and enhance the city's tax base, subject to consideration of Policy 2, where applicable.

The Proposed Actions are consistent with this policy. The Proposed Actions would allow new commercial and residential use in proximity to established and newly emerging residential, commercial, and community facility development. The Proposed Actions would facilitate the development of new commercial space to be occupied by local retail, generating new jobs, and would facilitate the development of affordable housing and increase opportunities for low-cost housing in the neighborhood. Thus, the Proposed Actions would promote housing and economic development and would enhance the city's tax base, in an area where compatible development is present.

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

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

The Proposed Actions are consistent with this policy. The Proposed Actions would permit new mixed-use residential and commercial development near high-capacity roadways, and mass transit infrastructure, and would integrate the site into the surrounding residential and commercial area, where there are also supportive community facility services (public schools) that could support the new residential development.

Sub-Policy 1.5 Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development pursuant to WRP Policy 6.2.

Residential, commercial, and other non-industrial projects that comply with Article 6 Chapter 2 of the New York City Zoning Resolution satisfy the consistency requirements for Policy 1.2. If the project is not subject to the Zoning Resolution, the standards of Article 6 Chapter 2 of the Zoning Resolution should be used as guidelines for development and the inclusion of open space, visual access, upland connections, and water-related uses.

The Proposed Actions are consistent with this policy. Though there is no NYC Building Code requirement for new developments located in the Shaded X Zones, as discussed below under Policy 6.2, the Projected Development would appropriately incorporate building features from the New York City Building Code Appendix G Flood Resistant Construction Standards for flood protection of the building.

Policy 6: Minimize Loss of Life, Structures, Infrastructure, and Natural Resources Caused by Flooding and Erosion, And Increase Resilience to Future Conditions Created by Climate Change.

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

As indicated below in **Figure C-1**, the Projected Development Site is located within the 2007 effective Flood Insurance Rate Map (FIRM) and 2015 Preliminary Flood Insurance Rate Map (PFIRM) 0.2% annual chance floodplain (500-year flood zone). However, as shown below in **Figure C-2** to **Figure C-5**, which references the New York City Panel on Climate Change (NPCC) future floodplain projections through the 2100s, the Projected Development Site is anticipated to fall within the future 1% annual chance floodplain by the 2020s.

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

As the Projected Development Site falls within the 0.2% annual chance floodplain instead of the 1% annual chance floodplain, the proposed building would not be subject to compliance with NYC Building Code Appendix G. Appendix G only requires owners of severely damaged or destroyed buildings and newly built buildings in the 1% annual chance floodplain to comply with the flood-resistant construction standards of the Building Code when they rebuild or construct. However, as discussed above, since the proposed building is not located within the 1% annual chance floodplain, the building code requirements are not warranted for the proposed building. Nevertheless, as discussed under Policy 6.2 below, based on the future flood projections, the design of the Proposed Project would consider future climate change and flood risks. Therefore, the Proposed Project would incorporate building-scale resiliency measures to reduce the risks of damage from current and future coastal hazards, and would be consistent with Policy 6.1.

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

The following assessment was prepared in accordance with *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance Document for Policy 6.2*. [1] The three basic steps to assessing an action's consistency with Policy 6.2 of the WRP include identifying vulnerabilities and consequences, identifying adaptive strategies, and assessing policy consistency.

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

Sub-Policy 6.2 Detailed Methodology

1. Identify Vulnerabilities and Consequences

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

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

The Projected Development Site is located in part within the boundaries of 0.2% annual chance floodplain pursuant to the 2015 PFIRMs.

The Projected Development Site's ground floor level (base plane) is located approximately 10.89 feet in elevation (NAVD88 Datum). The Development Site's vulnerable or critical features, which are most likely to be impacted by future flood events, are located in the cellar and first-floor level. The cellar level is located approximately 10 feet below the ground elevation or negative 0.89 feet (NAVD88 Datum). The first-floor level is located at grade or 10.89 feet (NAVD88 Datum).

Regulatory floodplains are defined by the elevation of the base flood (BFE) in relation to the elevation of the ground. According to datum (NAVD88) obtained from the National Oceanic and Atmospheric Administration (NOAA) website for the nearest NOAA station – The Battery Station (Station ID 8518750) - the mean of the higher high-water height (MHHW) is 2.61 feet. Based on the 2015 PFIRMs, the 1% flood height for the nearest AE zone is 11 feet.

The information in the following subsections is based on the results of the completed flood evaluation worksheet, which is provided in **Appendix C**, the New York City Panel on Climate Change (NPCC) future floodplain projections through the 2100s. flood hazard projections shown below in **Figure C-2** to **Figure C-5,** as well as the results of the calculations completed in the flood evaluation worksheet using site-specific data. **Figure C-6** shows the results of the MHHW and Sea Level Rise (SLR) projections and **Figure C-7** shows the results of the 1% Flood Elevation and SLR projections.

Figure C-1: 2007 FIRM vs. 2015 PFIRM





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





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



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





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





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

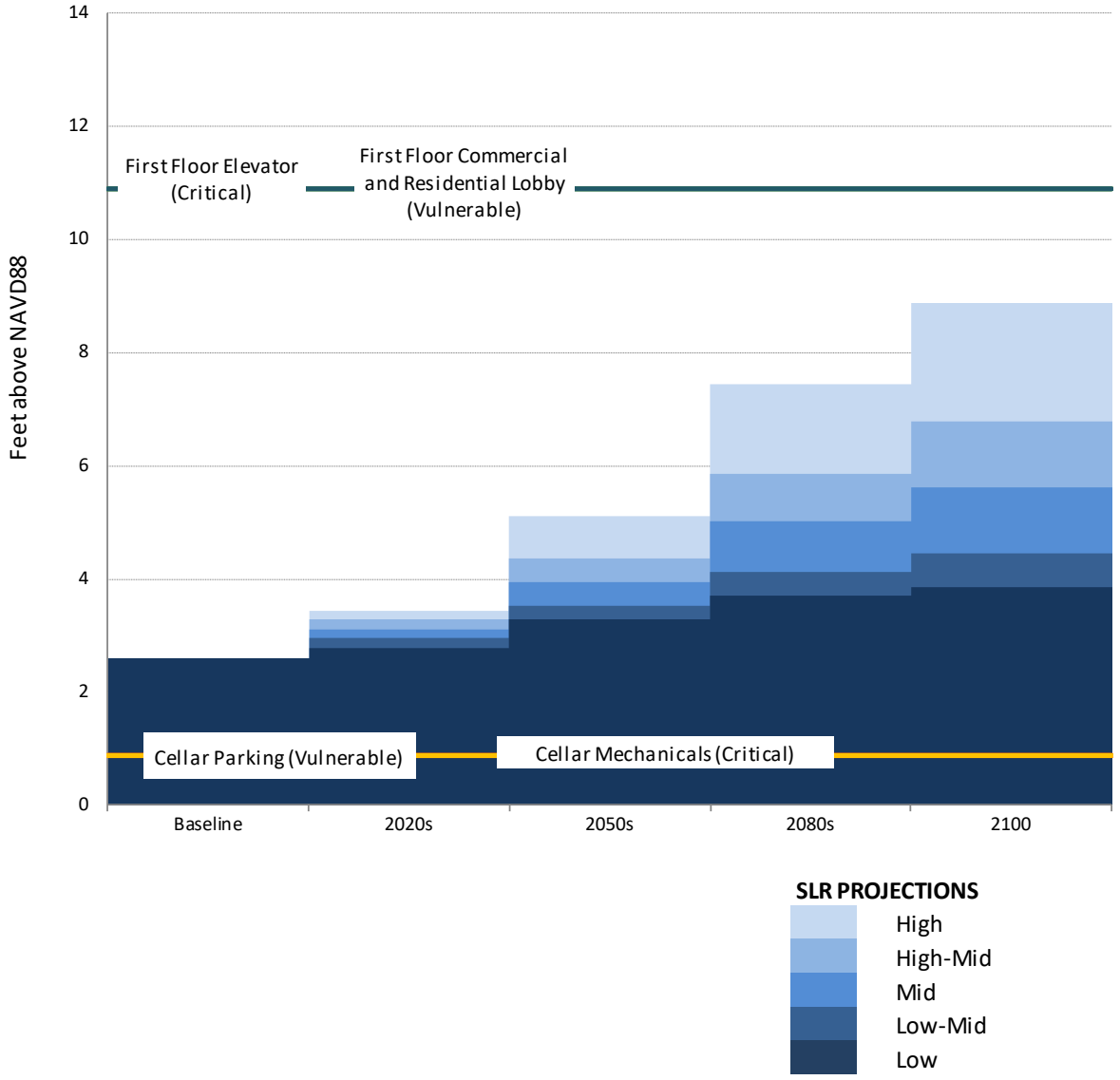
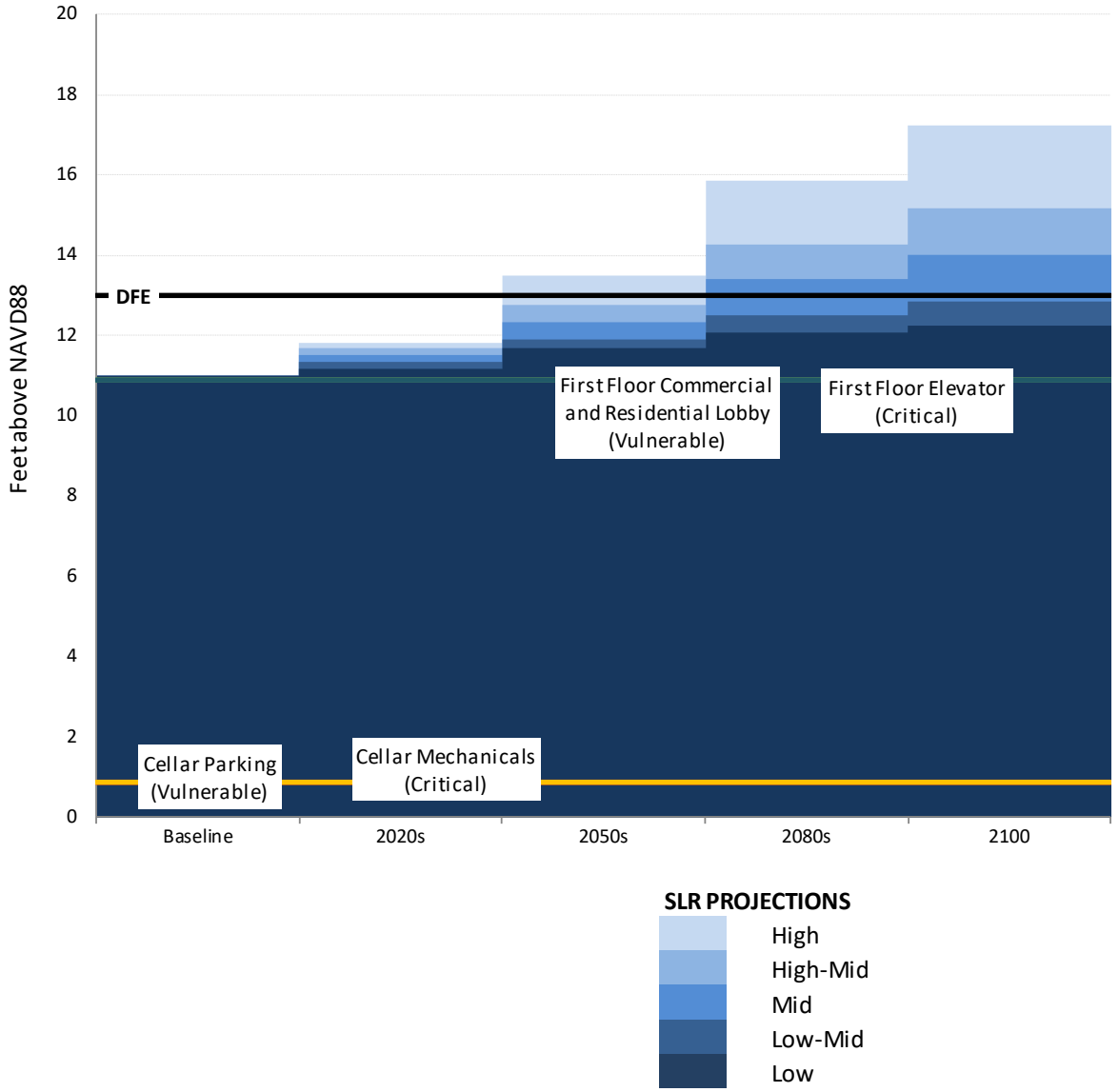


Figure C-7: 1.0 Percent Flood Elevation + SLR Projections



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

As indicated in **Figure C-7** above, currently, and in the future, the Proposed Development's cellar and ground floor levels are located within the 1% annual chance floodplain under low SLR projections.

