ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) AND SUPPLEMENTAL STUDIES TO THE EAS

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

Prepared for:
Stamford LLC

Prepared by:
Equity Environmental Engineering
500 International Drive, Suite 150
Mount Olive, NJ 07828

November 3, 2022

1465 38th St
Paperific Rezoning

Brooklyn, NY 11218
Block 5348, Lots 15, 17, 41, 42, 44, 45, 46, 47, 48, 49, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 118, and 119
Brooklyn Community District 12

CEQR Reference No: 22DCP045K

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* Paperific Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
22DCP045K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
220470ZMK N220471ZRK 220472ZSK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Department of City Planning			Stamford LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shellooe, Director of EARD			Amber Kartalyan, Equity Environmental Engineering		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 500 International Drive, Suite 150		
CITY New York	STATE NY	ZIP 10271	CITY Mount Olive	STATE NJ	ZIP 07828
TELEPHONE 212-720-3328	EMAIL 212-720-3328		TELEPHONE 201-757-3561	EMAIL amber.kartalyan@equityenvironmental.com	

5. *Project Description*

The Applicant, Stamford LLC, is seeking a zoning map amendment from R6, M1-2, and M2-1 zoning districts to an R6B and C4-4A zoning districts affecting Block 5348, Lots 15, 17, 41, 42, 44, 45, 46, 47, 48, 49, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 118, and 119 (the "Affected Area") within the Borough Park neighborhood of Brooklyn, Community District 12. The Applicant is also seeking a zoning text amendment to create an MIH Area that is coterminus with the Affected Area and a special permit pursuant to the New York Zoning Resolution (ZR) ZR Section 74-681 to allow development within or over a railroad or transit right-of-way or yard. The zoning map amendment, zoning text amendment, and special permit are collectively referred to as the "Proposed Actions."

The Proposed Actions would facilitate the development of a new 5-story, 63-foot, 134,840 gross square foot (GSF) (103,512 zoning square foot or ZSF; 4.0 FAR) commercial and office building on Lots 15, 17, 49, and 54 (the "Development Site") that would include 19,985 GSF of ground floor commercial space for a super market; 84,573 GSF of office space; and 25,900 GSF at the cellar level for an enclosed parking garage with 63 parking spaces, and a parking ramp that would be accessible from 37th Street. In addition, the first floor level would contain 528 GSF containing 35 bicycle parking spaces, and a 790 GSF loading berth accessed from 37th Street.

The zoning map amendment would rezone Block 5348, Lots 41, 42, 44, 45, 46, 47, and 48 from an R6 zoning district to a C4-4A zoning district; Block 5348, Lot 119 from an R6/M1-2 zoning district to a C4-4A zoning district; Block 5348, Lots 49 and 118 from an M1-2 zoning district to a C4-4A zoning district; Block 5348, Lot 17 from an M1-2/M2-1 zoning district to a C4-4A zoning district; Block 5348, Lots 15 and 54 from an M2-1 zoning district to a C4-4A zoning district; and Block 5348, Lots 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, and 66 from an M2-1 zoning district to an R6B zoning district.

The Proposed Actions are discretionary actions subject to environmental review. The NYC Department of City Planning is the lead agency on behalf of the City Planning Commission for environmental review under CEQR.

The Proposed Actions would facilitate development on the Applicant-owned sites as well as non-Applicant-owned sites in the Affected Area. The following reasonable worst case development scenario is assumed for the purposes of the

Environmental Assessment:

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54; Applicant-Owned): The four Applicant-owned lots would assemble and have a projected lot size of 25,900 SF within the proposed C4-4A zoning district. A 142,590-GSF (119,140 ZSF; 4.60 FAR) mixed-use commercial and residential building would be constructed on Projected Development Site 1, which would rise to a base height of 75 feet tall before rising to 9 stories at 95 feet tall after a 15-foot setback on both 37th and 38th Streets. The ground floor of the building would contain 16,835 GSF (16,162 ZSF; 0.62 FAR) of commercial local retail uses and the upper floors would contain 111,217 GSF (102,978 ZSF; 3.98 FAR) of residential uses. There would be 121 total dwelling units, with 97 being market rate and 24 being permanently set aside as affordable. 48 residential accessory parking spaces would be provided at cellar level of 14,538 GSF, which is accessible via a curb cut along 37th Street. No commercial accessory parking spaces are required within the proposed C4-4A zoning district.

Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47; Non-Applicant-Owned): The four lots could assemble to form an 8,000-SF mid-block lot with frontage along 15th Avenue. A 44,053-GSF (36,800 ZSF; 4.60 FAR) mixed-use commercial and residential building could be constructed, which could include 5,200 GSF (4,992 ZSF; 0.62 FAR) of commercial (local retail) uses on the ground floor and 34,353 GSF (31,808 ZSF; 3.98 FAR) of residential uses on the upper floors. The building could provide 37 total dwelling units, 7 of which could be permanently set aside as affordable. There could be a 4,500-GSF enclosed parking garage provided at cellar level with 15 residential accessory parking spaces accessible via a curb cut along 15th Avenue.

Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119; Non-Applicant-Owned): The four lots could assemble to form a 11,383-SF corner lot with frontages along 15th Avenue and 37th Street. A 61,981-GSF (52,362 ZSF; 4.60 FAR) mixed-use commercial and residential building could be constructed, which could include 11,383 GSF (10,928 ZSF; 0.96 FAR) of commercial (local retail) uses on the ground floor and 44,749 GSF (41,434 ZSF; 3.64 FAR) of residential uses on the upper floors. The building could provide 49 total dwelling units, 10 of which are permanently set aside as affordable. There could be a 5,850-GSF enclosed parking garage provided at cellar level with 19 residential accessory parking spaces accessible via a curb cut along 37th Street.

The incremental development induced as a result of the Proposed Actions (not including Potential Development Sites) is as follows: Residential: 111,217 GSF, 121 DUs; Commercial: -3,865 GSF

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 12	STREET ADDRESS 1459-1463 38th Street
TAX BLOCK(S) AND LOT(S) Block 5348; Lots 15, 17, 41, 42, 44, 45, 46, 47, 48, 49, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 118, and 119.		ZIP CODE 11218
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS 15th Avenue to the east, 37th Street to the north, 14th Avenue to the west, and 38th Street to the south.		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6, M1-2, and M2-1		ZONING SECTIONAL MAP NUMBER 22c

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

***Department of Environmental Protection*:** ☐ YES ☒ NO If "yes," specify:

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

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

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

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

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

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

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

☒ SITE LOCATION MAP ☒ ZONING MAP ☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP ☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 68,883
Waterbody area (sq. ft) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 68,883
Other, describe (sq. ft.): 0

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 134,840
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 134,840
HEIGHT OF EACH BUILDING (ft.): 63
NUMBER OF STORIES OF EACH BUILDING: 5

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: 25,900
The total square feet not owned or controlled by the applicant: 42,983

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: 25,900 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 259,000 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 25,900 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.)	111,217	-3,865	0	0
Type (*e.g.,* retail, office, school)	121 units	16,835 GSF Retail = With-Action; No-Action = 15,000 GSF Supermarket/ 5,700 GSF Office	N/A	N/A

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify:
NUMBER OF ADDITIONAL RESIDENTS: 420
NUMBER OF ADDITIONAL WORKERS: -18
Provide a brief explanation of how these numbers were determined: Residential = 3.47 per DU (2019 ACS average household size BK CD 12); Commercial = Based on standard worker densities per EARD (1 employee per 25 DU; 250 gsf of office space; 333.3 gsf of retail space).

Does the proposed project create new open space? ☐ YES ☒ NO If "yes," specify size of project-created open space: sq. ft.
Has a No-Action scenario been defined for this project that differs from the existing condition? ☐ YES ☒ NO If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:
9. *Analysis Year* CEQR Technical Manual Chapter 2
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2025
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO | IF MULTIPLE PHASES, HOW MANY?
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: A single phase 18-month construction period for the applicant site
10. *Predominant Land Use in the Vicinity of the Project* (check all that apply) ☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Public Facilities/ Parking Facilities

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐

	YES	NO
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		
(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 Appendix A		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☒	☐
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☒	☐
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☐	☒
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☐	☒
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?	☐	☒

	YES	NO
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 4,961 = (121*41)		
○ 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): 14087857.4 = (126.7*111,217)		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) see attached	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☒	☐

	YES	NO
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. No significant unmitigated adverse impact is found in the CEQR analysis areas of air quality, water quality, hazardous materials, or noise; accordingly, no public health analysis is warranted.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. No significant unmitigated adverse impact is found in any CEQR analysis areas related to neighborhood character. Additionally, the proposed project would not result in impact to any of the constituent elements of neighborhood character when considered together. Therefore pursuant to Chapter 21, Section 200 of the CEQR Technical Manual, no further analysis of neighborhood character is warranted.		
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.		

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	11/3/2022

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.

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

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

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

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

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

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

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

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

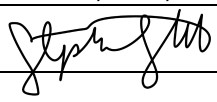
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result.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

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

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe, AICP, Director	November 4, 2022

SIGNATURE



NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

The Applicant, Stamford LLC, is seeking a zoning map amendment from R6, M1-2, and M2-1 zoning districts to an R6B and C4-4A zoning districts affecting Block 5348, Lots 15, 17, 41, 42, 44 - 49, 54 - 66, 118, and 119 (the "Affected Area") within the Borough Park neighborhood of Brooklyn, Community District 12. The Applicant is also seeking a zoning text amendment to establish a Mandatory Inclusionary Housing (MIH) Area that is coterminous with the Affected Area and a special permit pursuant to the New York City Zoning Resolution (ZR) Section 74-681 to allow development within or over a railroad or transit right-of-way or yard (the "Proposed Actions").Of the 25 separate lots within the Affected Area, four are controlled by the Applicant and are the location of the Development Site—Block 5348, Lots 15, 17, 49, and 54 (Projected Development Site 1). Together the four lots total 25,900 square feet (sf), with Lots 49 and 54 fronting 38th Street, and Lots 15 and 17 fronting 37th Street. Lot 49 is a 15,033-sf interior lot improved with the 15,000-gsf Paperific Supermarket; the building was constructed in 1930 and is one story tall. Lot 54 is a 5,863-sf interior lot that is improved with a one-story, 12-foot-tall, 5,700-gsf commercial building originally constructed in 1930. Lots 15 (3,370 sf) and 17 (1,634 sf) are both vacant lots fronting 37th Steet. The Proposed Actions would facilitate the development of a new 5-story, 63-foot, 134,840 gross square foot (GSF)(103,512 zoning square foot; 4.0 FAR) commercial and office building on Projected Development Site 1 that would include 19,985 GSF of ground floor commercial space for a super market; 84,573 GSF of office space; and 25,900 GSF at the cellar level for an enclosed parking garage with 63 parking spaces, and a parking ramp that would be accessible from 37th Street. In addition, the first-floor level would contain 528 GSF containing 35 bicycle parking spaces, and a 790 GSF loading berth accessed from 37th Street. In addition to the Applicant owned Projected Development Site 1, two Potential Development Sites would potentially be expected to develop as a result of the Proposed Actions. The Proposed Actions would not directly displace a land use that would adversely affect surrounding area land uses, nor would it generate a land use that would be incompatible with surrounding uses.

Open Space

A detailed open space analysis is included in the EAS. The Proposed Actions would reduce the open space ratio (OSR) by 0.67% to 0.061 acres per 1,000 residents. Though the area has a low OSR, based on the screening thresholds for preliminary open space assessment, the OSR decrease would be less than 1%, which is below the threshold warranting further assessment of open space. In addition, the Affected Area is located within a Walk to a Park Service Area. Accordingly, the Proposed Actions are not expected to have significant adverse impacts on the open space resources.

Hazardous Materials, Air Quality, and Noise

An (E) designation (**E-692**) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Evan Miller at +1 212-720-3657.

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE November 4, 2022
SIGNATURE	

TITLE	
Chair, City Planning Commission	
NAME Daniel R. Garodnick	DATE November 7,2022
SIGNATURE	

Project Name: Paperific Rezoning
CEQR # 22DCP045K
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Brooklyn	Block 5348: Lots 15, 17, 49, and 54
Potential Development Site 1	Brooklyn	Block 5348: Lots 44, 45, 46, and 47
Potential Development Site 2	Brooklyn	Block 5348: Lots 41, 42, 118, and 119

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (E-692) would be established as part of approval of the proposed actions on **Projected Development Site 1**, and **Potential Development Sites 1 and 2** as described below:

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

Hazardous Materials

The (E) designation requirements applicable for hazardous materials would apply as follows:

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54); Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47); and Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119)

An E-Designation should be placed on the site to assure that testing and mitigation will be performed, as necessary, before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation (OER).

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results

indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.
If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The Applicant should then provide proper documentation that the work has been satisfactorily completed.

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation. With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted.

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

Block 5348, Lots 15, 17, 49, and 54 (Projected Development Site 1): *Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level or at least 63 feet above grade, and that the stack is located at least 90 feet from the northern lot line facing 37th Street and 90 feet from the eastern lot line facing 15th Avenue to avoid any potential significant adverse air quality impacts.*

Block 5348, Lots 44, 45, 46, and 47 (Potential Development Site 1): *Any new residential or commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest level or at least 101 feet above grade, and that the stack is located at least 40 feet from the northern lot line facing 37th Street to avoid any potential significant adverse air quality impacts.*

Block 5348, Lots 41, 42, 118, and 119 (Potential Development Site 2): *Any new residential or commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest level or at least 101 feet above grade, and that the stack is located at least 60 feet from the southern lot line facing 38th Street to avoid any potential significant adverse air quality impacts.*

Noise

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

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54)
To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on façades facing 37th Street, eastern façades facing 15th Avenue within 50 feet of 37th Street and western façades facing 14th Avenue within 50 feet of 37th Street to maintain an interior noise level not greater than 45 dBA for residential/community facility uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.
Potential Development Site 2 (Block 5348, Lots 41, 42, 118 and 119)
To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on façades facing 37th Street, eastern façades facing 15th Avenue within 50 feet of 37th Street and western façades facing 14th Avenue within 50 feet of 37th Street to maintain an interior noise level not greater than 45 dBA for residential/community facility uses. To maintain a closed-window condition,

an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning. With the above E-designation, there would be no significant adverse impacts related to noise as a result of the Proposed Actions.

Figure 1: Project Location Map



Figure 2: Land Use Map



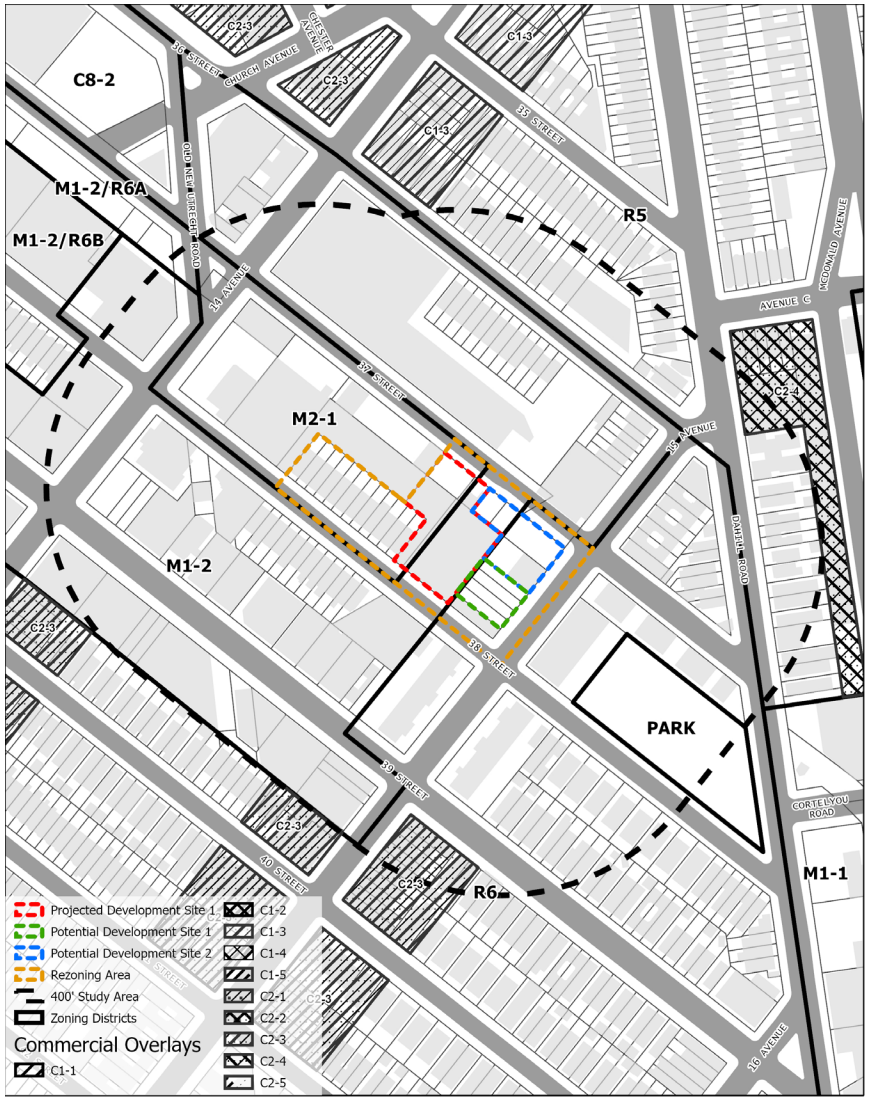
Figure 3: Tax Map



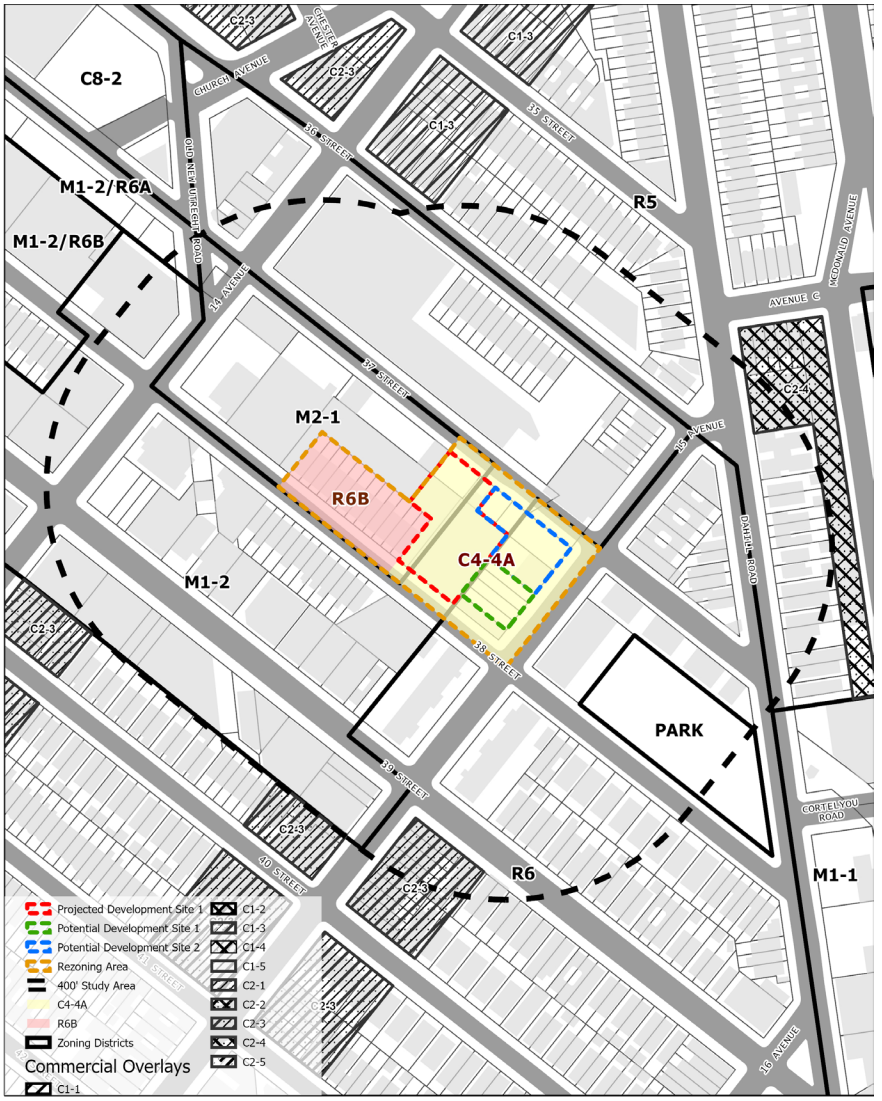
Figure 4: Zoning Map



Figure 5: Zoning Change Map



Existing M1-2/ M2-1/ R6 Zoning Districts



Proposed C4-4A/ R6B Zoning Districts

Figure 6-1: Site Photos (Taken on April 19th, 2021)



1. View of the site across 38th Street facing north



2. View of 38th Street in front of the site facing west



3. View of the site along 38th Street facing east





4. View of sidewalk along 38th Street facing east



5. View of the lot opposite to the site across 38th Street



6. View of sidewalk opposite to the site across 38th Street facing west





7. View of 38th Street at 15th Avenue intersection facing east



8. View of 15th Avenue at 38th Street intersection facing south



9. View of 38th Street at 15th Avenue intersection facing west





10. View of 38th Street and 15th Avenue facing northwest

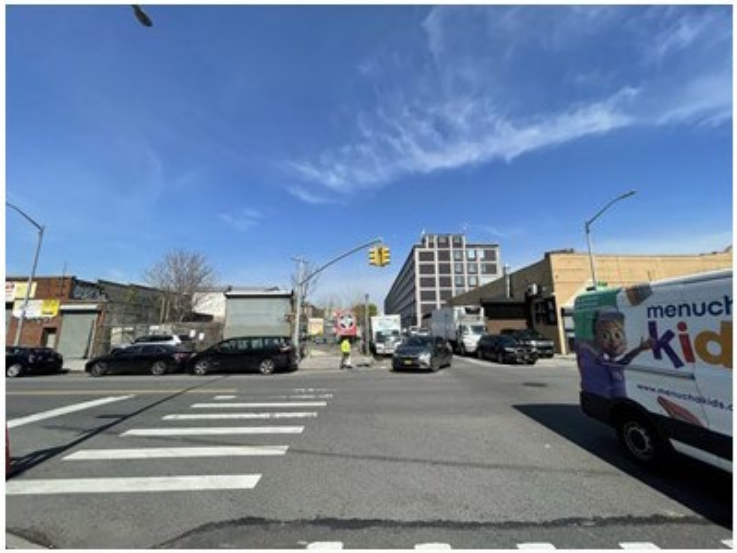


11. View of 15th Avenue facing north



12. View of mid 15th Avenue facing west





13. View of 37th Street at 15th Avenue intersection facing west



14. View of 15th Avenue at 37th Street intersection facing north



15. View of 15th Avenue at 37th Street intersection facing south





16. View of 37th St facing west

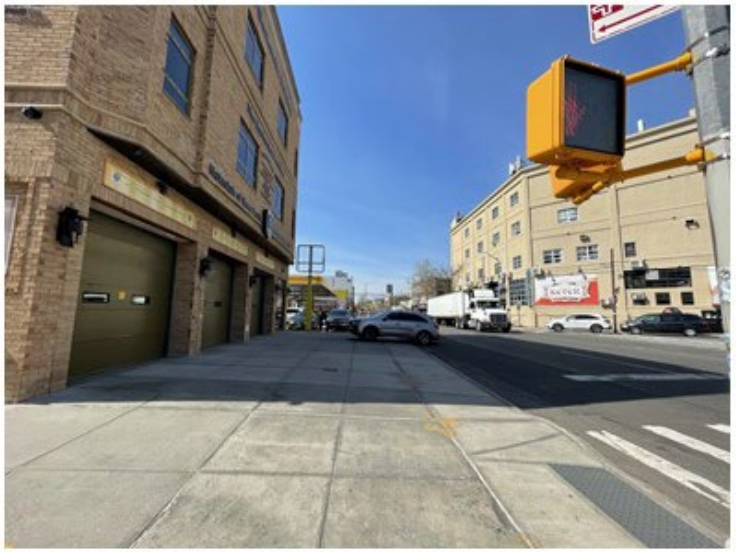


17. View of the site on 37th St facing southwest



18. View of 37th Street facing east





19. View of 14th Avenue facing south



20. View of 37th St at 14th Avenue intersection facing west



21. View of 14th Avenue facing north



1.0 Project Description

1.1 Introduction

The Applicant, Stamford LLC, is seeking a zoning map amendment from R6, M1-2, and M2-1 zoning districts to an R6B and C4-4A zoning districts affecting Block 5348, Lots 15, 17, 41, 42, 44, 45, 46, 47, 48, 49, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 118, and 119 (the "Affected Area") within the Borough Park neighborhood of Brooklyn, Community District 12. The Applicant is also seeking a zoning text amendment to create an MIH Area that is coterminous with the Affected Area and a special permit pursuant to ZR Section 74-681 to allow development within or over a railroad or transit right-of-way or yard. The zoning map amendment, zoning text amendment, and special permit are collectively referred to as the "Proposed Actions." The Proposed Actions would facilitate the development of a new 5-story, 63-foot, 134,840 gross square foot (GSF) (103,512 zoning square foot or ZSF; 4.0 FAR) commercial and office building on Lots 15, 17, 49, and 54 (the "Development Site") that would include 19,985 GSF of ground floor commercial space for a super market; 84,573 GSF of office space; and 25,900 GSF at the cellar level for an enclosed parking garage with 63 parking spaces, and a parking ramp that would be accessible from 37th Street. In addition, the first-floor level would contain 528 GSF containing 35 bicycle parking spaces and a 790 GSF loading berth accessed from 37th Street.

The zoning map amendment would rezone Block 5348, Lots 41, 42, 44, 45, 46, 47, and 48 from an R6 zoning district to a C4-4A zoning district; Block 5348, Lot 119 from an R6/M1-2 zoning district to a C4-4A zoning district; Block 5348, Lots 49 and 118 from an M1-2 zoning district to a C4-4A zoning district; Block 5348, Lot 17 from an M1-2/M2-1 zoning district to a C4-4A zoning district; Block 5348, Lots 15 and 54 from an M2-1 zoning district to a C4-4A zoning district; and Block 5348, Lots 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, and 66 from an M2-1 zoning district to an R6B zoning district.

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

1.2 Background

The Culver Elevated (The "Culver-El") shuttle was an elevated rapid transit line that ran from October 1954 to May 1975 from Ninth Avenue to Ditmas Avenue in Brooklyn with stops along the way at Fort Hamilton Parkway and 13th Avenue. The shuttle ran directly above 37th Street from Fort Hamilton Parkway to McDonald Avenue. The elevated structure was demolished in 1985. Beneath the shuttle, the South Brooklyn Railroad ran at ground level conducting freight operations until it was discontinued in the early 1980s. This former transit right-of-way has been the subject of several special permits along this corridor over the past 30 years.

In December 1996, City Planning Commission ("CPC") approved a special permit (C 960472 ZSK) pursuant to ZR § 74-681(a)(2) to facilitate the use of Block 5348 part of the former Lot 9 (currently Lot 119) to be included in the lot area of an open storage yard for building supplies on property located at 3702 15th Avenue, on the southwest corner of 15th Avenue and 37th Street. The portion of the lot that is subject to this special permit is part of the proposed Project Area, not the Proposed Development Site.

In March 2007, City Planning Commission ("CPC") granted a Special Permit (C 070227 ZSK) per ZR § 74-681(a)(2) to permit the construction of a 3-story 6,733 square foot warehouse on the current Lot 15 (formerly part of Lot 9). However, due to changed circumstances, the owner no longer needed the proposed warehouse and the site was never substantially constructed. Thus, the special permit has lapsed. The site today is used as a parking lot for Paperific customers.

In May 2007, CPC granted a Special Permit (C 070310 ZSK) pursuant to ZR § 74-681(a)(2) to permit the current Lot 17 (formerly part of lot 9) to be used for accessory parking, loading and storage use for the Paperific supermarket on Lot 49. This lot is currently being used for such purposes today.

The Affected Area was originally zoned M1-2 and M2-1 in the original 1961 zoning ordinance. In October 2007, a portion of the proposed Project Area, Lots 41-42, 44-48 and Lot 119 (p/o) was rezoned under the Kings Material Rezoning (C 040161 ZMK) from M1-2 to R6 to facilitate the construction of a 6-story residential building containing 35 dwelling units. An accompanying special permit was also granted in September 2007 (C 0400162 ZSK) pursuant to ZR § 74-681(a)(2) to allow the current lots 118 and 119, which were part of the former railroad right-of-way that has been permanently discontinued, to be included in the lot area for this development. To date, this building has not been built, and thus the special permit has lapsed.

In October 2010, City Council approved the Culver-El Rezoning (C 100345 ZMK), which mapped lower, mid-density and contextual zoning districts on all or portions of seven blocks spanning from 14th Avenue to the east to 12th Avenue to the west between 36th and 40th Streets. The approved actions were meant to recognize the existing mix of uses in the area and facilitate the development of affordable housing. The eastern boundary of this Rezoning is located one block west of the proposed Project Area.

There are E-Designations on Block 5348, Lots 41, 42, 44, 45, 46, and 47 (E-176) for window wall attenuation and alternate means of ventilation as a result of the Kings Material Rezoning (04DCP041K; Effective October 17, 2007).

1.3 Description of the Surrounding Area

The 400-foot surrounding area is developed with a mix of one- and two-family buildings, multi-family buildings, commercial and office buildings, public facilities, industrial uses, and parking facilities. The predominant land uses in the surrounding area are residential and commercial uses. Residential uses are featured with one- and two-family buildings and small-scale multi-family walk-up buildings of three or four dwelling units constructed along the numbered streets running east and west, which have building heights of two to three stories. Larger multi-family developments are generally located near or along the wider north-south avenues, which include the 18-unit building at 1463 36th Street (Block 5350, Lot 7501) constructed in 2010; the 21-unit building at 1502 37th Street (Block 5367, Lot 7501) constructed in 1997; the 36-unit elevator building at 3715 15th Avenue (Block 5367, Lot 7502) constructed in 2007; the 22-unit building at 3802 15th Avenue (Block 5347, Lot 7501) constructed in 1983; and the 22-unit building at 3801 15th Avenue (Block 5366, Lot 7501) constructed in 1983. Mixed-use residential and commercial buildings are mostly located along 14th Avenue with local retail on the ground floor and residential units on the upper floors.

Major commercial uses in the surrounding area include Brooklyn Square, a 6-story corporate office building with local retail stores on the ground floor at 3611 14th Avenue (Block 5349, Lot 1); Paperific Supermarket, a 1-story retail building at 1463 38th Street (Applicant-owned site; Block 5348, Lot 49); Towne Nursing, an employment center at 1413 38th Street (Block 5348, Lot 68); Chai Urgent Care, an urgent care center at 3802

14th Avenue (Block 5299, Lot 37); Shomrei Hadas Chapels, a funeral home at 3801 14th Avenue (Block 5347, Lot 6); and several restaurants mixed in with other uses.

Public facility buildings in the surrounding area include Bias Tzipora Girls School at 1449 39th Street (Block 5347, Lot 58); a synagogue at 3722 15th Avenue (Block 5348, Lot 48); Hatzolah of Boro Park Station 2, an ambulance service station at 3705 14th Avenue (Block 5348, Lot 7); Chasidei Belz Beth Malka, a religious school at 600 McDonald Avenue (Block 5369, Lot 6); Cong Toras Chaim Slatfina, an Orthodox Synagogue at 363 Dahill Road (Block 5369, Lot 62).

Industrial uses can be found along 15th and 14th Avenues, and along 39th Street on Block 5298, including 1- to 2-story buildings used as warehouses and light manufacturing factories. There are five consecutive vacant lots used as outdoor parking lots on Block 5348, Lots 11, 15, 17, 118, and 119, which all have lot frontages on 37th Street. Several more vacant lots (Lots 1, 13, 75, and 76) to the south on Block 5347 are also used as outdoor parking lots. Block 5347, Lots 15, 52, and 68 are improved with 1-story parking garages. Other notable land uses include Dome Playground, a 1.39-acre neighborhood park owned by NYC Parks.

The traffic grid is irregular as a result of Dahill Road running southeast-northwest across the surrounding area. The area is well-served by transit and is within a Transit Zone. The Ditmas Avenue subway station is serviced by the MTA with stops for the F line and is approximately 1,200 feet southeast of the Affected Area. The Church Avenue subway station provides access to the F and G subway lines, which is located about 1,600 feet northeast of the Affected Area. The area is also served by the D subway line with the Fort Hamilton Parkway station, which is located approximately 3,000 feet to the west of the Affected Area. The B16 and B35 buses run one block west along 14th Avenue. Stops for the B67 and B69 buses are also in the immediate area along Dahill Road.

1.4 Description of the Affected Area

The Affected Area is bounded by 37th Street to the north, 15th Avenue to the east, 38th Street to the south, and 14th Avenue to the west. Both 37th and 38th Streets are narrow (60 feet wide) one-way roads with a single moving lane of traffic and curbside parking—37th Street runs west to east, and 38th Street runs east to west. 14th Avenue is a wide one-way road (80 feet wide) with two moving lanes of traffic running from south to north and curbside parking. 15th Avenue is a north-south wide road (80 feet wide) with one moving lane of traffic in each direction and curbside parking. As is typical of this area, the narrow-numbered streets feed into the wider avenues, which in turn feed into the larger arterial roadways in the area, such as Fort Hamilton Parkway to the west and Ocean Parkway to the east.

The Affected Area intersects with M1-2, M2-1, and R6 zoning districts. M1-2 and M2-1 zoning districts both allow commercial and industrial development up to 2.00 FAR, and community facility development up to 4.80 FAR. R6 zoning districts allow residential development up to 3.00 FAR and community facility development up to 4.80 FAR.

Of the 25 separate lots within the Affected Area, 4 are controlled by the Applicant and are the location of the Development Site—Block 5348, Lots 15, 17, 49, and 54. Together the 4 lots total 25,900 square feet (sf), with Lots 49 and 54 fronting 38th Street, and Lots 15 and 17 fronting 37th Street. Lot 49 is a 15,033-sf interior lot improved with the 15,000-gsf Paperific Supermarket; the building was constructed in 1930 and is one story tall. Lot 54 is a 5,863-sf interior lot that is improved with a one-story, 12-foot-tall, 5,700-gsf commercial building originally constructed in 1930. Lots 15 (3,370 sf) and 17 (1,634 sf) are both vacant lots fronting 37th

Street, and are located within the former Culver-El right-of-way, having been granted special permits pursuant to ZR 74-681 (Development within or over a railroad or transit right-of-way or yard).

The Special Permit on Lot 15 (formerly part of Lot 9) was sought to facilitate the construction of a 3-story 6,733 square foot warehouse. However, due to changed circumstances, the owner no longer needed the proposed warehouse and the site was never substantially constructed. Thus, the special permit has lapsed. The Special Permit on Lot 17 (formerly part of Lot 9) was sought to permit the lot to be used for accessory parking, loading and storage uses for the Paperific supermarket on Lot 49. This lot is currently being used for such purposes today.

The other 21 lots in the Affected Area are located on the same block as the Development Site and are all non-applicant-controlled:

- Lot 42 is a 4,000-sf interior lot with frontage along 15th Avenue, containing a one-story, 2,000-gsf contractor's warehouse.
- Lot 41 is a 1,033-sf interior lot with frontage along 15th Avenue containing a portion of the warehouse (500 gsf) located on Lot 42.
- Lots 44-47 are all currently vacant 2,000-sf interior lots located on the western side of 15th Avenue in an R6 district.
- Lot 48 is a 2,000-sf corner lot located on the northwest corner of 38th Street and 15th Avenue. It contains a three-story, 3,300-gsf synagogue with a rectory and Rabbi's quarters on the upper floors. It is currently zoned R6.
- Lots 55 through 66 are all mid-block interior lots located on the northern side of 38th Street, and are all located in an M2-1 District. Permits were filed in 2011 for interior renovation and plumbing work on Lot 57, and a 1,500-gsf non-conforming commercial use is now located on the ground floor with an operating restaurant. All of the blocks are 1,800 sf and are developed with buildings constructed in 1901. These lots are all non-conforming uses within the M2-1 district.
- Lot 118 is a 1,900-sf interior lot located on the southern side of 37th Street, located in an M1-2 District and currently being used as a parking lot.
- Lot 119 is a 6,450-sf corner lot located on the southwest corner of the intersection of 37th Street and 15th Avenue, partially located in an R6 district and partially in an M1-2 District and currently being used as a parking lot.

1.5 Description of the Proposed Development

The Proposed Actions would facilitate the development of a new 5-story, 63-foot, 134,840 gross square foot (GSF) (103,512 zoning square foot or ZSF; 4.0 FAR) commercial and office building on Lots 15, 17, 49, and 54 (the “Development Site”). The Proposed Development would include 19,985 GSF of ground floor commercial space for a supermarket; 84,573 GSF of office space; and 25,900 GSF at the cellar level for an enclosed parking garage with 63 parking spaces and a parking ramp that would be accessible from 37th Street. In addition, the first-floor level would contain 528 GSF containing 35 bicycle parking spaces and a 790 GSF loading berth accessed from 37th Street.

1.6 Action(s) Necessary to Facilitate the Project

There are three actions necessary to facilitate the Proposed Development:

1. A Zoning Map Amendment to rezone Block 5348, Lots 41, 42, 44, 45, 46, 47, and 48 from an R6 zoning district to a C4-4A zoning district; Block 5348, Lot 119 from an R6/M1-2 zoning district to a C4-4A zoning district; Block 5348, Lots 49 and 118 from an M1-2 zoning district to a C4-4A zoning district; Block 5348, Lot 17 from an M1-2/M2-1 zoning district to a C4-4A zoning district; Block 5348, Lots 15 and 54 from an M2-1 zoning district to a C4-4A zoning district; Block 5348, Lots 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, and 66 from an M2-1 zoning district to an R6B zoning district.
2. A Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Community District 12, Brooklyn, to establish the Affected Area as an MIH Area.
3. A Special Permit pursuant to ZR Section 74-681 to allow development within or over a railroad or transit right-of-way or yard.

1.7 Purpose and Need

The Proposed Project could not be developed under existing zoning regulations because of the limited amount of FAR available for commercial development (2.00 FAR) and the high parking requirement within the existing M1-2 zoning district (1 space per 300 sf).

The Applicant believes that the increased commercial bulk (2.00 maximum commercial FAR to 4.00 maximum commercial FAR) and introduction of new uses (residential uses not permitted under the current M1-2 zoning district) under the proposed C4-4A zoning districts would reinforce emerging land use patterns in the area. The Applicant also believes that the increase in density is appropriate for the location because it is bounded by two wide streets and is near public transit.

The proposed C4-4A zoning district would permit comparable bulk to the nearby R6 district (4.60 residential FAR in C4-4A district and 3.00 residential FAR in R6 district with Quality Housing Regulations) and would help preserve the existing mixed commercial and residential character of the area. The proposed rezoning would promote new mixed-use development and would create a substantial amount of permanently affordable housing. The proposed R6B zoning district that is proposed on midblock Lots 55 through 66 would bring the existing residential uses into conformance.

1.8 Analysis Framework

The analysis framework would compare the incremental difference between the proposed and potential development under the Proposed Actions (With-Action Condition) and the development, which could occur under the existing zoning (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 Rezoning Area. This environmental assessment considers the potential effects of the Proposed Actions compared to future conditions without the approvals sought by the project sponsor. This 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 the Reasonable Worst-Case Development Scenario (RWCDS),

the use of which ensures that, regardless of which scenario occurs, its impacts would be no worse than those considered in the environmental review. The environmental assessment examines the incremental differences between the RWCDS of the future without the project in place (No-Action Condition) and the future with the project in operation (With-Action Condition).