The cellar level would contain enclosed parking spaces, a mechanical room, a sprinkler/water meter/fire pump room, an electrical room, a trash compactor room, and elevator pits. The ground-floor level would contain commercial space, and a residential lobby, as well as elevators.

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

As shown in **Figure C-2 though Figure C-5** based on the New York City Panel on Climate Change (NPCC) future floodplain projections, the proposed development would not fall within the MHHW currently, or in the future.

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

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

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

  These include any form of enclosed space within a building, including residential, commercial, industrial, or community facility land uses; enclosed parking structures; storage areas; enclosed recreational facilities; and bulkheads, revetments, piers, platforms, and other in-water infrastructure elements.

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

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

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

  Examples include hazardous materials, including highly volatile, flammable, explosive, toxic, or water-reactive materials; and materials that have the potential to become

waterborne in the event of a flood and would be dangerous to the health and safety of the public and the environment, such as the storage of construction materials, demolition debris, and aggregate materials.

Development Building Features within areas exposed to flooding from Mean Higher High Water or 1% Annual Chance Flood by the 2050s under the 90th percentile of sea level rise projections:

- Cellar: The building mechanicals in the cellar level are considered critical features, which if damaged, would have impact on the project and its ability to function as designed. These include a mechanical room, a sprinkler/water meter/fire pump room, an electrical room, a trash compactor room, and elevator pits and are currently, and in the future, within the 1% flood elevation under 90th percentile SLR projections. In addition, the cellar level would include enclosed parking, which is considered a vulnerable building feature. However, as discussed below, these features would be protected by exterior flood barriers and flood damage resistant materials.
- Ground Floor: The ground floor would contain commercial space, and a residential lobby (vulnerable features), as well as elevator (critical feature). As discussed below, these features would be protected by exterior flood barriers, flood damage resistant materials up to the DFE, and temporary removable exit stairs.

The project would not introduce any hazardous features, materials, or substances that if made insecure, would result in a threat to public health or the environment.

2. Identify Adaptive Strategies

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

The Projected Development Site is not located within the 1% annual chance floodplain and is therefore not required to comply with Appendix G of the NYC Building Code for Flood Resistant Construction; However, because the Projected Development Site is susceptible to the impacts of sea level rise and future flood events, it is recommended that building scale resiliency measures and flood mitigation strategies be considered. Pursuant to Policy 6.2: Climate Change Adaptation Guidance, consideration of climate change projections for coastal flooding and sea level rise should be incorporated into the design and planning of projects. The Proposed Project should identify potential vulnerabilities to and consequences of sea level rise and coastal flooding over its lifespan and identify and incorporate design techniques to address these risks.

Flood Damage Reduction Elements/Controls

Based on the future flood projections related to the 1% annual chance flood elevation, the Applicant would employ floodproofing measures for the cellar and ground floor levels as follows:

- The cellar level including all heating, ventilation, air conditioning, plumbing, electrical and other services facilities and equipment will be constructed so as to prevent water from entering or accumulating within the components during conditions of flooding in accordance with ASCE 24;
- The commercial tenants would have the option to install temporary multi-panel removable lip seal gasket flood barriers at their store entries. Temporary flood gates would also be installed at the parking ramp.
- Elevator pit flood switch features: the elevator pit would include a float switch which activates in high water operation, and would raise the elevator cabs to the next highest level above the BFE to prevent it from descending into the pit.
- The building would be equipped with temporary exit stairs to provide egress and ingress during conditions of flooding. During a flood, the way the residents would enter and exit the building would be through a special removable flood stair. The stair would begin outside and rise several steps to an elevated platform and door to the interior of the building, then descending to the 1st floor level. The exterior stair portion would prevent the flood water from entering the building at grade, but would allow residents to enter at the elevated door leading to the dry interior area. There would be periodic practice of installing and removing temporary stairs; and inspecting necessary material and equipment to activate or implement floodproofing. A flood emergency plan would be permanently posted in at least two conspicuous locations within the structure.

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

a) Flood Protection of Adjacent Sites:

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

b) Assess Policy Consistency

A project or action would advance the policy when:

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

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

A project or action would hinder the policy when:

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

As discussed above, based on the future flood projections related to the 1% annual chance flood elevation, the Proposed Development would incorporate floodproofing measures to protect the cellar and ground floor level building features from future flood events. These building-scale resiliency measures and adaptive strategies would minimize the potential damage to site-specific vulnerable or critical features. In addition, construction of the site would be performed pursuant to applicable Local, State, Federal regulations and laws. Therefore, the Proposed Actions are consistent with Policy 6.2 of the Waterfront Revitalization Program and would not jeopardize the intent of the WRP.

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: 46 Nelson LLC

Name of Applicant Representative: Amber Kartalyan - GZA GeoEnvironmental

Address: 46 Nelson Street

Telephone: 201-757-3561 Email: amber.kartalyan@gza.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The "Applicant," 46 Nelson LLC, seeks a Zoning Map Amendment from M1-1 to M1-2A/R7A and M1-2A/R6A that would affect a portion of Block 526 in the Red Hook neighborhood of Brooklyn Community District "CD" 6. The "Affected Area" consists of Block 526, Lots 1, 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31, bounded by Nelson Street to the north, Hicks Street to the west, Henry Street and Hamilton Avenue to the east, and Huntington Street to the south. In addition, the Affected Area is located just west of the Gowanus Expressway and just south of the merger of the Gowanus Expressway and the Brooklyn-Queens Expressway (BQE). In total, the Affected Area comprises approximately 43,447 SF of area, 20,000 SF of which is controlled by the Applicant.

The Zoning Map Amendment would rezone Block 526, Lot 1 (a rectangular corner lot of approximately 20,000 square feet with frontages on Nelson Street, Hicks Street, and Huntington Street) from an M1-1 zoning district to a MX (M1-2A/R7A) zoning district and Block 526, Lots 13, 14, 15, 16, 17, 18, 19, 20, 22, and part of Lots 23, 29 and 31 (a rectangular area of approximately of 23,447 square feet bounded in part by Nelson Street, Henry Street, and Huntington Street) from an M1-1 zoning district to an MX (M1-2A/R6A) zoning district. The Applicant also proposes a Zoning Text Amendment to Appendix F (Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas) to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. n addition, a Zoning Text Amendment is proposed to modify the New York City Zoning Resolution (ZR) Article XII, Chapter 3 to add R6A and R7A pairings to the MX-5 Designated Residence Districts. The Zoning Map Amendment and Zoning Text Amendments constitute the "Proposed Actions".

2. Purpose of activity

The Proposed Actions are sought to facilitate the Applicant's development of 46 Nelson Street, located on Block 526, Lot 1 ("Projected Development Site 1"). The "Proposed Development" involves the construction of a single 7-story plus cellar 125,168 Gross Square Foot "GSF" (100,188-Zoning Square Foot "ZSF", 5.01-FAR) mixed residential and commercial building. The building would contain approximately 17,188 GSF (17,188 ZSF, 0.86 FAR) of ground floor local retain use, 89,440 GSF (83,000 ZSF, 4.15 FAR) of residential uses on the upper floors, and 18,540 SF of parking, storage and mechanicals in the cellar. The Proposed Development would result in 108 dwelling units, 25-30% (27-32 units) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. The Applicant intends to pursue MIH Option 1, which would result in 27 affordable units at an average of 60% AMI. A below-grade parking garage would contain 42 residential accessory parking spaces. The building would rise to a building height and base height of 76 feet. One curb cut would be proposed along Huntington Street providing access to the below-grade parking.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): 526/1 13 14 15 16 17 18 19 20 22 p/o 23 29 31

Street Address: 46 Nelson Street

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

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☐ Other, explain: _____
- ☐ Funding for Construction, specify: _____
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1.	Does the project require a waterfront site?	☐ Yes	☑ No
2.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?	☐ Yes	☑ No
3.	Is the project located on publicly owned land or receiving public assistance?	☐ Yes	☑ No
4.	Is the project located within a FEMA 1% annual chance floodplain? *(6.2)*	☐ Yes	☑ No
5.	Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)*	☑ Yes	☐ No
6.	Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).*	☐ Yes	☑ No

- ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)
- ☐ Special Natural Waterfront Area (SNWA) (*4.1*)
- ☐ Priority Maritime Activity Zone (PMAZ) (*3.5*)
- ☐ Recognized Ecological Complex (REC) (*4.4*)
- ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☐
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☐
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☐
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☐
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☐
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☐
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☐
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☐
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☐
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☐
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☐
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☐
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☐
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☐
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☐
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☐
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☐
4.8	Maintain and protect living aquatic resources.	☐	☐	☐

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☐	☐	☑
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☐
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☐
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☐
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☐
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☐
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☐	☐	☑
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☐
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☐
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☐
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☐
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☐
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☐
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☐

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☐
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☐
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☐
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☐
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☐
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☐

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Amber Kartalyan

Address: 55 Lane Road, Fairfield NJ 07004

Telephone: 201-757-3561 Email: amber.kartalyan@gza.com

Applicant/Agent's Signature: _____

Date: 2/10/25

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☑ Copy of original signed NYC Consistency Assessment Form
- ☑ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☑ Environmental Review documents
- ☑ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☑ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

APPENDIX D

PHASE I ESA



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ECOLOGICAL
WATER
CONSTRUCTION MANAGEMENT

Fairfield, NJ
55 Lane Road
Suite 407
Fairfield, NJ 07004

Manhattan, NY
104 West 29th Street
10th Floor
New York, NY 10001

PHASE I ENVIRONMENTAL SITE ASSESSMENT
46 Nelson Street
Brooklyn, New York 11231

June 5, 2024
File No. 12.0077830.00



PREPARED FOR:
HH Realty Equities
Ariel Akkad
302 5th Avenue 5th floor
New York, New York

GZA GeoEnvironmental, Inc.
55 Lane Road, Suite 407 | Fairfield, NJ 07004
973-774-3300

www.gza.com

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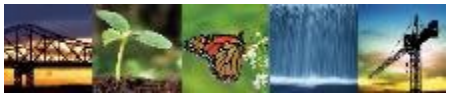

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PLANNING
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Fairfield, NJ
55 Lane Road
Suite 407
Fairfield, NJ 07004

Manhattan, NY
104 West 29th Street
10th Floor
New York, NY 10001

June 5, 2024
File No. 12.0077830.00

HH Realty Equities
Ariel Akkad
302 5th Avenue 5th Floor
New York, New York

Re: Phase I Environmental Site Assessment
46 Nelson Street
Brooklyn, NY 11231

Dear Mr. Akkad,

Pursuant to our professional services contract dated March 29, 2024, GZA GeoEnvironmental, Inc. is pleased to submit this Phase I Environmental Site Assessment Report for the above-referenced Subject Property. GZA completed this Phase I Environmental Site Assessment in general conformance with the guidelines described in ASTM International's *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21).