The Applicant proposes a commercial (supermarket and offices) building on Block 5348, Lots 15, 17, 49, and 54 (Projected Development Site 1) that would neither maximize FAR within the proposed C4-4A zoning district nor introduce uses that would be considered a reasonable worst-case scenario under CEQR. Therefore, the projected development scenario for the Applicant lots considers a more conservative development: ground floor local retail and upper floors residential development.

In addition to the Applicant's Projected Development Site 1, it is expected that two Potential Development Sites would potentially develop as a result of the Proposed Actions.

- Block 5348, Lots 44, 45, 46, and 47 (Potential Development Site 1), have frontage along 15th Avenue and are all vacant lots. These lots were rezoned to R6 as part of the Kings Material Rezoning in 2007, but have not developed to date. While the Proposed Actions would increase allowable residential FAR from 3.00 to 4.60 and add commercial uses at a maximum FAR of 4.0, the lack of previous development as a result of the Kings Material Rezoning, the ongoing Covid-19 pandemic, and potential market saturation from Projected Development Site 1 makes redevelopment of these lots less likely to occur.

- Block 5348, Lots 41, 42, 118, and 119 (Potential Development Site 2) could assemble to form a corner lot with frontage along 15th Avenue and could be built with 100 percent lot coverage. However, these lots (except for Lot 118, which was not part of the rezoning) were also rezoned as a part of the Kings Material Rezoning in 2007 but did not develop as a result. For the same reasons mentioned above, redevelopment of these lots is considered less likely to occur as a result of the Proposed Actions.

Build Year

The analysis year for the Proposed Actions is 2025, factoring the environmental process and ULURP process of 18 months, with an expected approval date at the end of 2023 and a single-phase 18-month construction period for the Applicant-owned site (Projected Development Site 1), ending in 2025.

The following analysis compares the difference between the future without the Proposed Actions (No-Actions Condition) and the future with the Proposed Actions (With-Action Condition) for the 2025 analysis year. This EAS studies the potential for individual and cumulative environmental impacts related to the Proposed Actions.

No-Action Condition

The No-Action Scenario would be the same as the existing conditions. Block 5348, Lots 54 and 49 would continue to be improved with two 1-story commercial buildings, while Block 5348, Lots 15 and 17 would remain vacant and unimproved. Redevelopment of the four Applicant-owned lots is not feasible in the

absence of the Proposed Actions due to the limited bulk (2.00 FAR commercial), restrictions on permitted uses (no residential uses allowed), and high parking requirements (1 space per 300 sf).

With-Action Condition

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54; Applicant-Owned)

The four Applicant-owned lots would assemble and have a projected lot size of 25,900 SF within the proposed C4-4A zoning district. A 142,590-GSF (119,140 ZSF; 4.60 FAR) mixed-use commercial and residential building would be constructed on Projected Development Site 1, which would rise to a base height of 75 feet tall before rising to 9 stories at 95 feet tall after a 15-foot setback on both 37th and 38th Streets. The ground floor of the building would contain 16,835 GSF (16,162 ZSF; 0.62 FAR) of commercial local retail uses and the upper floors would contain 111,217 GSF (102,978 ZSF; 3.98 FAR) of residential uses. There would be 121 total dwelling units, 25-30% (30-36) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. For the purposes of Early Childhood Programs analysis, 20% (24 units) of residential floor area is assumed to be affordable at or below 60% AMI. Forty-eight residential accessory parking spaces would be provided at the cellar level of 14,538 GSF, accessible via a curb cut along 37th Street. No commercial accessory parking spaces are required within the proposed C4-4A zoning district.

Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47; Non-Applicant-Owned)

The four lots could assemble to form an 8,000-SF mid-block lot with frontage along 15th Avenue. A 44,053-GSF (36,800 ZSF; 4.60 FAR) mixed-use commercial and residential building could be constructed, which could include 5,200 GSF (4,992 ZSF; 0.62 FAR) of commercial (local retail) uses on the ground floor and 34,353 GSF (31,808 ZSF; 3.98 FAR) of residential uses on the upper floors. The building could provide 37 total dwelling units, 25-30% (9-11) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. For the purposes of Early Childhood Programs analysis, 20% (7 units) of residential floor area is assumed to be affordable at or below 60% AMI. There could be a 4,500-GSF enclosed parking garage provided at the cellar level with 15 residential accessory parking spaces accessible via a curb cut along 15th Avenue.

Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119; Non-Applicant-Owned)

The four lots could assemble to form a 11,383-SF corner lot with frontages along 15th Avenue and 37th Street. A 61,981-GSF (52,362 ZSF; 4.60 FAR) mixed-use commercial and residential building could be constructed, which could include 11,383 GSF (10,928 ZSF; 0.96 FAR) of commercial (local retail) uses on the ground floor and 44,749 GSF (41,434 ZSF; 3.64 FAR) of residential uses on the upper floors. The building could provide 49 total dwelling units, 25-30% (12-15) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. For the purposes of Early Childhood Programs analysis, 20% (10 units) of residential floor area is assumed to be affordable at or below 60% AMI. There could be a 5,850-GSF enclosed parking garage provided at the cellar level with 19 residential accessory parking spaces accessible via a curb cut along 37th Street.

Other Affected Sites

The other lots within the Affected Area are not expected to develop:

- Lot 48 is a 2,000-sf corner lot improved with a 3,300-GSF community facility that operates as the Women's League Community Residence, providing care to people with special needs. Because the lot is under separate ownership from other lots and provides an important community service, redevelopment is considered unlikely.
- Lots 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, and 66 are all 1,800-sf mid-block lots, each improved with attached non-conforming 2-story residential buildings developed in 1901. Each lot contains 2 to 3 dwelling units, and Lot 57 includes a ground-floor restaurant called Josef. The Proposed Actions would bring each of these lots into conformance, with the exception of the ground floor commercial use on Lot 57, but would not be expected to induce development because of their longstanding uses, state of good repair, and difficulties in demolition and redevelopment of attached rowhomes.

For purposes of a conservative analysis, the RWCDS will assess the maximum permitted envelope for the urban design and shadows assessments. The shadows assessment will also take into account a reasonable bulkhead height for mechanical equipment (15-foot-tall bulkheads for the projected and potential development sites).

The RWCDS Analysis Framework described above is shown below in **Table 1.8-1** and **Table 1.8-2**.

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

Site Info				Existing/No-Action Condition					With-Action Condition			
Site ID	Block	Lot	Lot Area (GSF)	Zoning	Res. (GSF)	DU	Com. (GSF)	Mf. (GSF)	Zoning	Res. (GSF)	DU	Com. (GSF)
Projected Development Site 1	5348	15, 17, 49, 54	25,900	M1-2/ M2-1	0	0	20,700	0		111,217	121	16,835
Total			**25,900**		**0**	**0**	**20,700**	**0**		**111,217**	**121**	**16,835**
Potential Development Site 1	5348	44, 45, 46, 47	8,000	R6	0	0	0	0	C4-4A	34,353	37	5,200
Potential Development Site 2	5348	41, 42, 118, 119	11,383	R6/M1-2	2,700	3	0	2,500		44,749	49	11,383
Total			**19,383**		**2,700**	**3**	**0**	**2,500**		**79,101**	**86**	**16,583**

DU = Dwelling Units
GSF = gross square feet
Res. = Residential
Com. = Commercial
Mf. = Manufacturing

Table 1.8-2: RWCDS Analysis Framework Table (Projected Development Site 1)

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Land Use				
Residential	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify the following:				
Describe type of residential structures	N/A	N/A	One 9-story mixed-use building	
No. of dwelling units	N/A	N/A	121	121
No. of low- to moderate-income units	N/A	N/A	24	24
Gross floor area (sq. ft.)	N/A	N/A	111,217	111,217
Commercial	☑ Yes ☐ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify the following:				
Describe type (retail, office, other)	Supermarket & Office	Supermarket & Office	UG-6 Local Retail	
Gross floor area (sq. ft.)	Supermarket: 15,000 Office: 5,700	Supermarket: 15,000 Office: 5,700	16,835	-3,865
Manufacturing/Industrial	No	No	No	
If "yes," specify the following:				
Type of Use	N/A	N/A	N/A	
Gross floor area (sq. ft.)	N/A	N/A	N/A	
Open storage area (sq. ft.)	N/A	N/A	N/A	
If any enclosed activities, specify:	N/A	N/A	N/A	
Community Facility	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify the following:				
Type of Use	N/A	N/A	N/A	
Gross floor area (sq. ft.)	N/A	N/A	N/A	
Vacant Land	☑ Yes ☐ No	☑ Yes ☐ No	☐ Yes ☑ No	
If "yes", describe:	Two vacant lots	Two vacant lots	N/A	
Publicly Accessible Open Space	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify type (mapped City, State, or Federal Parkland, wetland-mapped or otherwise known, other):	N/A	N/A	N/A	
Other Land Uses	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," describe:	N/A	N/A	N/A	
Parking				
Garages	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	0	0
No. of accessory spaces	N/A	N/A	48	48
Operating hours	N/A	N/A	24/7	
Attended or non-attended	N/A	N/A	Non-Attended	
Lots	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	N/A	
No. of accessory spaces	N/A	N/A	N/A	
Operating hours	N/A	N/A	N/A	

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Other (includes street parking)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," describe:	N/A	N/A	N/A	
Population				
Residents	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify number:	N/A	N/A	420	420
Briefly explain how the number of residents was calculated:	Dwelling units X 3.47 (per 2019 ACS average household size based on Brooklyn CD 12)			
Businesses	☑ Yes ☐ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify the following:				
No. and type	1 supermarket and 1 office	1 supermarket and 1 office	8 local retail	
No. and type of workers by business	**68 total**	**68 total**	**50 total**	-18
No. and type of non-residents who are not workers				
Briefly explain how the number of businesses was calculated:	Based on standard worker densities per EARD. 1 employee per: 25 DU; 250 gsf of office space; 333.3 gsf of retail space.			
Other (students, visitors, concert-goers, *etc*.)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If any, specify type and number:	N/A	N/A	N/A	
Briefly explain how the number was calculated:				
Zoning				
Zoning classification	M1-2/M2-1	M1-2/M2-1	C4-4A	
Maximum amount of floor area that can be developed	4.8 CF 2.00 Industrial 2.00 Commercial	4.8 CF 2.00 Industrial 2.00 Commercial	4.6 Residential 4.00 Commercial 4.00 CF	
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Residential, mixed-use, industrial, public facility, parking, vacant land; M1-2, M2-1, R6, R6/C2-3	Residential, mixed-use, industrial, public facility, parking, vacant land; M1-2, M2-1, R6, R6/C2-3	Residential, mixed-use, industrial, public facility, parking, vacant land; M1-2, M2-1, R6, R6/C2-3, C4-4A	
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

2.0 Environmental Review

Chapter 4 Land Use, Zoning, and Public Policy

This analysis of land use, zoning, and public policy follows the guidelines set forth in the *2021 City Environmental Quality Review (CEQR) Technical Manual*. It characterizes the existing conditions in the area surrounding the project site and addresses potential impacts on land use, zoning, and public policy that would be associated with the Proposed Actions.

Methodology

According to the *2021 CEQR Technical Manual*, a preliminary land use and zoning assessment include a basic description of existing and future land uses and zoning information and describes any changes in zoning that could cause changes in land use. It also characterizes the land use development trends in the area surrounding the project site that might be affected by the proposed action and determines whether the proposed project is compatible with those trends or may affect them. This preliminary assessment includes a basic description of the proposed project that would be facilitated by the proposed action in order to determine whether a more detailed assessment would be appropriate. For public policy, the *2021 CEQR Technical Manual* stipulates that a preliminary assessment should identify and describe any public policies (formal plans, published reports) that pertain to the study area, and should determine whether the proposed project could alter or conflict with identified policies. If so, a detailed assessment should be conducted. Otherwise, no further assessment is needed. The following land use, zoning, and public policy assessment follows this guidance and provides a description of existing conditions of the project site and surrounding area. This is followed by an assessment of the future without and with the proposed action (Future No-Action and With-Action Conditions, respectively), and a determination that no further analysis is needed.

Existing land uses, zoning districts, and applicable public policies were identified by referencing the New York City Zoning and Land Use (ZoLa) database and PLUTOTM 21v2 shapefiles. Land uses were then confirmed and documented through site visits. Public Policy research was performed through an evaluation of the New York City Department of City Planning (NYCDCP) and other city agencies programs and documentation. Existing zoning districts related to the 400-foot Study Area were identified and described by referencing New York City Zoning Maps and the Zoning Resolution of the City of New York. These sources served as the basis for the Zoning, Land Use, and Public Policy evaluation of the Future No-Action and Future With-Action Conditions.

Land Use

The *CEQR Technical Manual* suggests that a land use, zoning, and public policy study area should generally extend 400 feet from the site of the Proposed Actions. Existing land use patterns of city blocks within approximately 400 feet of the Affected Area are presented in **Figure 2**. The proposed Zoning Map Amendment and Zoning Text Amendment would affect Block 5348, Lots 15, 17, 49, 54, 118, 48, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 44, 45, 46, 47, 42, 41, and 119, which is identified as the Affected Area.

Existing Conditions

Land Use Study Area

The surrounding area is a mix of one- and two-family buildings, multi-family buildings, commercial and office buildings, public facilities, industrial uses, and parking facilities. The predominant land uses in the Surrounding Area are residential and commercial uses. Residential uses are featured with one- and two-family buildings and small-scale multi-family walk-up buildings of 3 or 4 dwelling units constructed along the numbered streets running east and west, which have building heights of 2 to 3 stories. Larger multi-family developments are generally located near or along the wider north-south avenues, which include the 18-unit building at 1463 36th Street (Block 5350, Lot 7501) constructed in 2010, the 21-unit building at 1502 37th Street (Block 5367, Lot 7501) constructed in 1997, the 36-unit elevator building at 3715 15th Avenue (Block 5367, Lot 7502) constructed in 2007, the 22-unit building at 3802 15th Avenue (Block 5347, Lot 7501) constructed in 1983, and the 22-unit building at 3801 15th Avenue (Block 5366, Lot 7501) constructed in 1983. Mixed-use residential and commercial buildings are primarily located along 14th Avenue with local retail on the ground floor and residential units on the top.

Major commercial uses in the surrounding area include Brooklyn Square, a 6-story corporate office building with local retail stores on the ground floor at 3611 14th Avenue (Block 5349, Lot 1); Paperific Supermarket, a 1-story retail building at 1463 38th Street (Applicant-owned site; Block 5348, Lot 49); Towne Nursing, an employment center at 1413 38th Street (Block 5348, Lot 68); Chai Urgent Care, an urgent care center at 3802 14th Avenue (Block 5299, Lot 37); Shomrei Hadas Chapels, a funeral home at 3801 14th Avenue (Block 5347, Lot 6); and several restaurants scattered with other uses. Public facility buildings in the Surrounding Area include Bias Tzipora Girls School at 1449 39th Street (Block 5347, Lot 58); Hatzolah Of Boro Park Station 2, an ambulance service station at 3705 14th Avenue (Block 5348, Lot 7); Chasidei Belz Beth Malka, a religious school at 600 McDonald Avenue (Block 5369, Lot 6); Cong Toras Chaim Slatfina, an Orthodox Synagogue at 363 Dahill Road (Block 5369, Lot 62).

Industrial uses can be found along 15th and 14th Avenues, and also along 39th Street on Block 5298, including 1- to 2-story buildings used as warehouses and light manufacturing factories. There are five consecutive vacant lots used as outdoor parking lots on Block 5348, Lots 11, 15, 17, 118, and 119, which all have lot frontages on 37th Street. Several more vacant lots (Lots 1, 13, 75, and 76) to the south on Block 5347 are also used as outdoor parking lots. Block 5347, Lots 15, 52, and 68 are improved with 1-story parking garages. Other notable land uses include Dome Playground, a 1.39-acre neighborhood park owned by NYC Parks.

Affected Area

Of the 25 separate lots within the Affected Area, 4 are controlled by the Applicant and are the location of the Development Site—Block 5348, Lots 15, 17, 49, and 54. Together the 4 lots total 25,900 square feet (sf), with Lots 49 and 54 fronting 38th Street, and Lots 15 and 17 fronting 37th Street. Lot 49 is a 15,033-sf interior lot improved with the 15,000-gsf Paperific Supermarket; the building was constructed in 1930 and is one story tall. Lot 54 is a 5,863-sf interior lot that is improved with a one-story, 12-foot-tall, 5,700-gsf commercial building originally constructed in 1930. Lots 15 (3,370 sf) and 17 (1,634 sf) are both vacant lots fronting 37th Street, and are located within the former Culver-El right-of-way, having been granted special permits pursuant to ZR 74-681 (Development within or over a railroad or transit right-of-way or yard).

The other 21 lots in the Affected Area are in the same block as the Development Site and are all non-applicant-owned. Lot 42 is a 4,000-sf interior lot, containing a one-story, 2,000-gsf contractor's warehouse. Lot 41 is a 1,033-sf interior lot containing a portion of the warehouse (500 gsf) located on Lot 42. Lots 44-47 are all currently vacant 2,000-sf interior lots located on the western side of 15th Avenue. Lot 48 is a 2,000-sf corner lot, which contains a three-story, 3,300-gsf synagogue with a rectory and Rabbi's quarters on the upper floors. Lots 55 through 66 are all mid-block interior lots located on the northern side of 38th Street. Permits were filed in 2011 for interior renovation and plumbing work on Lot 57, and a 1,500-gsf non-conforming commercial use is now located on the ground floor with an operating restaurant. All of the blocks are 1,800 sf and are developed with buildings constructed in 1901. These lots are all non-conforming uses within the underlying M2-1 district. Lot 118 is a 1,900-sf interior lot currently being used as a parking lot. Lot 119 is a 6,450-sf corner lot currently being used as a parking lot as well.

Analysis

Future No-Action Condition

Absent the Proposed Actions, the lots within the Affected Area are expected to remain in their existing condition. There are no active construction permits in the 400-foot study area, and it is expected that conditions in the study area would remain as they are in the future.

Future With-Action Condition

Land use and development patterns in the land use study area are anticipated to remain unchanged in the future with the Proposed Actions. Any new development in the surrounding area would be consistent with the surrounding M1-2 and M2-1 manufacturing zoning districts, the low-density R5 residential zoning district, and the medium-density R6 residential zoning district.

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54)

The Applicant's Proposed Development will be the With-Action scenario that would consist of a 9-story, 95-foot-tall, 142,590-GSF (119,140 ZSF; 4.60 FAR) mixed-use building that would contain 16,835 GSF (16,162 ZSF; 0.62 FAR) of commercial local retail uses and 111,217 GSF (102,978 ZSF; 3.98 FAR) of residential uses. There would be 121 total dwelling units, with 97 being market rate and 30-36 (25-30%) being permanently set aside as affordable depending on the option selected. Forty-eight residential accessory parking spaces would be provided at the cellar level of 14,538 GSF.

Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47)

A 44,053-GSF (36,800 ZSF; 4.60 FAR) mixed-use building could be constructed, which could include 5,200 GSF (4,992 ZSF; 0.62 FAR) of commercial local retail uses and 34,353 GSF (31,808 ZSF; 3.98 FAR) of residential uses. The building could provide 37 total dwelling units, 9-11 (25-30%) of which could be permanently set aside as affordable depending on the option selected. There could be a 4,500-GSF enclosed parking garage provided at the cellar level with 15 residential accessory parking spaces.

Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119)

A 61,981-GSF (52,362 ZSF; 4.60 FAR) mixed-use building could be constructed, which could include 11,383 GSF (10,928 ZSF; 0.96 FAR) of commercial local retail uses and 44,749 GSF (41,434 ZSF; 3.64 FAR) of residential uses. The building could provide 49 total dwelling units, 12-15 (25-30%) of which would be permanently set aside as affordable depending on the option selected. There could be a 5,850-GSF enclosed parking garage provided at the cellar level with 19 residential accessory parking spaces.

Zoning

Existing Conditions

Zoning Study Area

The irregular-shaped M1-2 zoning district covers the middle of the Affected Area, which generally extends to 36th Street to the north, 13th Avenue to the west, midblock between 39th Street and 40th Street to the south, and 15th Avenue to the east. The underlying M2-1 zoning district mapped over the western portion of the Affected Area generally covers a rectangular area from the midblock to 14th Avenue. The eastern portion of the Affected Area is under the R6 zoning district along 15th Avenue, which is also mapped over a large area to the southwest of the Affected Area. Within the 400-foot study area, an R5 zoning district is generally located north of the Affected Area beyond 36th Street. A mix of M1-2, M2-1, R5, R5/C2-4, R6, R6/C2-3, and Park zoning districts are located within the 400-foot study area. **Table 4-1** below summarizes the existing zoning districts in the area.

Existing zoning districts within the Zoning Study Area include:

M1-2

M1 districts often serve as buffers between M2 or M3 and adjacent residential or commercial districts. M1-2 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. Permitted uses in M1-2 districts are as follows: UG 4-14, 16, and 17. M1-2 districts permit a FAR of 2.0 for permitted commercial and manufacturing uses, and 4.80 for permitted community facility uses. M1-2 districts are subject to parking requirements based on the type of use and size of an establishment (1 per 300 sf for PRC-B). Building heights are regulated by a sky exposure plane beginning at 60 feet (or four stories) above the street line.

M2-1

M2 districts occupy the middle ground between light and heavy industrial areas. M2-1 districts are mapped along much of Brooklyn's Red Hook and Sunset Park waterfronts and College Point in Queens. Permitted uses in M1-2 districts are as follows: UG 6-14, 16, and 17. The maximum manufacturing and commercial FAR are both 2.0 in M2-1 districts, while no community facility use is permitted in the district. M2-1 districts are subject to parking requirements based on the type of use and size of an establishment (1 per 300 sf for PRC-B). Building heights are regulated by a sky exposure plane beginning at 60 feet (or four stories) above the street line.

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 R3-2 or R4 districts, and are often transition districts between medium and lower density areas. The floor area ratio (FAR) of 1.25 typically produces three-and four-story attached houses and small apartment houses. With a height limit of 40 feet, R5 districts provide a transition between lower- and higher-density neighborhoods and permit Use Groups 1-4.

To ensure compatibility with the neighborhood scale, the maximum street wall height of a new building is 30 feet, and the maximum building height is 40 feet. Above a height of 30 feet, a setback of 15 feet is required from the street wall of the building; in addition, any portion of the building that exceeds a height of 33 feet must be set back from a rear or side yard line. Detached houses must have two side yards that total at least 13 feet, each with a minimum width of five feet. Semi-detached houses need one eight-foot-wide side yard. Apartment houses need two side yards, each at least eight feet wide. Front yards must be 10 feet deep or, if deeper, a minimum of 18 feet to prevent cars parked on-site from protruding onto the sidewalk. Cars may park in the side or rear yard, in the garage or in the front yard within the side lot ribbon; parking is also allowed within the front yard when the lot is wider than 35 feet. Off-street parking is required for 85% of the dwelling units in the building, 42.5% of IRHU (inclusionary residential housing) units (outside transit zone) and 10% of AIRS (affordable independent residences for seniors) units (outside transit zone). Parking is not required for IRHU/AIRS units within a transit zone

R6

R6 are medium-density non-contextual zoning districts widely mapped in built-up, medium-density areas in Brooklyn, such as the Study Area. Developers can choose between two sets of bulk regulations. Standard height factor regulations, introduced in 1961, produce small multi-family buildings on small zoning lots and, on larger lots, tall buildings that are set back from the street. Optional Quality Housing regulations produce high lot coverage buildings within height limits that often reflect the scale of older, pre-1961 apartment buildings in the neighborhood. In districts mapped R6 within an MX-8 district, all buildings shall comply with the height and setback regulations as set forth in ZR 123-662, Table A.

Height Factor Option

Buildings developed pursuant to height factor regulations are often tall buildings set back from the street and surrounded by open space and on-site parking. The floor area ratio (FAR) in R6 districts ranges from 0.78 (for a single-story building) to 2.43 at a typical height of 13 stories; the open space ratio (OSR) ranges from 27.5 to 37.5. Generally, the more open space, the taller the building. The maximum floor area ratio is achievable only where the zoning lot is large enough to accommodate a practical building footprint as well as the required amount of open space. There are no height limits for height factor buildings, although they must be set within a sky exposure plane, which begins at the height of 60 feet above the street line and then slopes inward over the zoning lot.

Off-street parking is generally required for 70 percent of a building's dwelling units, but requirements are lower for IRHU's and are further modified in certain areas, such as within

the Transit Zone and the Manhattan Core, or for lots less than 10,000 square feet. Parking can be waived if five or fewer spaces are required.

Quality Housing Option

The optional Quality Housing regulations produce high lot coverage buildings set at or near the street line. Height limitations ensure that these buildings are often more compatible with older buildings in the neighborhood. As an incentive for developers to choose the Quality Housing option outside the Manhattan Core, greater floor area ratio, and therefore, more apartments, is permitted for buildings on or within 100 feet of a wide street than would be permitted under height factor regulations. The FAR is 3.0; the maximum base height before setback is 65 feet with a maximum building height of 75 with a qualifying ground floor (70 feet without). On a narrow street (beyond 100 feet of a wide street), the maximum FAR is 2.2; the maximum base height before setback is 45 feet with a maximum building height of 55 feet. The area between a building's street wall and the street line must be planted, and the buildings must have interior amenities for the residents pursuant to the Quality Housing Program. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

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

C2-3/C2-4 Commercial Overlays

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. C2 districts permit a slightly wider range of uses, such as funeral homes and repair services. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use.

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

Affected Area

The Affected Area is zoned M1-2, M2-1, and R6. The M1-2 zoning district permits light manufacturing and commercial uses at a maximum FAR of 2.0 and community facility uses at up to 4.8 FAR. The M2-1 zoning district permits medium manufacturing and commercial uses at a maximum FAR of 2.0. The R6 zoning district permits medium-density residential use at a maximum FAR of 3.6 with Quality Housing Option and a maximum FAR of 2.43 with Height Factor Option. In addition, the R6 district permits community facility uses at up to 4.8 FAR.

Analysis

Future No-Action Condition

No changes to zoning are anticipated in the future without the Proposed Actions within the Affected Area or Study Area. The Affected Area would continue to be subject to M1-2, M2-1, and R6 zoning regulations. The residential buildings on Block 5348, Lots 55 through 66 would remain legal and non-conforming under the M2-1 zoning district.

Future With-Action Condition

With the Proposed Actions, the existing M1-2, M2-1, and R6 zoning districts would be rezoned to C4-4A and R6B zoning districts. The residential buildings on Block 5348, Lots 55-66 would become legal and conforming under the proposed R6B zoning district instead of the existing M2-1 zoning district.

C4-4A zoning districts are contextual districts where a variety of commercial uses, community facilities, and residential uses could be developed as-of-right. In these areas, specialty and department stores, theaters, and other commercial and office uses serve a larger region and generate more traffic than neighborhood shopping areas. Use Groups 1-6, 8-10, and 12, which include all residential and community facility uses as well as most retail establishments, are permitted in the C4-4A districts. C4-4A has a residential equivalent of R7A, which would permit residential uses with a maximum FAR of 4.6 and commercial and community facility uses with a maximum FAR of 4.0. The building bulks within C4-4A zoning district would be governed by the residential equivalent R7A height and setback requirements for the Quality Housing Program. The buildings would rise to a base height of 75 feet tall before rising to 9 stories at 95 feet tall after a 15-foot setback on narrow streets or a 10-foot setback on wide streets.

R6B zoning districts are contextual districts, which would permit residential and community facility uses with a maximum FAR of 2.0, a minimum street wall height of 30 feet, a maximum street wall height of 40 feet, and a maximum building height of 50 feet. R6B districts require off-street parking for 50 percent of the dwelling units in a building, with an exemption from parking for income-restricted units within the Transit Zone and a prohibition on curb cuts on zoning lots that are less than 40 feet in width. The Quality Housing program is mandatory for residential developments.

Conclusion

The Proposed Actions would not directly displace a land use that would adversely affect surrounding area land uses, nor would it generate a land use that would be incompatible with surrounding uses. The projected development that is expected to develop as a result of the Proposed Actions would provide a substantial amount of market rate and permanently affordable dwelling units, as well as locally serving retail and supermarket uses along a wide road in close proximity to public transportation.

Table 4-1: Summary of Existing Zoning Regulations within 400-foot Study Area

Zoning District	Type and Use Group (UG)	Floor Area Ratio (FAR)	Parking (Required Spaces)
M1-2	Light Manufacturing UGs 4-14, 16, 17	2.00 FAR – Manufacturing 2.00 FAR – Commercial 4.80 FAR – Community Facility	Varies by Use and Size of Establishment (1 per 300 sf PRC-B)
M2-1	Medium Manufacturing UGs 6-14, 16, 17	2.00 FAR – Manufacturing 2.00 FAR – Commercial	Varies by Use and Size of Establishment (1 per 300 sf PRC-B)
R5	Non-Contextual Residential UGs 1-4	1.25 FAR – Residential 2.00 FAR – Community Facility	85% of DU; 42.5% of IRHU (outside transit zone); 10% of AIRS (outside transit zone).
R6	Non-Contextual Residential UGs 1-4	2.20 – 3.60 FAR – QH Residential 0.78 – 2.43 FAR – HF Residential 4.80 FAR – Community Facility	50% of DU (QH Res); 70% of DU (HF Res); 50% of DU for lots less than 10,000 sf.; 25% of IRHU (outside transit zone); 10% of AIRS (outside transit zone). *Waived if 5 or fewer spaces*
C2-3 Commercial Overlays	Residential UGs 1-4 Commercial UGs 5-9, 14	1.00 FAR (R1-R5) 2.00 FAR (R6-R10)	Varies by Use and Size of Establishment (1 per 400 sf PRC-B)
C2-4 Commercial Overlays	Residential UGs 1-4 Commercial UGs 5-9, 14	1.00 FAR (R1-R5) 2.00 FAR (R6-R10)	Varies by Use and Size of Establishment (1 per 1,000 sf PRC-B)

IRHU = Inclusionary Residential Housing Units
AIRS = Affordable Independent Residences for Seniors
UG = Use Group
DU = Dwelling Units

Source: Zoning Handbook, New York City Department of City Planning, 2019
Note: Grey denotes the subject zoning district

Public Policy

For public policy, the *2021 CEQR Technical Manual* stipulates that a preliminary assessment should identify and describe any public policies (formal plans, published reports) that pertain to the study area, and should determine whether the proposed project could alter or conflict with identified policies. If so, a detailed assessment should be conducted. Otherwise, no further assessment is needed.

The Development Site 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 Proposed Actions are also not a large publicly sponsored project, and as such, consistency with the City's PlaNYC/OneNYC 2050 for sustainability is not required.

Housing New York: A Five-Borough, Five-Year Plan

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

The affordable units provided on-site would foster diverse and livable neighborhood, preserve the affordability and quality of the housing stock, and build new affordable housing for all New Yorkers.

PlaNYC/OneNYC 2050

PlaNYC was a strategic plan released by the New York City Mayor Michael Bloomberg in 2007 to prepare the city for one million more residents, strengthen the economy, combat climate change, and enhance the quality of life for all New Yorkers. The plan brought together over 25 City agencies and specifically targeted ten areas of interest: Housing and Neighborhoods; Parks and Public Spaces; Brownfields; Waterways; Water Suppy; Transportation; Energy; Air Quality; Solid Waste; and Climate Change.

In April 2015, an updated strategic document outlining city policies for inclusive growth, sustainability, and resilience to climate change was released as *One New York: The Plan for a Strong and Just City* or OneNYC. OneNYC 2050 is New York City's overarching, long-term strategy for a strong and fair city, also known as the NYC Green New Deal. It builds on New York City's 1.5°C compatible Climate Action Plan and earlier OneNYC, among other strategies. Released in April 2019, it looks 30 years ahead and puts equity, inclusivity and critical challenges including climate change at its core.

ONE NYC 2050 consists of 8 goals and 30 initiatives that together comprise a strategy to prepare New York City for the future. The goals are further explained as follows:

- A vibrant democracy: New York City will involve every New Yorker in the civic and democratic life of the city, welcoming immigrants, advancing justice, and leading on the global stage.
- An inclusive economy: New York City will grow and diversify its economy so that it creates opportunity for all, safeguards the American dream, and addresses the racial wealth gap.
- Thriving neighborhoods: New York City will foster communities that have safe and affordable housing and are well-served by parks, cultural resources, and shared spaces.

- Healthy lives: New York City will reduce inequities in health outcomes by addressing their root causes in residents' daily lives, guaranteeing health care, and facilitating both healthy lifestyles and a healthy physical environment.
- Equity and excellence in education: New York City will have a diverse and fair school system that delivers a high-quality education to children of all backgrounds and serves as a national model.
- A livable climate: New York City will lead a just transition to achieve carbon neutrality and adapt the city to withstand and emerge stronger from the impacts of climate change.
- Efficient mobility: New York City will enable reliable, safe, and sustainable transportation options so that no New Yorker needs to rely on a car.
- Modern infrastructure: New York City will invest in reliable physical and digital infrastructure that is ready to meet the needs of a 21st-century city.

The eight goals reflect both the core strengths of the City, including growing, diverse population, a strong economy, and global leadership, as well as the significant challenges the City must address, which are growing unaffordability, economic insecurity, inequity, the existential threats posed by climate change, decaying infrastructure, and rising global intolerance.

The Proposed Actions would not jeopardize the intent of the policies set forth in OneNYC or PlaNYC 2050.

Transit Zone

The Affected Area is in a Transit Zone, which has a lower accessory parking requirement for various types of affordable housing, including IRHUs, and generally applies to areas within one-half mile of a subway station where auto ownership rates are among the lowest in the city. The Proposed Actions are projected to introduce up to 24 IRHUs to the Affected Area, none of which would require a parking space per the Transit Zone incentive.

Food Retail Expansion to Support Health (FRESH) Program

The Affected Area is within a FRESH Program zone that offers zoning incentives and financial benefits to develop and retain convenient and accessible stores in underserved communities that provide fresh meat, fruit and vegetables, and other perishable goods. Such zoning incentives include additional floor area in mixed use buildings reduced parking requirements, and the construction of larger grocery stores as-of-right in light manufacturing districts. The Applicant is not proposing to apply for the FRESH incentive.

Conclusion

The Proposed Actions would not alter the essential character of the neighborhood or district or substantially impair the appropriate use or development of an adjacent property, nor would it be detrimental to the public welfare or jeopardize the intent of the Zoning Resolution. Accordingly, no further analysis of Public Policy is warranted.

Chapter 7 Open Space

The *2021 CEQR Technical Manual* defines the need for an open space assessment if the Proposed Action would have a direct or indirect effect on open space resources. Direct effects would occur if the Proposed Action 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 of population sufficiently large enough to noticeably diminish the ability of an area's open space to serve future population.

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

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

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

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. Ideally, this would comprise 0.50 acres (20 percent) of passive space and 2.0 acres (80 percent)

of active open space per 1,000 residents. For nonresidents who tend to use passive open space, for example, workers taking a break in a park, the optimal ratio for nonresidential populations is 0.15 acres of passive open space per 1,000 nonresidents.

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

Direct Effects

Direct effects to 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 **Chapter 8: Shadows**.

Indirect Effects

If a project may add population to an area, demand for existing open space would typically increase. Indirect effects may occur when the population generated by a Proposed Project would be sufficiently large to noticeably dimmish the ability of an area's open space to serve the future population.

For the majority of projects, an assessment is conducted if the Proposed Project would generate more than 200 residents or 500 employees, or a similar number of other nonresidential users (such as the population introduced by a new educational institution).

The Proposed Action would potentially result in approximately 420 residents in 121 units based on an average of 3.47 persons per unit. The addition of approximately 420 residents is above the CEQR preliminary screening threshold level, and a preliminary analysis of open space impacts due to new residents is warranted.

Preliminary Indirect Open Space Assessment

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 7-1**, the following fourteen census tracts that have 50% or more of their area within the ½ mile study area are 224, 226, 228, 230, 232, 234, 478, 484, 486, 488, 490, 494, 496, and 498.

Figure 7-1: Open Space Study Area Census Tracts



Existing Condition - Study Area Population

Based on the 2015-2019 ACS, the study area defined above, as of 2019, had a population of 61,896 residents, as shown in **Table 7-1** below.

Table 7-1: Study Area Population 2019

Census Tract	2019 Population
224	5,785
226	2,233
228	3,627
230	4,251
232	5,561
234	4,563
478	3,666
484	5,574
486	3,200
488	3,896
490	5,601
494	5,707
496	4,093
498	4,139
Total	**61,896**

Future No-Action Condition - Study Area Population

No residential development would occur in the future without the Proposed Actions within the Affected Area. As shown in **Figure 7-2**, there are 44 active permits within the study area, with 175 proposed new dwelling units. Using the same 3.47 residents per household figure as above, the no-action condition would have 607 new residents introduced to the study area by the 2025 build year. The no-action population would therefore be the existing population of 61,896 residents plus the 607 new residents introduced by the active construction projects, for a total no-action population of 62,503 residents.

Figure 7-2: Active Construction Permits Within Study Area



Future With-Action Condition – Study Area Population

The with-action population would be the no-action population of 47,669 residents described above plus the 420 residents anticipated as a result of the Proposed Actions. The with-action population would be 62,923 residents.

Table 7-2: Existing, No-Action, and With-Action Populations

Existing	No-Action	With-Action
61,896	62,503	62,923

Existing = 2015-2019 American Community Survey; No-Action = Existing plus 175 proposed dwelling units from active DOB permits; With-Action = No-Action plus 420 additional residents from Projected Development Site 1

Open Space Resources

There are six open space resources within the study area identified in **Table 7-3**. There are 3.84 acres of open space resources in the Study Area—2.88 are considered active, and 0.96 are considered passive based on field visits and a review of open space site plans. The location of the resources present in the Study Area are shown in **Figure 7-3.**

Existing Condition

The study area has 3.84 acres of open space and an existing residential population of 61,896. The open space ratio (OSR) under existing conditions is 0.062 acres per thousand residents.

Future No-Action Condition

In the future without the Proposed Actions, the population for the Study Area in the 2025 build year is forecasted to be 62,503 and is projected to be served by the same 3.84 acres of open space as in the existing condition. With this population, the OSR would be 0.061 acres per 1,000 residents.

Future With-Action Condition

The Proposed Actions would result in an increase in the No-Action population by 420 residents by the 2025 build year. The total 2025 build year With-Action population would be 62,923. With this increase in population, the OSR would remain 0.061 acres per 1,000 residents, but with a 0.67% reduction from the No-Action OSR.