We hope this satisfies your present needs. If you need additional information, please contact Kevin Williams at (973) 774-3529.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Robert Jackson, PE
Consultant Reviewer

Victoria Curran
Project Scientist

Christian DiGennaro
Project Scientist

Attachment: Phase I ESA Report

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EXECUTIVE SUMMARY

HH Realty Equities (also referred to herein as "Client" or "User") retained GZA GeoEnvironmental, Inc. (GZA) to perform a Phase I Environmental Site Assessment (ESA) of the Subject Property located at 46 Nelson Street, Brooklyn, New York (Subject Property). GZA performed this Phase I ESA in connection with the Client's rezoning application including the Subject Property.

This Phase I ESA was performed in general conformance with the scope and limitations of ASTM International's *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21) and included our visual observation of the Subject Property; a review of historical information, environmental databases, and information provided by the User; and one or more interviews with a current representative of the Subject Property. GZA prepared this Phase I ESA Report in conformance with the limitations presented in **Section 14.0**. Limiting conditions and/or deviations from ASTM E1527-21 are described in **Section 1.4** of this Phase I ESA Report.

The Subject Property is a rectangular-shaped parcel that is improved with a one-story building with loft and an adjoining parking lot. Historically, the Subject Property has been used for light industrial and commercial uses. Original development in the late 1800s included several residential dwellings. Currently, the Subject Property is occupied by Long Island Pipe Supply Inc. Based on the findings of our Phase I ESA and on our professional judgment, GZA has identified the following with respect to the Subject Property:

Recognized Environmental Conditions (RECs)

- In GZA's opinion, this Phase I ESA no evidence of RECs in connection with the Subject Property.

Controlled Recognized Environmental Conditions (CRECs)

- In GZA's opinion, this Phase I ESA revealed no evidence of CRECs in connection with the Subject Property.

Historical Recognized Environmental Conditions (HRECs)

- In GZA's opinion, this Phase I ESA revealed no evidence of HRECs in connection with the Subject Property.

***De Minimis* Conditions**

- In GZA's opinion, this Phase I ESA revealed no evidence of De Minimis Conditions in connection with the Subject Property.

Significant Data Gaps

- In GZA's opinion, this Phase I ESA revealed one data gap which has the potential to affect the ability to identify RECs, CRECs, or HRECs at the Subject Property. City Directory listings state that the building on the Subject Property was a Goodyear Truck Tire Center in 1976. No other historic records or database searches have yielded any other information of a tire service center at the Subject Property. The lack of additional information or detail regarding the potential Goodyear Truck Tire Center is considered a data gap for the Subject Property.

Business Environmental Risks (BERs)

- According to historic mapping and records, the Subject Property contained numerous structures since the early 1900s through 1964 with unknown heating sources. Evidence of former or inactive heating oil tanks were not observed; however, the historical heating source(s) (AST/UST) were not identified as part of this Phase I ESA. If heating oil tanks are identified or discovered during any demolition or development stages of Proposed Actions, GZA recommends they be assessed and removed in accordance with local and state requirements. Additionally, the former structures may have had basements which were filled in with unknown fill during demolition.

- Historic mapping and records identified several automotive repair and fueling operations in the surrounding area of the Subject Property. While no open spill cases or releases were identified from these sites, the potential for releases from the nearby auto repair and fueling facilities are considered a BER.

- GZA identified potential evidence of asbestos containing material in the floor tiles located in the storage room on the north side of the building.

- A suspected oil stain was observed on the floor of the building with no identified release to the environment. The suspected oil stain is considered a BER.

1.0 INTRODUCTION

This Phase I Environmental Site Assessment Report (Phase I ESA Report) presents the field observations, results, and opinions of the Phase I ESA conducted by GZA GeoEnvironmental, Inc. (GZA) for HH Equities Realty (also referred to herein as "Client") at the Subject property identified as 46 Nelson Street, Brooklyn, New York (Subject Property). GZA prepared this Phase I ESA Report in conformance with the limitations presented in **Section 14.0** and with the Phase I ESA Limitations included in **Section 14.0**. This Phase I ESA Report is subject to modification if GZA or another party develops subsequent information.

1.1 REASON FOR PERFORMING THE PHASE I ENVIRONMENTAL SITE ASSESSMENT

GZA understands that this Phase I ESA was requested as part of environmental due diligence services for a proposed zoning text variance application with the Board of Standards and Appeals pursuant to Section 72-21 of the Zoning Resolution of the City of New York.

1.2 PROJECT OBJECTIVES

We designed the Scope of Services described below in general conformance with ASTM International's *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21). The objectives of this Phase I ESA were:

- To render an opinion as to whether surficial or historical evidence indicates the presence of recognized environmental conditions (RECs) that could result in the presence of hazardous substances or petroleum products in the environment, as defined in ASTM E1527-21; and

- To permit the User of this Phase I ESA to satisfy the requirements for qualifying for certain Landowner Liability Protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

1.3 DEFINITIONS

As defined in ASTM E1527-21:

- A REC is "(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment."

- A "Controlled REC" (CREC) is a REC "affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority…with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls…." This term applies to a site that has reached regulatory closure with the implementation of an engineering control, such as an impermeable cap, an institutional control, such as a deed restriction or activity and use limitation (AUL), and/or other property use limitation.

- A "historical recognized environmental condition" (HREC) is "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the

applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities, without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations,)…"

- A "*de minimis* condition" is "a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies." ASTM E1527-21 does not consider *de minimis* conditions to be RECs.

- A "data gap" is "a lack of or inability to obtain information required by [E1527-21] despite good faith efforts by the Environmental Professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice…" A data gap is only considered significant if other information and/or the Environmental Professional's experience raises reasonable concerns involving the data gap.

- A "business environmental risk" (BER) is "a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily limited to those environmental issues required to be investigated [under ASTM E1527-21]." BERs may involve one or more of the non-scope considerations outlined in ASTM E1527-21 including, but not necessarily limited to, asbestos-containing building materials, lead paint, lead and arsenic in drinking water, radon, wetlands, cultural and historical resources, regulatory compliance, industrial hygiene, health and safety, indoor air quality, and mold.

1.4 SCOPE OF SERVICES

GZA's Scope of Services consisted of the following activities:

- A review of federal and State regulatory agency databases for the Subject Property and the minimum applicable search distances from the Subject Property.

- Contact with certain local regulatory agencies to inquire about environmental conditions at the Subject Property and in its vicinity.

- A review of the Subject Property history through available Standard Historical sources.

- A review of previous environmental reports prepared for the adjoining property.

- A site reconnaissance to observe current Subject Property conditions for evidence of recognized environmental conditions.

- The completion of a reconnaissance of the Subject Property vicinity.

- A review of adjoining properties to identify potential uses of hazardous substances or petroleum products.

- Interview(s) with the Key Site Manager, as well as other available occupants and major tenants, regarding the current and past Subject Property usage and facility operations.

- The preparation of this Phase I ESA Report presenting our findings.

In GZA's opinion, our ESA involved no significant deviations from ASTM E1527-21.

This Phase I ESA includes evaluations of the following environmental issues or conditions that ASTM E1527-21 considers non-scope considerations (see **Section 10.0**):

- Vapor Encroachment Assessment.
- Suspect Asbestos-Containing Material (ACM).
- Lead Paint.
- Mold; and
- Radon

2.0 DESCRIPTION OF SUBJECT PROPERTY AND VICINITY

GZA obtained the following information from our site reconnaissance, our research, and our interviews with people knowledgeable about the Subject Property. Photographs depicting the Subject Property conditions during GZA's reconnaissance are presented in **Appendix A**.

2.1 SUBJECT PROPERTY LOCATION

The Subject Property is located at 46 Nelson Street in the New York City Borough of Brooklyn, New York. The Subject Property is identified as Block 526, Lot 1 on the Brooklyn Tax Map. The Subject Property is approximately 20,000 square feet in size and is located on the corner of Hicks Street and Nelson Street. The Subject Property is in a M1-1 zoning district that is surrounded by mixed residential and commercial and light industrial uses. A map showing the location of the Subject Property is provided as **Figure 1**.

2.2 DESCRIPTION OF SUBJECT PROPERTY AND BUILDINGS

The Subject Property is currently improved with one (1) one-story warehouse building with loft totaling 16,000 gross square-feet of floor area. According to the NYC ZoLa (Zoning & Land Use) Database, the building was constructed in 1964. A map showing the Subject Property orientation and boundary is provided as **Figure 2**. Information regarding the Subject Property buildings is provided in the table below.

46 Nelson Street (Block 526, Lot 1)

Feature	Description
Year of Construction	1964
Square Footage	20,000 sf lot; 16,000 gsf building
# Stories/Basement	One story with a loft.
Heating/Cooling Systems	Natural gas ceiling mounted heaters, electric heat.
Elevators	N/A

The following entities provide utilities to the Subject Property:

Service	Provider
Electricity	Con Edison Co of New York (Con Edison)
Natural Gas	National Grid, according to Key Site Manager
Drinking Water	City of New York
Sanitary Sewer Services	City of New York sewer system

2.3 CURRENT SUBJECT PROPERTY USE

At the time of GZA's site reconnaissance, the Subject Property was improved with a one-story manufacturing building with loft with 16,000 gross square-feet of floor area. The building was occupied by Long Island Pipe Supply Inc. and was a warehouse consisting of a storage area with pipes, valves, and fire sprinkler devices; a utility room; a break room/storage area; two bathrooms; and an office area.

2.4 ADJOINING PROPERTIES

The following table lists the properties that adjoin the Subject Property and describes their current use.

Direction	Street Address/Location	Name (as applicable) and Current Use
North	Nelson Street followed by 727 Hicks Street	727 Hicks Street: Vacant, undeveloped lot
South	57-61 Huntington Street; Huntington Street followed by 749 Hicks Street and 56 Huntington Street	57-61 Huntington Street: Parking 749 Hicks Street: Status Auto Care - Detailing 56 Huntington Street: Parking
East	56 Nelson Street	56 Nelson Street: Industrial/manufacturing
West	Hicks Street followed by 401 Columbia Street	401 Columbia Street: Summit Academy Charter School

2.5 VICINITY PROPERTIES

As part of this Phase I ESA, GZA performed a reconnaissance of the immediate Subject Property vicinity. The Subject Property vicinity is mixed use with primarily commercial/manufacturing and residential uses.

3.0 PHYSICAL SETTING

The following subsections provide information regarding the general physiographic, geologic, hydrogeologic, and hydrologic conditions in the Subject Property vicinity.

3.1 REGIONAL PHYSIOGRAPHY

Based on a review of the U.S. Geological Survey topographic map provided by Environmental Data Resources, Inc. (*EDR), Historical Topo Map 2019*, the Subject Property is situated at an approximate elevation of 20 feet above mean sea level. The nearest water body is Gowanus Bay which is located approximately 0.4 miles southwest of the Subject Property.

3.2 GEOLOGIC, HYDROGEOLOGIC, AND HYDROLOGIC CONDITIONS

Based on Third-Party Database Reports and the web soil survey maps published by the USDA Natural Resources Conservation Service, overburden at the Subject Property consists of urban land. Based on the United States Geological Service (USGS) online GIS database, bedrock near the Subject Property is categorized as a stratified sequence of the Mesozoic era, Cretaceous system, and Upper Cretaceous series. GIS data of mapped groundwater data collection points and monitoring wells across the New York Metropolitan Area estimate a depth to groundwater at the Subject Property of approximately 5-10 feet bgs.

Based on local topography and surface water flow patterns, the inferred direction of groundwater flow is generally west. We subsequently refer to upgradient and downgradient properties in this Phase I ESA Report based on the inferred western direction of groundwater flow. However, the localized direction of groundwater flow near the Subject Property might vary because of underground utilities, subsurface preferential pathways, variations in weather, or heterogeneous geological and/or anthropogenic conditions (such as subway tunnels).

4.0 HISTORICAL USE INFORMATION

The Subject Property history was developed from "Standard Historical Sources," as defined in ASTM E1527-21, from available files and from interviews with knowledgeable parties. ASTM indicates that, "all obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier". ASTM further indicates that, "data failure is not uncommon," when trying to establish the historical use of a property. Specific information obtained from standard historical sources is contained in the following subsections, and **Appendix B** includes copies of relevant historical documents.