Figure 7-3: Open Space Location in Study Area



Table 7-3: Open Space Resources								
Name	**Address**	**Ownership**	**Acreage**	**% Active**	**% Passive**	**Total Active**	**Total Passive**	**Features**
Albemarle Playground	Albemarle Rd., Dahill Rd., Mcdonald Ave.	NYC DPR	0.54	75	25	0.41	0.14	Ba, BC, Pg, SS
Dome Playground	Dahill Rd. between 37 St. and 38 St.	NYC DPR	1.39	75	25	1.04	0.35	BC, FE, HC, Pg, SS
Di Gilio Playground	Ave. F between McDonald Ave. and E. 2 St.	NYC DPR	0.83	75	25	0.62	0.21	Ba, Pg, SS
P.S. 131 Playground	Fort Hamilton Pkwy. between 43 St. and 44 St.	NYC DOE	0.20	75	25	0.15	0.05	Pg
P.S. 164 Playground	14 Ave. between 42 St. and 43 St.	NYC DOE	0.22	75	25	0.17	0.06	BC, Pg
I.S. 62 Playground	Cortelyou Rd. between E 7 St. and E 8 St.	NYC DOE	0.66	75	25	0.50	0.17	BC, Pg
Total			**3.84**	**75**	**25**	**2.88**	**0.96**	

Ba = Bathrooms; BC = Basketball Courts; BF = Baseball Fields; FE = Fitness Equipment; HC = Handball Courts; Pg = Playgrounds; SS = Spray Showers

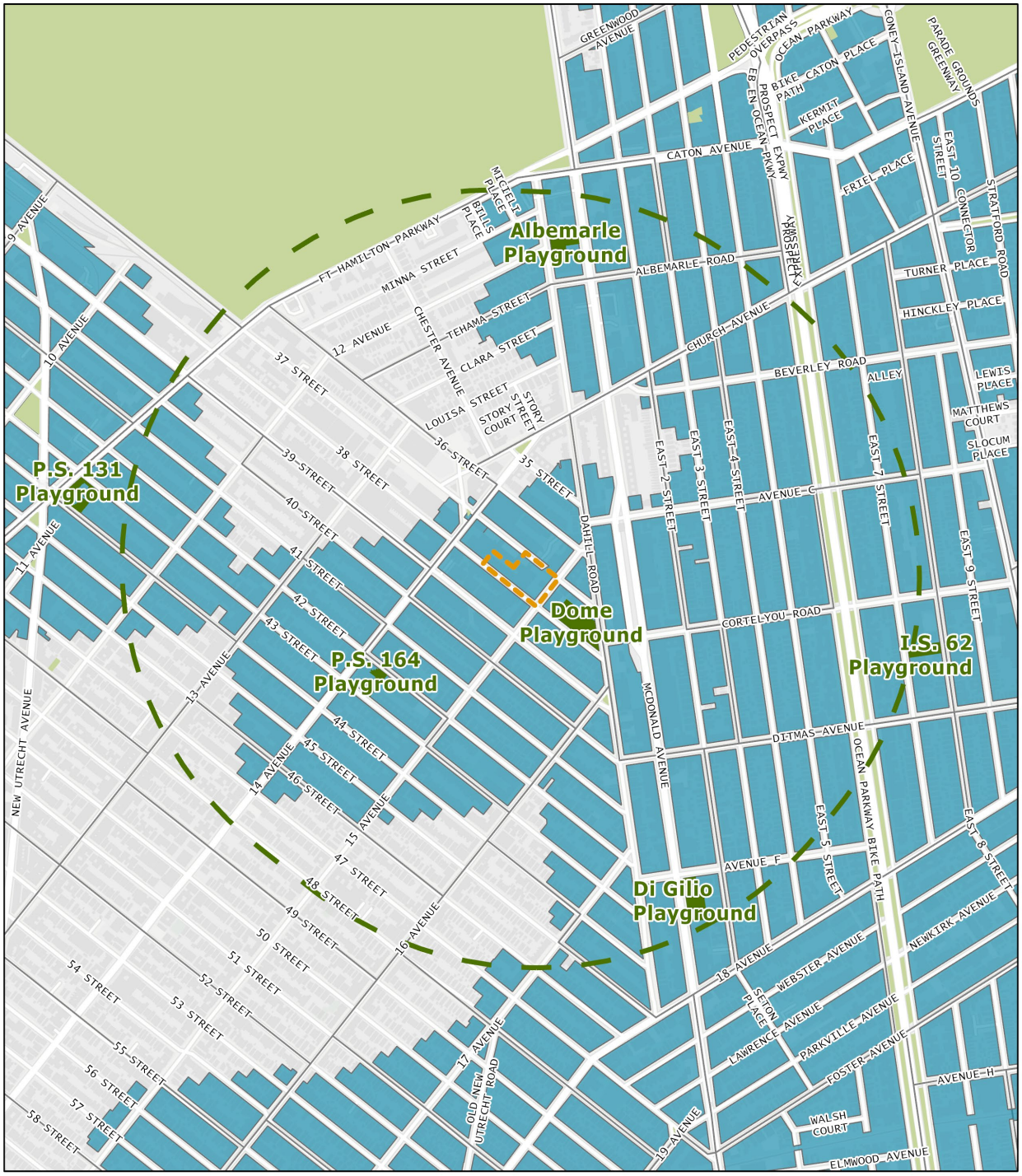
Walk to A Park Service Area Assessment

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.

Per the *2021 CEQR Technical Manual*, 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 to 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 per the *2021 CEQR Technical Manual*, when determining if a detailed open space assessment is warranted, the preliminary assessment should include a discussion of the Project Site's proximity to nearby regional parks, or other substantial open space resources located within or just outside the 1/2-mile study area boundary.

As shown in **Figure 7-4** below, the Affected Area is located within a Walk to a Park Service Area.

Figure 7-4: Walk to A Park Service Area Map



Conclusion

Pursuant to the *2021 CEQR Technical Manual*, projects expected to result in a decrease in the open space ratio should consider the following to determine if a more detailed analysis is warranted:

- Projects in study areas where the open space ratio approaches or exceeds the City's planning goal of 2.5 acres per 1,000 residents, may generally tolerate up to a five percent decrease of the open space ratio before considering the need for more detailed analysis.
- For projects in study areas where the open space ratio is not near the City's planning goal of 2.5 acres per 1,000 residents, the percentage decrease in open space ratio is weighed against how the open space ratio of the study area compares to the City's planning goal for open space. Table 7-1 of the *2021 CEQR Technical Manual* (**Table 7-4** below) provides general guidelines for ranges of open space ratios and acceptable percentage changes.
- Projects that have an effect on a nonresidential population's use of passive open space would not follow the guidelines presented in the below table, and should consider the need for a detailed assessment based on a comparison of the open space ratio to the optimal ratio of 0.15 acres of passive space per 1,000 nonresidents. Projects that lead to the non-residential open space ratio to drop below the optimal ratio of 0.15 acres of passive open space per 1,000 non-residents may warrant a more detailed assessment.

The Proposed Actions would reduce the OSR by 0.67% to 0.061 acres per 1,000 residents. Though the area has a low OSR, based on the screening thresholds for preliminary open space assessment (see **Table 7-4** below), the OSR decrease induced by the Proposed Actions would be less than 1%, which is below the threshold warranting further assessment of open space. In addition, as discussed above, the Affected Area is located within a Walk to a Park Service Area. Accordingly, the Proposed Actions are not expected to have significant adverse impacts on the open space resources in the Study Area.

Table 7-4: Preliminary Assessment Guidance for Percentage Change in Open Space Ratio

Open Space Ratio Range	Percentage Change in Open Space Ratio
2.01 to 2.50* or greater	5%
1.51 to 2.00	4%
1.01 to 1.50	3%
0.51 to 1.00	2%
0.50 or Less	1%
*2.5 OSR is the planning goal in NYC	

Chapter 8 Shadows

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

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

The *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.

The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. In general, shadows on city streets and sidewalks or on other buildings are not considered significant. Some open spaces also contain facilities that are not sensitive to sunlight. These are usually paved such as handball or basketball courts, places containing no seating areas and no vegetation, no unusual or historic plantings, or containing only unusual or historic plantings that are shade tolerant. These types of facilities do not need to be analyzed for shadow impacts. Additionally, it is generally not necessary to assess resources located to the south of projected development sites, as shadows cast by the action-generated development would not be cast in the direction of these resources. Furthermore, shadows occurring within one and one-half hour of sunrise or sunset generally are not considered significant in accordance with *CEQR Technical Manual* guidance.

Methodology

This preliminary analysis of shadows follows the guidelines set forth in the *2021 CEQR Technical Manual* for a preliminary assessment (Section 310). According to the *2021 CEQR Technical Manual*, a preliminary shadow assessment includes the development of a base map showing the site location in 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 sunlight-sensitive resources lay within the longest shadow study area, the next tier of screening assessment should be conducted. This preliminary assessment includes a basic description of the proposed project that would be facilitated by the Proposed Actions in order to determine whether a more detailed assessment would be appropriate.

Analysis

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54), Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47), and Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119) would each be developed with a building of 110 feet in height (95-foot building plus an additional 15 feet for mechanical bulkheads) in the proximity of sunlight sensitive resources. Accordingly, a preliminary assessment of shadows is warranted.

Tier 1 Screening Assessment

The shadow assessment begins with a preliminary screening assessment to ascertain whether a project's shadow may reach any sunlight-sensitive resources at any time of the year. If the screening assessment does not eliminate this possibility, a detailed shadow analysis may be warranted to determine the extent and duration of the net incremental shadow resulting from the project. The effects of shadows on a sunlight-sensitive resource are site-specific; therefore, as directed in the *CEQR Technical Manual*, the screening assessment was performed for the relevant Projected and Potential Development Sites to determine whether the development sites fall within the range of maximum possible shadow cast on potential sunlight sensitive resources as described above.

To determine whether the Proposed Actions would reach any potential sunlight-sensitive resources, a Tier 1 Screening Assessment was performed in accordance with the *CEQR Technical Manual*. A base map is developed that illustrates the proposed site location in relation to any sunlight-sensitive resources. The longest shadow study area is then determined, which encompasses the site of the proposed project and a perimeter around the site's boundary with a radius equal to the longest shadow that could be cast by the proposed structure, which is 4.3 times the height of the structure that occurs on December 21st, the winter solstice. A map as shown in **Figure 8-1** was prepared by placing NYC Department of Parks Resources and Selected Facilities and Program Sites provided on NYC.gov Department of City Planning GIS portal, as well as a list of park and public spaces provided from NYC.gov DOITT- GIS and Mapping Portal, as well as a screen of SHPO and NYC Landmark Listed Properties with sunlight-sensitive building features. A buffer map was prepared to display the maximum possible shadow of 430 feet, which could be cast from the Projected and Potential Development Sites in the proposed rezoning area. This shadow cast was derived by multiplying the height of 110 feet (the maximum possible height under the proposed rezoning with MIH bonus plus a 15-foot bulkhead) by 4.3 (the *CEQR Technical Manual* multiplier representing the maximum shadow cast from

any object as being 4.3 times its height). The potentially impacted area of shadow from the projected site was then compared to those resources identified above to see if any fell within the shadow cast area.

Based on the Tier 1 analysis in **Figure 8-1**, it was determined that one sunlight-sensitive resource, Dome Playground, is within reach of the longest possible shadow that could be cast from the buildings on the Projected and Potential Development Sites associated with the requested rezoning within the Affected Area. Therefore, the Proposed Actions may have an adverse impact on the sunlight-sensitive resource, and a Tier 2 Assessment is required.

Figure 8-1: Tier I Shadow Screening Assessment

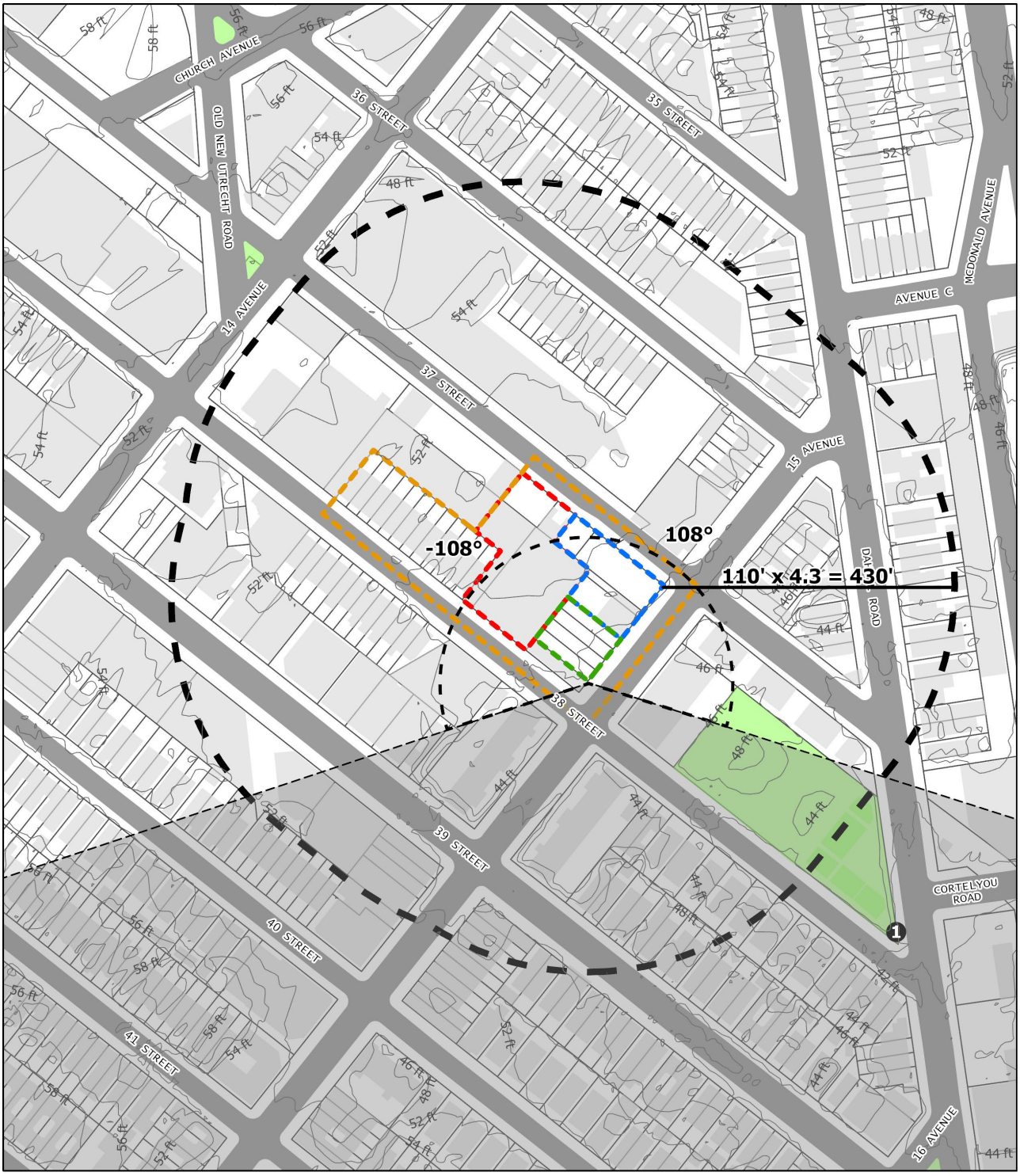


Tier 2 Shadow Screening Assessment

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

As shown in **Figure 8-2**, the Tier 2 screening assessment showed that the Dome Playground (Block 5367, Lot 25; Resource 1) is inside of the -108/+108 area, and therefore a Tier 3 screening would be required.

Figure 8-2: Tier 2 Shadow Assessment



Tier 3 Shadow Screening Assessment

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

As shown in **Figures 8-3 to 8-6 and Table 8-1** below, shadows from the projected buildings would reach Dome Playground on two analysis days in May/August and June without taking into consideration intervening/existing buildings. A detailed shadow analysis for Sunlight Sensitive Resource 1 is required.

Table 8-1: Tier 3 Shadows Table

Analysis Day	Dec 21	Mar 21 / Sep 21	May 6 / Aug 6	Jun 21
Timeframe Window	8:51 a.m. - 2:53 p.m.	7:36 a.m. - 4:29 p.m.	6:27 a.m. - 5:18 p.m.	5:57 a.m. - 6:01 p.m.
Sunlight Sensitive Resource 1	Dome Playground			
Shadow Enter - Exit Times	-	-	4:48 pm – 5:18 pm	4:48 pm – 6:01 pm
Incremental Shadow Duration	-	-	30 Minutes	1 Hour 13 Minutes
Note: Daylight savings time not used				

Figure 8-3: Tier 3 Screening December

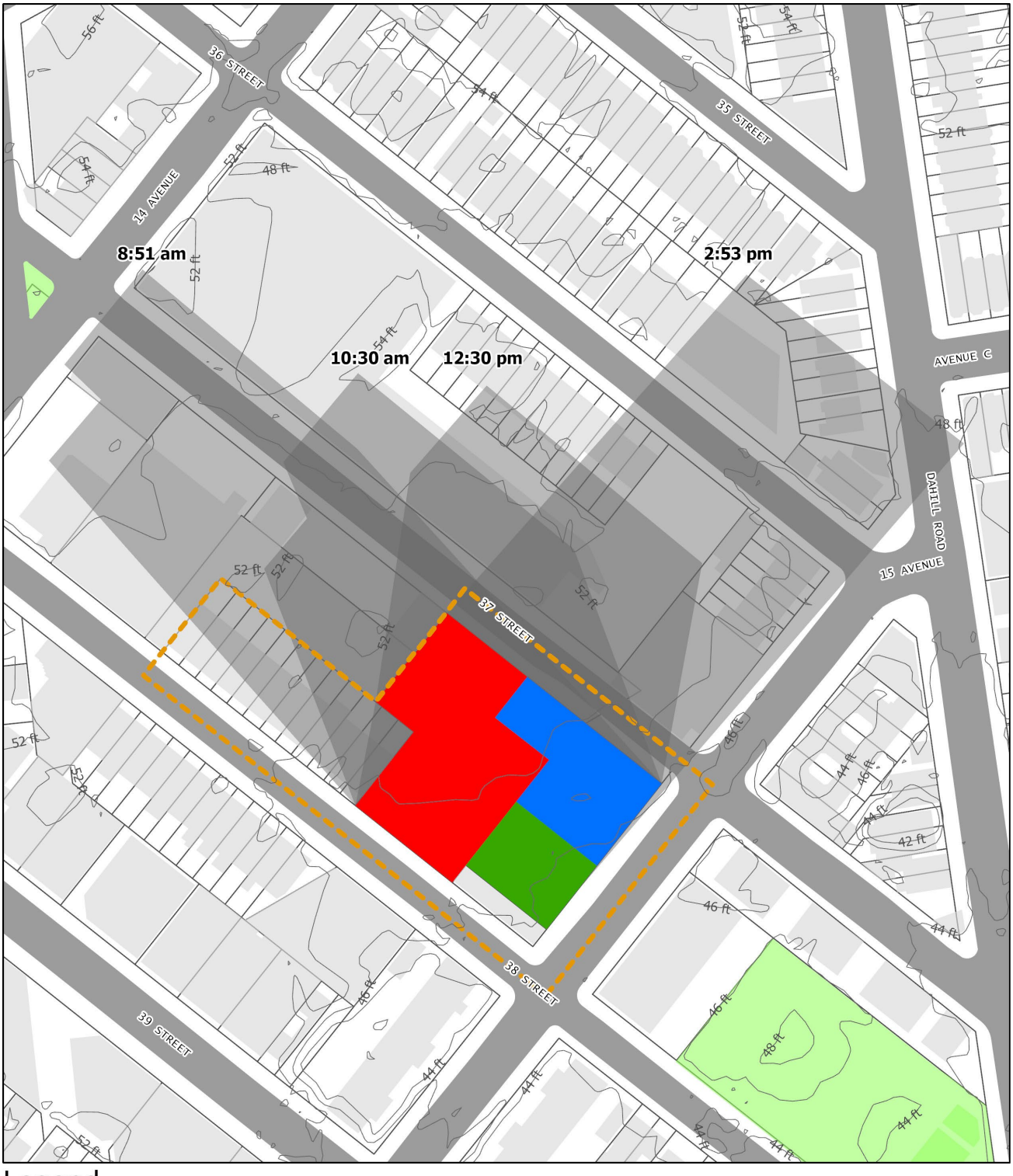


Figure 8-4: Tier 3 Screening March/September



Figure 8-5: Tier 3 Screening May/August

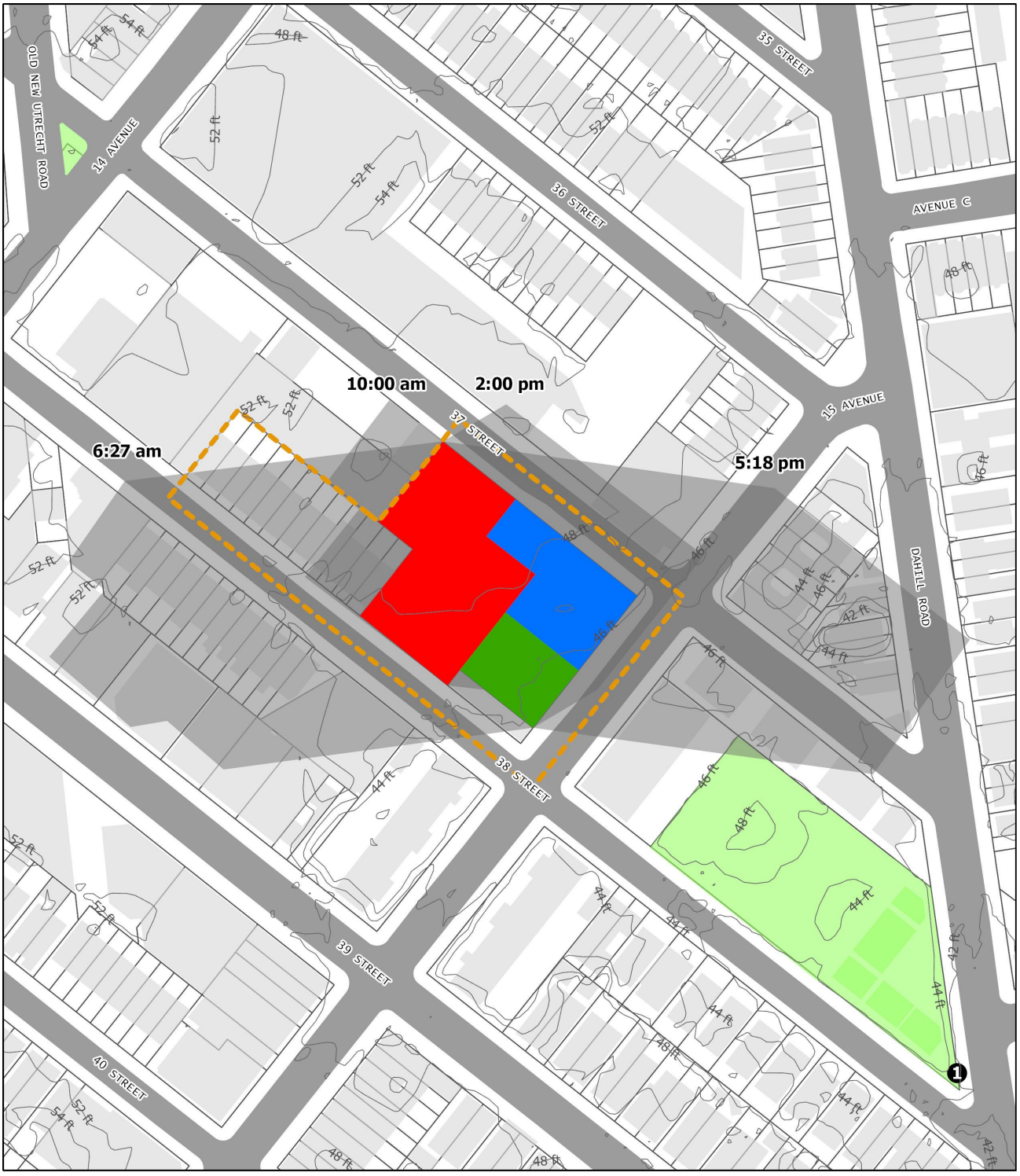
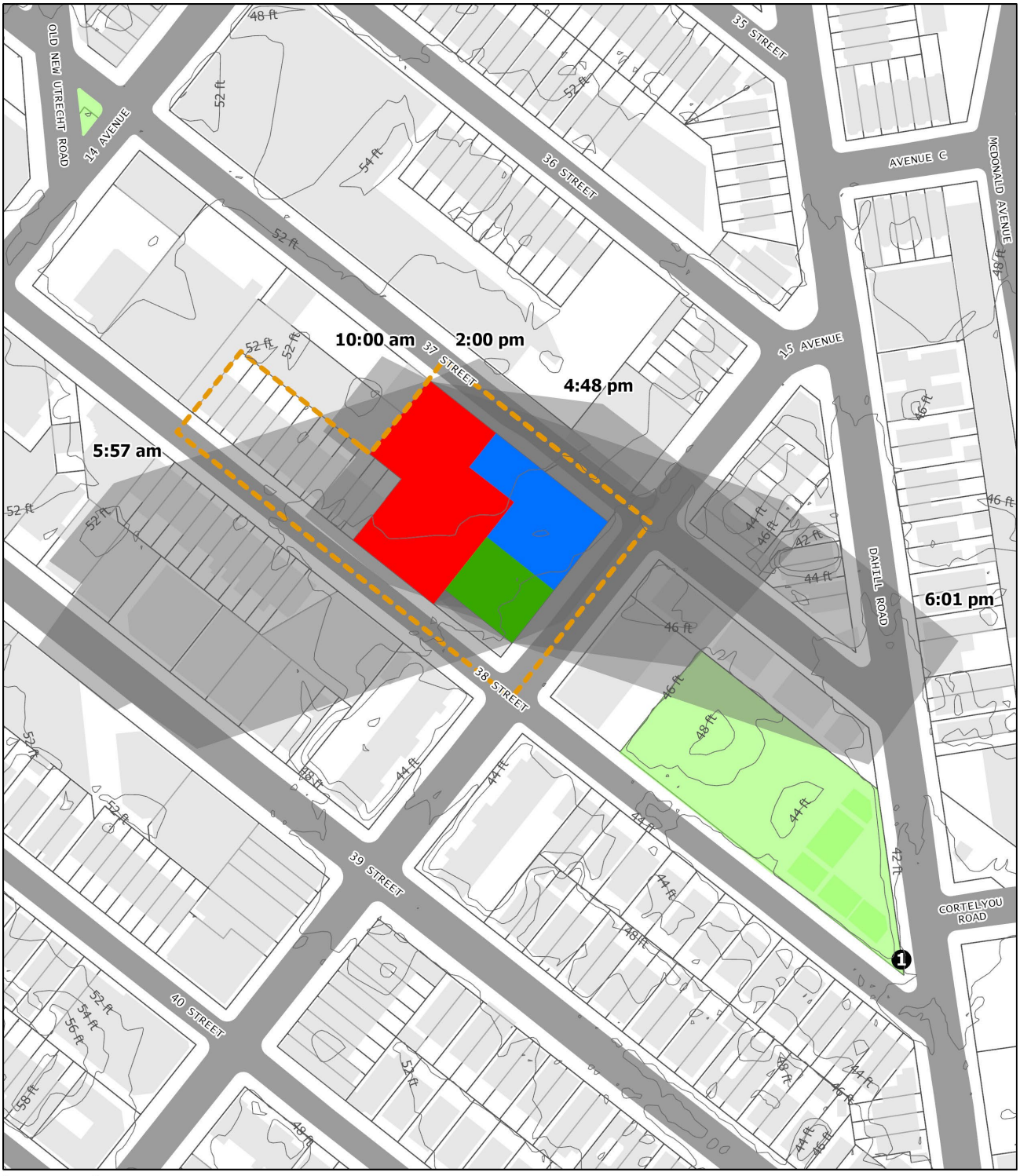


Figure 8-6: Tier 3 Screening June



Detailed Shadow Analysis

The *2021 CEQR Technical Manual* states that a detailed shadow analysis is warranted when the screening analyses do not rule out the possibility that project-generated shadows would reach any sunlight-sensitive resources. The purpose of the detailed analysis is to determine the extent and duration of shadows that fall on a sunlight-sensitive resource as a result of the proposed project.

The results of the detailed shadow analyses on the identified resources of concern are summarized in **Table 8-2**, and the incremental shadows cast by the Projected and Potential Development Sites are shown below in **Figures 8-7 and 8-8**. The shadows of intervening buildings were included in the detailed shadow analysis in order to identify any incremental shadows cast by the buildings on Projected and Potential Development Sites.

Table 8-2: Detailed Shadows Table

Analysis Day	Dec 21	Mar 21 / Sep 21	May 6 / Aug 6	Jun 21
Timeframe Window	8:51 a.m. - 2:53 p.m.	7:36 a.m. - 4:29 p.m.	6:27 a.m. - 5:18 p.m.	5:57 a.m. - 6:01 p.m.
Sunlight Sensitive Resource 1	Dome Playground			
Shadow Enter - Exit Times	-	-	-	-
Incremental Shadow Duration	-	-	-	-
Note: Daylight savings time not used				

Conclusion

Based on the Findings of the Detailed Shadow Analysis, there are no additional shadows cast by the Potential or Projected Developments on Dome Playground as shown in **Figure 8-7** and **Figure 8-8** below. Therefore, the Proposed Actions would not result in significant adverse shadows impact, and no further analysis is warranted.

Figure 8-7: Detailed Shadows Analysis – May 6 / August 6 – 5:18 PM

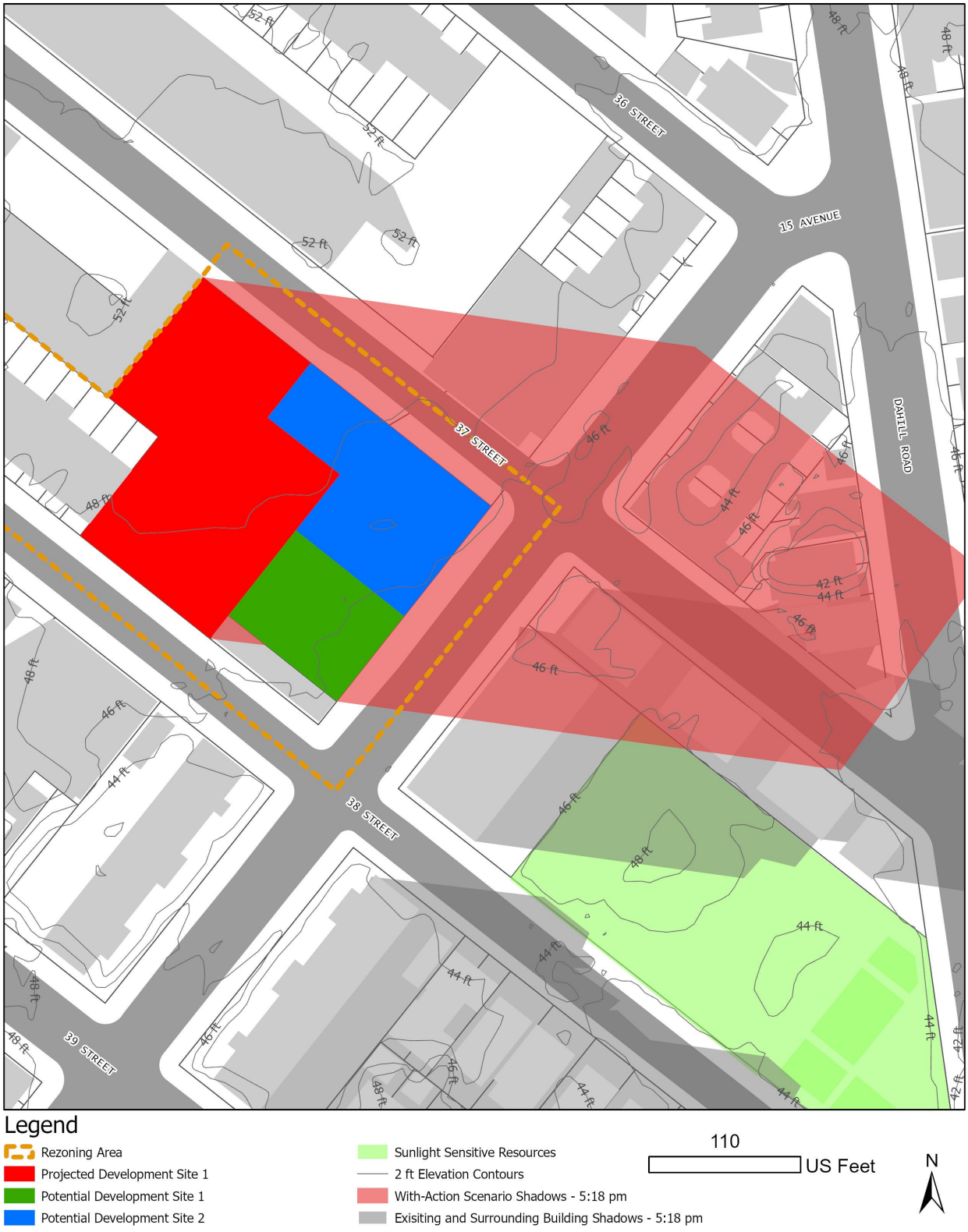


Figure 8-8: Detailed Shadows Analysis – June 21 – 6:01 PM



Chapter 9 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 *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.

Historic and Architectural Resources

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

To determine whether the Proposed Development has the potential to affect nearby off-site historic or architectural resources, the study area is screened for historic and architectural resources. No architectural resources were found in the project area that were considered historic or significant.

The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources. By letter dated May 13, 2021, the LPC indicated that the study area does not contain any sites or buildings of known architectural significance (see **Appendix A**). Therefore, significant adverse impacts on architectural resources are not expected because of the Proposed Actions, and further analysis is not warranted.

Cultural and 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 Development Site and Potential Development Sites. As noted, the LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received on May 13, 2021 (see **Appendix A**). The LPC has indicated that no cultural resource of archaeological significance is associated

with the study area. Therefore, significant adverse impacts on archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

Conclusion

The project would result in in-ground disturbance to develop the proposed mixed-use buildings with cellar space for parking. LPC was contacted for their initial review of the proposed project's potential to impact historic and cultural resources on or near the Affected Area. In a letter dated May 13, 2021, LPC indicated that the Study Area does not contain any sites or buildings of known architectural or archaeological significance (see **Appendix A**). Thus, the Proposed Actions are not anticipated to result in significant adverse impacts on sensitive architectural or archaeological resources.

Chapter 10 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

Pursuant to the *CEQR Technical Manual*, an assessment of urban design is appropriate when a project may affect one or more of the elements that contribute to the pedestrian experience of the public realm. The assessment of Urban Design and Visual Resources focuses on those elements of the Proposed Actions that may have the potential to impact the use, arrangement, appearance, and functionality of the built environment. The *CEQR Technical Manual* defines that a preliminary urban design analysis is appropriate when there is potential for a pedestrian to observe a material alteration beyond that allowed by existing zoning. This preliminary analysis provides an assessment of the Proposed Actions; to determine when comparing existing and future conditions with and without the Proposed Actions whether the project may result in a significant adverse environmental impact.

The Urban Design analysis examines each of those elements that play an important role in the pedestrian experience, including street hierarchy and streetscape (including the arrangement and orientation of streets); building scale as defined by their height and bulk in relation to adjacent built form and arrangement; as well as natural features, open space, and topography. These components are further considered in relation to changes in use and density of use, in so far as it impacts the experience of the pedestrian.

The preliminary analysis also considers the effects of the Proposed Actions on an area's visual resources, or those important public view corridors, vistas, natural or built features. Visual resources can include waterfront views, public parks, landmark structures or districts, or natural features, such as rivers or geologic formations. Based on *CEQR Technical Manual* guidelines, the study area for urban design is the area where the project may influence land use patterns and the built environment. The urban design study area consists of both a primary study area (where urban design effects of the Proposed Actions are direct) and a secondary study area. For the purpose of this assessment, the primary study area is the Affected Area. As with the analysis of land use, zoning, and public policy, the secondary study area for the urban design assessment is defined as the area within approximately 400 feet of the Rezoning Area (see **Figure 10-1**). The analysis is based on field visits, aerial views, computerized massing studies and montages, and photographs of the Affected Area and the 400-foot study area.

Analysis

The proposed rezoning of the Affected Area from M1-2, M2-1, and R6 to C4-4A and R6B would alter the permitted bulk and height within the Affected Area. Therefore, further analysis is warranted. The differences between existing and proposed zoning, with regards to those aspects of zoning affecting urban design, are presented in the following **Table 10-1**.

Table 10-1: No-Action and With-Action Zoning Calculations

	No-Action			With-Action	
Zoning	M1-2	M2-1	R6	C4-4A	R6B
Permitted Uses	Manu., Com., CF	Manu., Com.	Res., CF	Res., Com., CF	Res., CF
Maximum FAR	2.00 FAR – Manu. 2.00 FAR – Com. 4.80 FAR – CF	2.00 FAR – Manu. 2.00 FAR – Com.	2.20-3.60 FAR – QH Res. 0.78-2.43 FAR – HF Res. 4.80 FAR – CF	4.60 FAR – Res. 4.00 FAR – Com. 4.00 FAR – CF	2.20 FAR – Res. 2.00 FAR – CF
Maximum Height	Sky Exposure Plane starting at: 60 ft or 4 stories	Sky Exposure Plane starting at: 60 ft or 4 stories	Min. Base Height: 30 ft Max Base Height (with MIH / VIH): 65 ft Max Building Height: 80 ft Max Building Height (w/QGF): 85 feet	Min. Base Height: 40 ft Max Base Height (with MIH / VIH): 75 ft Max Building Height: 90 ft Max Building Height (w/QGF): 95 ft	Min. Base Height: 30 ft Max Base Height (with MIH / VIH): 45 ft Max Building Height: 50 ft Max Building Height (w/QGF): 55 ft
Lot Coverage	20 Foot rear yard required	20 Foot rear yard required	Corner Lot Coverage: 100% Interior Lot Coverage: 65%	Corner Lot Coverage: 100% Interior Lot Coverage: 65%	Corner Lot Coverage: 100% Interior Lot Coverage: 60%

Manu.: Manufacturing; Com.: Commercial; CF = Community Facility; Res. = Residential; QH = Quality Housing; HF = Height Factor; MIH = Mandatory Inclusionary Housing; VIH = Voluntary Inclusionary Housing; QGF = Qualifying Ground Floor

Existing Conditions

Context

The primary study area (Affected Area) consists of twenty-five (25) lots on Block 5348 bounded by 37th Street to the north, 15th Avenue to the east, 38th Street to the south, and 14th Avenue to the west in the Borough Park neighborhood of Brooklyn, described in detail in **Section 1.4**. Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54) are controlled by the Applicant. Lot 49 is a 15,033-sf interior lot improved with the 1-story 15,000-gsf Paperific Supermarket. Lot 54 is a 5,863-sf interior lot that is developed with a one-story, 12-foot-tall, 5,700-gsf commercial building. Lots 15 (3,370 sf) and 17 (1,634 sf) are both vacant lots used as parking facilities fronting 37th Street.

The other 21 lots in the primary study area are in the same block as Projected Development Site 1. Lot 42 is a 4,000-sf interior lot containing a one-story, 2,000-gsf contractor's warehouse. Lot 41 is a 1,033-sf interior lot containing a portion of the warehouse (500 gsf) located on Lot 42. Lots 44-47 are all currently vacant 2,000-sf interior lots located on the western side of 15th Avenue. Lot 48 is a 2,000-sf corner lot developed with a three-story, 3,300-gsf synagogue with a rectory and Rabbi's quarters on the upper floors. Lots 55

through 66 are all mid-block interior lots developed with residential buildings constructed in 1901. Lots 118 and 119 are interior lots currently being used as parking lots.

The 400-foot secondary study area is developed with a mix of one- and two-family buildings, multi-family buildings, commercial and office buildings, public facilities, industrial uses, and parking facilities. The predominant land uses in the secondary study area are residential and commercial uses. Residential uses are featured with one- and two-family buildings and small-scale multi-family walk-up buildings of 3 or 4 dwelling units constructed along the numbered streets running east and west, which have building heights of 2 to 3 stories. Larger multi-family developments are generally located near or along the wider north-south avenues, which include the 18-unit building at 1463 36th Street (Block 5350, Lot 7501) constructed in 2010, the 21-unit building at 1502 37th Street (Block 5367, Lot 7501) constructed in 1997, the 36-unit elevator building at 3715 15th Avenue (Block 5367, Lot 7502) constructed in 2007, the 22-unit building at 3802 15th Avenue (Block 5347, Lot 7501) constructed in 1983, and the 22-unit building at 3801 15th Avenue (Block 5366, Lot 7501) constructed in 1983. Mixed-use residential and commercial buildings are mostly located along 14th Avenue with local retail on the ground floor and residential units on the top.

Major commercial uses in the secondary study area include Brooklyn Square, a 6-story corporate office building with local retail stores on the ground floor at 3611 14th Avenue (Block 5349, Lot 1); Paperific Supermarket, a 1-story retail building at 1463 38th Street (Applicant-owned site; Block 5348, Lot 49); Towne Nursing, an employment center at 1413 38th Street (Block 5348, Lot 68); Chai Urgent Care, an urgent care center at 3802 14th Avenue (Block 5299, Lot 37); Shomrei Hadas Chapels, a funeral home at 3801 14th Avenue (Block 5347, Lot 6); and several restaurants scattered with other uses. Public facility buildings in the secondary study area include Bias Tzipora Girls School at 1449 39th Street (Block 5347, Lot 58); Hatzolah of Boro Park Station 2, an ambulance service station at 3705 14th Avenue (Block 5348, Lot 7); Chasidei Belz Beth Malka, a religious school at 600 McDonald Avenue (Block 5369, Lot 6); Cong Toras Chaim Slatfina, an Orthodox Synagogue at 363 Dahill Road (Block 5369, Lot 62).

Industrial uses can be found along 15th and 14th Avenues, and along 39th Street on Block 5298, including 1- to 2-story buildings used as warehouses and light manufacturing factories. There are five consecutive vacant lots used as outdoor parking lots on Block 5348, Lots 11, 15, 17, 118, and 119, which all have lot frontages on 37th Street. Several more vacant lots (Lots 1, 13, 75, and 76) to the south on Block 5347 are also used as outdoor parking lots. Block 5347, Lots 15, 52, and 68 are improved with 1-story parking garages. Other notable land uses include Dome Playground, a 1.39-acre neighborhood park owned by NYC Parks.

Access

The traffic grid is irregular as a result of Dahill Road running southeast-northwest across the secondary study area. The block of the Projected and Potential Development Sites is surrounded by three different road types according to the New York State Department of Transportation (NYSDOT) that includes 37th Street to the north (a local road), 15th Avenue to the east (a major collector road), 38th Street to the south (a local road), and 14th Avenue to the west (a minor arterial road). Both 37th and 38th Streets are narrow (60 feet wide) one-way roads with a single moving lane of traffic and curbside parking—37th Street runs west to east, and 38th Street runs east to west. 14th Avenue is a wide one-way road (80 feet wide) with two moving lanes of traffic running from south to north and curbside parking. 15th Avenue is a north-south wide road (80 feet wide) with one moving lane of traffic in each direction and curbside parking. As is typical of this area, the narrow numbered streets feed into the wider avenues, which in turn feed into the larger arterial roadways in the area, such as Fort Hamilton Parkway to the west and Ocean Parkway to the east.

The area is well-served by transit and is within a Transit Zone. The Ditmas Avenue subway station is serviced by the MTA with stops for the F line and is approximately 1,200 feet southeast of the Affected Area. The Church Avenue subway station provides access to the F and G subway lines, which is located about 1,600 feet northeast of the Affected Area. The area is also served by the D subway line with the Fort Hamilton Parkway station, which is located approximately 3,000 feet to the west of the Affected Area. The B16 and B35 buses run one block to the west along 14th Avenue. Stops for the B67 and B69 buses are also in the immediate area along Dahill Road.

Sidewalks, ranging from 10 to 15 feet wide, are in good condition with paved surfaces, street lights, and street trees predominantly along 38th Street, 14th Avenue, and 15th Avenue. The sidewalks along 37th Street are not pedestrian friendly given that the curbs are all broken and on-street vehicle parking takes up the pedestrian space along the building streetwalls. All intersections are regulated by traffic lights and are marked by pedestrian crossing markers.

Visual Resources

Dome Playground, the only visual resource in the secondary study area, is located within the 400-foot study area to the east of Projected Development Site 1. Dome Playground is not visible from the primary study area as the view of the public outdoor space is blocked by the 6-story apartment elevator building across 15th Avenue. The Proposed Development would not block the visual resource or alter the context of the playground.

Future No-Action Condition

As shown in **Figures 10-2, 10-5, and 10-8** below, in the future, without the Proposed Actions, it is expected that while tenants within the residential, manufacturing, retail, and office buildings may change, the overall use of these buildings within the primary and secondary study areas would remain the same. Any physical changes to buildings in the primary and secondary study areas would comply with designated zoning regulations. No significant changes to the area's urban character are anticipated. No changes to the area's views of the adjacent parks and open spaces are also expected.

Future With-Action Condition

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54)

The Applicant-owned Projected Development Site 1 would be rezoned from M1-2 and M2-1 to C4-4A. The proposed Zoning Map Amendment would permit the development on Projected Development Site 1 with a maximum residential FAR of 4.6 and a maximum commercial and community facility FAR of 4.0 under the proposed C4-4A zoning district. The Proposed Development in the With-Action scenario would increase the building height to what is permitted within the new rezoning district.

Pursuant to the Proposed Actions, a 142,590-GSF (119,140 ZSF; 4.60 FAR) mixed-use commercial and residential building would be constructed on Projected Development Site 1, which would rise to a base height of 75 feet tall before rising to 9 stories at 95 feet tall after a 15-foot setback on both 37th and 38th Streets. The ground floor of the building would contain 16,835 GSF (16,162 ZSF; 0.62 FAR) of commercial local retail uses and the upper floors would contain 111,217 GSF (102,978 ZSF; 3.98 FAR) of residential uses. There would be 121 total dwelling units, 25-30% (30-36) of which would be affordable pursuant to MIH at an average

of 60-80% AMI depending on the option selected. 48 residential accessory parking spaces would be provided at the cellar level of 14,538 GSF, which is accessible via a curb cut along 37th Street.

Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47)

The non-Applicant-owned Potential Development Site 1 are all vacant lots. The four lots could assemble to form an 8,000-SF mid-block lot with frontage along 15th Avenue. A 44,053-GSF (36,800 ZSF; 4.60 FAR) mixed-use commercial and residential building could be constructed, which could include 5,200 GSF (4,992 ZSF; 0.62 FAR) of commercial (local retail) uses on the ground floor and 34,353 GSF (31,808 ZSF; 3.98 FAR) of residential uses on the upper floors. The building could provide 37 total dwelling units, 25-30% (9-11) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. There could be a 4,500-GSF enclosed parking garage provided at the cellar level with 15 residential accessory parking spaces accessible via a curb cut along 15th Avenue.

These lots were rezoned to R6 as part of the Kings Material Rezoning in 2007, but have not developed to date. While the Proposed Actions would increase allowable residential FAR from 3.00 to 4.60 and add commercial uses at a maximum FAR of 4.0, the lack of previous development as a result of the Kings Material Rezoning, the ongoing Covid-19 pandemic, and potential market saturation from Projected Development Site 1 makes redevelopment of Potential Development Site 1 less likely to occur.

Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119)

Potential Development Site 2 contains four non-Applicant-owned lots with frontage along 37th Street and 15th Avenue. A one-story contractor's warehouse is developed on Lots 41 and 42 while Lots 118 and 119 are unimproved, currently being used as parking facilities. The four lots could assemble to form a 11,383-SF corner lot with frontages along 15th Avenue and 37th Street. A 61,981-GSF (52,362 ZSF; 4.60 FAR) mixed-use commercial and residential building could be constructed, which could include 11,383 GSF (10,928 ZSF; 0.96 FAR) of commercial (local retail) uses on the ground floor and 44,749 GSF (41,434 ZSF; 3.64 FAR) of residential uses on the upper floors. The building could provide 49 total dwelling units, 25-30% (12-15) of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the option selected. There could be a 5,850-GSF enclosed parking garage provided at the cellar level with 19 residential accessory parking spaces accessible via a curb cut along 37th Street.

However, these lots (with the exception of Lot 118, which was not part of the rezoning) were also rezoned as a part of the Kings Material Rezoning in 2007 but did not develop as a result. For the same reasons mentioned above, redevelopment of Potential Development Site 2 is considered less likely to occur as a result of the Proposed Actions.

Since the two Potential Development Sites are less likely to be redeveloped as a result of the Proposed Actions, **Figures 10-3, 10-6, and 10-9** show the reasonable worst-case development building massing on Projected Development Site 1 only and **Figures 10-4, 10-7, and 10-10** show the reasonable worst-case development building massing on both Projected Development Site 1 and the two Potential Development Sites. The With-Action massing is compared to the massing under existing conditions and No-Action conditions.

Figure 10-1: Urban Design Study Area – Photomontage Locations



Figure 10-2: Existing Condition and No-Action Condition 1: Looking Northwest at 15th Avenue & 38th Street



Figure 10-3: With-Action Condition 1 (Projected Development Site 1 Only): Looking Northwest at 15th Avenue & 38th Street



Figure 10-4: With-Action Condition 1 (Projected and Potential Development Sites): Looking Northwest at 15th Avenue & 38th Street



Figure 10-5: Existing Condition and No-Action Condition 2: Looking West at Mid 15th Avenue



Figure 10-6: With-Action Condition 2 (Projected Development Site 1 Only): Looking West at Mid 15th Avenue



Figure 10-7: With-Action Condition 2 (Projected and Potential Development Sites): Looking West at Mid 15th Avenue

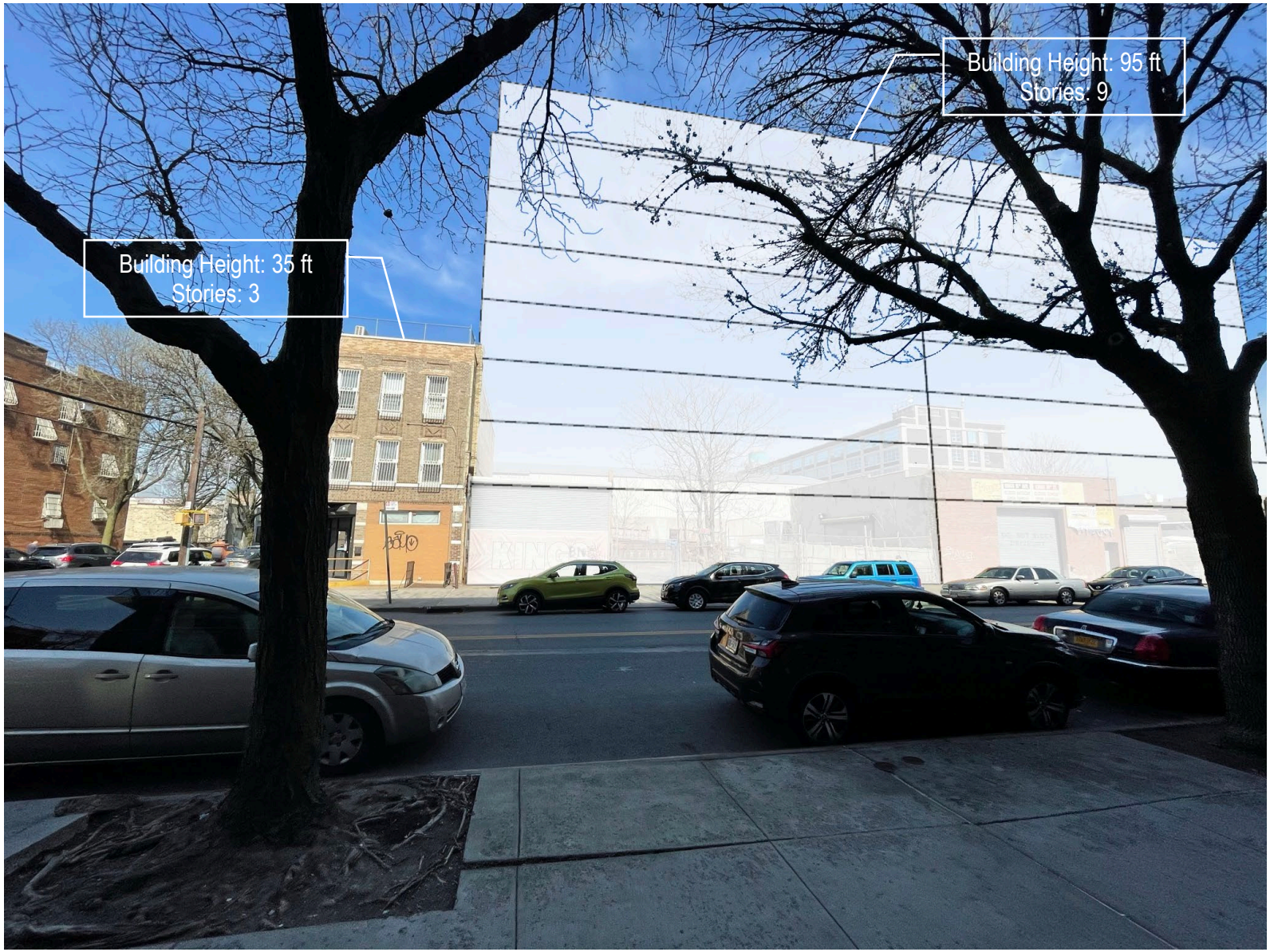


Figure 10-8: Existing Condition and No-Action Condition 3: Looking Southwest at 15th Avenue & 37th Street



Figure 10-9: With-Action Condition 3 (Projected Development Site 1 Only): Looking Southwest at 15th Avenue & 37th Street



Figure 10-10: With-Action Condition 3 (Projected and Potential Development Sites): Looking Southwest at 15th Avenue & 37th Street



Conclusion

Within the secondary study area, there is a 6-story, 70-foot-tall elevator apartment building of 36 dwelling units located at 3715 15th Avenue (Block 5367, Lot 7502) to the east of Projected Development Site 1, which was built in 2007 with comparable building height and FAR as the Proposed Development. In addition, Brooklyn Square, a 6-story, 90-foot-tall corporate office building with local retail stores on the ground floor is located at 3611 14th Avenue (Block 5349, Lot 1) to the north of Projected Development Site 1, which is also featured with a comparable building height and FAR compared to the Proposed Development. Therefore, the building massing induced by the Proposed Actions is compatible with the study area where multiple medium-density residential and mixed-use developments were developed.

Although the Proposed Actions would introduce a new mixed-use commercial and residential building on Projected Development Site 1 with a height limit and bulk restriction that is greater than what is currently permitted in the primary urban design study area, the Proposed Development would be limited to the similar bulk restrictions established within the surrounding R6 zoning districts to the south of the Affected Area and therefore would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood. The Proposed Development on Projected Development Site 1 would consist of ground floor local retail space and a significant number of dwelling units, which be consistent with the range of permitted uses in the secondary study area. Therefore, the Proposed Actions would not result in any significant adverse impact on the constituent elements of Urban Design, and a detailed analysis is not warranted.

Chapter 12 Hazardous Materials

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

Methodology

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

Analysis

Phase I ESA (Block 5348, Lots 15, 17, 49, and 54)

Projected Development Site 1, Block 5348, Lots 15, 17, 49, and 54, is owned by the Applicant and is currently used as a grocery store. Lot 15 is a parking lot for the store, Lot 17 is the loading dock area for the store, Lot 49 is the main portion of the grocery store and some storage area, and Lot 54 is storage for the store.

The proposed rezoning from M1-2 and M2-1 zoning districts to C4-4A zoning districts is being sought on Projected Development Site 1, to facilitate the development of a 9-story, 142,590-GSF mixed-use development, which would include 121 dwelling units (111,217 GSF of residential space), 16,835 GSF of commercial space (local retail), and 14,538 GSF of proposed cellar space to provide 48 parking spaces. Accordingly, a Phase I ESA was conducted for Projected Development Site 1 by Equity Environmental Engineering (EEE) in April 2021. A copy of this report is included in **Appendix C**. This Phase I ESA was also reviewed by the Department of Environmental Protection.

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.

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release, or a material threat of a release into structures on the property or into the ground, groundwater or surface waters of the property. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. All RECs, excluding de minimis RECs, were considered in the Phase I.

Historical Recognized Environmental Conditions (HRECs) are defined as a past release of any hazardous substance or petroleum product that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls, such as property use restrictions or activity and use limitations (AULs, which include both institutional controls and engineering controls.)

Controlled Recognized Environmental Conditions (CRECs) are defined as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by a regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restriction, activity and use limitations, institutional controls, or engineering controls).

A Vapor Encroachment Condition (VEC) is defined as a condition where the presence or likely presence of chemicals of concern vapors in the subsurface of the target property caused to be the release of vapors from contaminated soil and/or groundwater either on or near the target property.

EEE has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13. The following conditions were observed:

- RECs – There are no RECs associated with the Subject Property.
- HRECs – There are no HRECs associated with the Subject Property.
- CRECs – There are no CRECs associated with the Subject Property.
- VECs – The EDR Vapor Encroachment database identified VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property related to three historic gas stations and one historic cleaner at higher elevations. Based on these findings, a possible vapor encroachment cannot be ruled out.

Based on the findings of the Phase I ESA, VECs were identified related to the Subject Property. Therefore, the development of Projected Development Site 1 under the Proposed Actions may have the potential for adverse impacts related to hazardous materials and a Phase II ESA should be undertaken, collecting original samples of soil, groundwater or building materials to analyze for quantitative values of various contaminants. However, a Phase II ESA cannot be performed currently as the intrusive investigation through the Phase II process is not practical on the site where the existing building is still in use.

Conclusion

Based on the Phase I ESA for Block 5348, Lots 15, 17, 49, and 54, additional investigation is required. Because the project sites are improved with buildings that are operating with active businesses, the Applicant is electing to place an E-Designation on Projected Development Site 1; the non-applicant Potential Development Sites will also require an E-Designation. The E-Designation language related to Hazardous Materials is as follows:

E-Designation (E-692)

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54); Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47); and Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119)

An E-Designation should be placed on the site to assure that testing and mitigation will be performed, as necessary, before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation (OER).

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

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

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

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted.

Chapter 16 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.

Methodology

The *2021 CEQR Technical Manual* states that a preliminary trip generation 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 peak hour CWFS ferry trips; or
- 200 peak hour pedestrian trips.

The *2021 CEQR Technical Manual* also states that if the threshold for traffic is surpassed, a parking assessment may also be warranted. This chapter assesses the potential for project-generated vehicle, transit, and pedestrian trips to affect the local transportation network, as well as an assessment of transportation safety in the study area.

Analysis

Future No-Action Condition

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54) would remain unchanged under the No-Action Condition with a combined 20,700 GSF, all of which is for commercial uses. It would not provide parking spaces on site as the existing condition.

Future With-Action Condition

Pursuant to the Proposed Actions, Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54) would be developed under RWCDS with a 9-story, 95-foot-tall, 142,590-GSF (119,140 ZSF; 4.60 FAR) mixed-use commercial and residential building. There would be 16,835 GSF (16,162 ZSF; 0.62 FAR) of commercial local retail uses on the ground floor and 111,217 GSF (102,978 ZSF; 3.98 FAR) of residential uses from the 2nd to 9th floors. There would be 121 total dwelling units, with 97 being market rate and 24 being permanently set aside as affordable. 48 residential accessory parking spaces would be provided at the cellar level of 14,538 GSF. No commercial accessory parking spaces are required within the C4-4A zoning district.

There would be two Potential Development Sites under the With-Action condition. Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47) could be improved with a 44,053-GSF (36,800 ZSF; 4.60 FAR) mixed-use building, which could include 5,200 GSF (4,992 ZSF; 0.62 FAR) of commercial local retail uses and 34,353 GSF (31,808 ZSF; 3.98 FAR) of residential uses. The building could provide 37 total dwelling units, 7 of which could be permanently set aside as affordable. There could be a 4,500-GSF enclosed parking garage provided at the cellar level with 15 residential accessory parking spaces.

In total, there would be an increase of 121 dwelling units and a decrease of 3,865 GSF local retail space incremented as a result of the new building on Projected Development Site 1.

Preliminary Assessment

Based on the Affected Area's location, it is within Traffic Zone 2. According to Table 16-1 of the *2021 CEQR Technical Manual*, 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 a weighted 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 121 more residential dwelling units (0.61 weighted average) and a decrease of 3,865 GSF of local retail space (-0.26 weighted average), which results in a weighted average of 0.35 for the Proposed Actions. Based on the above thresholds, no further analysis is warranted.

Chapter 17 Air Quality

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. 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 possible impact on the project site by 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 most concern are carbon monoxide, lead, nitrogen dioxide, ozone, relatively coarse inhalable particulates (PM_{10}), fine particulate matter ($PM_{2.5}$), and sulfur dioxide. The *2021 CEQR Technical Manual* generally recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., atypical roadways, large scale parking lots, garages). The *2021 CEQR Technical Manual* generally recommends assessments when new stationary sources of pollutants are created, or when a new use might be affected by existing stationary sources.

Project Description

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54; Applicant-Owned)
Projected Development Site 1 is owned by the Applicant and is currently used as a grocery store. Under the Worst-Case Scenario, the Proposed Actions would facilitate the development of a 9-story, 142,590-GSF mixed-use commercial and residential building on Projected Development Site 1, which would include 121 dwelling units (111,217 GSF of residential space), 16,835 GSF of commercial space (local retail), and 14,538 GSF of proposed cellar space to provide 48 parking spaces.

Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47; Non-Applicant-Owned)
The four lots could assemble to form an 8,000-SF mid-block lot with frontage along 15th Avenue. A 44,053-GSF (36,800 ZSF; 4.60 FAR) mixed-use commercial and residential building could be constructed, which could include 5,200 GSF (4,992 ZSF; 0.62 FAR) of commercial (local retail) uses on the ground floor and 34,353 GSF (31,808 ZSF; 3.98 FAR) of residential uses on the upper floors. The building could provide 37 total dwelling units. There could be a 4,500-GSF enclosed parking garage provided at the cellar level with 15 residential accessory parking spaces accessible via a curb cut along 15th Avenue.

Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119; Non-Applicant-Owned)
The four lots could assemble to form a 11,383-SF corner lot with frontages along 15th Avenue and 37th Street. A 61,981-GSF (52,362 ZSF; 4.60 FAR) mixed-use commercial and residential building could be constructed, which could include 11,383 GSF (10,928 ZSF; 0.96 FAR) of commercial (local retail) uses on the ground floor and 44,749 GSF (41,434 ZSF; 3.64 FAR) of residential uses on the upper floors. The building could provide 49 total dwelling units. There could be a 5,850-GSF enclosed parking garage provided at the cellar level with 19 residential accessory parking spaces accessible via a curb cut along 37th Street.

Air Quality Standards, Regulations, and Benchmarks

National Air Quality Standards

The EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants—known as "criteria" pollutants. The presence of these pollutants in ambient air is generally due to

numerous diverse and widespread sources of emissions. The NAAQS primary standards are designed to protect public health with adequate margin of safety. The NAAQS secondary standards are designed to protect the public welfare from adverse effects, including those related to effects on soils, water, vegetation, visibility, and other aspects. As required by the Clean Air Act, EPA periodically conducts comprehensive reviews of the scientific literature on health and welfare effects associated with exposure to the criteria air pollutants. The NAAQS have been adopted as the ambient air quality standards for the State of New York.

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

Table 17-1: NAAQS and Background Concentrations at the Nearest NYSDEC Monitoring Stations

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO_2	1-Hour	188 µg/m^3	99.83 µg/m^3 (53.1 ppb)	Queens College
	Annual	100 µg/m^3	23.5 µg/m^3 (12.46 ppb)	
SO_2	1-Hour	196 µg/m^3	15.1 µg/m^3 (5.77 ppb)	Queens College
	Annual (1)	80 µg/m^3	0.9 µg/m^3 (0.35 ppb)	
$PM_{2.5}$	24-Hour (2)	35 µg/m^3	19.2 µg/m^3	Division Street
	Annual	12 µg/m^3	9.1 µg/m^3	

1. 6 CRR-NY 257-2.3 for annual SO_2 standard: "During any 12 consecutive months, the annual average of the 24-hour average concentrations shall not exceed 0.03 ppm.
2. 24-hour $PM_{2.5}$ was calculated as the average of the last 3 years as the NYSDEC report omitted the decimal place (19 µg/m^3).

New York State Standards

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the NYSDEC has established guidelines for maximum allowable concentration of "noncriteria pollutants," which are potentially toxic or carcinogenic pollutants. These include 185 hazardous air pollutants (HAPs) that are regulated by the EPA. The maximum allowable guidelines set a maximum 1-hour and annual averaging time concentrations and are published in the DAR-1 AGC/SGC Table, where AGC/SGC refers to Annual and Short-term Guideline Concentrations. The most recent DAR-1 guidelines were published on February 12, 2021.

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

NYC De Minimis Criteria

The City's *de minimis* criteria are used to determine the significance of the incremental increase in CO and $PM_{2.5}$ concentrations that would result as a consequence of the proposed project. The CO criteria set the minimum change in 8-hour average CO concentration that constitutes a significant environmental impact. Significant increase of 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-Actions 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-Actions) concentrations and the 8-hour standard, when No-Actions concentrations are below 8 ppm.

The following criteria are used for the determination of significant adverse $PM_{2.5}$ incremental impacts for projects subject to the CEQR:

- Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources; or for mobile sources, at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations); or
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

Accordingly, 24-hour $PM_{2.5}$ *de minimis* is an increment of 7.90 $\mu g/m^3$, and 0.3 $\mu g/m^3$ for annual $PM_{2.5}$ concentration increment relevant to a stationary source. As the mobile source screened out, the CO and annual $PM_{2.5}$ *de minimis* for mobile source are not mentioned here.

Mobile Source

Projects may result in significant mobile source impacts when they create mobile sources of pollutants, change traffic patterns, or add new uses near mobile sources of pollutants. Per CEQR guidelines, a detailed analysis is conducted to predict whether the Proposed Actions could potentially have a significant adverse air quality impact if certain threshold criteria are met or exceeded, while proposed projects that do not meet or exceed the threshold criteria (screen out) are not expected to have a mobile source impact. Projects that require a detailed analysis model the ambient air CO and $PM_{10}/PM_{2.5}$ concentrations—the mobile source pollutants of concern—and compare the modeled concentrations with the applicable air quality standard.

Screening Assessment

Project-Generated Traffic

Per the *CEQR Technical Manual*, localized increases in CO and $PM_{2.5}$ levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the Proposed Development. As such, screening analyses for CO and $PM_{2.5}$ were carried out to determine whether the project-generated traffic has the potential to cause a significant impact. As shown in Section 16 above, incremental project-generated traffic is below the thresholds warranting further evaluation of CO impact as outlined in Section 210, Chapter 17 of the *CEQR Technical Manual*. Therefore, no CO detailed analysis is warranted.

The $PM_{2.5}$ equivalent truck calculation in vehicular emission screen ranges from 12 to 23 HDDVs depending on the type of road. Per NYS DOT Functional Classification, the Affected Area is bounded by 37th Street (Minor Arterial) to the north, 15th Avenue (Major Collector) to the east, and 38th Street (local road) to the south.

Using the worksheet provided in the *CEQR Technical Manual Section 210*, project-generated auto and truck trips were screened at the surrounding Study Area intersections where project-generated vehicles would traverse including 37th Street and 15th Avenue, and 38th Street and 15th Avenue. The HDDV screen conservatively assumes that the total project-generated trip-ends would traverse through both of the above-listed intersections. The intersection HDDV equivalent was calculated for the intersection with the lowest functional classification type (38th Street – local roadway, and 15th Avenue – collector roadway), using the lowest screening threshold for a local roadway. All autos were assumed to be LDGT1 class vehicles, based on guidance from the Department of City Planning (DCP) on similar projects.

Table 17-2 shows the total project-generated Auto and Truck Trips and the results of the *CEQR Technical Manual* Equivalent Truck Calculation for each peak-hour period.

As shown below in **Table 17-2**, all Study Area intersections screen out of detailed HDDV analysis. Accordingly, significant adverse impact from project-generated mobile source emissions is not anticipated as a result of the Proposed Action.

Table 17-2: HDDV Screen Results

Peak-Hour Period	Truck	LDGT1 / HDDV	Equivalent Truck
15th Avenue and 38th Street (Local Roadway 12 HDDVs)*			
AM	1	18	9.5
MD	1	7	3.6
PM	0	11	5.4
Sat MD	0	11	5.7
Note: *The threshold for local roadway is 12.46 HDDV, 19.27 for collector roadway, and 23 for arterial roadway, based on the worksheet in the *CEQR Technical Manual Appendices*. 15th Avenue is a collector roadway, and 38th Street is a local roadway. The HDDV screen conservatively considers the intersection as a local roadway			

Parking Garage

According to the *CEQR Technical Manual*, projects that would result in parking facilities may result in potential adverse air quality impact, and based on guidance from the New York City Department of City Planning (DCP), a detailed analysis is required if the project would result in 85 or more off-street spaces. The Proposed Action would facilitate 48 parking spaces in Projected Development Site 1. The number of parking spaces does not exceed the parking spaces threshold criterion. Therefore, no detailed air quality analysis is required.

Existing Mobile Sources of Pollutant

According to the *2021 CEQR Technical Manual*, projects that would result in new sensitive uses within 200 feet of an atypical roadway or near an existing parking facility may result in significant mobile source air quality impacts. These impacts are estimated at sensitive receptors located at air intakes, operable windows, and terraces of the receptor building. There is no atypical roadway within 200 feet of the Proposed Project, and there are no large parking facilities located near the Proposed Project. Therefore, no analysis was required, and no mobile source significant adverse air quality impacts are expected to the Proposed Project from vehicular emission generated at an existing nearby mobile source of pollutant.

Stationary Sources

According to CEQR, an action can result in stationary source air quality impacts when it creates new stationary sources of pollutants such as emission stacks for industrial plants, hospitals, or other large institutional uses, or even building boilers- that can affect surrounding uses, or when they introduce sensitive uses near existing (or planned future) emissions stacks, and the new uses might be affected by the emissions from the stack.

Project HVAC Systems Analysis

The heating/hot water, ventilation, and air conditioning (HVAC) systems analysis considers the potential for emissions from the HVAC system(s) of a Proposed Action(s) to result in development that significantly impacts existing land uses (project-on-existing), and the potential of a proposed project to significantly impact each other (project-on-project). Based on the *CEQR Technical Manual*, a preliminary screening assessment is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system(s) boiler emissions can be significant. The screening analysis determines the threshold of a development size below which the action would not have a significant impact.

Screening Analysis

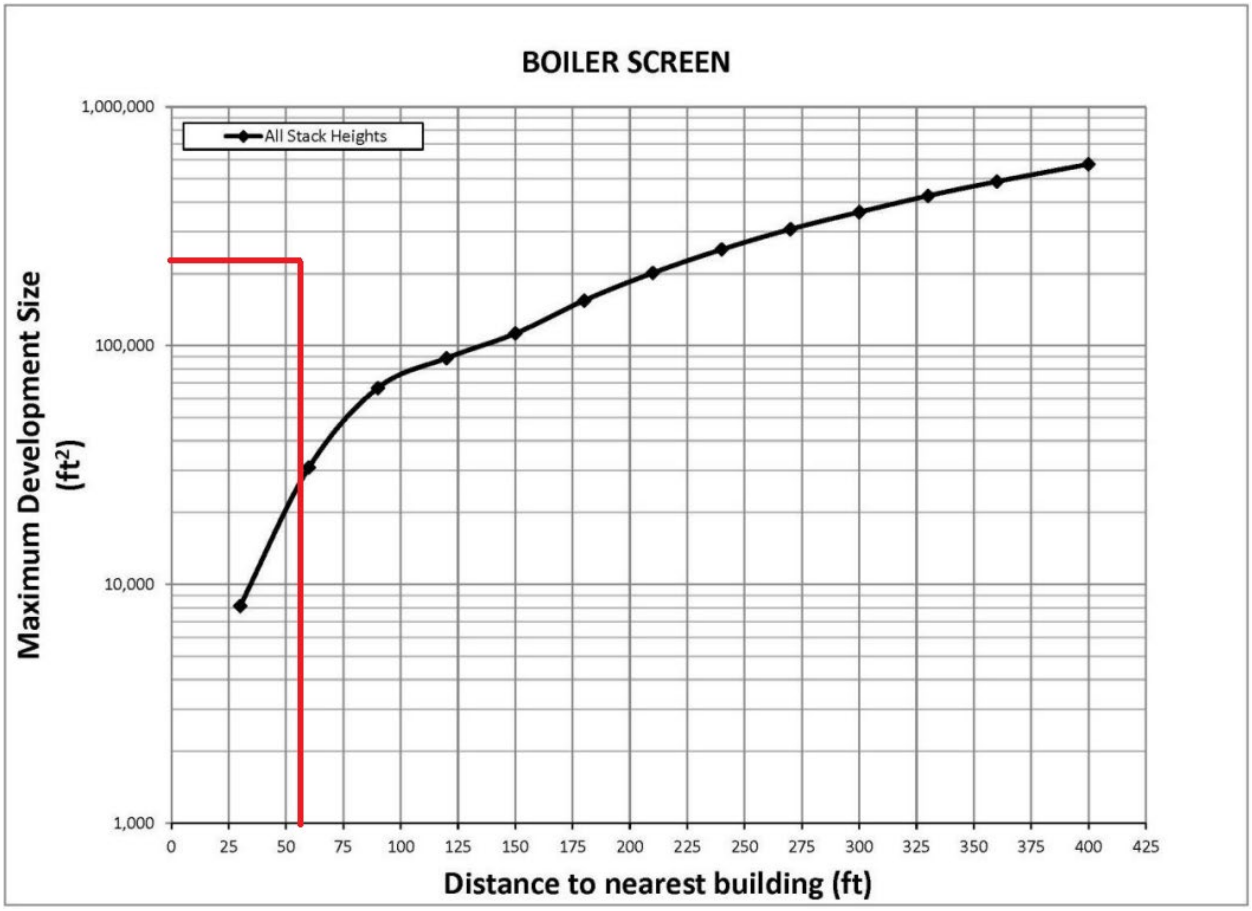
The potential for the heat and hot water system(s) to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used by the HVAC system, the height of the stack venting the emissions, the distance to the nearest building of similar or greater height, and the building's use and the square footage of the development that would be served by the system, both of which effect 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 failed.

The *2021 CEQR Technical Manual* Figure 17-3 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.

For the project-on-existing screening analysis, the Proposed Project was analyzed as a 223,737 gsf building, which is the floor areas of Projected Development Site 1, Potential Development Site 1, and Potential Development Site 2 combined floor areas excluding the parking facilities gsf. A height of 63 feet was assumed, which is the Projected Development Site 1 proposed building height and the most conservative

approach. The roof height of buildings in the area were obtained from the NYC Building Footprint database.[1] The nearest building of similar or greater height is the 6-story, 90-foot-tall, commercial building located at 3611 14th Avenue (Block 5349, Lot 1), which is 55 feet from the Proposed Project. **Figure 17-1** (using Figure 17-3 of the *2021 CEQR Technical Manual*) shows the screening analysis.

Figure 17-1: The Proposed Project on Existing Land Uses – HVAC Screen



As seen in **Figure 17-1** (using Figure 17-3 of the *2021 CEQR Technical Manual*), the line corresponding to the Proposed Project is above the curve. Therefore, a detailed analysis is required.

For the project-on-project screening analysis scenario, the Development Sites are adjacent to each other. Therefore, the screening analysis is not applicable and a detailed analysis is required.

HVAC Detailed Analysis

A stationary source modeling was conducted to evaluate the project-on-existing potential for significant impact associated with the boiler stack(s) emission. Lakes Environmental MPI executable was used in the

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

analysis. The MPI executable takes advantage of computers with multiple processors, reducing run-time significantly. Lakes Environmental has adjusted the US EPA AERMOD source code and recompiled the model to parallelize the processing of receptors. The latest MPI executable (used in the analysis) modified the EPA's AERMOD latest executable model version 21112. AERMOD model incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. The model was run with the regulatory default option and for both with and without downwash effects options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses were conducted using five consecutive years of meteorological data (2016-2020), obtained from the New York State Department of Environmental Conservation (NYSDEC). Surface data used in the analysis is from LaGuardia Airport, 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 5-year period. Population in Kings County, obtained from the U.S. Census Bureau (July 2019), was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

Natural gas was assumed to be the type of fuel used in the Projected Development Site 1 HVAC system, and the HVAC equipment would be equipped with low-NOx burners. The pollutants of concern of natural gas-fueled boilers are NO_2 and $PM_{2.5}$. The Projected Development Site 1 HVAC system's total energy capacity was calculated based on the building gsf, excluding the parking garage, and an energy consumption rate of 60.3 thousand Btu per gsf[2], corresponding to residential use in the building (the most conservative approach). Nitrogen oxides (NOx) emission rate, emitted from natural gas-fueled HVAC system equipped with low-NOx burner(s), was calculated based on emission factor obtained from the NYC Department of City Planning (DCP) for similar type of analysis. $PM_{2.5}$ emission factors were obtained from the EPA AP-42 manual for external combustion sources. All fuel was assumed to be consumed during the 100-day (or 2,400 hour) heating season to determine the boiler's capacity. **Table 17-3** shows the Projected Development Site 1 HVAC system's energy capacity and pollutants emission rates.

Fuel Oil No. 2 was assumed to be the type of fuel used in the Potential Development Sites 1 and 2 HVAC systems. The HVAC systems' energy capacities were calculated based on the Potential Development Sites gsf, excluding the parking garages, corresponding to residential use in the buildings and fuel consumption rate obtained from the *CEQR Technical Manual Appendices.* Emission factors were obtained from the EPA AP-42 manual for external combustion sources. All fuel was assumed to be consumed during the 100-day (or 2,400 hour) heating season to determine the boiler's capacity. **Table 17-3** shows the Potential Development Sites 1 and 2 HVAC system's energy capacity and pollutants emission rates.

[2] U.S. Energy Information Administration (EIA) Table US1: Total Energy Consumption, Expenditures, and Intensities, 2005 Part 1: Housing Unit Characteristics and Energy Usage Indicators.

Table 17-3: Development Sites HVAC System(s) Emission Rates

Site ID	Development Floor Area (gsf) and Roof Height (ft)	Boiler's Energy Intensity (MMBtu); Fuel Used	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
Projected Development Site 1	128,052 gsf, 63 feet	3.22; natural gas low-NOx	NO_2	1.48E-02	4.05E-03
			$PM_{2.5}$	3.02E-03	8.28E-04
Potential Development Site 1	39,553 gsf, 95 ft	0.87; Oil No. 2	NO_2	1.58E-02	4.32E-03
			$PM_{2.5}$	1.68E-03	4.60E-04
			SO_2	1.68E-04	4.60E-05
Potential Development Site 2	56,132 gsf, 95 ft	1.24; Oil No. 2	NO_2	2.24E-02	6.14E-03
			$PM_{2.5}$	2.39E-03	6.53E-04
			SO_2	2.39E-04	6.53E-05

The Projected Development Site 1 and Potential Development Site 2 boiler stack diameters and exit temperatures were estimated based on values obtained from the New York City Department of Environmental Protection (DEP) "CA Permit" database for corresponding boiler sizes (i.e., rated heat input or million Btu per hour)[3], and the stacks' exit velocities were calculated based on the fuel dry volume of combustion components per unit of heat content. The *CEQR Technical Manual* default stack diameter and exit velocity were applied for the Potential Development Site 1, and the stack's exit temperature was assumed to be 426°K, which is appropriate for boilers, based on values obtained from the DEP "CA Permit" database.