4.1 SUBJECT PROPERTY AND AREA HISTORY SUMMARY

According to the review of historical aerial photographs and Sanborn fire insurance maps, the Subject Property appears to have been developed since at least 1886 developed with a building generally consistent with the present building since 1969. The Subject Property was originally developed with several residential dwellings until they were removed, and the property was used for construction storage. In 1969, the building on the Subject Property was marked as a lift repair facility with an adjoining parking lot. City Directory listings state that the building on the Subject Property was a Goodyear Truck Tire Center in 1976. From 1977 to at least 1986, the building on the Subject Property was of commercial use. The building on the Subject Property has been used as a warehouse since 1987. City Directory listings state that the Subject Property was a paper products facility from at least 1995 to 1997. Victor Li, Key Site Manager, stated that he believes that the current company (Long Island Pipe Supply Inc.) has been present at the Subject Property since approximately 2010.

The Subject Property is in a mixed residential and commercial with light industrial use area of Brooklyn and is bounded to the north by Nelson Street and to the west by Hicks Street. Historically, the area in the vicinity of the Subject Property has consisted of mixed commercial and residential properties with light industrial use.

4.2 AERIAL PHOTOGRAPH REVIEW

GZA consulted historical aerial photographs provided by EDR from 1924 to 2019. The table below contains GZA's description of the Subject Property and vicinity properties as shown in the aerial photographs.

Year	Description of Subject Property	Description of Vicinity
1924	The northeastern portion of the Subject Property appears to be developed.	The surrounding area is largely developed. Roadways in the area are generally consistent with present-day roadways.
1940	The Subject Property appears to be developed with several buildings.	Apartment buildings have been constructed to the south of the Subject Property. A large building has been constructed to the west of the Subject Property.
1943, 1951	The Subject Property appears to be unchanged.	The surrounding area appears unchanged.
1954, 1961	An additional building appears to have been developed on the Subject Property.	The surrounding area appears unchanged.
1966, 1971, 1974, 1981	The buildings on the Subject Property have been removed and replaced by one large building in the northern portion of the Subject Property. The remainer of the property is undeveloped and appears to be used for parking.	Many of the small buildings to the east of the Subject Property have been removed and replaced by three large buildings. The buildings to the north of the Subject Property have been removed.
1985	The Subject Property appears unchanged.	The area to the north of the Subject Property appears to be used for storage.
1991, 1994	The quality of the aerial image does not allow for site-specific details to be identified.	The quality of the aerial image does not allow for details of the surrounding area to be identified.
1995, 2008, 2011, 2015, 2019	The Subject Property appears unchanged.	The surrounding area appears unchanged.

4.3 FIRE INSURANCE MAPS

GZA consulted historical Sanborn Fire Insurance Maps provided by EDR from 1886 to 2007. The table below contains GZA's description of the Subject Property and vicinity properties as shown in the historical fire insurance maps.

Year	Description of Subject Property	Description of Vicinity
1886	The Subject Property is developed with several small buildings. One building is labeled as a storefront, and two buildings are labeled as residential dwellings. All other buildings are unmarked.	The surrounding area is moderately undeveloped with residential buildings. Two school buildings are located to the west of the Subject Property. A dry paint works facility is located to the northwest with a grinding room and drying room. Several bakeries are present to the north of the Subject Property.
1904	The Subject Property is developed with several buildings including six that are marked as residential dwellings. One building is labeled as a storefront. One small building in the northern portion of the Subject Property is marked as a kitchen.	The surrounding area is largely developed. A brass foundry with seven tanks is located to the south of the Subject Property. A tin can yard is located to the southwest of the Subject Property. There is a Department of Street Cleaning station to the west of the Subject Property across Hicks Street. A dairy facility is located to the north of the Subject Property along Luquer Street.
1915	The Subject Property is developed with five residential dwellings.	The previous brass foundry to the south of the Subject Property is now labeled as a smelting facility with three tanks. There are two auto houses surrounding the smelting facility. Further south is an Edison Electric Illuminating Co distributing station.

Year	Description of Subject Property	Description of Vicinity
1938	The previous residential dwellings have been removed.	An area to the east of the Subject Property is marked as steel drum storage. The previous smelting facility to the south of the Subject Property is now a wet wash laundry facility. A bake house with three gas tanks for ovens is located to the south of the Subject Property. Two auto garages are located to the south and southeast of the Subject Property. Another garage is located further southeast with one gas tank. Two garages are located to the southwest beyond the Brooklyn Edison Co subway station and transformer yard. An apartment building complex has been constructed to the southwest of the Subject Property.
1950	The Subject Property is developed with two small buildings and is labeled as a construction storage yard.	A stamping works facility is located to the north of the Subject Property. The previous dry paints facility to the northwest is now an iron working facility with a machine shop. An auto repair facility is located further northwest. The public school to the west of the Subject Property has expanded. A garage with one gas tank is located to the south of the laundry facility south of the Subject Property. A wet wash laundry facility and an auto repair facility are located to the southeast of the Subject Property along Hamilton Avenue.
1969	The Subject Property is developed with one building marked as Lift Repair with an attached office space. The remainder of the Subject Property is used for parking.	The steel drum storage area to the east of the Subject Property has been removed and developed with a warehouse. The previous stamping works facility and surrounding buildings to the north have been removed. The previous auto repair facility to the northwest is now a filling station. A previous garage to the southwest is now a warehouse with two gas tanks. A parking lot is located to the southeast of the Subject Property across Huntington Street. A previous garage to the southeast is now an auto repair facility.
1977, 1979, 1980, 1981, 1982	The building on the Subject Property is marked as a commercial building.	An area to the northwest of the Subject Property adjacent to the iron working facility is marked for tank storage. A previous storage area to the northwest is now an auto body shop .A previous garage to the southwest is now a warehouse. The previous laundry facility and garage to the south of the Subject Property is now auto repair and auto body shop. The wet laundry facility to the southeast of the Subject Property has been removed. A previous garage and warehouse to the southeast has been replaced by an auto repair and auto body shop. A previous garage to the southeast of the Subject Property is now marked as an oil truck garage.
1986	The Subject Property is unchanged.	The area to the north of the Subject Property is labeled as used auto sales.
1987	The previous commercial building on the Subject Property is now marked as a warehouse.	The previous auto sales facility to the north of the Subject Property has been removed. A parking lot is located to the southwest of the Subject Property. An area to the

Year	Description of Subject Property	Description of Vicinity
		south of the Subject Property is marked as used for auto storage. A church has been developed to the south of the Subject Property.
1988	The Subject Property is unchanged.	The previous auto storage area to the south of the Subject Property has been removed.
1991	The Subject Property is unchanged.	The previous parking lot to the south of the Subject Property has been removed. The previous filling station to the northwest of the Subject Property has been replaced by an auto repair facility.
1992, 1993, 1995	The Subject Property is unchanged.	Previous auto repair shops to the northwest and southeast of the Subject Property are now iron works facilities.
1996	The Subject Property is unchanged.	A filling station is located to the east of the Subject Property along Hamilton Avenue. A steel overpass is being developed over the Brooklyn Battery Tunnel Plaza to the northeast of the Subject Property.
2001, 2002	The Subject Property is unchanged.	The previous bake house with three gas tanks for ovens to the southeast of the Subject Property has been removed.
2003, 2004, 2005	The Subject Property is unchanged.	An apartment complex has been developed to the southeast of the Subject Property.
2006	The Subject Property is unchanged.	A previous auto repair facility to the northwest of the Subject Property has been removed.
2007	The Subject Property is unchanged.	A previous iron works facility to the northwest of the Subject Property has been removed.

4.4 PROPERTY TAX FILES

GZA consulted property tax files available online at the NYC Gov. website. The files indicated that the Subject Property is identified as Block 526/Lot 1. The lot is 0.46 acres in size. The current owner is listed as 46 Nelson Street LLC.

4.5 LAND TITLE RECORDS

The review of a title search helps to identify the historical use of the Subject Property, as well as applicable environmental liens and Activity and Use Limitations (AULs); ASTM identifies a title search as a User Responsibility. No title information was provided by the Client as part of the User's Responsibilities, and the completion of a title search was not included in the scope of this assessment. However, a limited AUL review conducted by EDR (refer to **Section 7.0**) did not identify an AUL associated with the Subject Property.

4.6 HISTORICAL USGS TOPOGRAPHIC MAPS

GZA reviewed historical USGS topographic maps provided by EDR from 1891 to 2019. The table below contains GZA's description of the Subject Property and vicinity properties as shown on the historical topographic maps.

Year	Scale	Description of Subject Property	Description of Vicinity
1891		No site-specific features are shown on the Subject Property. The right side of the topographic map area is unmapped.	The Subject Property is located approximately 0.25 miles to the northeast of Brooklyn Basin, Erie Basin, and Gowanus Bay. The Subject Property is approximately 0.3 miles to the southeast of Atlantic Basin and Buttermilk Channel. Governors Island is approximately 1.0 mile to the northwest of the Subject Property. A rail line is located approximately 2.0 miles to the south of the Subject Property.
1898, 1900, 1905		No site-specific features are shown on the Subject Property. The Subject Property sits an elevation of approximately 25 feet above sea level.	There is a tributary stream that leads to Gowanus Bay approximately 0.5 miles east of the Subject Property. No major changes in elevation are noted from the previous map. Small unlabeled structures can be seen along the shoreline. The right side of the 1905 topographic map was not included.
1925		No site-specific features are shown on the Subject Property. No changes in elevation are mapped at the Subject Property.	The surrounding area has been more highly developed with roads and buildings. Governors Island has increased in size.
1947		No site-specific features are shown on the Subject Property. No changes in elevation are mapped at the Subject Property.	The surrounding area has been more highly developed with buildings. “N Twin Tank” and “S Tank” are approximately 0.5 miles to the west of the Subject Property. “Black Tank” and Fort Jay are now labeled on Governors Island. Brooklyn Union Gas Co. and four possible gas tanks are approximately 0.4 miles to the east of the Subject Property. Bush Terminal Buildings, possible tanks, and additional rail lines are shown to the south of the Subject Property.
1955/1956		No site-specific features are shown on the Subject Property. No changes in elevation are mapped at the Subject Property.	Labeled gas tanks are shown to the east and southeast of the Subject Property across the Gowanus Parkway at Brooklyn Union Gas Co. Tanks are also shown to the south of the Subject Property near the “Dry Docks”.
1967		No site-specific features are shown on the Subject Property. No changes in elevation are mapped at the Subject Property.	Most of the tanks to the south of the Subject Property are no longer shown. Brooklyn Gas Co. and the associated tanks to the east are no longer present.
1979/1981, 2013/2014, 2016, 2019		No site-specific features are shown on the Subject Property. No changes in elevation are mapped at the Subject Property.	Tanks are shown approximately 0.6 miles to the south of the Subject Property, just south of Red Hook Recreational Area.

4.7 CITY DIRECTORY

GZA reviewed a city directory abstract including listings from 1928 to 2020 provided by EDR. Addresses in the immediate vicinity of the Subject Property were reviewed for the Subject Property and adjoining properties. The

table below contains GZA's description of the Subject Property and provides a listing of the adjoining properties as presented in the city directory abstract.

Year(s)	Listings for 46 Nelson Street (Subject Property)
1965-1970	Tow Motor Corp. Service Department
1973	Foley Tow Lift Inc.
1976	Goodyear Tire & Rubber Co. The Goodyear Truck Tire Center
1992	Turano John & Sons
1995-1997	Abaline Paper Products Inc., Penn Paper Inc.
2000	CJ Hanlon Company Incorporated
2010-2017	Idea Nuova Inc.