The HVAC stack(s) were initially placed 3 feet above the roofline and as close as possible to the receiving building. A stack setback distance from the receiving building and/or raising the stack higher was specified if impact was predicted. Two combinations of stack locations were evaluated for the project-on-existing scenario. In addition, for the 1-hour NO_2, a variable emission factor of 1 was specified during the October to May heating season and a factor of 0.35 during the other months, based on guidance from the DCP on a similar type of analysis.

The Development Sites were modeled as buildings that cover their entire lot area(s) (wall façade placed on the outer lot line(s)) and raise to the heights shown in **Table 17-3**. Buildings in the surrounding area were accounted for in the downwash effect on plume dispersions (BPIP). Receptors on the receiving building were placed on all wall façade from the ground floor to the roof-top height in spaced intervals. For the project-on-existing scenario, receptors were placed on the commercial building located at 3611 14th Avenue (Block 5349, Lot 1) and the 6-story, 70-foot-tall residential building located at 3715 15th Avenue (Block 5367, Lot 7502).

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 buildings' base elevations. The base elevations of the receptors and stacks were set to

[3] DEP "CA Permit" database obtained from the New York City Department of City Planning, February 2020.

their buildings' base elevations. Roof heights of buildings in the area were obtained from the NYC Building Footprint database,[4] except the newly constructed, 60-foot-tall building located at 1440 39th Street (Block 5346, Lot 17), which was obtained from the New York City Department of Building (DOB) zoning diagram.

A Tier 1 approach was used to predict the NO_2 concentrations, where the 1-hour NO_2 was modeled with 8th highest concentration (the NAAQS design value). Twenty-four-hour $PM_{2.5}$ concentration was modeled with 1st highest concentration (the *de minimis* design value). One-hour SO2 was modeled with the 4th highest concentration (the NAAQS design value). The model was run twice; with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The NO_2 or SO_2 modeled concentrations were added to the background concentrations and the result evaluated with the NAAQS. $PM_{2.5}$ modeled concentrations were evaluated with the *de minimis* for stationary source. The HVAC dispersions analysis results are shown in **Table 17-4**.

Table 17-4: HVAC Dispersion Analysis Results

Pollutant	Modeled Concentration (µg/m³) (2)	Background Concentration (µg/m³)	Evaluated Concentration (µg/m³)	Threshold Concentration (µg/m³)	Threshold Standard
Concentration at Potential Development Site 1					
1-hour NO_2	87.97	99.83	187.8	188	NAAQS
Annual NO_2	2.03	23.5	26	100	NAAQS
24-hour $PM_{2.5}$	4.86	19.2	4.9	7.9	*de minimis*
Annual $PM_{2.5}$	0.21	9.1	0.21	0.3	*de minimis*
1-hour SO_2	1.0	15.1	16	196	NAAQS
Annual SO_2	0.02	0.9	1	80	NAAQS
Concentration at Potential Development Site 2					
1-hour NO_2	85.17	99.83	185.0	188	NAAQS
Annual NO_2	1.08	23.5	25	100	NAAQS
24-hour $PM_{2.5}$	6.36	19.2	6.4	7.9	*de minimis*
Annual $PM_{2.5}$	0.15	9.1	0.15	0.3	*de minimis*
1-hour SO_2	1.1	15.1	16	196	NAAQS
Annual SO_2	0.01	0.9	1	80	NAAQS
Concentration at Existing					
1-hour NO_2	38.34	99.83	138.2	188	NAAQS
Annual NO_2	0.82	23.5	24	100	NAAQS
24-hour $PM_{2.5}$	3.47	19.2	3.5	7.9	*de minimis*
Annual $PM_{2.5}$	0.11	9.1	0.11	0.3	*de minimis*
1-hour SO_2	0.4	15.1	15	196	NAAQS
Annual SO_2	0.01	0.9	1	80	NAAQS

As seen in **Table 17-4**, the NO_2 and SO_2 concentrations are within the NAAQS and $PM_{2.5}$ concentrations do exceed the *de minimis*. Therefore, no impact is predicted on project-generated buildings or existing buildings within 400 feet of the Proposed Project. The concentrations shown in **Table 17-4** were predicted with certain

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

restrictions to ensure that no significant adverse air quality impact(s) would occur. The restrictions placed on the Development Sites are specified in the Air Quality E-Designations shown below.

(E) Designation (E-692)

Block 5348, Lots 15, 17, 49, and 54 (Projected Development Site 1): Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level and at least 63 feet above grade, and that the stack is located at least 90 feet from the northern lot line facing 37th Street and 90 feet from the eastern lot line of lot 17 facing 15th Avenue to avoid any potential significant adverse air quality impacts.

Block 5348, Lots 44, 45, 46, and 47 (Potential Development Site 1): Any new residential or commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest level and at least 101 feet above grade, and that the stack is located at least 40 feet from the northern lot line facing 37th Street to avoid any potential significant adverse air quality impacts.

Block 5348, Lots 41, 42, 118, and 119 (Potential Development Site 2): Any new residential or commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest level and at least 101 feet above grade, and that the stack is located at least 60 feet from the southern lot line facing 38th Street to avoid any potential significant adverse air quality impacts.

Industrial Emissions Analysis

A search of potential industrial sites was performed to identify any NYC DEP, and USEPA1 Air Quality Permits issued within 400 feet of the Affected Area. This Study Area and uses screened as part of the preliminary analysis based on NYCDCP MAPPLUTO database, are identified in **Figure 17-2**. This search was performed to determine if hazardous air toxics would have the potential to impact the Projected and Potential Developments.

The full list of the properties screened for industrial process emissions can be seen in **Table 17-5**, and their locations are provided in **Figure 17-2**. These sites were screened using the DEP CATS database to find any registered (current/expired) industrial permits. A reconnaissance was then conducted to affirm the findings of the industrial search, and to identify any uses with potential unpermitted industrial process emissions.

As shown in **Table 17-5**, of the twenty-six (26) sites identified for screening, two (2) have active permits, two have expired industrial permits, and four (4) facilities were identified for further analysis, as described below.

Table 17-5: 400 Foot Study Area - Industrial Permit Search Results

Site ID	Block	Lot	Address	Land Use	Current Industrial Permits	Expired Industrial Permits	Expired Permit Owner	Current Permit Owner	Current Use (Land Survey)	Notes
1	5349	1	3611 14th Ave	Commercial	PR011921	PA44991; PB029306; PB031706; PA026498	Knitting Corp, Custom Furniture, American Craft Jewelers	Brooklyn Square LLC.	Commercial Office/Retail	Current Permit: PR011921 Generator 9.76 BTU/Hr - Screens Out Expired Permits = Knitting Corp - Inactive; American Craft Jewelers - Inactive; Custom Furniture/Prestige Furniture – Screened Further
2	5349	42	3614 15th Ave	Industrial/Manufacturing	PB049813; PB049913	NA	NA	Kleins Kosher Ice Cream	Kleins Kosher Ice Cream	Screens Out - Emergency Use Generators
3	5368	7	3601 15th Ave	Commercial	NA	NA	NA	NA	Deli/Eagle Auto Repair	Screens Out - Eagle Auto Repair performs diagnostics, inspection, servicing, mechanical work - no body work/painting
4	5348	41/42	3708-10 15th Ave	Industrial/Manufacturing	NA	NA	NA	NA	Warehouse	Screens Out
5	5348	68	1413 38th St	Commercial	NA	NA	NA	NA	Commercial Office	Screens Out
6	5348	1	3713 14th Ave	Transportation/Utility	NA	NA	NA	NA	Gas Station	Screens Out
7	5349	99	3618 14th Ave	Industrial/Manufacturing	NA	NA	NA	NA	Home Health Care	Screens Out
8	5300	45	1365 38th St	Industrial/Manufacturing	PB038011	NA	NA	Verizon Wireless	Religious Goods Store	Screens Out - Emergency Use Generator
9	5299	37	3802 14th Ave	Commercial	NA	NA	NA	NA	Urgent Care	Screens Out
10	5299	42	3820 14th Ave	Commercial	NA	NA	NA	NA	Commercial Office	Screens Out
11	5347	6	3801 14th Ave	Commercial	NA	NA	NA	NA	Religious Facility	Screens Out
12	5347	71	1411 39th St	Industrial/Manufacturing	NA	NA	NA	NA	Clothing Store	Screens Out
13	5347	66	1431 39th St	Transportation/Utility	NA	NA	NA	NA	39th Street Auto Repair Inc.	Screens Out - Auto Repair Faciliy
14	5347	64	1433 39th St	Transportation/Utility	NA	NA	NA	NA	Boro Taxi Meter Inc	Screened Further - Auto Repair and Body Shop
15	5347	55	1451 39th St	Industrial/Manufacturing	NA	NA	NA	NA	Warehouse	Screens Out
16	5347	52	1461 39th St	Parking Facilities	NA	NA	NA	NA	Dependable Collision	Screened Further - Active auto body repair facility with active NYSDEC Air Registration Certificate (Registration ID: 2-6103-00722/00001)
17	5347	32	1462 39th St	Industrial/Manufacturing	NA	NA	NA	NA	Yeshiva	Screens Out
18	5347	49	1469 39th St	Commercial	NA	PB023407	Dependable Collision	NA	Commercial Office	Screens Out - (Dependable Collision located at Site ID 16)
19	5346	10	1414 39th St	Commercial	NA	NA	NA	NA	Commercial	Screens Out
20	5346	15	1426 39th St	Commercial	NA	NA	NA	NA	Commercial	Screens Out
21	5346	32	1462 39th St	Commercial	NA	NA	NA	NA	Party Equipment Rental	Screens Out
22	5346	37	3902 15th Ave	Commercial	NA	NA	NA	NA	Restaurant	Screens Out
23	5436	38	3904 15th Ave	Commercial	NA	NA	NA	NA	Restaurant	Screens Out
24	5436	39	3906 15th Ave	Industrial/Manufacturing	NA	NA	NA	NA	Lighting Store	Screens Out
25	5436	41	3910 15th Ave	Industrial/Manufacturing	NA	NA	NA	NA	Party Equipment Rental	Screens Out
26*	5365	8	3905 15th Ave	Commercial	NA	NA	NA	NA	Auto School	Screens Out

Note Site ID Corresponds to Figure 17-2 below
*Previously manufacturing land use - now commercial

Figure 17-2: 400-Foot Study Area Industrial Screen Site ID Map



Site 1: 3611 14th Avenue (Block 5349, Lot 1): The property at 3611 14th Avenue is a commercial and office building. DEP CATS database indicates that this site is currently under one (1) active and four (4) expired Industrial Permit. The DEP Permit PR011921 is a small combustion installation, and therefore, an exempt source. Permit PA044991, expiration year 2000, is registered to Zebra Knitting Corp. Permit PA026498, expiration year 2004, is registered to American Craft Jewelers. Both the Zebra Knitting Corp. and American Craft Jewelers are inactive corporations, and therefore, screened out. The other two Permits (PB029306 and PB031706), registered to Custom Furniture expired in 2007. Custom Furniture was not identified as a building occupant. However, an online search identified two other possible woodworking facilities, Prestige Custom Furniture and AB Custom Furniture, in the building. Prestige Custom Furniture indicated, in a phone call, that the location at 3611 14th Avenue is an office space, and that the woodworking processing is performed at another location. AB Custom Furniture indicated, in a phone call, that they do not operate from the building at 3611 14th Avenue. As such, the facility was screened out.

Site 13: 1431 39th Street (Block 5347, Lot 66): The property at 1431 39th Street is currently occupied by Auto Repair Inc., based on a reconnaissance of the area. There are no permits register to the facility in the DEP CATS or NYSDEC databases. A sign on the outside wall identifies the facility as a wheel alignment and emission inspection facility. The facility indicated (in a phone call) that service provided does not include auto body repair. As such, the facility was screened out.

Site 14: 1433 39th Street (Block 5347, Lot 64): Based on a reconnaissance of the area, this site, designated as transportation/utility land use, is occupied by Boro Taxi Meter Inc. There are no permits associated with air emission registered to the facility in the DEP CATS or NYSDEC databases. However, the facility was categorized as an auto body repair facility, and further analysis is required.

Site 18 (aka Site 16): 1469 39th Street (Block 5347, Lot 49): This site was identified as having one expired industrial permit PB023407 (expired 11/20/2019) registered to Dependable Collision Inc. for an autobody spray booth. Dependable Collision also has an active NYSDEC certificate for painting (Facility DEC ID 2-6103-00722). Based on a reconnaissance of the area, Dependable Collision is still present (located next store at 1461 39th Street Block 5347, Lot 52). Accordingly, further analysis of this facility is warranted.

Dependable Collision, Inc. and Boro Taxi Meter, Inc. Facilities Emission

The Dependable Collision, Inc. and Boro Taxi Meter, Inc. are located within 400 feet of the Development Sites. The Dependable Collision, Inc. have both DEP and NYSDEC Air Facility Registration Certificate associated with the processing activities. The Boro Taxi Meter, Inc. facility operates with no DEP or NYSDEC Air Facility Registration Certificate. Emission from spray-painting processing comprises of solids, which is 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 amount of the sprayed solids is over-sprayed and could be emitted to the outside air. The VOC evaporate during the spraying activity and while the coating substance dries. The Dependable Collision, Inc. DEP permit PB023407 provided the particulate and VOC emissions. Particulate and VOC emissions of the Boro Taxi Meter, Inc. facility, operating with no NYSDEC Air Facility Registration Certificate and/or DEP permit, were based on coating compound consumption rate of 0.125 gallon per hour during 4 hour per day activity, and a maximum of 55 gallon per year consumption rate, which is the maximum allowable usage of facilities operating with no Air Facility Registration Certificate with the NYSDEC. **Table 17-6** shows the auto body facilities permits, particulates and VOC emissions, and hour per day activities.

Table 17-6: Auto Body Facilities Particulates and VOC Emissions

Facility	Permit ID		Particulate		VOC		Activity (hr/day)
			(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)	
Dependable Collision, Inc.	PB023407	2-6103-00722/00001	0.33	495	3.1	4650	6
Boro Taxi Meter, Inc.			0.081	35.8	0.775	341	4

Particulate emissions (New York Identification number NY079-00-0 or NY075-00-0) shown in **Table 17-7** include PM, PM_{10} and $PM_{2.5}$ combined. The particle size distribution ($PM_{10}/PM_{2.5}$) associated with each spray-painting processing emission was obtained from the EPA *AP-42 Manual Appendix B.1-12, Automobile and Light-Duty Truck Surface Coating Operations: Automobile Spray Booths (Water-Base Enamel)*. In addition, each facility hour per day activity was used to calculate the 24-hour average emission. **Table 17-7** shows the auto body facilities short-term and annual particulate emissions.

Table 17-7: Auto Body Facilities $PM_{2.5}$ and PM_{10} Emissions

Facility	Permit ID	$PM_{2.5}$		PM_{10}
		(lb/day)	(lb/yr)	(lb/yr)
Dependable Collision, Inc.	PB023407	0.566	141.6	0.92
Boro Taxi Meter, Inc.		0.093	10.2	0.15

The chemicals that make up the VOCs group was not included in the DEP permit. As such, the chemical composition listed in the DEP permit PW001217, registered to Alex's Auto Body, was used to derive each facility coating compound VOC composition. The DEP permit PW001217 is a comprehensive DEP certificate that includes paint, clear coats, reducer, and thinner (as applied coating compound). **Table 17-8** shows the auto body facilities chemicals that make up the VOC emission.

Table 17-8: Auto Body Facilities VOCs Emissions

Chemical	CAS No.	Dependable Collision, Inc.		Boro Taxi Meter, Inc.	
		lb/hr	lb/yr	lb/hr	lb/yr
Isopropyl Alcohol	67-63-0	0.04	61.7	0.01	4.5
Acetone	67-64-1	0.53	790.1	0.13	57.9
Butanone	78-93-3	0.19	283.9	0.05	20.8
Benyzl Butyl Phthalate	85-68-7	0.02	37.0	0.01	2.7
Ethylbezene	100-41-4	0.02	28.8	0.01	2.1
4-Methylpentan	108-10-1	0.01	20.6	0.004	1.5
2-Methoxy-1-Methylethyl Acetate	108-65-6	0.11	168.7	0.03	12.4
Methylcyclohexane	108-87-2	0.07	98.8	0.02	7.2
Toluene	108-88-3	0.39	592.6	0.10	43.5
Isopropyl Acetate	110-19-0	0.08	123.5	0.02	9.1
Heptan-2-one	110-43-0	0.01	8.2	0.002	0.6
N-Butyl Acetate	123-86-4	1.12	1687	0.28	123.7
Heptane	142-82-5	0.19	288.1	0.05	21.1
Ethyl 3-Ethoxypropionate	763-69-9	0.04	57.6	0.01	4.2
Xylenes	1330-20-7	0.11	172.8	0.03	12.7
Ligroine	8032-32-4	0.11	168.7	0.03	12.4

2-(2H-Benzotriazol-2-yl)-4,6-Ditertpentylphenol	25973-55-1	0.01	20.6	0.004	1.5
Solvent Naphtha	64742-89-8	0.03	41.2	0.01	3.0

Industrial Source - Air Dispersion Analysis

The *CEQR Technical Manual* Industrial Source Screen methodology was used to predict each emission source VOC 1-hour and annual concentrations, 24-hour $PM_{2.5}$ concentration, and 24-hour PM_{10} concentration. The cumulative result is the sum of concentrations (for each pollutant). The *CEQR Technical Manual* Industrial Source Screen methodology can be used to predict pollutant concentration emitted from a single source at various distances (from 30 to 400 feet). The distances between the facilities and the Development Sites were used in the screening analysis. AERMOD was used to predict the annual $PM_{2.5}$ cumulative concentration. The AERMOD application, including model inputs, is discussed in the HVAC detailed analysis section.

Stack parameters specified in the Dependable Collision, Inc. DEP permit PB023407 were applied in the model, and a stack diameter of 30 inch, based on similar permits and satellite imagery. The *CEQR Technical Manual* default stack parameters were used for the Boro Taxi, Inc. emission source. The Development Sites were modeled as a building that cover their entire lot area (the wall façade located on the outer lot lines). Buildings in the surrounding area were accounted for in the downwash effect on plume dispersions (BPIP). Receptors on the receiving developments were placed on all wall façade from 6 feet above grade to the roof-top height in spaced intervals.

The criteria pollutants cumulative results are presented in **Table 17-9**.

Table 17-9: Criteria Pollutants Cumulative Dispersion Analysis Results

Criteria Pollutant	Threshold Standard	Increment (Modeled) Concentration (µg/m³)	Background Concentration (µg/m³)	Evaluated Concentration (µg/m³)	Threshold Criteria (µg/m³)
$PM_{2.5}$ 24-Hour	*de minimis*	6.25	19.2	6.25	7.90
$PM_{2.5}$ Annual	*de minimis*	0.25	9.1	0.25	0.3
PM_{10} 24-Hour	NAAQS	10.2	24	34	150

As seen in **Table 17-9**, the $PM_{2.5}$ increment concentrations do not exceed the *de minimis* and PM_{10} concentration is within the NAAQS. **Table 17-10** shows the VOC cumulative air dispersion analysis results.

As seen in **Table 17-10**, the noncriteria pollutants concentrations are within the SGC/AGC standard. In addition, the inhalation risk for the HAPs is 0.34 (less than 10), and the Hazardous Index is 0.01 (less than 2) for the non-carcinogenic pollutants. Therefore, no adverse air quality impact is predicted at the Development Sites from existing industrial source emissions in the study area.

Table 17-10: Noncriteria Pollutants Cumulative Dispersion Analysis Result

Contaminant	CAS No.	1-Hour	SGC	Annual	AGC
		(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
Isopropyl Alcohol	67-63-0	31.8	98000.0	0.2	7000.0
Acetone	67-64-1	376.8	180000.0	3.0	30000.0
Butanone	78-93-3	138.0	13000.0	1.1	5000.0
Benyzl Butyl Phthalate ***	85-68-7	15.9	---	0.14	0.42
Ethylbezene ***	100-41-4	15.9	---	0.1	1000.0
4-Methylpentan ***	108-10-1	10.6	31000.0	0.1	3000.0
2-Methoxy-1-Methylethyl Acetate	108-65-6	79.6	36850.0	0.6	2000.0
Methylcyclohexane	108-87-2	47.8	---	0.4	3800.0
Toluene ***	108-88-3	281.3	37000.0	2.2	5000.0
Isopropyl Acetate	110-19-0	58.4	71300.0	0.5	565.0
Heptan-2-one	110-43-0	5.3	---	0.0	550.0
N-Butyl Acetate	123-86-4	806.6	71300.0	6.4	565.0
Heptane	142-82-5	138.0	210000.0	1.1	3900.0
Ethyl 3-Ethoxypropionate ***	763-69-9	26.5	140.0	0.2	64.0
Xylenes ***	1330-20-7	79.6	22000.0	0.7	100.0
Ligroine	8032-32-4	79.6	---	0.6	900.0
2-(2H-Benzotriazol-2-yl)-4,6-Ditertpentylphenol	25973-55-1	10.6	---	0.1	---
Solvent Naphtha	64742-89-8	21.2	---	0.2	3200.0

Note:
*** Indicates a HAP or AGC equivalent to one in a million excess cancer risk.

Conclusion

No significant adverse air quality impact was predicted in the analysis. The HVAC refined analysis indicates that there would be no potential for significant adverse air quality impacts from the HVAC systems with the requirements specified in the (E) Designation for the Projected/Potential Development Sites adhered to. Predicted contaminant concentrations, cancer risk, and/or hazard index from the existing auto body repair facilities operating within 400 feet of the Development Sites would be below the threshold criterions. Hence, no significant adverse impacts are anticipated due to air toxics emissions from facilities operating within 400 feet of the Development Sites. In addition, the Proposed Actions would not result in any significant adverse mobile source air quality impacts and no major/large source is located within 1,000 feet of the Development Sites.

Chapter 19 Noise

Introduction

Equity Environmental Engineering, LLC (Equity) conducted Noise Monitoring in support of the Proposed Actions. Vehicular traffic is the predominant source of noise in the area. Additionally, an elevated rail line is located approximately 700 feet to the east of the Project Site. Therefore, the Proposed Actions warrant an assessment of the potential for adverse effects on project occupants from ambient noise. The Affected Area is bounded by 37th Street to the north, 15th Avenue to the east, and 38th Street to the south.

37th Street is a one-way eastbound street with curbside parking. 15th Avenue is a two-way north-south bound street with curbside parking. 38th Street is a one-way westbound street with curbside parking. Local intersections are controlled by stop signs and traffic signals.

The Proposed Actions would allow noise-sensitive residential development. Therefore, an assessment of the potential for adverse effects on project occupants from ambient noise is warranted. 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. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. Therefore, this noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development. The predominant noise source in the Affected Area is vehicular traffic from the surrounding streets.

Framework of Noise Analysis

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

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

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 19-1: Noise Levels of Common Sources

Sound Source	SPL (dB(A))
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear 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.	
Source: 2021 CEQR Technical Manual	

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

- 3-dBA change is the threshold of change detectable by the human ear;
- 5-dBA change is readily noticeable; and
- 10-dBA change is perceived as a doubling or halving of the noise level.

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

- L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity, level. High noise levels during a measurement period will have a greater effect on the L_{eq} than low noise levels. L_{eq} has an advantage over other descriptors because L_{eq} values from various noise sources can be added and subtracted to determine cumulative noise levels.

- 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.

- $L_{eq(24)}$ is the continuous equivalent sound level over a 24-hour time period.

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.

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.

Noise Standards and Guidelines

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Quality Review (CEQR) noise exposure guidelines for exterior noise levels. As shown in Table 19-2 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 *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 dBA (*L_{10} or Ldn, depending on the source*) or below.

Table 19-2: 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 19-3 CEQR TM: 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)

Measurement Location and Equipment

Because the predominant noise sources in the area of the Proposed Development consist of vehicular traffic, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day. Pursuant to *CEQR Technical Manual* Methodology, measurements were conducted for 20-minute periods and 1-hour periods during each of the peak periods at each monitoring location at the Affected Area: Location One (1) at an elevated location on the 38th Street frontage of the Project Site with a direct line-of-sight to the elevated rail line; Location Two (2) was on the 38th Street frontage of the Project Site; and Location Three (3) was located on the 15th Avenue frontage of the Project Site; Location Four (4) was located on the 37th Street frontage of the Project Site. The noise monitoring locations are shown in **Figure 19-1** and **Photos 19-1** through **19-4**.

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

Figure 19-1: Noise Monitoring Locations

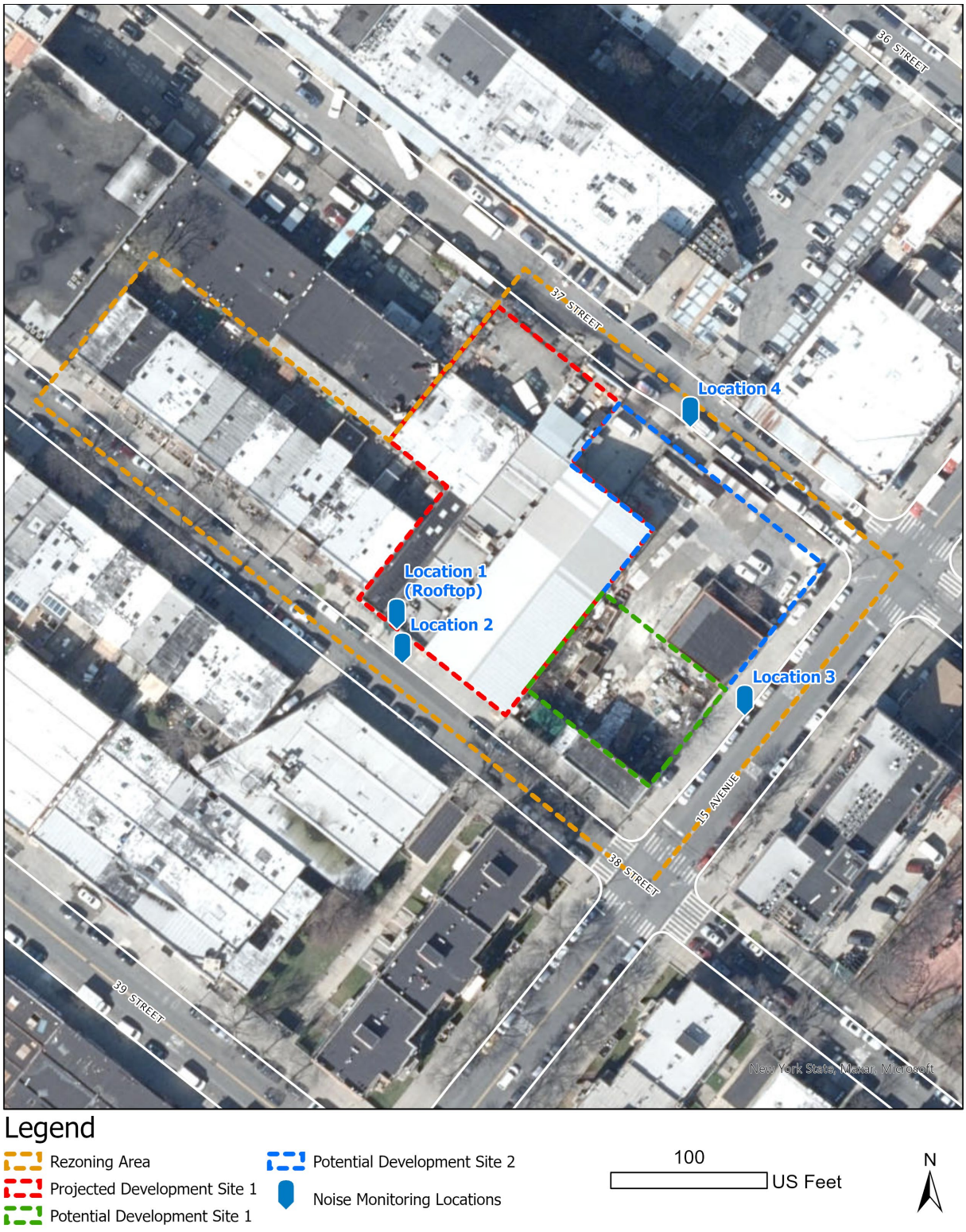


Photo 19-1: Location 1 – 38th Street (elevated)



Photo 19-2: Location 2 – 38th Street



Photo 19-3: Location 3 – 15th Avenue



Photo 19-4: Location 4 – 37th Street



Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Tuesday, May 25, 2021, and Thursday, January 13, 2022. The weather was dry and wind speeds were moderate during all monitoring periods. The sound meter was calibrated before and after each monitoring session. Traffic volumes and vehicle classification were documented during the noise monitoring.

Existing Conditions

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

Table 19-4 through 19-7 *below contains the results for the measurements taken at Noise Monitoring Locations 1 through 4, respectively:*

Table 19-4: Noise (dB) Levels at Location 1

Tuesday, May 25, 2021			
Time	**8:00 am – 9:00 am**	**12:01 pm – 1:01 pm**	**4:32 pm – 5:44 pm**
L_{max}	75.5	88.8	78.6
L_{10}	64.5	65.5	65.5
L_{eq}	63.4	65.0	64.3
L_{50}	63.0	64.0	63.5
L_{90}	61.0	62.0	61.5
L_{min}	59.1	60.7	59.9

Table 19-5: Noise (dB) Levels at Location 2

Tuesday, May 25, 2021 – AM & Thursday, January 13, 2022 – MD/PM			
Time	**7:30 am – 7:50 am**	**12:35 pm – 12:55 pm**	**4:30 pm – 4:50 pm**
L_{max}	78.2	80.4	83.5
L_{10}	68.5	66.5	66.0
L_{eq}	64.8	63.4	64.9
L_{50}	59.5	60.0	56.0
L_{90}	51.0	51.0	50.0
L_{min}	48.8	46.0	46.3

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

Table 19-6: Noise (dB) Levels at Location 3

Tuesday, May 25, 2021			
Time	**8:34 am – 8:54 am**	**1:09 pm – 1:29 pm**	**5:20 pm – 5:40 pm**
L_{max}	78.6	79.1	85.2
L_{10}	66.5	66.0	69.5
L_{eq}	63.5	63.2	65.8
L_{50}	59.5	59.5	61.5
L_{90}	55.0	54.5	58.0
L_{min}	52.4	50.7	55.2

Table 19-7: Noise (dB) Levels at Location 4

Tuesday, May 25, 2021			
Time	**8:10 am – 8:30 am**	**12:27 pm – 12:48 pm**	**4:58 pm – 5:18 pm**
L_{max}	89.6	95.0	77.4
L_{10}	68.0	**70.0**	66.5
L_{eq}	67.0	**71.0**	63.1
L_{50}	59.0	64.0	60.5
L_{90}	57.5	60.0	58.5
L_{min}	54.2	58.1	56.8

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

Tables 19-8 through **Table 19-10** contain the traffic volumes and vehicle classifications for the morning, noon, and evening monitoring sessions at Noise Monitoring Locations 2, 3 and 4, respectively.

Table 19-8: Traffic Volumes and Vehicle Classifications – Location 2

Tuesday, May 25, 2021 – AM & Thursday, January 13, 2022 – MD/PM			
	7:30 am – 7:50 am	**12:35 pm – 12:55 pm**	**4:30 pm – 4:50 pm**
Car	15	19	8
SUV	20	51	41
Medium Truck	1	1	0
Heavy Truck	0	1	2
Bus	8	0	3
Train	0	0	0

Table 19-9: Traffic Volumes and Vehicle Classifications – Location 3

Tuesday, May 25, 2021			
	8:34 am – 8:54 am	**1:09 pm – 1:29 pm**	**5:20 pm – 5:40 pm**
Car	40	37	47
SUV	51	48	58
Medium Truck	7	5	7
Heavy Truck	2	1	13
Bus	21	1	0
Train	0	0	0

Table 19-10: Traffic Volumes and Vehicle Classifications – Location 4

Tuesday, May 25, 2021			
	8:10 am – 8:30 am	**12:27 pm – 12:48 pm**	**4:58 pm – 5:18 pm**
Car	13	29	27
SUV	13	30	30
Medium Truck	5	4	5
Heavy Truck	3	1	1
Bus	7	0	3
Train	0	0	0

Determination of Impacts/Building Attenuation Requirements

The *2021 CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the Proposed Actions, 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 MD and PM periods. The highest recorded L_{10} at Location 2 was 68.5 dB(A) during the AM period. The highest recorded L_{10} at Location 3 was 69.5 dB(A) during the PM period. The highest recorded L_{eq} at Location 4 was 71.0 dB(A) during the MD period.

Based on the results of the noise monitoring, a window/wall attenuation of 28 dB(A) is required for Projected Development Site 1 (Lots 15, 17, 48, and 54; Applicant-Owned) and Potential Development Site 2 (Block 5348, Lots 41, 42, 188 and 119; Non-Applicant-Owned) for facades fronting 37th Street.

(E) Designation (E-692)

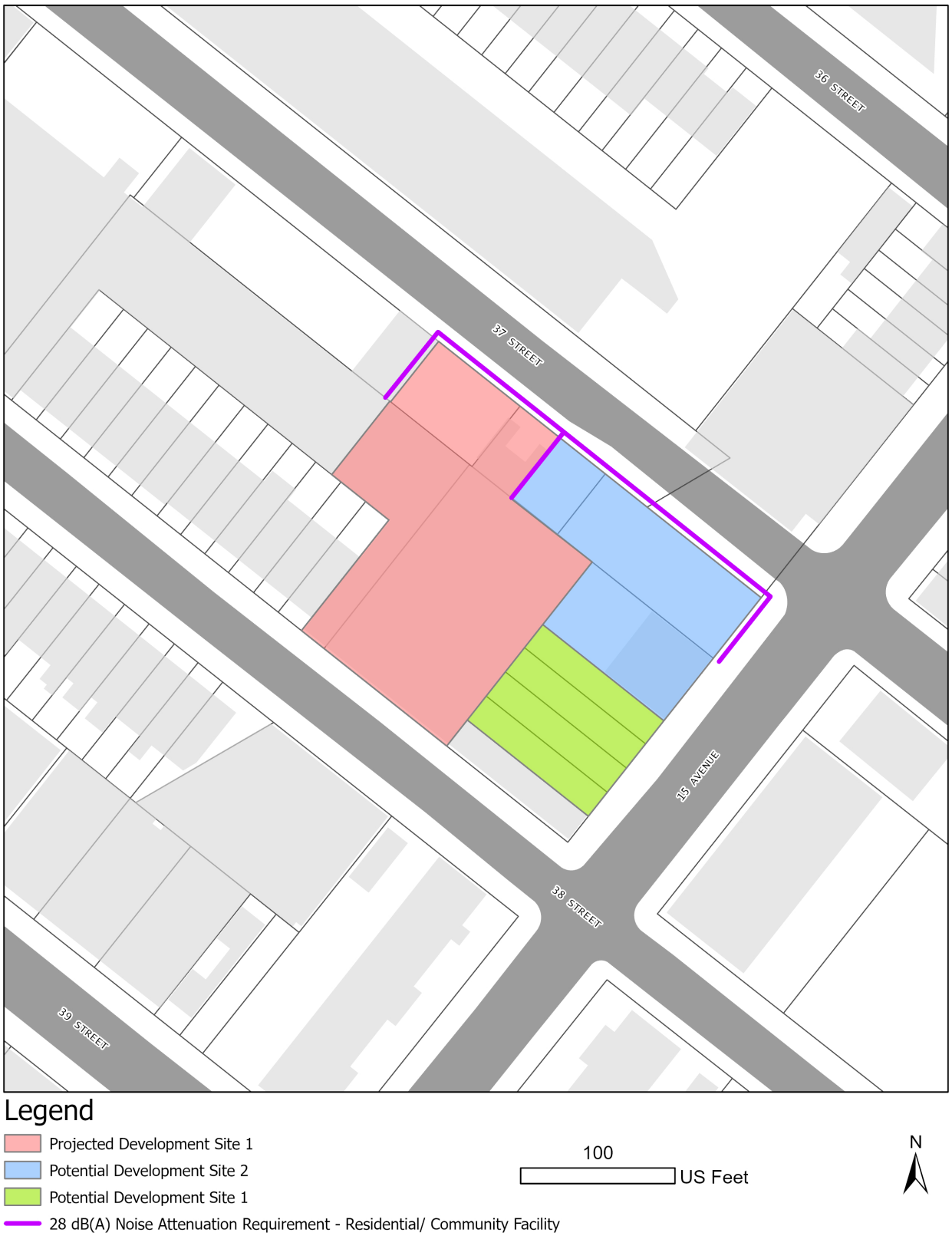
Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54)
To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on façades facing 37th Street, eastern façades facing 15th Avenue within 50 feet of 37th Street and western façades facing 14th Avenue within 50 feet of 37th Street to maintain an interior noise level not greater than 45 dBA for residential/community facility uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Potential Development Site 2 (Block 5348, Lots 41, 42, 118 and 119)

To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on façades facing 37th Street, eastern façades facing 15th Avenue within 50 feet of 37th Street and western façades facing 14th Avenue within 50 feet of 37th Street to maintain an interior noise level not greater than 45 dBA for residential/community facility uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

The above noise attenuation requirements are detailed in **Figure 2.8 2** below. With the above E-designation, there would be no significant adverse impacts related to noise as a result of the Proposed Actions.

Figure 19-2: Noise Attenuation Diagram



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: 1465 38 STREET
Date Received: 5/11/2021

Properties with no Architectural or Archaeological significance:

1) 37 STREET, BBL: 3053480015
2) 37 STREET, BBL: 3053480017
3) 3708 15 AVENUE, BBL: 3053480041
4) 3710 15 AVENUE, BBL: 3053480042
5) 3714 15 AVENUE, BBL: 3053480044
6) 3716 15 AVENUE, BBL: 3053480045
7) 3718 15 AVENUE, BBL: 3053480046
8) 3720 15 AVENUE, BBL: 3053480047
9) 3722 15 AVENUE, BBL: 3053480048
10) 1463 38 STREET, BBL: 3053480049
11) 1459 38 STREET, BBL: 3053480054
12) 1462 37 STREET, BBL: 3053480118
13) 3706 15 AVENUE, BBL: 3053480119

Gina Santucci 5/13/2021

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 35616_FSO_DNP_05132021.docx

Environmental Protection

Rohit T. Aggarwala
Commissioner

Angela Licata
Deputy Commissioner
Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

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

March 31, 2022

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

Re: Paperific Rezoning
Block 5348, Lots 15, 17, 41, 42, 44, 45, 46, 47, 48, 49, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 118, and 119
CEQR # 22DCP045K

Dear Evan Miller:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the March 2022 Revised Environmental Assessment Statement (EAS) Hazardous Materials chapter and the April 2021 Phase I Environmental Site Assessment (Phase I) prepared by Equity Environmental Engineering, LLC on behalf of Stamford LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning (DCP) from R6, M1-2, and M2-1 zoning districts to an R6B and C4-4A zoning districts affecting Block 5348, Lots 15, 17, 41, 42, 44, 45, 46, 47, 48, 49, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 118, and 119 (Affected Area) within the Borough Park neighborhood of Brooklyn Community District 12. The applicant is also seeking a zoning text amendment to create a Mandatory Inclusionary Housing Area that is coterminus with the Affected Area and a special permit pursuant to New York City Zoning Resolution Section 74-681 to allow development within or over a railroad or transit right-of-way or yard. The zoning map amendment, zoning text amendment, and special permit are collectively referred to as the Proposed Actions. The Proposed Actions would facilitate the development of a new 5-story, 134,840 gross square feet (gsf) commercial and office building on Block 5348, Lots 15, 17, 49, and 54 (Projected Development Site 1) that would include 19,337 gsf of ground floor commercial space for a supermarket; 84,573 gsf of office space; and 30,930 gsf at cellar level for an enclosed parking garage with 55 parking spaces and a parking ramp that would be accessible from 37th Street. The zoning map amendment would rezone Block 5348, Lots 41, 42, 44, 45, 46, 47, and 48 from an R6 zoning district to a C4-4A zoning district; Block 5348, Lot 119 from an R6/M1-2 zoning district to a C4-4A zoning district; Block 5348, Lots 49 and 118 from an M1-2 zoning district to a C4-4A zoning district; Block 5348, Lot 17 from an M1-2/M2-1 zoning district to a C4-4A zoning district; Block 5348, Lots 15 and 54 from an M2-1 zoning district to a C4-4A zoning district; and Block 5348, Lots 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, and 66 from an M2-1

zoning district to an R6B zoning district. Projected Development Site 1 is improved with buildings that are operating with active businesses. In addition to the applicant's Projected Development Site 1, it is expected that Block 5348, Lots 44, 45, 46, and 47 (Potential Development Site 1) and Block 5348, Lots 41, 42, 118, and 119 (Potential Development Site 2) would potentially develop as a result of the Proposed Actions. The other lots within the Affected Area are not expected to develop.