Year(s)	Listings for 729 Hicks Street (Subject Property)
2017	LI Pipe Supply

Year(s)	Listings for 741 Hicks Street (Subject Property)
1973	White Woody

Year(s)	Listings for 727 Hicks Street, adjoining property to the north
1934	ROMA ID STEPHEN, ROMA ID HELEN FCTY WKR R, ROMA ID BERNARD T R
1949-1960	O CONNOR JAS
1985	LUCCI
2005	Picone & Me Cullagh

Year(s)	Listings for 56 Nelson Street, adjoining property to the east
1934	Caranauto Mary H
2010	Jeremy Mizrahi
2014-2017	Damico Coffee
2020	Damico Coffee, Liberty View Self Storage LLC

Listings for the adjoining property to the west of the Subject Property (401 Columbia Street) and the adjoining property to the south of the Subject Property (749 Hicks Street) were not provided in the City Directory report.

4.8 BUILDING DEPARTMENT RECORDS

GZA reviewed building department records available from the New York City Department of Buildings (NYC DOB) Building Information System (BIS) for the Subject Property (Block 526/Lot 1) and the adjoining properties. No evidence of hazardous materials or petroleum usages were identified at the Subject Property.

4.9 OTHER HISTORICAL RECORDS

GZA requested access to records available with the New York State Department of Environmental Conservation (NYSDEC) and the New York City Department of Environmental Protection (NYCDEP) through a Freedom of Information Law (FOIL) request on April 10, 2024. A response was received from the NYCDEP on April 12, 2024,

stating that no responsive records were found. A response from the NYSDEC was received on April 19, 2024, stating that no responsive records were found.

5.0 PREVIOUS INVESTIGATIONS

GZA is not aware of any previous investigations or environmental concerns at the Subject Property. GZA was not provided with any documents regarding previous site investigations conducted at the Subject Property.

6.0 SITE RECONNAISSANCE

The purpose of GZA's site reconnaissance was to observe current Subject Property conditions for evidence of recognized environmental conditions that could result in the presence of hazardous substances or petroleum products in the environment at the Subject Property. GZA Project Scientist Christian DiGennaro conducted a site reconnaissance at the Subject Property on April 16, 2024. Victor Li was identified as the Key Site Manager and was present for the reconnaissance and was interviewed that day. GZA documented its observations and photo-documented the pertinent features and/or areas of environmental concern which we reference in this Phase I ESA Report. Selected photographs are included in **Appendix A**, and **Figure 2** – **Subject Property Boundary Map** depicts the Site, Site boundaries, and any pertinent features.

Limitations to GZA's site reconnaissance, if any, are noted in **Section 1.4**.

The following table discusses features of potential environmental concern identified at the Subject Property.

Feature	Description
Aboveground storage tank (AST) systems	Not observed.
Underground storage tank (UST) systems	Not observed.
Chemical or petroleum storage or handling areas	In the restroom on the northern half of the building, there is a large container of chlorinated machine dish powdered detergent and a large container hand cleanser. Also in the restroom, there are a few bottles of hand soap, bleach, and other cleaning chemicals. Just northeast of the garage bay doors, there are five containers of diesel exhaust fluid and a gas can. There are two propane tanks and nine tanks of liquified petroleum gas stored near the warehouse entrance outside of the building on the southern half of the Subject Property. These tanks are used for the forklifts on-site.
Chemical waste or petroleum waste storage or handling areas	Not observed.
Dumpsters	One dumpster was observed in the southeastern portion of the Subject Property.
Floor drains, trenches, sumps, and associated piping	One suspected floor drain was observed inside the building to the north of the westernmost warehouse bay door.
Oil/water separators	Not observed.

Feature	Description
Storm water drains, grates and associated piping	One stormwater grate was observed north of the eastern most garage bay door.
Drainage swales, culverts, impoundments, and surface water bodies	Not observed.
Septic systems, leach fields, seepage pits, and dry wells	Not observed.
Open pipe discharges	Not observed.
Landfills and solid waste dumping	Not observed.
Historical fill or other fill material	Not observed.
Staining or stressed vegetation	A suspected oil stain was observed on the floor of the building.
Strong, pungent, or noxious odors	Not observed.
Electrical transformers or capacitors	Not observed.
Hydraulic equipment, including lifts, elevators, and compactors	Not observed.
Active or inactive production wells	Not observed.
Monitoring wells, former boreholes, or other evidence of environmental investigations	Not observed.
Additional observations	• No manufacturing takes place at the Subject Property. The business exclusively buys and sells piping. • There is a overhead crane near the center of the building. The crane is believed to operate using an electric motor according to Victor Li, Operations Manager and Key Site Manager. • Fluorescent light ballasts were observed throughout the building. • GZA identified potential evidence of asbestos containing material in the floor tiles located in the storage room on the north side of the building.

In GZA's opinion, none of the identified features are RECs for the Subject Property.

7.0 REGULATORY DATABASE REVIEW

This section is based on publicly available information from various federal, state, and local agencies that maintain environmental regulatory databases.

7.1 FEDERAL AND STATE ENVIRONMENTAL RECORD SOURCES

Federal and state databases were searched by EDR, a professional data search company, and search results were provided to GZA in a report dated April 10, 2024. The following table indicates the databases searched by EDR, the minimum search distances from the Subject Property, and the number of properties that appear on the database within the minimum search distances used. Descriptions of the federal and state databases, and the dates on which EDR accessed these databases, are provided in the Third-Party Database Report (see **Appendix C**). The Subject Property was identified on the NY NYC Land Use database searched by EDR.

Federal and State List	Approximate Minimum Search Distance*	Subject Property and Adjoining Properties	# Sites Within Search Distance
NPL	*1 mile*	0	1
Delisted NPL	*1 mile*	0	0
SEMS	*½ mile*	0	5
SEMS Archive	*½ mile*	0	1
Corracts	*1 mile*	0	2
RCRA-SQG	*¼ mile*	0	2
RCRA-LQG	*¼ mile*	0	12
RCRA-VSQG	*¼ mile*	0	2
Federal IC/EC Registries	*½ mile*	0	2
ERNS	*Site only*	0	0
State Equivalent NPL	*1 mile*	0	0
NY LTANKS	*½ mile*	0	31
NY UST	*¼ mile*	0	19
NY AST	*¼ mile*	0	12
State IC/EC Registries	*½ mile*	0	2
Voluntary Cleanup Program Sites	*½ mile*	0	8
NY Brownfields	*½ mile*	0	5
NY Spills	*¼ mile*	1	34
FINDS	*Site only*	0	0
ECHO	*Site only*	0	0
NY Manifest	*¼ mile*	0	55
NY NYC Land Use	*Site only*	1	1
EDR Hist Auto	*¼ mile*	0	4
EDR Hist Cleaner	*¼ mile*	0	1

* This indicates the minimum distance measured from the nearest Subject Property boundary which EDR performed the database review.

7.2 LISTINGS FOR SUBJECT PROPERTY AND ADJOINING PROPERTIES

Name	46 Nelson Street
Address	46 Nelson Street
Distance	Subject Property
Database(s)	NY NYC Land Use
Comments	The Subject Property is classified in the NY NYC LAND USE database as an M1-1 manufacturing district with E1: Warehouse building class and land use category 'Industrial and Manufacturing'.

Name	Spill Number 0205143
Address	727 Hicks Street
Distance/Direction from Subject Property	0.019 miles north/northeast of the Subject Property (upgradient of the Subject Property)
Database(s)	NY Spills
Comments	An abandoned 55-gallon drum of waste oil was identified at the site. The drum was not leaking, and the spill case was closed on September 19, 2002.

7.3 LISTINGS FOR VICINITY PROPERTIES

GZA reviewed information for the following vicinity properties:

Name	Cardinal Tank Corp.
Address	700 Hicks Street
Distance/Direction from Subject Property	0.037 miles southwest of the Subject Property (upgradient of Subject Property)
Database(s)	NY AST
Comments	The following tank information is listed for this site: • One #2 fuel oil tank (2,000-gallon) closed and removed • One used oil tank (275-gallons) closed and removed • Two used oil tanks (500-gallons each) closed and removed • One used oil tank (1,000-gallons) closed and removed • One used oil tank (2,000-gallons) closed and removed • Three used oil tanks (4,000-gallons each) closed and removed • Three used oil tanks (4,500-gallons each) closed and removed • Two used oil tanks (10,000-gallons each) closed and removed

Name	East Coast Tank Lining Corp.
Address	700 Hicks Street
Distance/Direction from Subject Property	0.037 miles southwest of the Subject Property (upgradient of Subject Property)
Database(s)	NY Spills
Comments	An environmental assessment was conducted at this site, and it was determined that no further investigation or remediation was required. While no specific spill information is available, the spill case was closed on May 6, 2023.
Name	700 Hicks Street
Address	700 Hicks Street
Distance/Direction from Subject Property	0.037 miles southwest of the Subject Property (upgradient of Subject Property)
Database(s)	NY Spills
Comments	Soil and groundwater contamination was identified at this site. Remedial actions were taken, and the contaminated soil was excavated and replaced with clean fill. The spill case was closed on August 18, 2023

Name	NYC Dept of Education – Public School 27K
Address	27 Huntington Street
Distance/Direction from Subject Property	0.049 miles west of the Subject Property (downgradient of Subject Property)
Database(s)	NY Spills
Comments	An abandoned UST was found leaking into the basement of the building at 27 Huntington Street. Absorbent socks were used in the basement as a remedial measure and no further contamination was identified. The spill case was closed on October 20, 2011.

Name	Gulf Gas Station / Red Hook Service Station
Address	260 Hamilton Avenue
Distance/Direction from Subject Property	0.076 miles east/southeast of the Subject Property (upgradient of Subject Property)
Database(s)	NY Spills, EDR Hist Auto, NY LTANKS
Comments	• NY Spills: Soil contamination was identified onsite and remediated. Contamination is suspected to be from previously stored tanks onsite. The spill case was closed on May 27, 2004. • NY Spills: Diesel fuel was seen pooling around pump dispensers due to a suspected equipment failure. The spill was cleaned, and the spill case was closed on March 3, 2015. • EDR Hist Auto: The site is listed on the EDR Hist Auto database from 2000 – 2010. • NY LTANKS: This site is listed on the NY LTANKS database due to several tank test failures. Each spill case has been closed.

Name	Gowanus Service Center
Address	218 Hamilton Avenue
Distance/Direction from Subject Property	0.078 miles east/southeast of the Subject Property (upgradient of Subject Property)
Database(s)	EDR Hist Auto
Comments	The site is listed on the EDR Hist Auto database from 1969 – 1985.

Name	Kleen Cleaners
Address	449 Colombia Street
Distance/Direction from Subject Property	0.119 miles east/southeast of the Subject Property (downgradient of Subject Property)
Database(s)	EDR Hist Cleaner
Comments	The site is listed on the EDR Hist Cleaner database from 1991 – 2008.

Other federal and state-listed sites were identified within the search distances used. Based on their distance from the Subject Property, closed regulatory status, or the anticipated hydraulic gradient, it is GZA's opinion that the remaining listed sites are unlikely to impact the soil, groundwater, or soil vapor conditions at the Subject Property.

7.4 EVALUATION OF UNMAPPED PROPERTIES

GZA also reviewed the list of "orphan" sites, which are properties with insufficient address information to allow the mapping software to plot a location. Based on the incomplete descriptions provided in the database summary and based on their distance and direction from the Subject Property, it does not appear that the 16 listed properties could impact the Subject Property.

7.5 REGULATORY FILE REVIEW

Responses were received in regard to the Freedom of Information Law (FOIL) requests sent to NYSDEC and NYDEP. Both responses stated that no responsive records were found.

8.0 INTERVIEWS

The owner's representative, Victor Li, was interviewed as part of this Phase I ESA. The information that the interviewee provided is discussed within the text of this Phase I ESA Report.

9.0 USER-PROVIDED INFORMATION

GZA requested information from the Client regarding title information, environmental liens, Activity and Use Limitations, and specialized knowledge or commonly known information regarding the Subject Property and, if applicable, the reason for a significantly discounted purchase price. The completed User Questionnaire is provided in **Appendix D**. Responses provided within the Questionnaire do not indicate additional conditions of concern.

GZA was not provided with any information or documents regarding previous site investigations conducted at the Subject Property.

10.0 NON-ASTM E1527-21 CONSIDERATIONS

This Phase I ESA includes an evaluation of the following environmental issues or conditions that ASTM E1527-21 stipulates as non-scope considerations:

- Vapor Encroachment Assessment.
- Suspect Asbestos-Containing Material (ACM).
- Lead Paint.
- Mold; and
- Radon

10.1 VAPOR ENCROACHMENT ASSESSMENT

Christian DiGennaro, Project Scientist of GZA, performed the area reconnaissance portion of the vapor encroachment assessment (VEA) on April 14, 2024. ASTM E2600-15 requires identification of potential petroleum-related volatile organic compound (VOC) sources within 1/10 mile of the Site and potential non-petroleum related VOC sources within 1/3 mile of the Site. Based site reconnaissance discussed in **Section 7.0** above, no Vapor Encroachment Conditions (VECs) were identified.

Other federal and state-listed sites were identified within the search distances used. Based on their distance from the Subject Property, description provided, closed regulatory status, or the anticipated hydrogeologic gradient, it is GZA's opinion that the remaining listed sites are unlikely to be VECs.

10.2 SUSPECT ASBESTOS-CONTAINING MATERIAL

GZA did not sample any suspect asbestos-containing material (ACM) during this investigation. Only a limited visual survey, within accessible areas, for the presence of suspect ACM within the Subject Property building was

performed. The intent of the visual survey was to identify exposed suspect ACM through a preliminary, non-destructive survey. GZA focused on identifying 1) surfacing materials, 2) exposed thermal system insulation, and 3) friable miscellaneous materials. GZA identified potential evidence of asbestos containing material from the floor tiles in the north side of the building.

10.3 LEAD PAINT

Use of lead in household paint was banned by the Consumer Products Safety Commission in 1978. Structural steel beams continued to be treated with Lead Paint for commercial and industrial applications even after the 1978 residential ban. Majority of the buildings in the surrounding area were constructed prior to 1978. Therefore, it is possible that the exposed and/or underlying layers of paint contain lead. The EPA and the U.S. Department of Housing and Urban Development (HUD) defined lead paint with containing lead levels greater than or equal to 1.0 milligram per square centimeter or more than 0.5% by weight. A lead paint survey was not completed as part of this assessment.

10.4 MOLD

GZA performed a visual inspection for the presence of mold at the Subject Property. GZA did not observe evidence of mold and did not perform a mold survey.

10.5 RADON

Radon is a naturally occurring, colorless and odorless radioactive gas. The Subject Property was generally located on the State Radon Potential Map produced by the EPA. The EPA's Map of Radon Zones assigns each of the 3,141 counties in the U.S. to one of three zones based on radon potential:

- Zone 1: a predicted average indoor radon screening level greater than 4 picocuries per liter (pCi/L) (red zones)
- Zone 2: a predicted average indoor radon screening level between 2 and 4 pCi/L (orange zones)
- Zone 3: a predicted average indoor radon screening level less than 2 pCi/L (yellow zones)

According to the EPA's map, Brooklyn, New York falls within Zone 3, which is not typically a concern for additional testing.

It also should be noted that the EPA map is general in nature, and that wide variations of radon levels could be found in a particular zone. The EPA recommends that residential buildings with readings greater than 4 pCi/L install remedial measures to reduce the amount of radon. In buildings with readings between 2 and 4 pCi/L the EPA has suggested that installation of remedial measures should be considered. A qualified professional should determine the actual radon levels for the Subject Property building if remedial measures are being considered.

11.0 FINDINGS AND CONCLUSIONS

GZA performed a Phase I ESA in general conformance with the scope and limitation of ASTM E1527-21 for the Subject Property located at 46 Nelson Street, Brooklyn, New York. Exceptions to, or deviations from, this practice are described in **Section 1.4** of this Phase I ESA Report.

11.1 RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs)

In GZA's opinion, this Phase I ESA revealed no evidence of RECs in connection with the Subject Property.

11.2 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS (CRECs)

In GZA's opinion, this Phase I ESA revealed no evidence of CRECs in connection with the Subject Property.

11.3 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS (HRECs)

In GZA's opinion, this Phase I ESA revealed no evidence of HRECs in connection with the Subject Property.

11.4 *DE MINIMIS* CONDITIONS

In GZA's opinion, this Phase I ESA revealed no evidence of De Minimis Conditions in connection with the Subject Property.

11.5 SIGNIFICANT DATA GAPS

In GZA's opinion, this Phase I ESA revealed one data gap which has the potential to affect the ability to identify RECs, CRECs, or HRECs at the Subject Property. City Directory listings state that the building on the Subject Property was a Goodyear Truck Tire Center in 1976. No other historic records or EDR databases search have yielded any other information or mention of a tire service center at the Subject Property. The lack of additional information or detail regarding the potential Goodyear Truck Tire Center is considered a data gap for the Subject Property.

11.6 NON-ASTM E1527-21 CONSIDERATIONS

No non-ASTM E1527-21 considerations were observed as part of GZA's Scope of Services.

11.7 BUSINESS ENVIRONMENTAL RISKS

According to historic mapping and records, the Subject Property contained numerous structures since the early 1900s through 1964 with unknown heating sources. Evidence of former or inactive heating oil tanks were not observed; however, the historical heating source(s) (AST/UST) were not identified as part of this Phase I ESA. If heating oil tanks are identified or discovered during any demolition or development stages of Proposed Actions, GZA recommends they be assessed and removed in accordance with local and state requirements. Additionally, the former structures may have had basements which were filled in with unknown fill during demolition.

Historic mapping and records identified several automotive repair and fueling operations in the surrounding area of the Subject Property. While no open spill cases or releases were identified from these sites, the potential for releases from the nearby auto repair and fueling facilities are considered a BER.

GZA identified potential evidence of asbestos containing material in the floor tiles located in the storage room on the north side of the building.

A suspected oil stain was observed on the floor of the building with no identified release to the environment. The suspected oil stain is considered a BER.

12.0 REFERENCES

EDR, Aerial Photo Decade Package, Shelton, CT, dated April 10, 2024.

EDR, City Directory Image Report, Shelton, CT, dated April 10, 2024.

EDR, Historical Topo Map Report, Shelton, CT, dated April 10, 2024.

EDR, The EDR Radius Map Report with Geocheck™, dated April 10, 2024.

EDR, Sanborn® Map Report, Shelton, CT, dated April 11, 2024.

New York City Department of Buildings: building permit and actions information (http://www.nyc.gov/html/dob/html/bis/bis.shtml).

New York City Department of Finance ACRIS; property tax assessment information (http://nycprop.nyc.gov/nycproperty/nynav/jsp/selectbbl.jsp).

NYC Planning ZoLa New York City's Zoning & Land Use Map, https://zola.planning.nyc.gov/about/#9.72/40.7125/-73.8393

United States Geological Service (USGS) online GIS database, Mineral Resources Online Spatial Data: Geologic maps (usgs.gov)

Depth to Groundwater in the New York Metropolitan Area https://www.arcgis.com/apps/mapviewer/index.html?webmap=36952527b5ef46f388180a27aaf159bc

13.0 ENVIRONMENTAL PROFESSIONAL OPINION

I declare, to the best of my professional knowledge and belief, that I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312; that I have the specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the subject property; and that I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312. The signature of the Environmental Professional is contained on the cover letter of this Phase I ESA Report. The qualifications of the Environmental Professional are provided in **Appendix E**.

14.0 LIMITATIONS

GZA prepared this Phase I ESA Report on the Subject Property on behalf of, and for the exclusive use of, Vasco Ventures for the purpose indicated above. Use of this Phase I ESA Report, in whole or in part, at other locations, or for other purposes, might lead to inappropriate conclusions, and we do not accept any responsibility for the consequences of such use. Further, reliance by any party not identified in the agreement, for any use, shall be at that party's sole risk, and without any liability to GZA.

In conducting this Phase I assessment, GZA performed its services using that degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. We make no warranty, express or implied.

Our findings and conclusions are based on the work conducted as part of the Scope of Services set forth in this Phase I ESA Report and reflect our professional judgment. Our findings and conclusions should not be considered as scientific certainties or engineering certainties, but rather as our professional opinions based on the limited data gathered during our work.

No environmental site assessment can eliminate the uncertainty of the possible presence of RECs. This Phase I ESA Report was prepared to help reduce, not to eliminate, such uncertainty. Consistent with ASTM E1527-21, we developed our opinions in light of the constraints imposed by time and budget.

As indicated within this Phase I ESA Report, we observed conditions at the Subject Property and at adjoining properties for evidence of RECs at the Subject Property. Where access to portions of the Subject Property or to structures on the Subject Property was unavailable or limited, GZA renders no opinion as to the presence of hazardous substances, hazardous waste, or petroleum products, or to the presence of indirect evidence relating to these materials, in those portions of the Subject Property or structures. In addition, GZA renders no opinion as to the presence of hazardous substances, hazardous waste, or petroleum products, or to the presence of indirect evidence relating to these materials, where direct observation of the interior walls, floors, and/or ceilings of a structure on the Subject Property was obstructed by objects and/or coverings on and/or over such surfaces. We based our opinions on such limited observations. Additionally, activities or events impacting environmental conditions at the Subject Property or at adjoining properties might have been transient and not observable at the time of GZA's site reconnaissance.

We relied upon information made available by federal, state, and local authorities, the Key Site Manager, and others. We did not attempt to independently verify the accuracy or completeness of that information. To the extent we encountered inconsistencies in this information, they were identified within the Report.

The lender, seller, buyer, or other parties that might become involved with the Subject Property might develop additional opinions or information regarding the presence or absence of RECs at the Subject Property. Such additional opinions or information might not fully support the opinions provided in this Phase I ESA Report. In the event such additional opinions or information is developed, we recommend retaining GZA to review this material so that we have the opportunity to evaluate and modify, as necessary, the opinions provided in this Phase I ESA Report.

Unless otherwise specified within this Phase I ESA Report, we have rendered no opinion on the compliance of Subject Property conditions or activities with federal, state, and local codes, laws, or regulations.

GZA based the opinions expressed in this Phase I ESA Report on conditions observed during our work on this Subject Property; these conditions might change over time. ASTM E1527-21 specifies that observations and opinions are only valid for 180 days from the date the underlying information is developed. After 180 days, portions of this Phase I ESA Report may need to be updated.

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Figures



LEGEND

APPROXIMATE SUBJECT PROPERTY BOUNDARY

SERVICE LAYER CREDITS: WORLD TOPOGRAPHIC MAP: NYC OPENDATA, STATE OF NEW JERSEY, ESRI, HERE, GARMIN, INCREMENT P, USGS, METI/NASA, EPA, USDA

0 1,000 2,000 4,000

SCALE IN FEET

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46 NELSON STREET
46 NELSON STREET
BROOKLYN, NY 11231

PHASE I
SUBJECT PROPERTY LOCATION MAP

PREPARED BY:
GZA GeoEnvironmental, Inc.
www.gza.com

PREPARED FOR:
HH REALTY EQUITIES

PROJ MGR: CS	REVIEWED BY: KW	CHECKED BY: JH	FIGURE 1
DESIGNED BY: MB	DRAWN BY: MB	SCALE: 1:24,000	
DATE: 06/05/2024	PROJECT NO: 12.0077830.00	REVISION NO:	

© 2024 - GZA GeoEnvironmental, Inc.
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LEGEND

APPROXIMATE SUBJECT PROPERTY BOUNDARY

NYC PARCELS

SERVICE LAYER CREDITS: BING MAPS HYBRID: © 2024 MICROSOFT CORPORATION © 2024 MAXAR ©CNES (2024) DISTRIBUTION AIRBUS DS © 2024 TOMTOM

0 15 30 60

SCALE IN FEET

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46 NELSON STREET
46 NELSON STREET
BROOKLYN, NY 011231 (BLOCK 526, LOT 1)

PHASE I
SUBJECT PROPERTY BOUNDARY MAP

PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: HH REALTY EQUITIES	
PROJ MGR: CS	REVIEWED BY: KW	CHECKED BY: JH	FIGURE 2
DESIGNED BY: MB	DRAWN BY: MB	SCALE: 1:360	
DATE: 06/05/2024	PROJECT NO: 12.0077830.00	REVISION NO:	

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J:\77801 to 77850\77830, 46 Nelson St - Rezoning\Technical\GIS\Site Boundary\phase1 figures.aprx, June 05, 2024 - 2:08 PM, miranda.bandeli

Appendix A - Photographic Log

Photographic Log

Client Name: HH Realty Equities	**Subject Property Location:** 46 Nelson Street, Brooklyn, NY 11231	**Project No.** 12.0077830.00

Photo No.	**Date:**
1	4/16/24

Direction Photo Taken:
Southeast

Description:
Building façade of the Subject Property building along Nelson Street.