Block 5348, Lots 15, 17, 49, and 54

The April 2021 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including a grocery store, a commercial/office building, a synagogue, schools, residential buildings, a steel manufacturer, a coal yard, a stone yard, rail lines, lumber storage, a plumbing supply, a paint spraying facility, storefronts, garages, an auto repair shop, a paper bag and twine manufacturer, a motor freight station, a chemical manufacturer, a cotton batting manufacturer, a building materials manufacturer, a refrigerator manufacturer, a woodworking shop, a knitting mill, a shipping facility, an air conditioner manufacturer, a tire warehouse, a park, etc. Regulatory databases identified 17 spills, 9 historical auto sites, and 4 historical cleaner sites within 1/8 mile; 15 underground storage tank sites, 33 aboveground storage tank sites, and 2 dry cleaners within 1/4 mile; 24 leaking storage tank sites, 4 voluntary cleanup program sites, and 1 brownfield site within 1/2 mile of the project site.

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

Projected Development Site 1 (Block 5348, Lots 15, 17, 49, and 54) (Site under the control or ownership of the applicant)

- The conclusion of the EAS Hazardous Materials chapter incorrectly references Projected Development Site 1 as Block 1867, Lots 15, 17, 49, and 54. Therefore, DCP should instruct the applicant to revise the block to Block 5348.

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination and testing is not physically possible during the CEQR process, DEP concurs with the EAS recommendation that an (E) Designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property. The (E) Designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Potential Development Site 1 (Block 5348, Lots 44, 45, 46, and 47) and Potential Development Site 2 (Block 5348, Lots 41, 42, 118, and 119) (Sites not under the control or ownership of the applicant)

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

Future correspondence and submittals related to this project should include the following CEQR # **22DCP045K**. If you have any questions, you may contact me at (718) 595-4358.

Sincerely,

Wei Yu

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
T. Estesen
M. Wimbish
S. Shellooe – DCP
A. Meunier – DCP
M. Bertini – OER

APPENDIX B

ILLUSTRATIVE ARCHITECTURAL PLANS



PRELIMINARY DCP PLAN SET

MAY 23, 2022

1459-1463 38th St.

BROOKLYN, NY 11218

Architect

J FRANKL ARCHITECTS
16 Court St, 36th Floor
Brooklyn, NY 11241
718.569.2200

KEY PLAN



REVISION TABLE		
NUMBER	DATE	DESCRIPTION

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ULURP

PLUMBING
ELECTRICAL
MECHANICAL
STRUCTURAL
ARCHITECTURAL

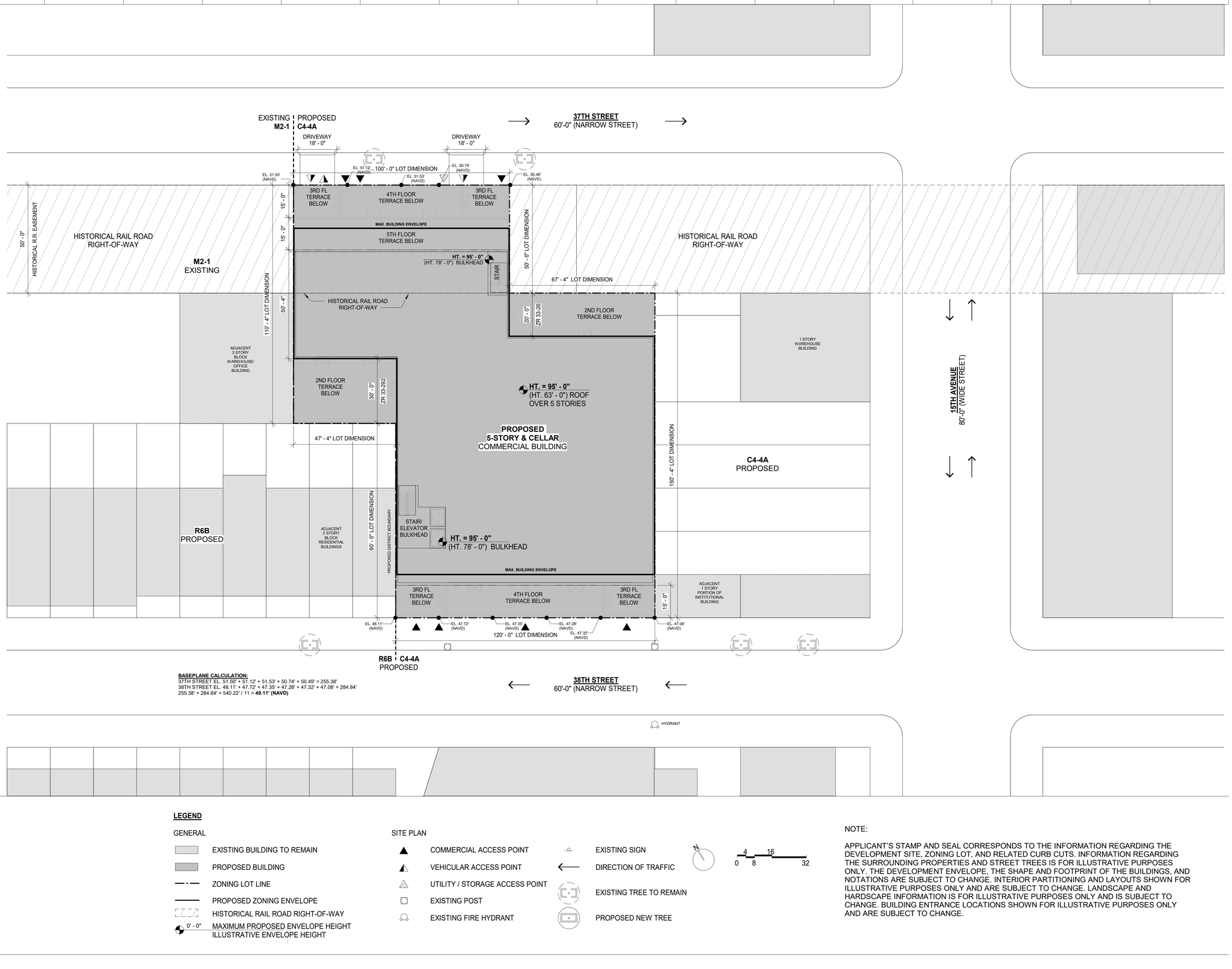
TITLE SHEET

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	HP
SCALE	

U-000

SHEET 1 OF 12

DOB BSCAN STICKER



BASEPLANE CALCULATION:
37TH STREET EL. 51.50' + 51.12' + 51.53' + 50.74' + 50.49' = 255.38'
38TH STREET EL. 48.11' + 47.72' + 47.35' + 47.28' + 47.32' + 47.06' = 284.84'
255.38' + 284.84' = 540.22' / 11 = **49.11' (NAVD)**

LEGEND

GENERAL

- EXISTING BUILDING TO REMAIN
- PROPOSED BUILDING
- ZONING LOT LINE
- PROPOSED ZONING ENVELOPE
- HISTORICAL RAIL ROAD RIGHT-OF-WAY
- 0' - 0" MAXIMUM PROPOSED ENVELOPE HEIGHT / ILLUSTRATIVE ENVELOPE HEIGHT

SITE PLAN

- COMMERCIAL ACCESS POINT
- VEHICULAR ACCESS POINT
- UTILITY / STORAGE ACCESS POINT
- EXISTING POST
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- DIRECTION OF TRAFFIC
- EXISTING TREE TO REMAIN
- PROPOSED NEW TREE

N

0 4 8 16 32

NOTE:

APPLICANT'S STAMP AND SEAL CORRESPONDS TO THE INFORMATION REGARDING THE DEVELOPMENT SITE, ZONING LOT, AND RELATED CURB CUTS. INFORMATION REGARDING THE SURROUNDING PROPERTIES AND STREET TREES IS FOR ILLUSTRATIVE PURPOSES ONLY. THE DEVELOPMENT ENVELOPE, THE SHAPE AND FOOTPRINT OF THE BUILDINGS, AND NOTATIONS ARE SUBJECT TO CHANGE. INTERIOR PARTITIONING AND LAYOUTS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO CHANGE. LANDSCAPE AND HARDSCAPE INFORMATION IS FOR ILLUSTRATIVE PURPOSES ONLY AND IS SUBJECT TO CHANGE. BUILDING ENTRANCE LOCATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO CHANGE.

1459-1463 38th St.

BROOKLYN, NY 11218

Architect

jfa

J FRANKL ARCHITECTS
16 Court St, 36th Floor
Brooklyn, NY 11241
718.569.2200

KEY PLAN



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ZONING LOT SITE PLAN

PLUMBING
ELECTRICAL
MECHANICAL
STRUCTURAL
ARCHITECTURAL

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	HP
SCALE	1" = 20'-0"

U-001

SHEET 2 OF 12

DOB BSCAN STICKER

1459-1463 38th Street - Paperific

Floor	Program	Gross Floor Area		*Deductions	Zoning Floor Area
Cellar	Parking (63 Spaces), Ramp, etc.		*25,900*	-	-
First	Parking Ramp		*2,760*	-	-
	Utility		*304*	-	-
	Bicycle Storage (35 Spaces)		*528*	-	-
	Loading		*790*		-
	Retail	19,985		200	19,785
	Office Lobby, Egress, etc.		1,220	12	1,208
Second			23,065	231	22,834
Third			21,737	217	21,520
Fourth			19,773	198	19,575
Fifth			18,278	183	18,095
Roof			500	5	495

Gross Subtotals	19,985	84,573	1,046	
Gross NB		134,840		
ZFA Zoning Lot Total	Floor Area (4.0 x 25,900 = **103,600 SF permitted**)			**103,512**
Total Proposed FAR **(4.0 FAR permitted)**				**4.00**
Remaining FAR				0.00

Lot Area Breakdown	
Lot 49	15,033
Lot 54	5,863
Lot 15	3,370
Lot 17	1,634
Lot Area Total	**25,900**

Legend	
	Commercial Retail
	Commercial Office
	Parking Ramp
	Utility / Bike Parking
	Loading

Maximum FAR	**4.0**
Maximum Floor Area	**103,600**

1459-1463 38th St.
BROOKLYN, NY 11218

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jfa

J FRANKL ARCHITECTS
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KEY PLAN



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PLUMBING
ELECTRICAL
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STRUCTURAL
ARCHITECTURAL

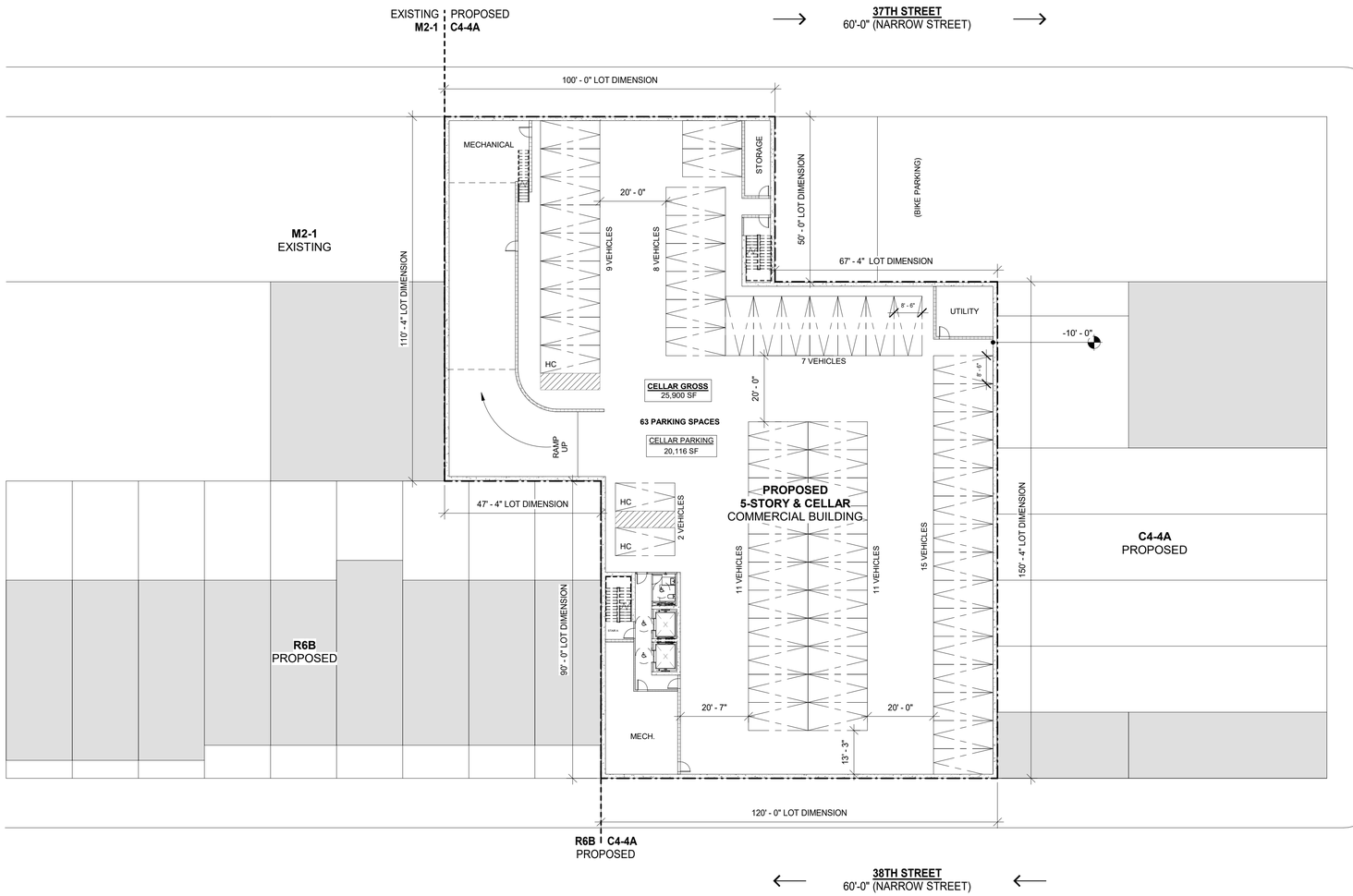
ZONING ANALYSIS

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	

U-002

SHEET 3 OF 12

DOB BSCAN STICKER



LEGEND

GENERAL

- EXISTING BUILDING TO REMAIN
- PROPOSED BUILDING
- ZONING LOT LINE
- PROPOSED ZONING ENVELOPE
- 0' - 0" MAXIMUM PROPOSED ENVELOPE HEIGHT / ILLUSTRATIVE ENVELOPE HEIGHT

SITE PLAN

- COMMERCIAL ACCESS POINT
- VEHICULAR ACCESS POINT
- UTILITY / STORAGE ACCESS POINT
- EXISTING POST
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- DIRECTION OF TRAFFIC
- EXISTING TREE TO REMAIN
- PROPOSED NEW TREE

N

0 4 8 16 32

NOTE:

APPLICANT'S STAMP AND SEAL CORRESPONDS TO THE INFORMATION REGARDING THE DEVELOPMENT SITE, ZONING LOT, AND RELATED CURB CUTS. INFORMATION REGARDING THE SURROUNDING PROPERTIES AND STREET TREES IS FOR ILLUSTRATIVE PURPOSES ONLY. THE DEVELOPMENT ENVELOPE, THE SHAPE AND FOOTPRINT OF THE BUILDINGS, AND NOTATIONS ARE SUBJECT TO CHANGE. INTERIOR PARTITIONING AND LAYOUTS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO CHANGE. LANDSCAPE AND HARDSCAPE INFORMATION IS FOR ILLUSTRATIVE PURPOSES ONLY AND IS SUBJECT TO CHANGE. BUILDING ENTRANCE LOCATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO CHANGE.

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BROOKLYN, NY 11218

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KEY PLAN



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ULURP

PLUMBING

ELECTRICAL

MECHANICAL

STRUCTURAL

ARCHITECTURAL

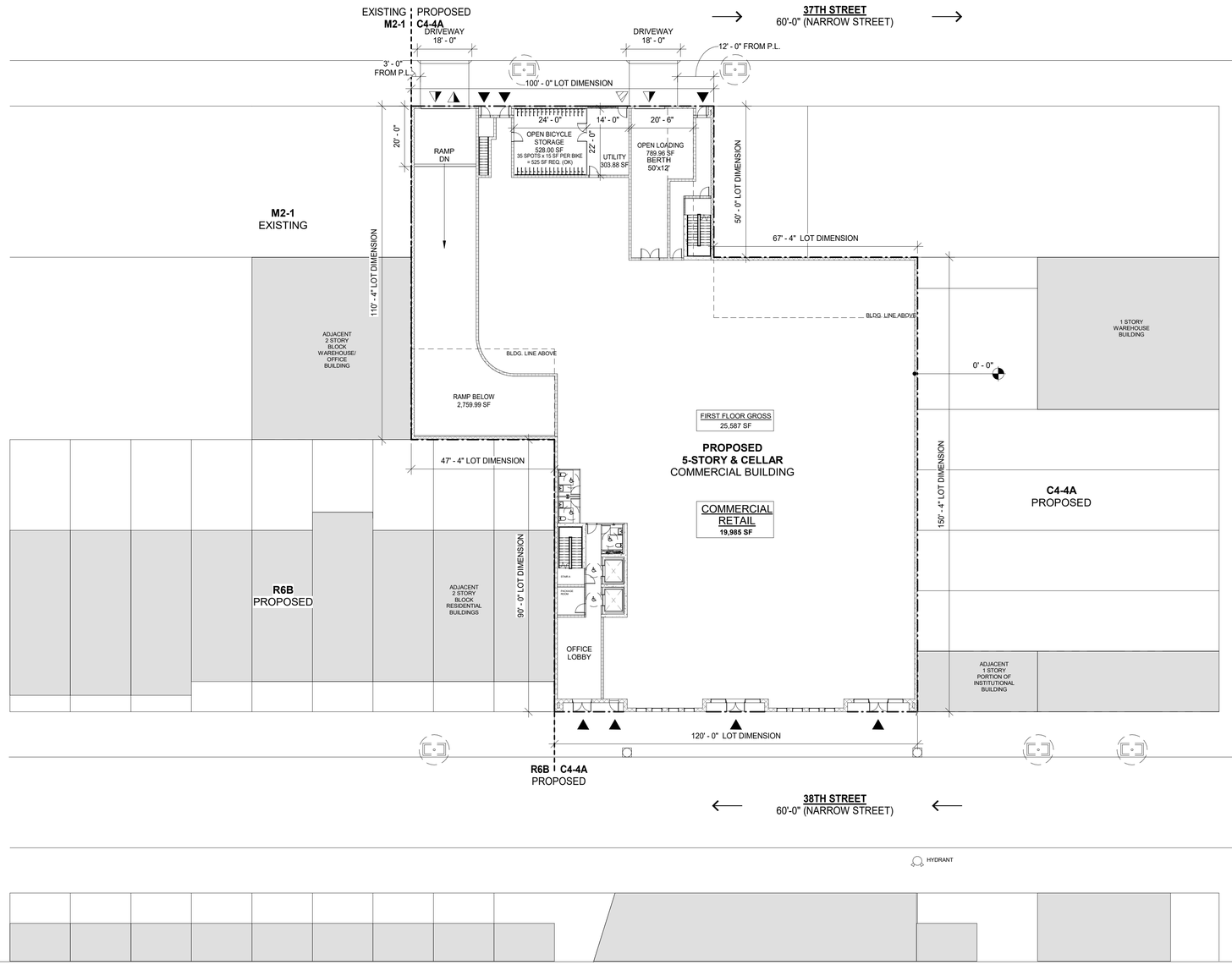
ILLUSTRATIVE CELLAR PLAN

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	1" = 20'-0"

U-100

SHEET 4 OF 12

DOB BSCAN STICKER



LEGEND

GENERAL

- EXISTING BUILDING TO REMAIN
- PROPOSED BUILDING
- ZONING LOT LINE
- PROPOSED ZONING ENVELOPE
- 0' - 0" MAXIMUM PROPOSED ENVELOPE HEIGHT / ILLUSTRATIVE ENVELOPE HEIGHT

SITE PLAN

- COMMERCIAL ACCESS POINT
- VEHICULAR ACCESS POINT
- UTILITY / STORAGE ACCESS POINT
- EXISTING POST
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- DIRECTION OF TRAFFIC
- EXISTING TREE TO REMAIN
- PROPOSED NEW TREE

N

0 4 8 16 32

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KEY PLAN



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PLUMBING
ELECTRICAL
MECHANICAL
STRUCTURAL
ARCHITECTURAL

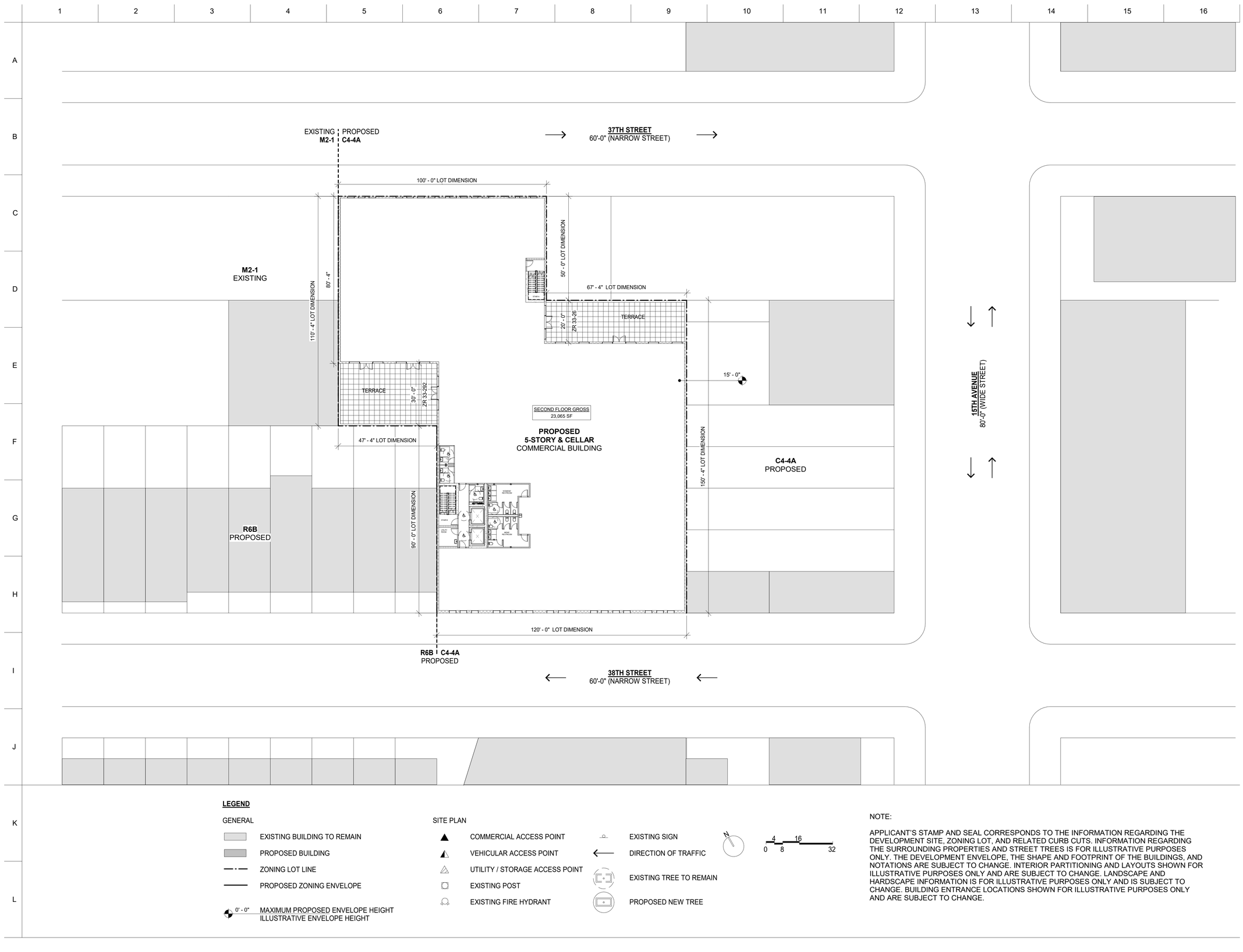
ILLUSTRATIVE FIRST FLOOR PLAN

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	1" = 20'-0"

U-101

SHEET 5 OF 12

DOB BSCAN STICKER



LEGEND

GENERAL

- EXISTING BUILDING TO REMAIN
- PROPOSED BUILDING
- ZONING LOT LINE
- PROPOSED ZONING ENVELOPE
- 0' - 0" MAXIMUM PROPOSED ENVELOPE HEIGHT / ILLUSTRATIVE ENVELOPE HEIGHT

SITE PLAN

- COMMERCIAL ACCESS POINT
- VEHICULAR ACCESS POINT
- UTILITY / STORAGE ACCESS POINT
- EXISTING POST
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- DIRECTION OF TRAFFIC
- EXISTING TREE TO REMAIN
- PROPOSED NEW TREE

N

0 4 8 16 32

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BROOKLYN, NY 11218

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jfa

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16 Court St, 36th Floor
Brooklyn, NY 11241
718.569.2200

KEY PLAN



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PLUMBING
ELECTRICAL
MECHANICAL
STRUCTURAL
ARCHITECTURAL

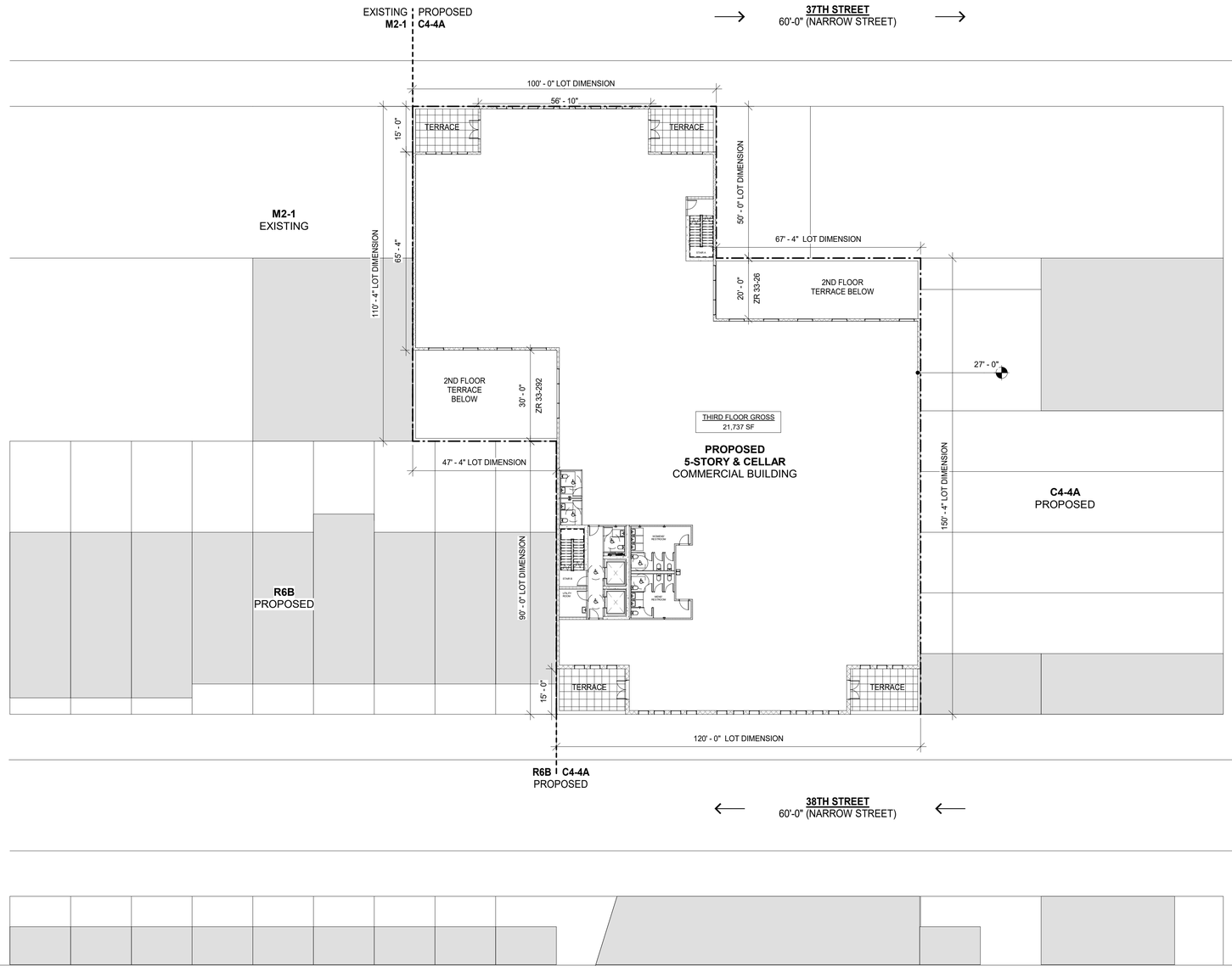
ILLUSTRATIVE SECOND FLOOR PLAN

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	1" = 20'-0"

U-102

SHEET 6 OF 12

DOB BSCAN STICKER



LEGEND

GENERAL

- EXISTING BUILDING TO REMAIN
- PROPOSED BUILDING
- ZONING LOT LINE
- PROPOSED ZONING ENVELOPE
- 0' - 0" MAXIMUM PROPOSED ENVELOPE HEIGHT / ILLUSTRATIVE ENVELOPE HEIGHT

SITE PLAN

- COMMERCIAL ACCESS POINT
- VEHICULAR ACCESS POINT
- UTILITY / STORAGE ACCESS POINT
- EXISTING POST
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- DIRECTION OF TRAFFIC
- EXISTING TREE TO REMAIN
- PROPOSED NEW TREE

N

0 4 8 16 32

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KEY PLAN



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PLUMBING

ELECTRICAL

MECHANICAL

STRUCTURAL

ARCHITECTURAL

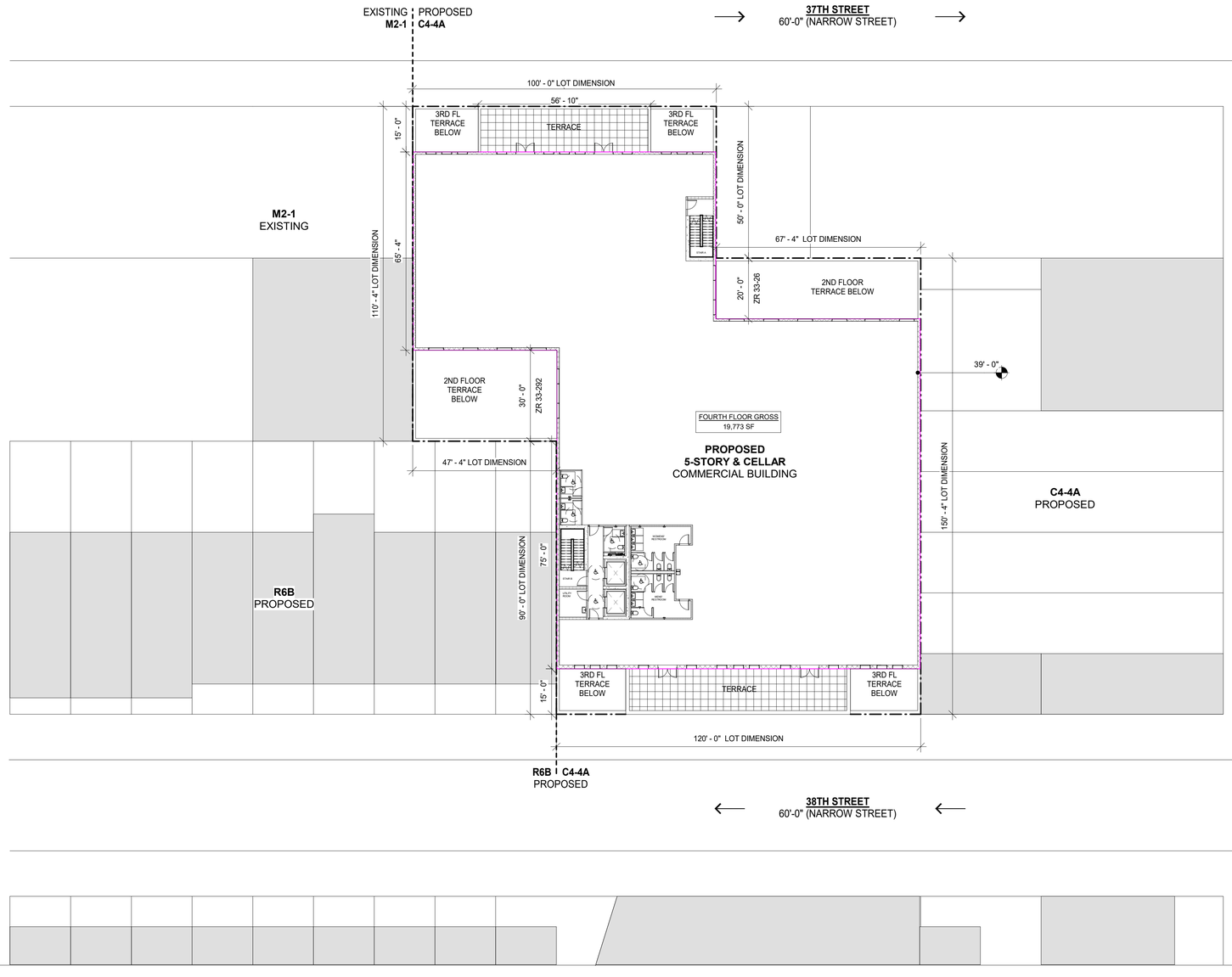
ILLUSTRATIVE THIRD FLOOR PLAN

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	1" = 20'-0"

U-103

SHEET 7 OF 12

DOB BSCAN STICKER



LEGEND

GENERAL

- EXISTING BUILDING TO REMAIN
- PROPOSED BUILDING
- ZONING LOT LINE
- PROPOSED ZONING ENVELOPE
- 0' - 0" MAXIMUM PROPOSED ENVELOPE HEIGHT / ILLUSTRATIVE ENVELOPE HEIGHT

SITE PLAN

- COMMERCIAL ACCESS POINT
- VEHICULAR ACCESS POINT
- UTILITY / STORAGE ACCESS POINT
- EXISTING POST
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- DIRECTION OF TRAFFIC
- EXISTING TREE TO REMAIN
- PROPOSED NEW TREE

N

0 4 8 16 32

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PLUMBING
ELECTRICAL
MECHANICAL
STRUCTURAL
ARCHITECTURAL

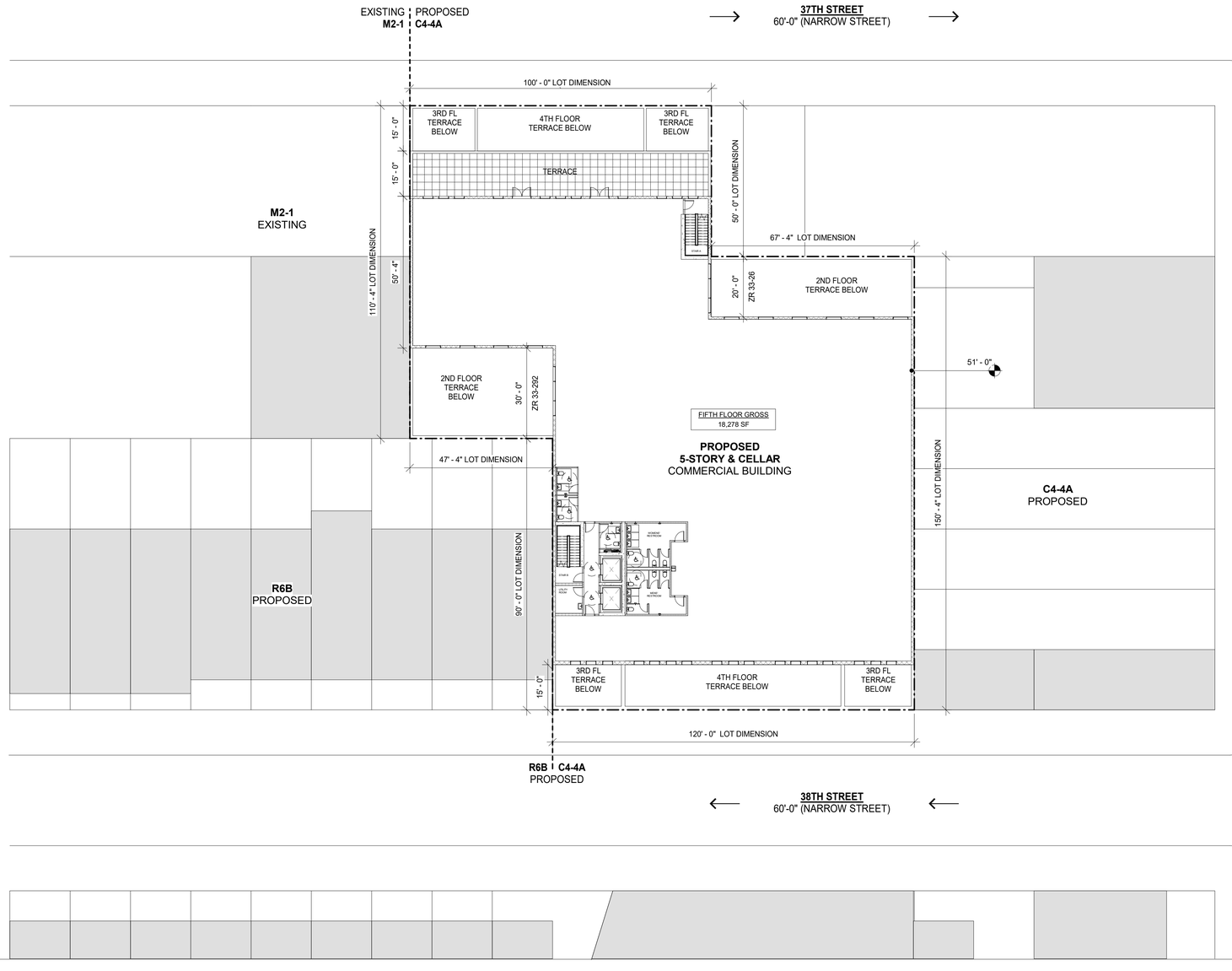
ILLUSTRATIVE FOURTH FLOOR PLAN

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	1" = 20'-0"