Photo No.	**Date:**
2	4/16/24

Direction Photo Taken:
Northeast

Description:
Building façade of the Subject Property building taken from the corner of Huntington Street and Hicks Street.



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Street, Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No.	Date:
3	4/16/24

Direction Photo Taken:
North

Description:
Adjacent property to the north of the Subject Property, across Nelson Street.



Photo No.	Date:
4	4/16/24

Direction Photo Taken:
South

Description:
Adjacent property to the south, across Huntington Street.



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Street, Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No.	Date:
5	4/16/24

Direction Photo Taken:
East southeast

Description:
Courtyard area south of the school building. The photo was taken along East 10th Street.



Photo No.	Date:
6	4/16/24

Direction Photo Taken:
Southeast

Description:
Adjoining property to the east of the Subject Property.



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Street, Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No.	Date:
7	4/16/24

Direction Photo Taken:
Northeast

Description:
Office entrance and loading dock on the east side of the building.



Photo No.	Date:
8	4/16/24

Subject Property Location:
Office area - Subject Property building

Description:
View of the office in the Subject Property warehouse building.



Photographic Log

Client Name: HH Realty Equities	**Subject Property Location:** 46 Nelson Brooklyn, NY 11231	**Project No.** 12.0077830.00

Photo No.	**Date:**
9	4/16/24

Direction Photo Taken:
Southwest

Description:
Pipe storage on the inside of the warehouse building.



Photo No.	**Date:**
10	4/16/24

Subject Property Location:
Warehouse area – Subject Property building

Description:
Suspected floor drain north of the furthest west garage bay door.



Photographic Log

Client Name: HH Realty Equities	**Subject Property Location:** 46 Nelson Brooklyn, NY 11231	**Project No.** 12.0077830.00

Photo No. 11	**Date:** 4/16/24
Direction Photo Taken: North	
Description: Warehouse that includes the storage of pipes, valves, fittings, and sprinkler system devices.	



Photo No. 12	**Date:** 4/16/24
Subject Property Location: Warehouse area – Subject Property building	
Description: Rows of shelves stocked with pipes, fittings, and valves in the warehouse.	



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No. 13	Date: 4/16/24

Subject Property Location: Warehouse area – Subject Property building

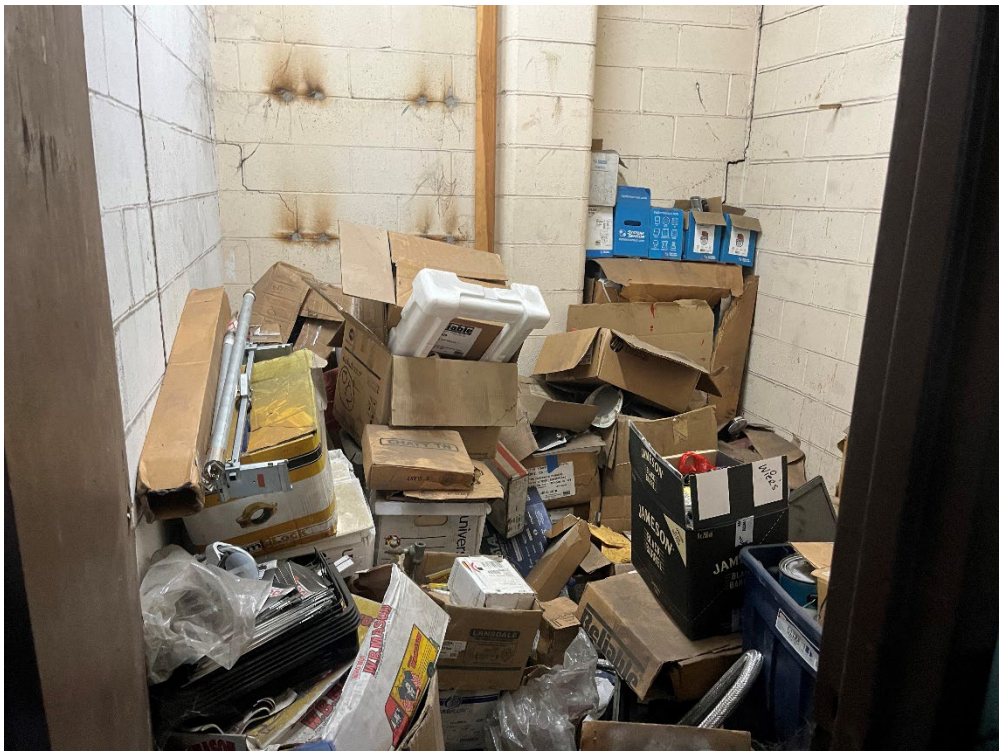
Description: Sprinkler system devices stored in the northwest corner of the warehouse.



Photo No. 14	Date: 4/16/24

Subject Property Location: Warehouse area – Subject Property building

Description: Storage room in the northeastern corner of the warehouse area.



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No.	Date:
15	4/16/24

Subject Property Location: Warehouse loft – Subject Property building

Description: View from the top of the loft facing the building entrance to the south.



Photo No.	Date:
16	4/16/24

Subject Property Location: Warehouse loft – Subject Property building

Description: Water heater in the loft.



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Street, Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No. 17	Date: 4/16/24
Subject Property Location: Warehouse loft – Subject Property building	
Description: Roof access by way of a ladder and hatch.	



Photo No. 18	Date: 4/16/24
Direction Photo Taken: West	
Description: View of the roof and adjacent property to the west.	



Photographic Log

Client Name: HH Realty Equities	**Subject Property Location:** 46 Nelson Street, Brooklyn, NY 11231	**Project No.** 12.0077830.00

Photo No. 19	**Date:** 4/16/24
Direction Photo Taken: Southeast	
Description: View of the roof and adjacent properties to the south.	



Photo No. 20	**Date:** 4/16/24
Subject Property Location: Storage room – Subject Property building	
Description: Back storage area in the northern half of the Subject Property. Potential evidence of asbestos-containing material was observed in the floor tiles.	



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Street, Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No. 21	Date: 3/27/24
Subject Property Location: Restroom – Subject Property building	
Description: Restroom in the northern half of the building.	

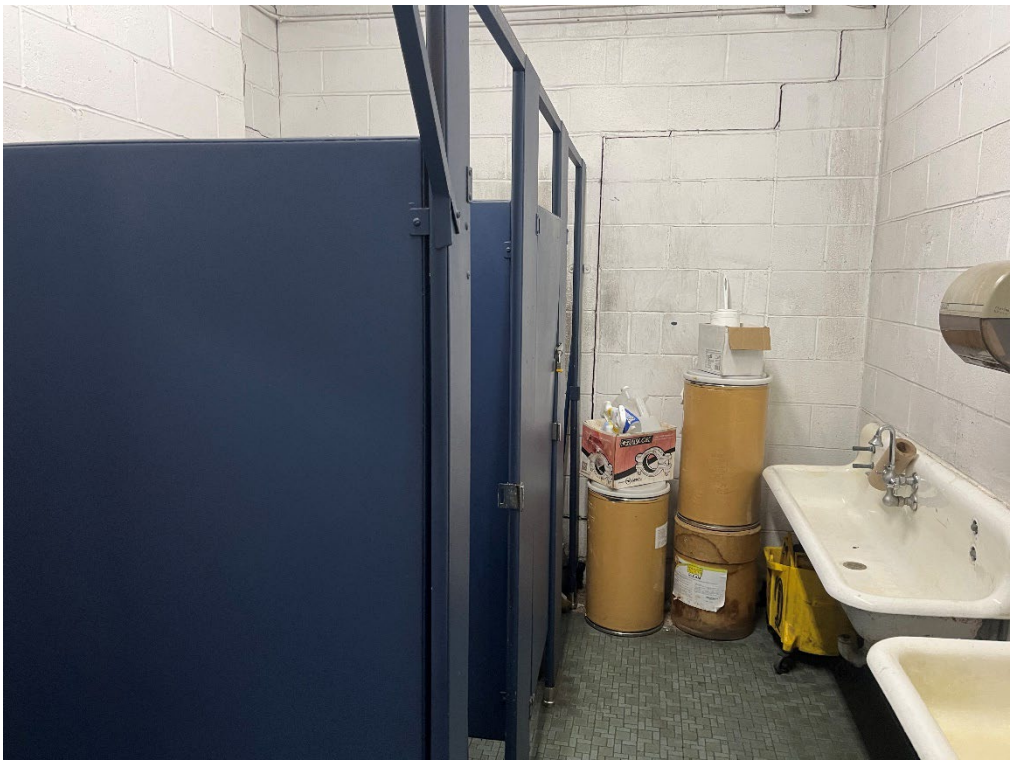


Photo No. 22	Date: 4/16/24
Subject Property Location: Warehouse area – Subject Property building	
Description: Crane in the warehouse area.	



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Street, Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No.	Date:
23	4/16/24

Subject Property Location: Warehouse area – Subject Property building

Description: Stormwater grate just north of the east garage bay door.



Photo No.	Date:
24	4/16/24

Direction Photo Taken: East

Description: Loading/unloading area on the eastern side of the Subject Property. Liquified petroleum gas and propane tanks are stored in the corner.



Photographic Log

Client Name: HH Realty Equities	Subject Property Location: 46 Nelson Street, Brooklyn, NY 11231	Project No. 12.0077830.00

Photo No.	Date:
25	4/16/24

Direction Photo Taken:
North

Description:
West side of the Subject Property building.



Photo No.	Date:
26	4/16/24

Direction Photo Taken:
North

Description:
Fenced in area in the northwestern corner of the Subject Property.



Photographic Log

Client Name: HH Realty Equities	**Subject Property Location:** 46 Nelson Street, Brooklyn, NY 11231	**Project No.** 12.0077830.00

Photo No.	**Date:**
27	4/16/24

Subject Property Location: Warehouse area- Subject Property building

Description: Suspected oil stain observed on the floor of the warehouse area. This stain is identified as a Business Environmental Risk (BER).



APPENDIX E

NOISE BACKUP

CASELLA

Certificate of Conformance and Calibration for

CEL-120 Acoustic Calibrator

Applicable Standards :-IEC 60942: 2003 & ANSI S1.40: 2006

CEL-120/1 Class 1 ☑

CEL-120/2 Class 2 ☐

Serial No: 1530748

Firmware: 04

Temperature: 24.5 °C Pressure: 1013 mb %RH 54

Frequency = 1.00kHz ± 2Hz T.H.D. = < 1%	Calibration Level
SPL @ 114.0dB Setting	114.01 dB
SPL @ 94.0dB Setting (CEL-120/1 only)	93.97 dB/N.A

Engineer :- [signature] Date :- 15 SEP 2023

Company test equipment and acoustic working standards, used for conformance testing, are subject to periodic calibration, traceable to UK national standards, in accordance with the company's ISO9001 Quality System.