U-104

SHEET 8 OF 12

DOB BSCAN STICKER



LEGEND

GENERAL

- EXISTING BUILDING TO REMAIN
- PROPOSED BUILDING
- ZONING LOT LINE
- PROPOSED ZONING ENVELOPE
- 0' - 0" MAXIMUM PROPOSED ENVELOPE HEIGHT / ILLUSTRATIVE ENVELOPE HEIGHT

SITE PLAN

- COMMERCIAL ACCESS POINT
- VEHICULAR ACCESS POINT
- UTILITY / STORAGE ACCESS POINT
- EXISTING POST
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- DIRECTION OF TRAFFIC
- EXISTING TREE TO REMAIN
- PROPOSED NEW TREE

N

0 4 8 16 32

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Brooklyn, NY 11241
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PLUMBING
ELECTRICAL
MECHANICAL
STRUCTURAL
ARCHITECTURAL

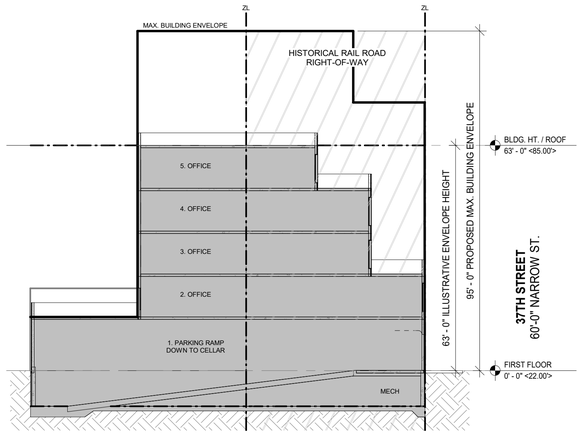
ILLUSTRATIVE FIFTH FLOOR PLAN

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	1" = 20'-0"

U-105

SHEET 9 OF 12

DOB BSCAN STICKER



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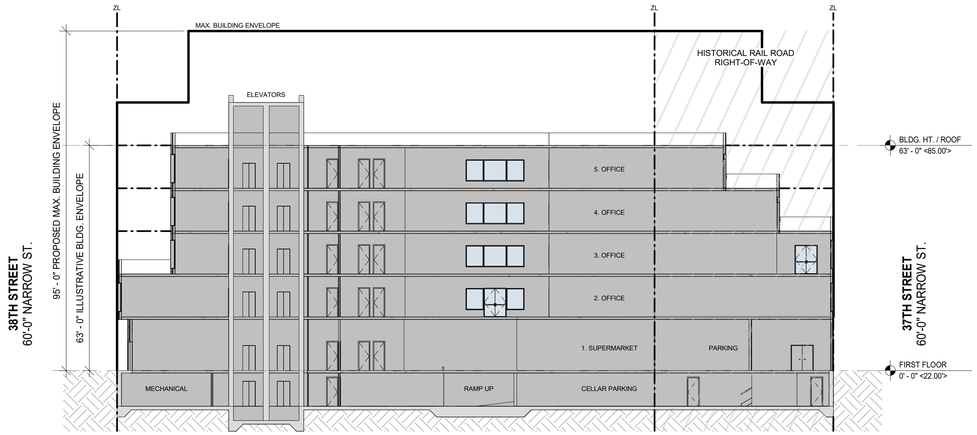
1" = 20'-0"



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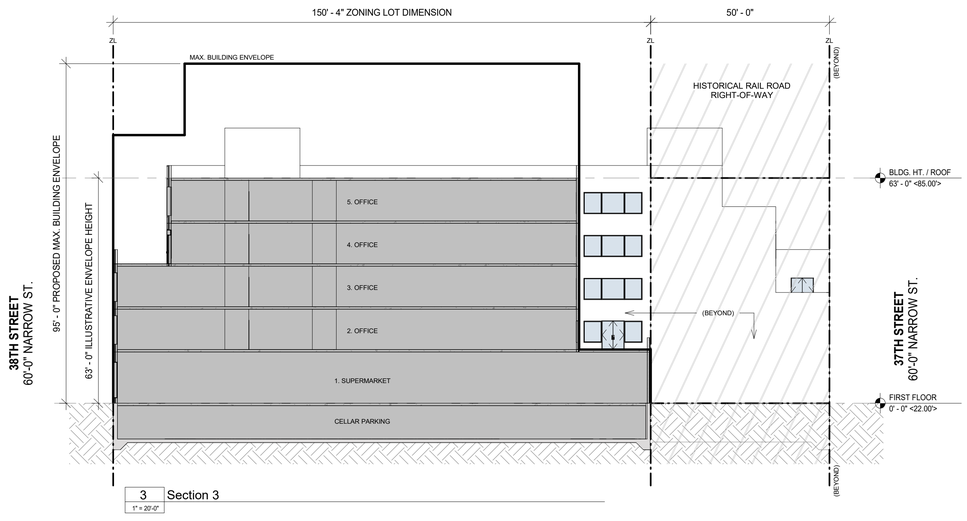
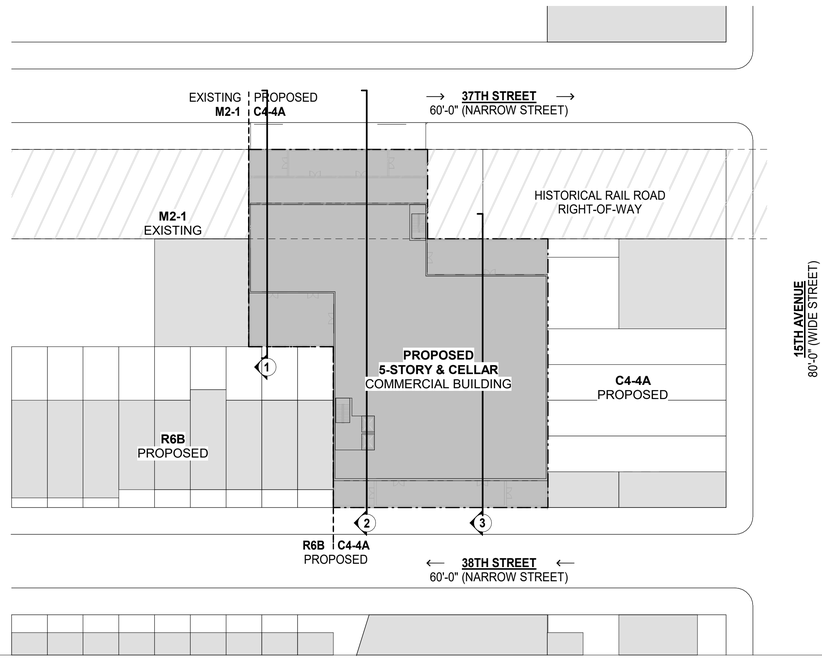
1" = 20'-0"



3 Section 3
1" = 20'-0"



LEGEND

- **HT. = +90.00'** / (HT. = +86.58') — MAXIMUM PROPOSED ENVELOPE HEIGHT / ILLUSTRATIVE ENVELOPE HEIGHT
- BASE PLANE
- ZONING LOT LINE BOUNDARY
- MAXIMUM PROPOSED BUILDING ENVELOPE
- ILLUSTRATIVE BUILDING ENVELOPE
- RAILROAD RIGHT-OF-WAY

NOTE:

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ULURP

PLUMBING
ELECTRICAL
MECHANICAL
STRUCTURAL
ARCHITECTURAL

SECTION DIAGRAMS

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	As indicated

U-201

SHEET 10 OF 12

DOB BSCAN STICKER



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BROOKLYN, NY 11218

Architect

jfa

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KEY PLAN



REVISION TABLE		
NUMBER	DATE	DESCRIPTION

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ULURP

PLUMBING
ELECTRICAL
MECHANICAL
STRUCTURAL
ARCHITECTURAL

ILLUSTRATIVE 38TH ST. ELEVATION

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	

U-301

SHEET 10 OF 12

DOB BSCAN STICKER



1459-1463 38th St.
BROOKLYN, NY 11218

Architect

J FRANKL ARCHITECTS
16 Court St, 36th Floor
Brooklyn, NY 11241
718.569.2200

KEY PLAN



REVISION TABLE		
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ILLUSTRATIVE 37TH ST. ELEVATION

DOB JOB #	
BIN #	
DATE	5/23/2022
DRAWN BY	Author
SCALE	

U-302

SHEET 12 OF 12

DOB BSCAN STICKER

APPENDIX C

PHASE I ESA

PHASE I ENVIRONMENTAL SITE ASSESSMENT



1459-1465 38th Street
Brooklyn, New York 11692

April 2021

Prepared for:

Northern Development Group, LLC
1814 Avenue J
Brooklyn, New York 11230

Prepared by:

EQUITY ENVIRONMENTAL ENGINEERING, LLC

500 International Drive, Suite 150
Mount Olive, New Jersey 07828
(973) 527-7451

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

April 2021

EXECUTIVE SUMMARY

Equity Environmental Engineering, LLC (Equity) was retained by Northern Development Group, LLC to conduct a Phase I Environmental Site Assessment (Phase I) to identify Recognized Environmental Conditions (RECs) associated with current and prior site use at the property identified 1459-1465 38th Street. Equity conducted the assessment in accordance with the requirements of the American Society for Testing and Materials (ASTM) Standard E1527-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and good professional practices.

Site Overview

The Subject Property is as follows:

Property Designation	1465 38th Street
Property Address	1459-1465 38th Street Brooklyn, NY 11218
Parcel ID	Block 5348 / Lots 15, 17, 49, 54
Parcel Size	25,881 Square Feet
Number of Buildings	One (1)
Number of Stories	Two (2)
Finished Area (SF)	20,700 Square Feet
Date Constructed	1930
Construction Type	Concrete foundation with steel framing
Property Usage	Grocery store
Inspection Date	April 20, 2021
Weather Conditions	Sunny, 70's
Site Contact/Title	Moshe Friedlander / Store manager
Site Contact Phone	(347) 996-8504

Definitions

The ASTM Phase I Standard defines environmental conditions as follows:

- ***Recognized Environmental Conditions (RECs)***

  The term "Recognized Environmental Condition" means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

- ***Controlled Recognized Environmental Conditions (CRECs)***

  The term "Controlled Recognized Environmental Condition" is a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

- ***Historical Recognized Environmental Conditions (HRECs)***

  The term "Historical Recognized Environmental Condition" is 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 residential use criteria established by a regulatory authority, without subjecting the property to any required controls, such as property use restrictions or activity and use limitations (AULs, which include both institutional controls and engineering controls).

- ***Vapor Encroachment Conditions (VECs)***

  The term "Vapor Encroachment Condition" is a condition where 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.

- ***De Minimis Conditions***

  The term "De Minimis Condition" is a condition 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.

- ***Data Gaps***

  The term "Data Gap" is a lack of or inability to obtain information required by this practice 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, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.).

- ***Non-Scope Considerations***

  Consideration of business environmental risk issues some of which are identified in Section 13 and Appendix XI of ASTM E1527-14 (e.g., asbestos, ecological resources, mold, radon, wetlands, regulatory compliance et. Al.).

Findings

The following environmental conditions were identified:

A. Recognized Environmental Conditions (RECs)

No RECs were identified as a result of this assessment.

B. Controlled Recognized Environmental Conditions (CRECs)

No Controlled RECs were identified as a result of this assessment.

C. Historical Recognized Environmental Conditions (HRECs)

No Historic RECs were identified as a result of this assessment.

D. Vapor Encroachment Conditions (VECs)

The EDR Vapor Encroachment database identified VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property related to three historic gas stations and one historic cleaner at higher elevations. Based on these findings, a possible vapor encroachment cannot be ruled out. Details on the VECs can be found in Appendix C.

E. De Minimis Conditions

No De Minimis Conditions were identified as a result of this assessment.

F. Data Gaps

Equity did not identify any significant data gaps that would affect its ability to identify RECs associated with the Subject Property.

Conclusions

Equity's review of available information and observations of the subject and surrounding properties indicates that no RECs, CRECs, HRECs, De Minimus Conditions, or data gaps were identified as a result of this assessment. However, a VEC could not be ruled out.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

April 2021

I. INTRODUCTION

A. Purpose

Equity Environmental Engineering, LLC (Equity) was contracted by Northern Development Group LLC to perform a Phase I Environmental Site Assessment of the referenced property in accordance with the American Society for Testing and Materials (ASTM) Standard E1527-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The ASTM Standard satisfies the requirements of the United States Environmental Protection Agency's (USEPA) All Appropriate Inquiry Standard, 40 CFR Part 312, which is required to qualify for certain landowner liability protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The ASTM Standard constitutes "all appropriate inquiry into previous ownership and uses of the property consistent with good commercial or customary practice." The investigation was conducted to identify Recognized Environmental Conditions (RECs), which are identified as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

It is Equity's understanding that the Phase I ESA is being conducted as part of the due diligence process for the ongoing rezoning of the Subject Property. The rezoning is pursuant to the development of a nine-story commercial use building.

B. Scope-of-Services

The Phase I consisted of the following components:

1. review of environmental and historical records
2. site reconnaissance
3. interviews
4. report preparation

The environmental assessment is non-invasive and does not include any testing or sampling of materials, such as soil, water, air, or building materials. The environmental assessment included a non-invasive (no sampling) evaluation of the potential for asbestos-containing materials, lead-based paint, and lead in drinking water.

C. Significant Assumptions, Limitations, and Exceptions

Unless noted, Equity assumes that the information obtained through the records review, site inspection, and interviews is correct. Equity does not warrant the accuracy of this information or warrant that any RECs that were not identified through the Phase I process do not exist on the property. RECs do not include De Minimis conditions that do not present

a threat to human health or the environment, and that would not be subject to an enforcement action by government agencies.

D. Special Terms and Conditions

No Special Terms or Conditions apply to this project.

E. Reliance

This report is for the use and benefit of Northern Development Group LLC and any of their respective affiliates, agents, and advisors.

II. SITE DESCRIPTION

A. Location and Description

The subject parcel is identified as 1459-1465 38th Street, Brooklyn, NY 11218. The title to the properties is vested in Stamford LLC, Capril Optics Inc, and Capri Wellings Inc. The Subject Property is identified as Block 5348/Lots 15, 17, 49, and 54 on the New York City Tax Map. Parcels 15 and 17 are rectangular-shaped lots on 37th Street. Parcel 49 is a rectangular-shaped lot on 38th Street. Parcel 54 is an irregularly shaped lot on 38th Street. The Subject Property is located in the Borough Park neighborhood of Brooklyn.

A USGS Site Location Map and Site Boundary Map are included in Figures 1 and 2 in Appendix A. Site photographs are provided in Appendix B.

B. Site and Vicinity Characteristics

The Subject Property is currently located in an M1-2/M2-1 zoning district surrounded by mostly residential and commercial uses with some industrial uses. This zoning district allows for light and moderate industrial uses. The proposed rezoning would change the Subject Property to an R6B and C4-4A zoning district. The R6B district would bring the already developed row houses included in the rezoning into conformance. The C4-4A district would allow for the development of commercial and office space in densely populated areas with limited parking.

C. Current Use of the Property

The Subject Property is currently used as a grocery store. Lot 15 is a parking lot for the store, Lot 17 is the loading dock area for the store, Lot 49 is the main portion of the grocery store and some storage area, and Lot 54 is storage for the store.

D. Description of Structures, Improvements, and Utilities

The existing building is constructed with a steel frame and concrete foundation.

Utilities at the property include the following:

1. Electricity

Electricity is provided by Consolidated Edison (Con Ed). There are no emergency generators located on the Subject Property.

2. Water

Potable water is supplied by the City of New York. No groundwater drinking wells were reported or identified as a result of this assessment.

3. Sewers

Sanitary wastewater is discharged to the City of New York sewer system.

4. Heat

The building is heated by natural gas-fired boiler. The natural gas is provided by National Grid.

E. Current Uses of Adjoining Properties

The following sites adjoin the parcel:

- North –Large commercial/office building
- East – Synagogue
- South – Yeshiva Imrei Phi boy's school
- West – Residential

III. USER PROVIDED INFORMATION

The ASTM Standard defines the "User" as the person on whose behalf the Phase I is being conducted. The ASTM Standard requires the User to provide site information for the Phase I. ESI was not provided with the following information.

- Environmental liens (i.e., legal, deed notice) or Activity and Use Limitations (i.e., engineering controls, etc.) were identified.

- Specialized knowledge or commonly known information regarding current or historical hazardous material use on the Subject Property or adjoining properties, which would be considered a REC, were identified.

- There were no indications that the fair market value of the property was reduced due to environmental concerns.

IV. RECORDS REVIEW

A. Standard Environmental Record Sources

EDR of Shelton, Connecticut, was contracted by Equity to prepare an environmental database survey for the subject site and surrounding areas. A copy of the EDR report, which summarizes the environmental concerns presented by nearby sites, is attached as Appendix C. The listing of a site on any of these databases is, in itself, not indicative of an existing environmental concern. Distance, geology, and groundwater flow gradient are the factors that determine the importance of a listed site to the soil and groundwater quality on the Subject Property. Equity has relied on distance from the listed site and topographical gradient to judge whether that site has the potential to affect the Subject Property.

According to the EDR environmental database search, the Subject Property was not identified in any database. The surrounding properties were identified in the federal and state databases within a one-wile search radius of the Subject Property and are identified as follows:

Database	0-1/8 Mile	1/8 – 1/4 Mile	1/4 – 1/2 Mile	1/2 – 1 Mile
RCRA-LQG	3	9	-	-
RCRA-SQG	0	4	-	-
RCRA-VSQG	0	0	-	-
RCRA-NonGen/NLR	26	75	-	-
EDR Historic Auto	9	-	-	-
NY Spills	17	-	-	-
NY Manifest	34	90	-	-
NY Drycleaners	0	2	-	-
NJ Manifest	7	29	-	-
NY AST	9	21	-	-
NY UST	3	12	-	-
NY E Designation	6	-	-	-
NY L Tanks	2	5	17	-
PA Manifest	0	2	-	-
NY VCP	0	1	3	-
NY HSWDS	0	0	1	-
NY SWF/LF	0	3	2	-
NY Brownfields	1	0	0	-
NY SHWS	0	0	1	1

Additional information regarding each of the individual properties identified in the databases listed above is provided in **Appendix C**.

B. Orphans Summary

The EDR Orphan Summary lists ten (10) properties that were included in certain federal or state environmental databases but were reported by EDR to be unmapped due to insufficient address information. The listing of orphan sites within the database search was reviewed, cross-referencing available address information with facility names. Upon review, it was determined that no orphan site appears to be associated with the subject or adjoining properties. Additional information regarding the EDR Orphan Summary Report can be found in **Appendix C.**

C. City Environmental Quality Review "E" Designation

A copy of the EDR report, includes City Planning Commission approved amendments to the New York City Zoning Map which may include environmental designations of certain tax lots that have physical or historical evidence of uses related to hazardous materials. The "E" designations shown on the zoning maps function as indicators of the environmental review that must be conducted when the lots are developed in accordance with the regulations of the rezoned district. The City Planning Commission's rezoning actions, including environmental designations, were made effective upon the City Council's approval of the Zoning Map Amendment. Based upon a review of the NYCDEP "E" Designation database on April 21, 2021, the Subject Property was not identified.

D. Physical Setting Source

The Subject Property is located in Brooklyn and surrounded by primarily residential and commercial properties. The ground surface at the site is predominantly level. Ground cover consists primarily of a concrete sidewalk, the paved parking and loading dock areas, and the building footprint The Subject Property is accessed from the west or east via 38th Street and 37th Street, respectively. Based on a review of the 2013-2014 USGS Brooklyn, Coney Island, The Narrows, and Jersey City 7.5-minute topographic maps for the area, groundwater is inferred to flow to the southeast toward Paerdegat Basin.

Based on the soil survey maps published by the USDA Soil Conservation Service (1994) and information provided in the EDR Report, the subsurface soils expected at the site include Urban Land, which is variable in texture and does not qualify as hydric soil. Urban land soils are those which have lost original characteristics due to human activity (construction, development, demolition, debris, etc.). The geologic age identification of the rock at the Subject Property is of the Mesozoic Era, Cretaceous System, Upper Cretaceous Series, (Code uK). No settling ponds, lagoons, surface impoundments, wetlands, or natural catch basins were observed on the Subject Property during this investigation.

E. Historical Use Information on the Property

The historical sources reviewed indicate that the property was initially used as stone and coal yards prior to the buildings being developed similar to current footprints. Copies of these sources are provided in **Appendix D**.

1. Sanborn Fire Insurance Maps

Equity reviewed digital Sanborn Fire Insurance Maps provided by EDR, Inc. Copies are provided as Appendix D. A total of twenty-three maps were reviewed spanning 1906 to 2007.

Year	Subject Property	Surrounding Area
1906	The Subject Property is undeveloped.	The surrounding blocks are all undeveloped.
1929	The Subject Property is now occupied by a steel garage/bungalow manufacturing operation that extends off the Subject Property boundary. The portions of the manufacturer on the Subject Property includes the coal yard, the stone yard, a stone-saw-planer area, and a storage area. Also, the BMT Culver Line railroad runs behind the property along 37th Street.	On the same block, about half of the area is developed with dwellings and storefronts. The remainder of the lot is developed with the other portion of the steel manufacturer, lumber storage, and plumbing supply company. On block 5349, there is a paint spraying facility, a lumber storage lot, lofts, and the remainder is residential dwellings. On block 5367, it is mostly undeveloped with five storefronts and two flats. On block 5347 it is developed with two garages, lofts, and the rest is dwellings.
1950	The Subject Property no longer has the stone yard and stone-saw-planer area.	On the same lot, an auto repair shop is now shown on the lumber storage area. On block 5349, the lumber yard is now a paper bag and twine manufacturer.
1969	The coal yard is now gone and there is a motor freight station and a chemical manufacturer.	On block 5349, the bag and twine manufacturer is now a cotton batting manufacturer. On block 5367, an undeveloped area is now occupied by a building

		materials manufacturer. On block 5347, one of the garages and half the dwellings are now occupied by a refrigerator manufacturer, a woodworking shop, a knitting mill, a shipping facility, and an air conditioner manufacturer.
1977	The Subject Property is unchanged from the previous map.	On the same block, the plumbing supply building is now a tire warehouse. On block 5347, the knitting mill is now an unspecified manufacturer and warehouse.
1979	The chemical manufacturer is now a warehouse.	On the same block, several buildings along 15th Avenue are now gone and used for building material storage. On block 5637, the remainder of the undeveloped area is now Dahill Park.
1981, 1983	The warehouse is now occupied by a chemical manufacturer.	On the same block, the area for building material storage is now occupied by a one-story building. On block 5347, the dwellings along 15th Avenue are now undeveloped lots.
1986, 1987	The Subject Property is unchanged from the previous map.	On block 5347, the newly undeveloped lots are now apartment buildings.
1988, 1989, 1992, 1993, 1994, 1995	The auto currier station and chemical manufacturer are now warehouses.	On block 5347, the other large garage is now a commercial building.
2001	The Subject Property is unchanged from the previous map.	On block 5347, the new commercial building and one of the warehouse buildings are now private school buildings.
2002	The Subject Property is unchanged from the previous map.	On the same block, the steel manufacturer near the Subject Property is now a school building and a warehouse building.

2003, 2004	The Subject Property is unchanged from the previous map.	On the same block, vacant lots along 15th Avenue are now used for material storage.
2005, 2006, 2007	The BMT Culver Line is now gone on the Subject Property.	The BMT Culver Line is now gone from the entire block along 37th Street.

2. USGS Topographic Maps

Equity reviewed a total of nine (9) historical Topographic Maps provided by EDR ranging in date from 1897 to 2014. The maps indicate that there were active rail lines directly north of Subject Property on 37th Street until sometime between 1998 and 2013. Also, the maps show the Subject Property and some of the surrounding area was not developed until sometime between 1900 and 1947. Copies are provided in **Appendix E**.

3. Historic Aerial Photographs

Equity reviewed a total of twelve (12) aerial photographs spanning from 1924 to 2017. The Subject Property is consistent with the current shape and size of the Subject Property following the 1951 photo. Based on the available photos, the rail line along 37th Street appears to go out of service sometime between the 1984 and 2006 photos. Other buildings on the Subject Property appear to remain the same shape and size from the 1951 photo onward. Copies are provided in **Appendix F**.

4. City Directory

Equity reviewed local city directory listings provided by EDR, Inc. for the subject and adjacent properties from 1928 to 2017. The area is characterized by commercial and residential listings. The City Directory report is included as **Appendix G**.

The Subject Property was primarily identified as commercial. Adjacent properties were also primarily identified as commercial, residential, and some industrial. The industrial listings for the adjacent properties include the Anchor Steel Structures (1976, 1960, 1928), Harry S Repair & Brake Lining (1976), Dunbello Garage Corp (1960), Triano Trucking Company (1973), and Betty Court Auto Repair (1928). The commercial listing for the adjacent properties includes Yeshiva Imrei Phi (2014, 2005).

5. Regulatory File Review

Equity reviewed title information for the Subject Property contained in New York City Zola database. The title to the property is vested in Stamford LLC, Capril Optics Inc., and Capri Wellings LLC. The Subject Property is identified as Block 5348/Lots 15, 17, 49, and 54.

For Lot 15, according to the New York City Department of Buildings (DOB) website, zero complaints, zero violations, six jobs, and zero actions have been identified at 1456 37th Street. The jobs are in relation to a new building, filing a pavement plan, mechanical and plumbing work, installing a sprinkler system, and shoring and underpinning.

For Lot 17, there is no available property record on the New York City DOB website.

For Lot 49, according to the New York City DOB website, four complaints, two violations, eight jobs, and eleven actions have been identified at 1461 and 1463-1471 38th Street. The complaints are in relation to a hole in the wall, no building permit, no signs on the sidewalk, and illegal signs for the driveway. The violations are in relation to work without a permit. The jobs are in relation to installing a business sign, removing the mezzanine, replacing the HVAC unit, replacing the roof, and plumbing work. The actions are in relation to certificates of occupancy, demolition, docket, new buildings, plumbing repairs, and a DOB violation.

For Lot 54, according to the New York City DOB website, zero complaints, seven violations, five jobs, and eight actions have been identified at 1459 38th Street. The violations are in relation to the boiler. The jobs are in relation to replacing the HVAC unit, adding a second and third floor, structural work, and filing a builders pavement plan. The actions are in relation to alteration. certificates of occupancy, oil burner application, plumbing, and DOB violations.

Regulatory records are included in **Appendix H**.

6. Prior Environmental Assessments and Reports

Equity was not provided with any prior environmental assessments or reports.

F. Historical Use Information on Adjoining Properties

The following information summarizes the historical use of properties adjoining the site based on a review of the Sanborn Fire Insurance Maps and Historic Aerial Photographs.

- North – Rail line and paint spraying operation
- East – Residential, industrial, and storage facility
- South – Garage, commercial, and school building
- West – Residential and steel manufacturer

V. SITE RECONNAISSANCE

A. Methodology and Limiting Conditions

Mr. Zach Landis, Junior Engineer of Equity Environmental conducted the Phase I site inspection on April 20, 2021. A site representative, Moshe Friedlander, lead the building walk-through. No limiting conditions such as weather or inaccessible areas were encountered during the completion of this assessment. Therefore, Equity does not consider this a data gap.

B. On-Site Operations/Manufacturing

Lot 15 is used as a parking lot area for the grocery store. This lot provides access to the grocery store's storage warehouse on Lot 54. There are no structures on the lot and the entire surface is covered with asphalt pavement. There is a two cubic yard dumpster for general trash.

Lot 17 is used as the loading dock area for shipments to be unloaded into the storage areas of the grocery store. The loading dock has 3 large walk-in freezers and a shipping container that was converted into an additional walk-in freezer. There were also empty pallets and an old rooftop HVAC unit stored in this area. The HVAC unit did not show any signs of release, but, is rusty from outdoor conditions.

Lot 49 is used as the grocery store on three-quarters of the first floor. The remaining area on the first floor and the entirety of the second floor are used for storage of the grocery supplies. In the first-floor storage area, there is a large walk-in freezer area for storing meats and the deli meat preparing area. The remainder of the storage area is for general products sold at the store such as paper products, cleaning supplies, non-perishable foods, and similar items. Storage of the items includes stacking pallets and large shelving along the walls.

Lot 54 is used as additional storage for the grocery store and an office. There is no cold storage in this area and mostly items similar to those included on Lot 49 are stored here. Items are also stored by stacking pallets and large shelving units. There was also some storage of old building materials, such as wood and plumbing parts, from the previous building alterations done. There was some damage to the interior ceiling and can be seen in the Photo Log.

Overall, the buildings were in fair condition. Some areas of repair were noted, such as the ceiling but, no immediate environmental or structural hazards were observed.

Equity submitted a Freedom of Information Law (FOIL) request to the New York City Department of Environmental Protection (NYCDEP) on April 28, 2021. A response was not provided prior to the completion of this report. If a response with pertinent information is provided, Equity will notify the owners of the property and inform them.

Photographs of the lots and the building's interior and exterior are provided in **Appendix B**.

C. Chemical and Petroleum Use and Storage (USTs, ASTs, and Containers)

The only chemicals stored at the Subject Property were household cleaning products for use at the store and to be sold. Empty containers of waterproofing for the floor were found in the storage area of Lot 54. No petroleum products were stored at the site during reconnaissance. A vent and fill port were found on the side of the building on Lot 54 leading into the warehouse. There has not been a tank since Mr. Friedlander worked at the site, and he was not aware of when the tank was removed. No staining or odors indicative of release were observed in storage areas or throughout the building.

D. Solid and Hazardous Waste

The solid waste generated on-site is disposed of via the Cogent Waste Solution's waste removal services located at 860 Humboldt Street, Brooklyn, New York.

E. Releases or Spills

No staining or spills were observed during the site reconnaissance.

F. Groundwater Wells

No potable, production, irrigation, or monitoring wells were observed or determined through the assessment.

G. Surface Water, Stormwater Drainage and Wastewater Discharge

Lot 15 had no surface or stormwater drains present. Lot 17 had one circular drain and a trench drain in the loading dock area presumed to lead to the city stormwater sewer. Lot 49 had four roof drains presumed to lead to the city stormwater sewer. Lot 54 had one roof drain in the rear of the building presumed to lead to the city stormwater sewer.

H. Wetlands

Equity reviewed National Wetland Inventory maps included as a layer within the EDR Radius Map Report. No wetlands were identified within the Subject Property. The report is provided in Appendix C.

I. Polychlorinated Biphenyls (PCBs)

No equipment likely to contain PCBs were observed during the site reconnaissance.

J. Hydraulic Equipment

Two forklifts are operated at the site; however, they are maintained at an offsite location and are not assumed to use hydraulic fluid containing PCBs. Both forklifts are electrically powered.

K. Drains and Sumps

One drain was located at the Subject Property in the building on Lot 49. The drain was located inside the building near the loading dock area. No staining was observed around the drain and is assumed to drain stormwater coming in through the loading dock garage door entrance.

L. Vapor Migration/Encroachment

A Vapor Encroachment Screening in accordance with ASTM E2600-15 was performed by Equity. The EDR Vapor Encroachment database identified VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property related to three historic gas stations and one historic cleaner at higher elevations. Based on these findings, a possible vapor encroachment cannot be ruled out. Details on the VECs can be found in Appendix C.

M. Other Environmental Considerations

Asbestos Containing Materials

The EPA banned several types of asbestos in the late 1970s, but its use continued in some building applications through the 1980s. An asbestos survey was not performed as part of this study. Given the age of the building, asbestos-containing materials may be present.

Drinking-Water

Potable water is supplied by the City of New York. A drinking water assessment was not performed as part of this study.

Lead-Based Paint

In 1978, EPA banned the manufacture and use of lead-based paint and lead-based paint products. Given the age of the building, lead-based paint may be present. A lead-based paint study was not performed as part of this study.

N. Off-Site Concerns

There were no offsite concerns, other than the VECs identified in Section K.

VI. INTERVIEWS

As part of the Phase I for the property, Equity interviewed Moshe Friedlander, the manager operating the Paperific grocery store, during the site reconnaissance. Mr. Friedlander was not aware of any previous environmental issues regarding the property.

VII. RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs)

Equity completed the Phase I of the Subject Property in accordance with the scope and limitations of ASTM Practice 1527-13. Any exceptions to, or deletions from, this practice are noted in appropriate sections of this report. RECs are defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. Controlled Recognized Environmental Condition is a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Historical RECs are RECs previously remediated to current unrestricted residential use applicable regulatory standards. De Minimis conditions are those that do not present a threat to human health or the environment and would not be the subject of an enforcement action by a government agency. Data Gaps are a lack of or inability to obtain information required by the practice that affects the ability of the environmental professional to identify RECs despite good faith efforts to gather the information.

A. Recognized Environmental Conditions (RECs)

No RECs were identified as a result of this assessment.

B. Controlled Recognized Environmental Conditions (CRECs)

No Controlled RECs were identified as a result of this assessment.

C. Historical Recognized Environmental Conditions (HRECs)

No Historic RECs were identified as a result of this assessment.

D. Vapor Encroachment Concerns (VECs)

The EDR Vapor Encroachment database identified VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property related to three historic gas stations and one

historic cleaner at higher elevations. Based on these findings, a possible vapor encroachment cannot be ruled out. Details on the VECs can be found in Appendix C.

E. De Minimis Conditions

No De Minimis Conditions were identified as a result of this assessment.

F. Data Gaps

Equity did not identify any significant data gaps that would affect its ability to identify Recognized Environmental Concerns (RECs) associated with the Subject Property.

Conclusions

Equity's review of available information and observations of the subject and surrounding properties indicates that no RECs, CRECs, HRECs, De Minimus Conditions, or data gaps were identified as a result of this assessment. However, a VEC could not be ruled out.

VIII. DEVIATIONS

Equity did not deviate from the scope of service outlined in Section I of this report.

IX. REFERENCES

The following references were used in the preparation of this report:

1. EDR Environmental Databases
2. Sanborn Fire Insurance Maps
3. Aerial Photographs
4. City Directory
5. Historical Topographic Maps
6. City Databases
7. New York City Department of Buildings Website
8. New York City Zola Database

X. SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional, as defined in the USEPA All Appropriate Inquiry Standard, 40 CFR, Part 312.10. We have the specific qualifications based on education, training, and experiences to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR, Part 312.

Assessor:

Zachary Landis
Junior Engineer

Environmental Professional:

Robert Jackson
Managing Director

XI. QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Qualifications of the Environmental Professionals are provided in **Appendix I**.

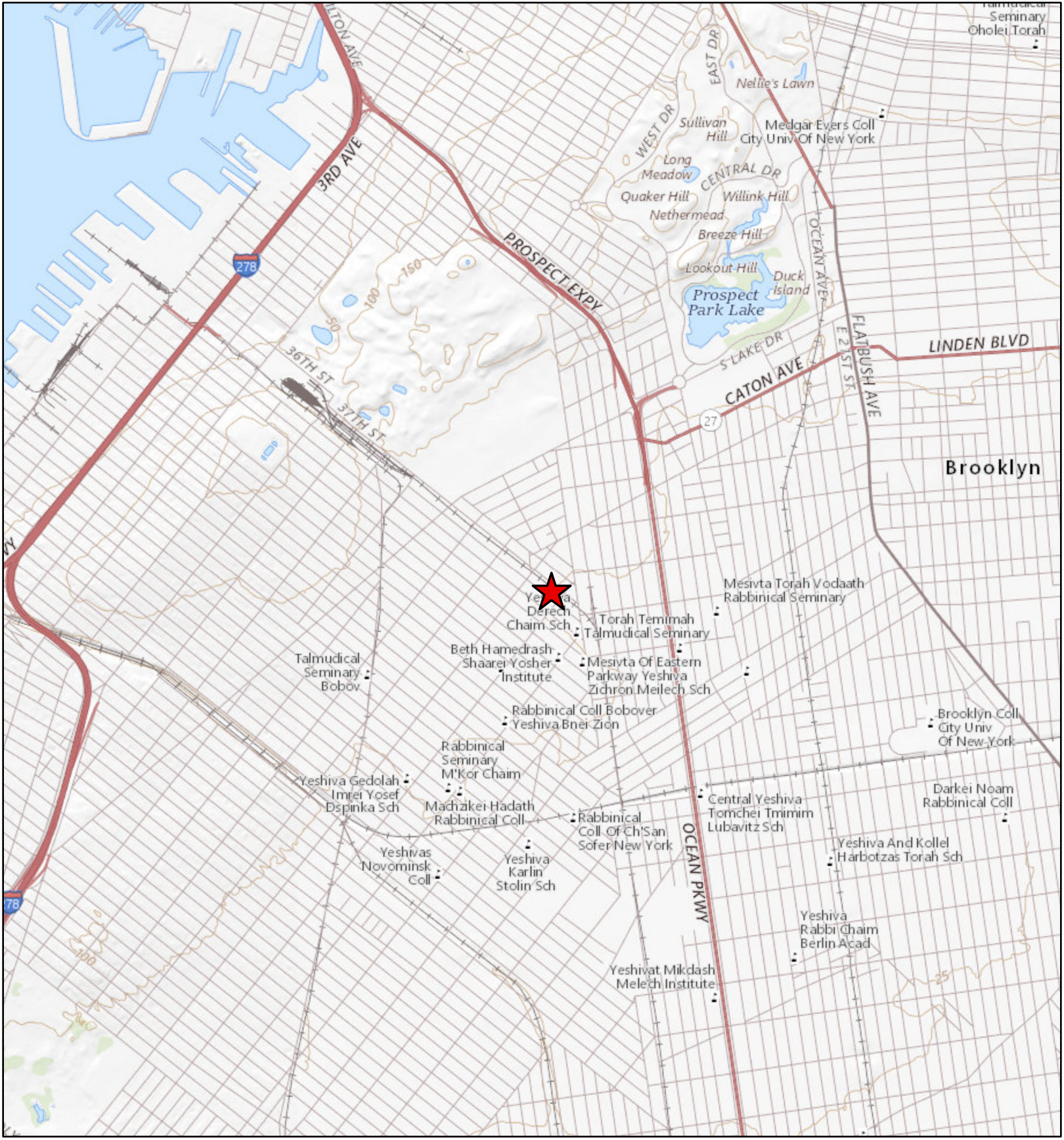
PHASE I ENVIRONMENTAL SITE ASSESSMENT

1459-1465 38th Street
Brooklyn, NY 11218

April 2021

Appendix A

Figures



Legend

1465 38th Street

N

0.8

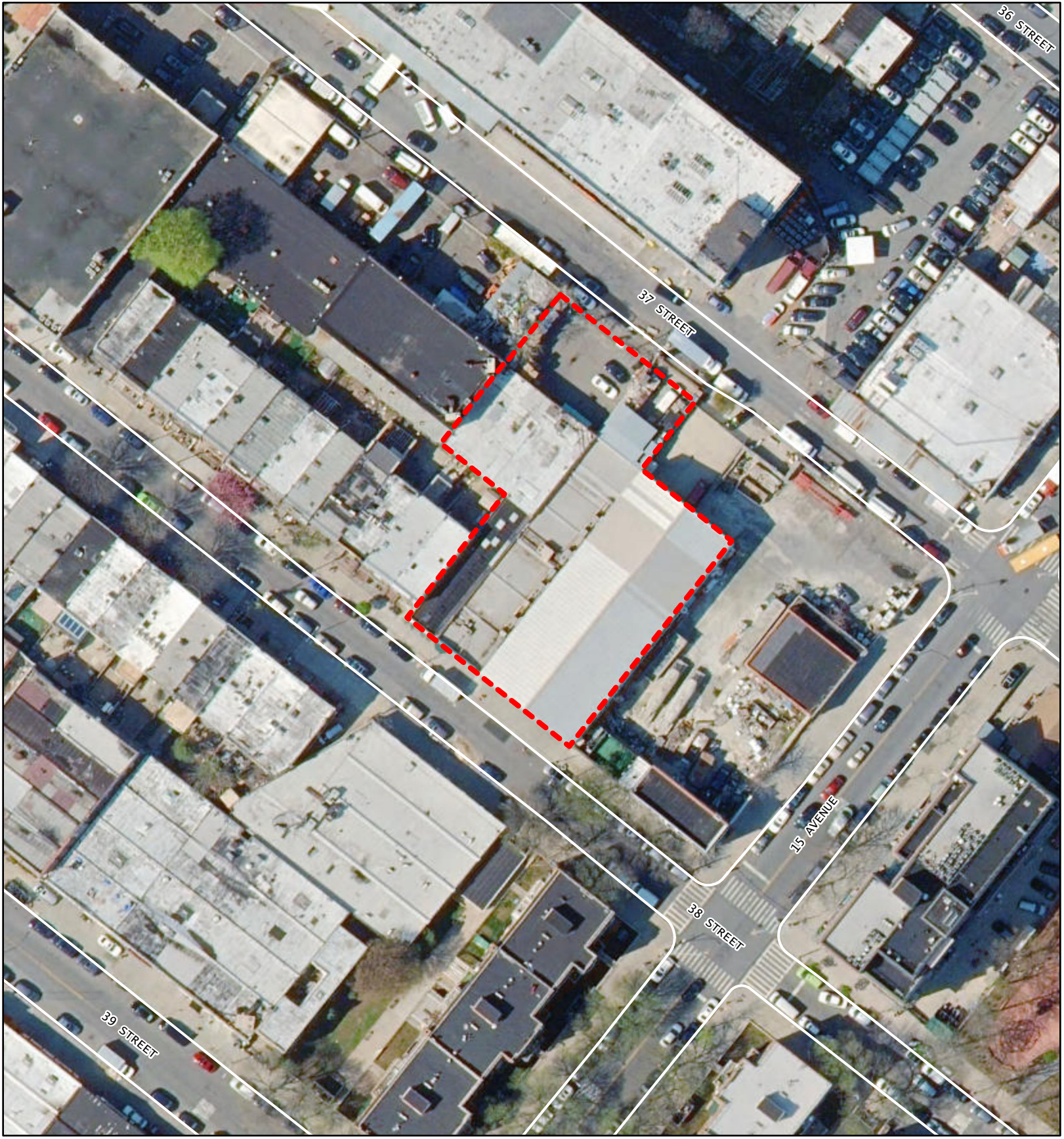
Miles

Figure 1
Phase I ESA
USGS Site Location Map

1465 38th Street
Brooklyn, New York

equity environmental engineering
500 International Drive, Suite 150, Mount Olive, NJ 07828
Office: (973) 527-7451 / Fax: (973) 858-0280

DRAWN BY / DATE	REV / DATE	DRAWING NUMBER
GB/1.27.21		2020087-01



Legend

1465 38th Street

N

100

US Feet

Figure 2
Phase I ESA
Site Boundary Map

1465 38th Street
Brooklyn, New York

equity environmental engineering
500 International Drive, Suite 150, Mount Olive, NJ 07828
Office: (973) 527-7451 / Fax: (973) 858-0280

DRAWN BY / DATE	REV / DATE	DRAWING NUMBER
GB/1.27.21		2020087-02

APPENDIX D

NOISE METER CALIBRATION CERTIFICATE AND BACKUP

01/13/22 1465 38th Street, Brooklyn, NY

Depart: 10:15

Arrive: 11:50

personnel: CD

Scope: Noise (midday and evening only)

weather: 30s, sunny

Location 2 only

Start 12:14

Stop 12:34

Heavy truck idle from 12:24 - 12:30, another midday session conducted.