DECLARATION OF CONFORMITY

This certificate confirms that the instrument specified above has been produced and tested to comply with the manufacturer's published specifications and the relevant European Community CE directives.

Casella
Regent House, Wolseley Road, Kempston, Bedford, MK42 7JY
Phone: +44 (0) 1234 844100 Fax: +44 (0) 1234 841490
E-mail: info@casellasolutions.com
Web: www.casellasolutions.com

198032A-02

Certificate of Conformity and Calibration



Instrument Model:-	**CEL-633C**		
Serial Number	1438642		
Firmware revision	V006-05		
Microphone Type:-	**CEL-251**	**Preamplifier Type:-**	**CEL-495**
Serial Number	6693	Serial Number	005669
Instrument Class/Type:-	**1**		

Applicable standards:-

IEC 61672: 2013 / 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:-	24.1 °C 54 %RH 1012 mBar	**Test Engineer:-** **Date of Issue:-**	Nicola Cartwright September 15, 2023

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 9001:2015 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

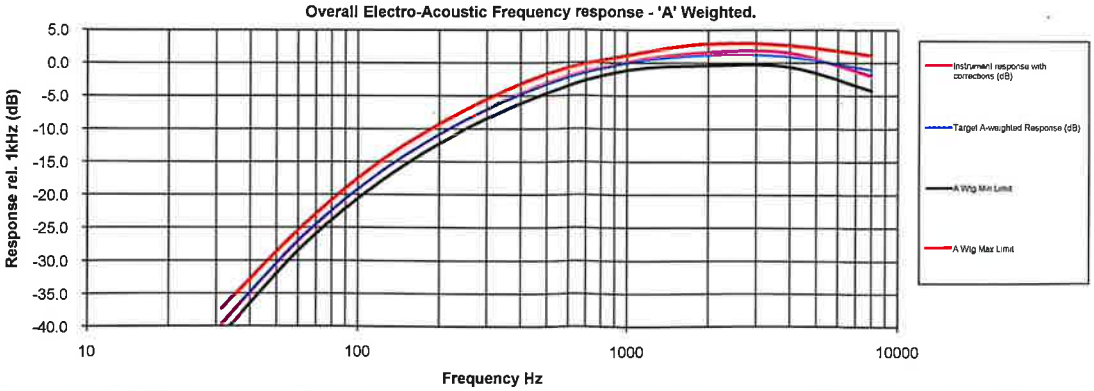
Test Summary:-

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.



Casella UK
Regent House, Wolseley Road,
Kempston, Bedford
MK42 7JY
United Kingdom
Tel: +44 (0) 1234 844100
E-mail: info@casellasolutions.com

Casella C/o TSI Incorporated
500 Cardigan Road
Shoreview
MN 55126
USA
Tel: +1 651-490-2860
E-mail: Answers@tsi.com

Casella India
TSI Instruments India Pvt.Ltd.
Office no 1203, 12th floor,
Eros corporate park, IMT,
Manesar, Sector2, Gurugram,
Haryana 122050, India
Tel: +91 124 4465171
E-mail:rajeshjoshi@casellasolutions.com



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Fairfield, NJ
55 Lane Road
Suite 407
Fairfield, NJ 07004

Manhattan, NY
104 West 29th Street
10th Floor
New York, NY 10001

Noise Assignment Field Sheet

Name of Project: 46 Nelson Street 12.0077830.00

Project Address: 46 Nelson Street Brooklyn, New York

Date(s) of Field Work: 4/16/2024

Personnel: Christian DiGennaro

Project Specific Scope of Work:

3 x 20-minute readings AM, Midday, PM

Location 3 on rooftop

Phase 1

Site Contact – Jacob Seligson #

I. Start of Noise Monitoring Day

Departure Time: 5:50 Arrival Time: 7:15

Weather Conditions (temp, wind speed, precipitation): 70°F, sunny, light wind

Meter Type: CASELLA Meter Serial #: 1438642 Meter Location: 1, 2, 3

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 #: 1530748 Meters used on: 1438642

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.*

An Equal Opportunity Employer M/F/V/H

II. Morning Session 7:30 AM – 9:00 AM

Before Measurement:

Meter Serial #: 1438642 Time: 7:54 Calibration Passed at 114 dB? (Y) / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 1438642 Time: 9:00 Calibration Passed at 114 dB? (Y) / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

Meter Serial #: _____ Time: _____ 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
3	7:54	8:14
2	8:18	8:38
1	8:39	8:59

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
3						
2	0	7	2	0	0	0
1	1	15	0	0	0	0

*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): Construction underneath the elevated roadway to the northwest generated noise throughout the morning session. Sound generated from the adjacent lot to the north during the Location 2 and Location 1 sessions. I notified the PM. Work on the ajacent lot the north will last to approx. 14:00 to 14:30. Traffic on the elevated roadway was not visible from Location 3 (roof).

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

III. Midday 12:00 PM – 1:30 PM

Before Measurement:

Meter Serial #: 1438642 Time: 12:02 Calibration Passed at 114 dB? (Y) / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 1438642 Time: 13:13 Calibration Passed at 114 dB? (Y) / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

Meter Serial #: _____ Time: _____ 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
3	12:02	12:22
2	12:29	12:49
1	12:52	13:12

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
2	1	1	0	0	0	0
1	3	3	0	0	0	0

*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): Noise generated from the northwest continues during the Midday session. No noise from the adjacent lot to the north during the Location 3 session. Noise from the northwest and north not as loud as the morning session ~~for~~ for locations 2 and 1.

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 #: 1438642 Time: 16:45 Calibration Passed at 114 dB? (Y) / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 1438642 Time: 17:54 Calibration Passed at 114 dB? (Y) / N

Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

Meter Serial #: _____ Time: _____ 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
3	16:45	17:05
2	17:13	17:33
1	17:34	17:54

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
2	5	5	0	0	0	0
1	6	5	0	0	0	0

*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): Loud noise from the northwest throughout the Location 3 session; Loud car at 16:53; no noise from the adjacent lot to the north throughout the evening session. No noise northwest for the Location 2 and Location 1 sessions. Loud cars at 17:46 and 17:49.

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: Access issues before the evening session. The business closed at 16:30. Operations manager, Victor Li, would not allow roof access after 16:30. Victor Li off-site at 16:30. I notified the pm (Gene Dove) and spoke to the client, Jacob Seligson.

Departure Time: 18:15 Arrival Time: 19:35

Total Time to Be Billed: 15

Notes continued:

Driver from Long Island pipe supply Inc. onsite at 16:32. The driver said he has access to the building. Spoke to Jacob at 16:32, filled him in on the last 15 minutes. After the conversation with Jacob, I spoke to the driver about letting me into the building. The driver refused to let me in, called Jacob back at 16:37 and he spoke to the driver. Again the driver refused to open the building. The driver recieves a call from the other manager and eventually allows access at approx. 16:40.

Instrument Model	**CEL-633C**		
Serial Number	1438642	LASmin	61 dB
Start Date & Time	4/16/2024 8:39:27 AM	LAeq	64.6 dB
End Date & Time	4/16/2024 8:59:36 AM	LAS 10%	65.5 dB
Duration	00:20:09 HH:MM:SS	LAS 50%	64.5 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	63.5 dB
Calibration (Before) Date	4/16/2024 7:54:08 AM	LDN	0
Calibration (After) Date	4/16/2024 9:00:17 AM	Result	Cumulative
LASmax	78.5 dB		

Instrument Model	**CEL-633C**		
Serial Number	1438642	LASmin	58.3 dB
Start Date & Time	4/16/2024 12:52:48 PM	LAeq	62.7 dB
End Date & Time	4/16/2024 1:12:49 PM	LAS 10%	64 dB
Duration	00:20:01 HH:MM:SS	LAS 50%	62 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	60.5 dB
Calibration (Before) Date	4/16/2024 12:02:13 PM	LDN	0
Calibration (After) Date	4/16/2024 1:13:28 PM	Result	Cumulative
LASmax	87.4 dB		

Instrument Model	CEL-633C		
Serial Number	1438642	LASmin	55.3 dB
Start Date & Time	4/16/2024 5:34:32 PM	LAeq	65.7 dB
End Date & Time	4/16/2024 5:54:33 PM	LAS 10%	64 dB
Duration	00:20:01 HH:MM:SS	LAS 50%	60.5 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	59.5 dB
Calibration (Before) Date	4/16/2024 4:55:45 PM	LDN	0
Calibration (After) Date	4/16/2024 5:54:45 PM	Result	Cumulative
LASmax	92.8 dB		

Report On CEL-63X

Instrument Model	**CEL-633C**		
Serial Number	1438642	LASmin	59.7 dB
Start Date & Time	4/16/2024 5:13:24 PM	LAeq	67.4 dB
End Date & Time	4/16/2024 5:33:30 PM	LAS 10%	69.5 dB
Duration	00:20:06 HH:MM:SS	LAS 50%	66.5 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	62.5 dB
Calibration (Before) Date	4/16/2024 4:55:45 PM	LDN	0
Calibration (After) Date	4/16/2024 5:54:45 PM	Result	Cumulative
LASmax	85.5 dB		

Instrument Model	**CEL-633C**		
Serial Number	1438642	LASmin	67.6 dB
Start Date & Time	4/16/2024 8:18:27 AM	LAeq	73.4 dB
End Date & Time	4/16/2024 8:38:28 AM	LAS 10%	75 dB
Duration	00:20:01 HH:MM:SS	LAS 50%	73 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	70 dB
Calibration (Before) Date	4/16/2024 7:54:08 AM	LDN	0
Calibration (After) Date	4/16/2024 9:00:17 AM	Result	Cumulative
LASmax	89 dB		

Instrument Model	**CEL-633C**		
Serial Number	1438642	LASmin	63.1 dB
Start Date & Time	4/16/2024 12:29:47 PM	LAeq	68.8 dB
End Date & Time	4/16/2024 12:51:22 PM	LAS 10%	70.5 dB
Duration	00:21:35 HH:MM:SS	LAS 50%	68.5 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	66.5 dB
Calibration (Before) Date	4/16/2024 12:02:13 PM	LDN	0
Calibration (After) Date	4/16/2024 1:13:28 PM	Result	Cumulative
LASmax	81.1 dB		

Instrument Model	**CEL-633C**		
Serial Number	1438642	LASmin	62.7 dB
Start Date & Time	4/16/2024 12:02:44 PM	LAeq	67.5 dB
End Date & Time	4/16/2024 12:22:48 PM	LAS 10%	69 dB
Duration	00:20:04 HH:MM:SS	LAS 50%	67 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	65.5 dB
Calibration (Before) Date	4/16/2024 12:02:13 PM	LDN	0
Calibration (After) Date	4/16/2024 1:13:28 PM	Result	Cumulative
LASmax	74.7 dB		

Instrument Model	**CEL-633C**		
Serial Number	1438642	LASmin	62.9 dB
Start Date & Time	4/16/2024 4:45:55 PM	LAeq	68.2 dB
End Date & Time	4/16/2024 5:05:56 PM	LAS 10%	69.5 dB
Duration	00:20:01 HH:MM:SS	LAS 50%	68 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	66 dB
Calibration (Before) Date	4/16/2024 4:55:45 PM	LDN	0
Calibration (After) Date	4/16/2024 5:54:45 PM	Result	Cumulative
LASmax	86.3 dB		

Instrument Model	CEL-633C		
Serial Number	1438642	LASmin	68 dB
Start Date & Time	4/16/2024 7:54:21 AM	LAeq	71.4 dB
End Date & Time	4/16/2024 8:14:22 AM	LAS 10%	72.5 dB
Duration	00:20:01 HH:MM:SS	LAS 50%	71 dB
Pause Duration	00:00:00 HH:MM:SS	LAS 90%	70 dB
Calibration (Before) Date	4/16/2024 7:54:08 AM	LDN	0
Calibration (After) Date	4/16/2024 9:00:17 AM	Result	Cumulative
LASmax	84.8 dB		