Start: 12:35

Stop: 12:55

Evening

Start: 4:30 → 16:30

End: 4:50 → 16:50

Depart: 17:05

Arrive: 18:58

CD

1/13/22

Noise Job Field Sheet

Name of Project: 1465 38th Street 2020087

Project Address: 1465 38th Street Brooklyn, NY

Date(s) of Field Work: 01/13/21 *Note - Actual date 1/13/2022 - date entered into sheet incorrectly

Personnel: Christian DiGennaro

Project Specific Scope of Work:

1 x 20-minute locations Midday, PM
Location 2 Only

Maximum Billable Hours for the Day: 15

I. Start of Noise Monitoring Day

Departure Time: 10:15 Arrival Time: 11:50

Weather Conditions (temp, wind speed, precipitation): 30s, sunny, no wind

Meter Type: CASELLA Meter Serial #: 1488256 Meter Location: 2
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
*If more locations are needed for a project use a second Field Sheet

Calibrator Serial #: 2045304 Meters used on: 1488256
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.*

III. Midday Session 12:00 PM – 1:30 PM 1 of 2

Before Measurement:

Meter Serial #: 1488256 Time: 12:13 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

After Measurement:

Meter Serial #: 1488256 Time: 12:57 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
2	12:14	12:34

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
2	14	32	1	3	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):
Car door slam near meter at 12:15 and 12:16.
Heavy truck idle making delivery from 12:24 – 12:30 (another midday session conducted after because of this). Motorcycle at 12:33

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

III. Midday Session 12:00 PM – 1:30 PM 2 of 2

Before Measurement:

Meter Serial #: 1438256 Time: 12:13 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

After Measurement:

Meter Serial #: 1438256 Time: 12:57 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
2	12:35	12:55

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
2	19	51	1	1	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):
Rattling shopping carts at 12:36 and 12:39; horn at 12:39; UPS Truck delivery across street, beeping vehicle from 12:47 – 12:50; drilling from apartment northwest at 12:50, 12:53, and 12:54; honking east at 12:52.

**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 #: 1483256 Time: 16:29 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 #: 1483256 Time: 16:51 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
2	16:30	16:50

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
2	92	41	0	2	3	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):
Sirens west at 16:31; rattling shopping cars in front of meter at 16:34; honk at 16:36.

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

V. End of Noise Monitoring Day

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

Anything of note/concern for the day: _____

_____

_____

Departure Time: 17:05 Arrival Time: 18:58

Total Time to Be Billed: 11

Noise Job Field Sheet

Name of Project: 1465 38th Street 2020087

Project Address: 1465 38th Street Brooklyn, NY

Date(s) of Field Work: 5/17/21

Personnel: John Vrabel

Project Specific Scope of Work:

3 x 20-minute locations AM, Midday, PM
1 x 1-hour rooftop location (please hang mic over roof edge)
Bring ladder and method to secure meter handing over roof.
Site Contact -

I. Start of Noise Monitoring Day

Departure Time: 5:30 Arrival Time: 7:00

Weather Conditions (temp, wind speed, precipitation): Sunny, dry, low wind

Meter Type: Cirella Meter Serial #: 508686 Meter Location: 1
Meter Type: Cirella Meter Serial #: 4278006 Meter Location: 2, 3, 4
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
*If more locations are needed for a project use a second Field Sheet

Calibrator Serial #: 278385 Meters used on: 508686, 4278006
Calibrator Serial #: _____ Meters used on: _____
Calibrator Serial #: _____ Meters used on: _____
Were Photos Taken of Each Location? (Y) / N *Discuss specific photo instructions w/ Project Manager

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

II. Morning Session 7:30 AM – 9:00 AM

Before Measurement:

Meter Serial #: 5086366/4278006 Time: 7:01/7:05 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " 4278006 " Time: 8:10 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " 4278006 " Time: 8:30 Calibration Passed at 114 dB? (Y) / N

After Measurement:

Meter Serial #: 5086366/4278006 Time: 9:00/7:51 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " 4278006 " Time: 8:30 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " 4278006 " Time: 8:54 Calibration Passed at 114 dB? (Y) / N

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

1 8:00 9:00

Location #	Start Time	End Time
2	7:30	7:50
4	8:10	8:30
3	8:34	8:54

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
2	15	20	1	0	8	—
4	13	13	5	3	7	—
3	40	51	7	2	21	—

*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):
- 742 generator across st. starts through end of monitoring @ loc. 1

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

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

Before Measurement:

Meter Serial #: 508866/427806 Time: 12:00/1205 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 427806 Time: 1225 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 427806 Time: 1247 Calibration Passed at 114 dB? (Y) / N

After Measurement:

Meter Serial #: 508866/427806 Time: 1300/1025 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 427806 Time: 1247 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 427806 Time: 13:29 Calibration Passed at 114 dB? (Y) / N
*If more locations are needed for a project use a second Field Sheet

1 12:00 13:00

Location #	Start Time	End Time
2	1205	1225
4	1227	12:47
3	1309	1329

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
2	17	19	2	0	0	—
4	29	36	4	1	0	—
3	37	48	5	1	1	—

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

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):
Horns @ 12:12 (Loc. 1)
Honk @ 13:16 (Loc 3)

**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 #: 5086866/4278006 Time: 1631/1636 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 4278006 Time: 1658 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 4278006 Time: 1718 Calibration Passed at 114 dB? (Y) / N

After Measurement:

Meter Serial #: 5086866/4278006 Time: 1745/1656 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 4278006 Time: 1718 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 4278006 Time: 1741 Calibration Passed at 114 dB? (Y) / N
*If more locations are needed for a project use a second Field Sheet

1 1632 17:45

Location #	Start Time	End Time
2	1636	1656
4	1658	1718
3	17:21	17:41

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

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
2	13	12	3	0	2	—
4	27	30	5	1	3	—
3	47	58	7	13		—

*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):
child crashes bike at 16:55 - 16:56 @ loc. 2 in front of meter

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

V. End of Noise Monitoring Day

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

Anything of note/concern for the day: _____

_____

_____

Departure Time: 18:45 Arrival Time: 19:45

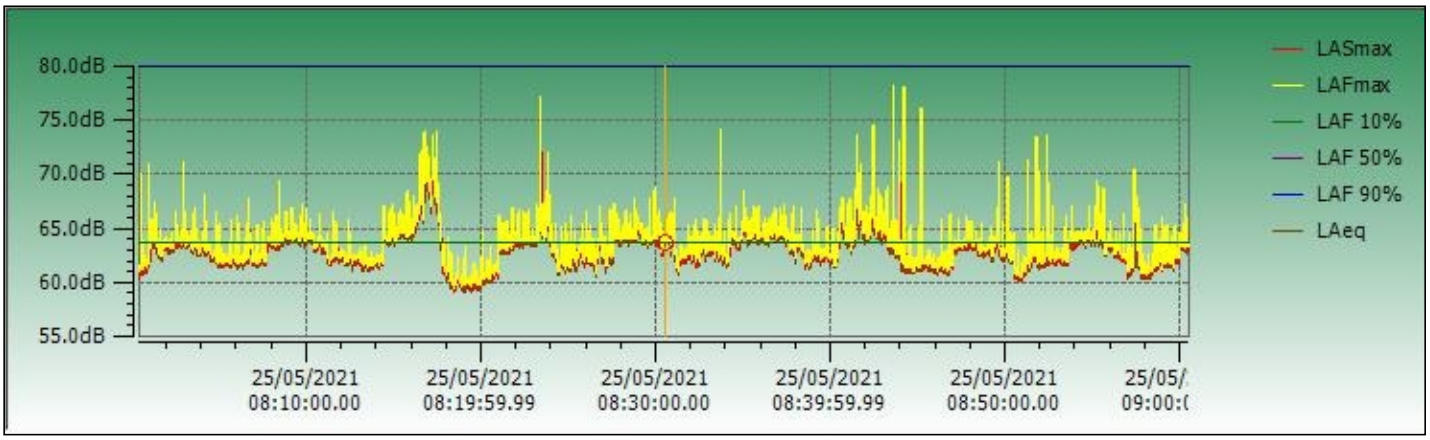
Total Time to Be Billed: 15

Figure 2.6-1 Noise Monitoring Locations



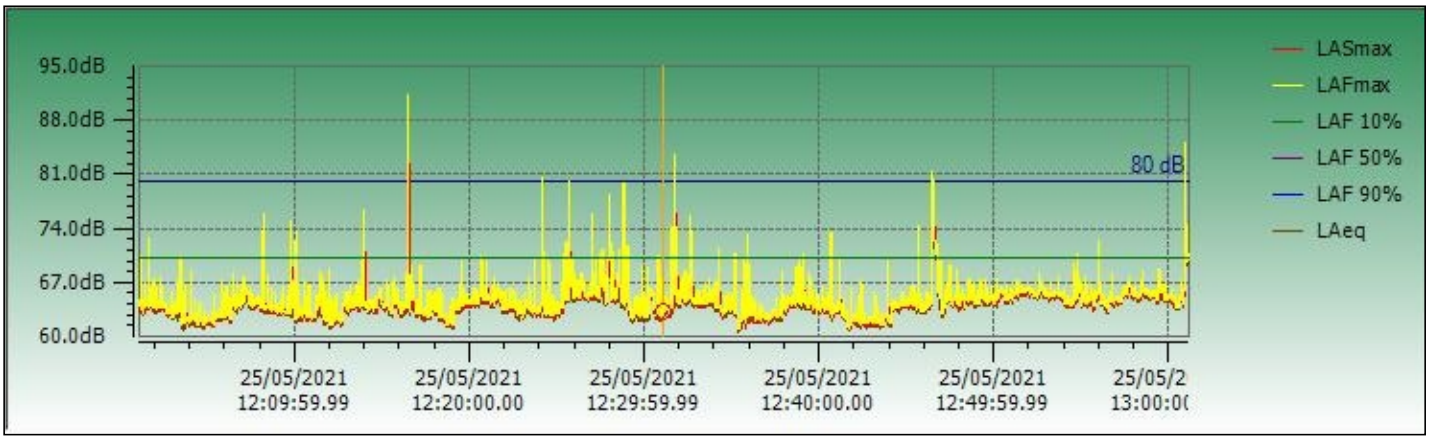
Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	64.5 dB	Result
LASmax	75.5 dB	LAS 50%	63 dB	
LASmin	59.1 dB	LAS 90%	61 dB	
Start Date & Time	5/25/2021 8:00:27 AM	Calibration (Before) Date	5/25/2021 8:00:20 AM	
Duration	01:00:05 HH:MM:SS	Calibration (After) Date	5/25/2021 9:00:47 AM	
LAeq	63.4 dB	Calibration Drift	-0.1 dB	
End Date & Time	5/25/2021 9:00:32 AM	Battery Low	No	
Notes				



Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	65.5 dB	Result
LASmax	88 dB	LAS 50%	64 dB	
LASmin	60.7 dB	LAS 90%	62 dB	
Start Date & Time	5/25/2021 12:01:08 PM	Calibration (Before) Date	5/25/2021 12:01:04 PM	
Duration	01:00:02 HH:MM:SS	Calibration (After) Date	5/25/2021 4:32:09 PM	
LAeq	65 dB	Calibration Drift	-0.4 dB	
End Date & Time	5/25/2021 1:01:10 PM	Battery Low	No	
Notes				

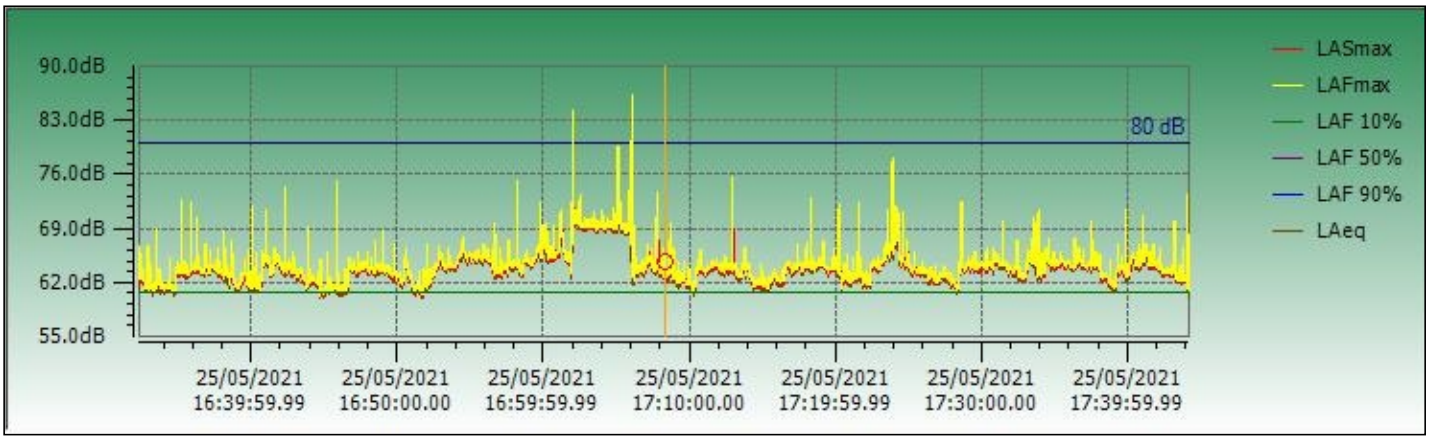


Location 1 PM

Report On CEL-63X

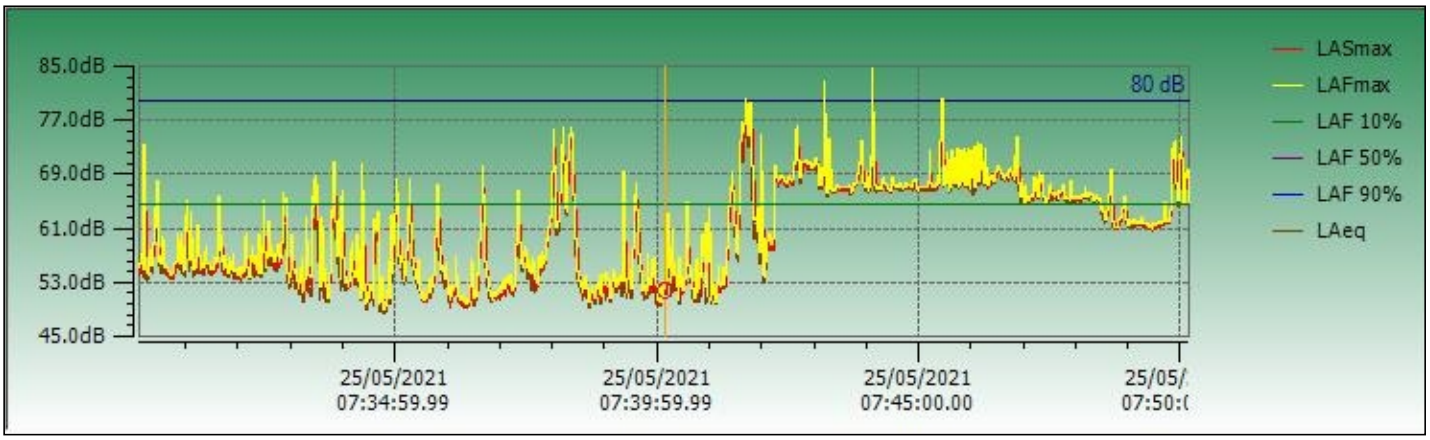
Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	65.5 dB	Result
LASmax	78.6 dB	LAS 50%	63.5 dB	
LASmin	59.9 dB	LAS 90%	61.5 dB	
Start Date & Time	5/25/2021 4:32:20 PM	Calibration (Before) Date	5/25/2021 4:32:09 PM	
Duration	01:11:53 HH:MM:SS	Calibration (After) Date	5/25/2021 5:44:23 PM	
LAeq	64.3 dB	Calibration Drift	0.3 dB	
End Date & Time	5/25/2021 5:44:13 PM	Battery Low	No	
Notes				



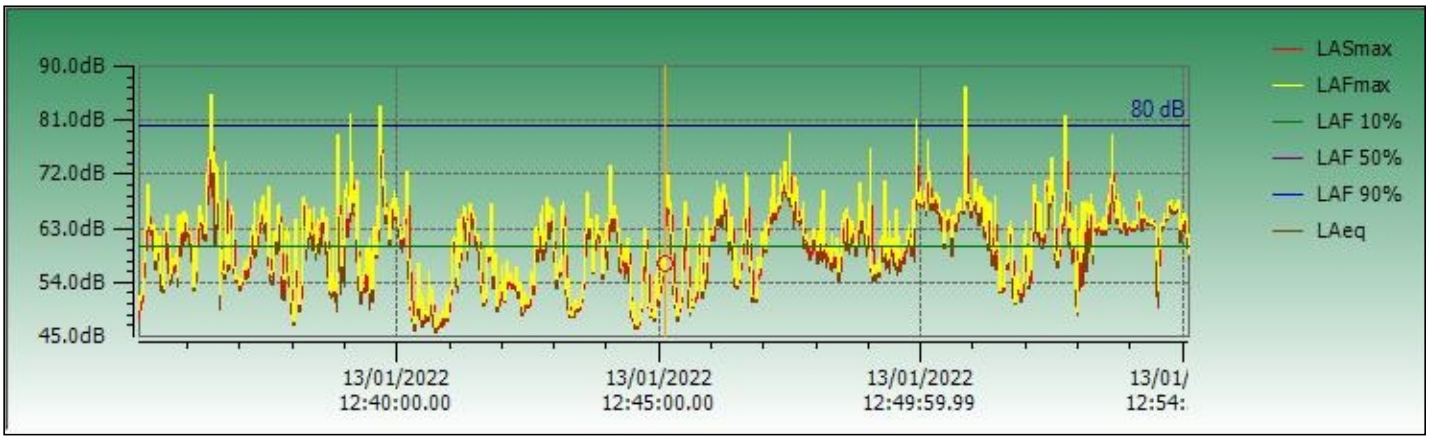
Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	68.5 dB	Result
LASmax	78.2 dB	LAS 50%	59.5 dB	
LASmin	48.8 dB	LAS 90%	51 dB	
Start Date & Time	5/25/2021 7:30:06 AM	Calibration (Before) Date	5/25/2021 7:05:34 AM	
Duration	00:20:03 HH:MM:SS	Calibration (After) Date	5/25/2021 7:50:51 AM	
LAeq	64.8 dB	Calibration Drift	0.1 dB	
End Date & Time	5/25/2021 7:50:09 AM	Battery Low	No	
Notes				



Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	1488256	LAS 10%	66.5 dB	Result
LASmax	80.4 dB	LAS 50%	60 dB	
LASmin	46 dB	LAS 90%	51 dB	
Start Date & Time	1/13/2022 12:35:04 PM	Calibration (Before) Date	1/13/2022 12:13:09 PM	
Duration	00:20:03 HH:MM:SS	Calibration (After) Date	1/13/2022 12:57:00 PM	
LAeq	63.4 dB	Calibration Drift	0.2 dB	
End Date & Time	1/13/2022 12:55:07 PM	Battery Low	No	
Notes				

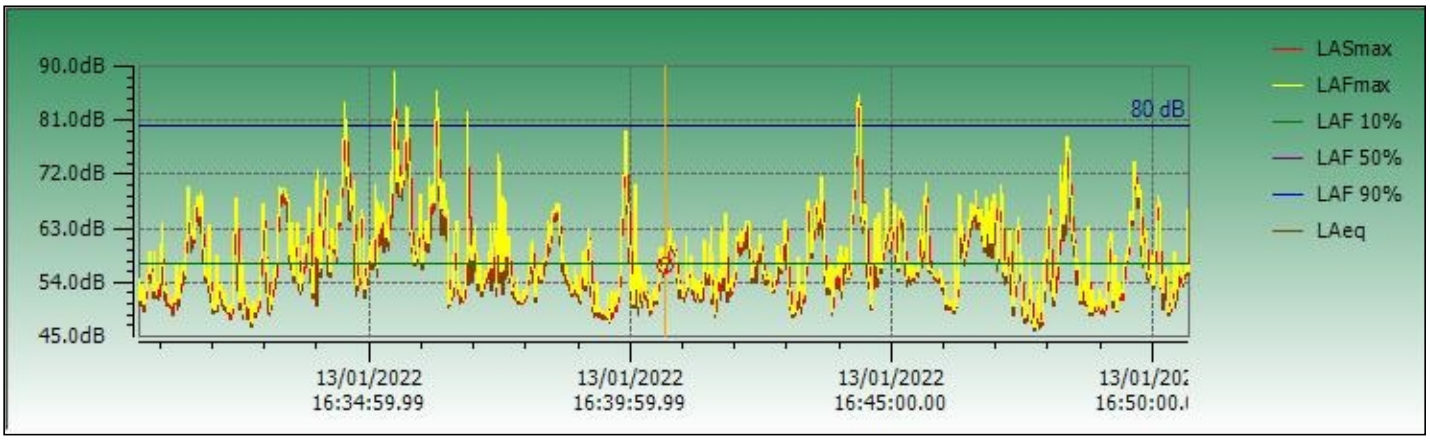


Location 2 PM

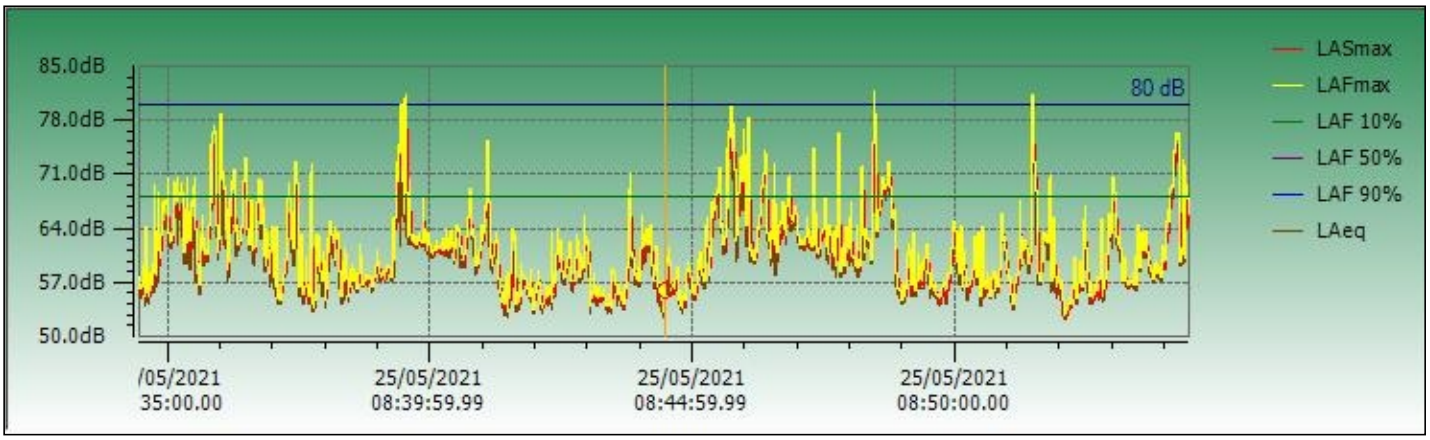
Report On CEL-63X

Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	1488256	LAS 10%	66 dB	Result
LASmax	83.5 dB	LAS 50%	56 dB	
LASmin	46.3 dB	LAS 90%	50 dB	
Start Date & Time	1/13/2022 4:30:36 PM	Calibration (Before) Date	1/13/2022 4:29:18 PM	
Duration	00:20:06 HH:MM:SS	Calibration (After) Date	1/13/2022 4:51:24 PM	
LAeq	64.9 dB	Calibration Drift	0.1 dB	
End Date & Time	1/13/2022 4:50:42 PM	Battery Low	No	
Notes				

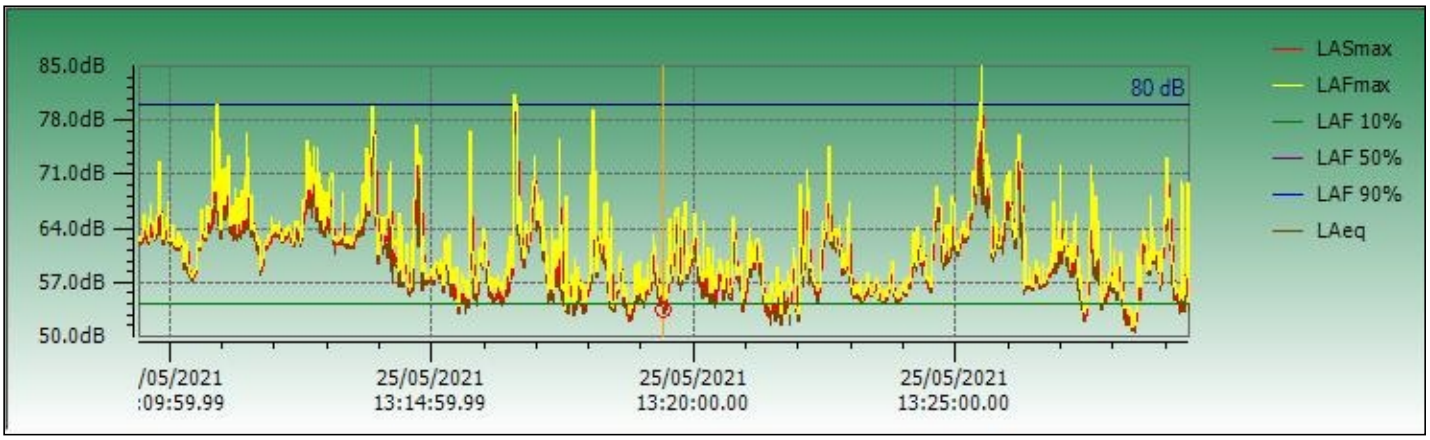


Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	66.5 dB	Result
LASmax	78.6 dB	LAS 50%	59.5 dB	
LASmin	52.4 dB	LAS 90%	55 dB	
Start Date & Time	5/25/2021 8:34:27 AM	Calibration (Before) Date	5/25/2021 8:31:41 AM	
Duration	00:20:01 HH:MM:SS	Calibration (After) Date	5/25/2021 8:54:39 AM	
LAeq	63.5 dB	Calibration Drift	0.0 dB	
End Date & Time	5/25/2021 8:54:28 AM	Battery Low	No	
Notes				

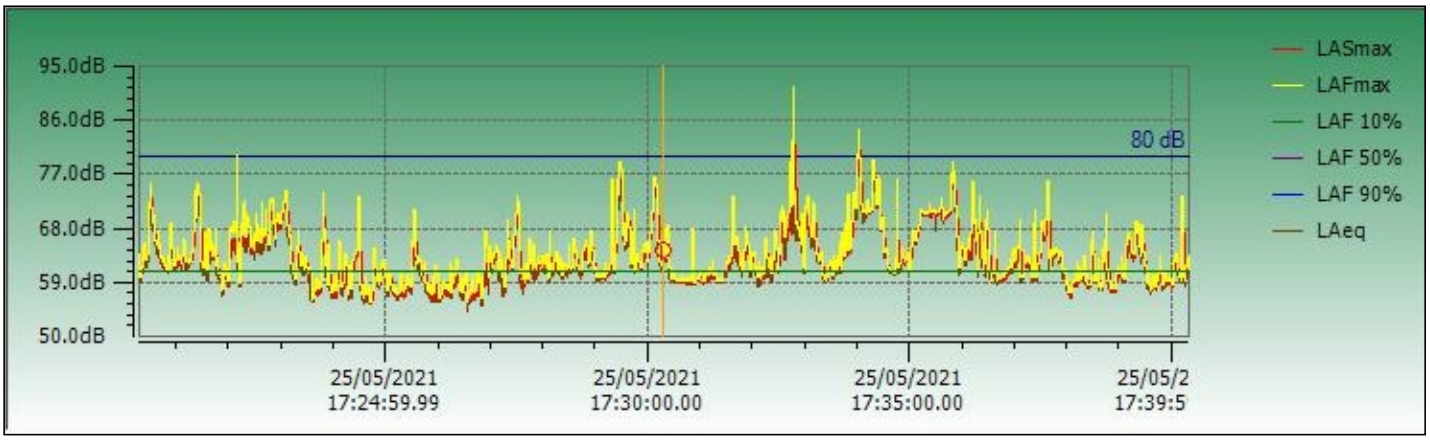


Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	66 dB	Result
LASmax	79.1 dB	LAS 50%	59.5 dB	
LASmin	50.7 dB	LAS 90%	54.5 dB	
Start Date & Time	5/25/2021 1:09:25 PM	Calibration (Before) Date	5/25/2021 12:48:39 PM	
Duration	00:20:02 HH:MM:SS	Calibration (After) Date	5/25/2021 1:29:36 PM	
LAeq	63.2 dB	Calibration Drift	-0.1 dB	
End Date & Time	5/25/2021 1:29:27 PM	Battery Low	No	
Notes				

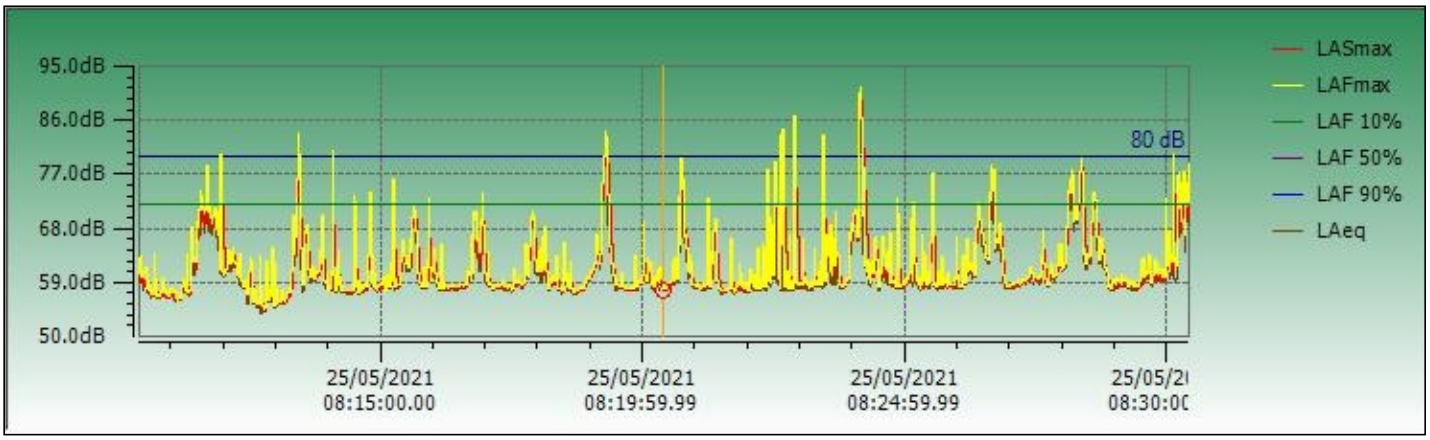


Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	69.5 dB	Result
LASmax	85.2 dB	LAS 50%	61.5 dB	
LASmin	55.2 dB	LAS 90%	58 dB	
Start Date & Time	5/25/2021 5:20:18 PM	Calibration (Before) Date	5/25/2021 5:19:19 PM	
Duration	00:20:02 HH:MM:SS	Calibration (After) Date	5/25/2021 5:40:28 PM	
LAeq	65.8 dB	Calibration Drift	0.0 dB	
End Date & Time	5/25/2021 5:40:20 PM	Battery Low	No	
Notes				



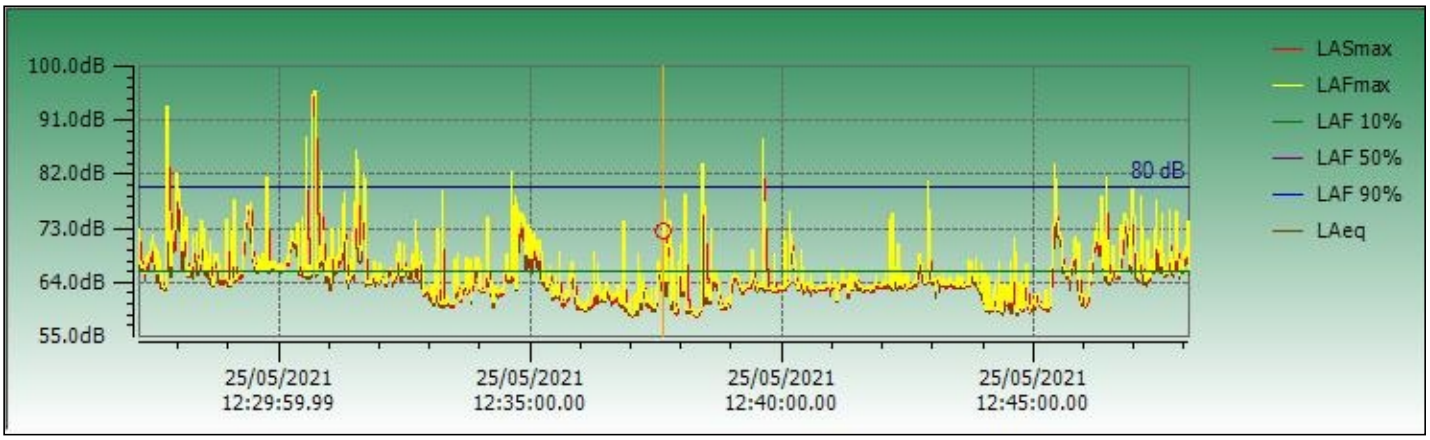
Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	68 dB	Result
LASmax	89.6 dB	LAS 50%	59 dB	
LASmin	54.2 dB	LAS 90%	57.5 dB	
Start Date & Time	5/25/2021 8:10:24 AM	Calibration (Before) Date	5/25/2021 8:10:12 AM	
Duration	00:20:02 HH:MM:SS	Calibration (After) Date	5/25/2021 8:30:40 AM	
LAeq	67 dB	Calibration Drift	0.0 dB	
End Date & Time	5/25/2021 8:30:26 AM	Battery Low	No	
Notes				



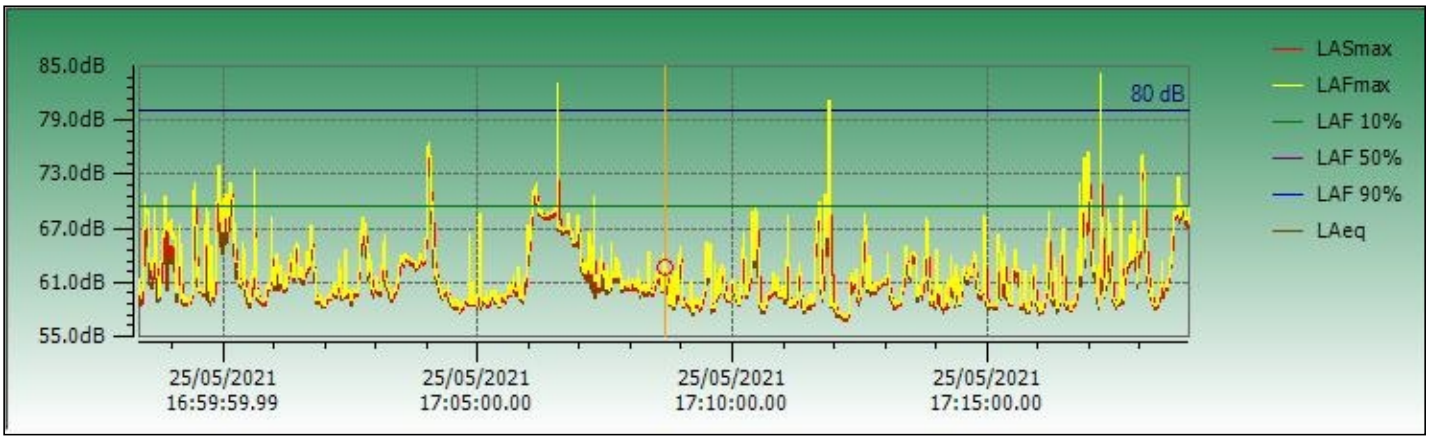
Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	70 dB	Result
LASmax	95 dB	LAS 50%	64 dB	
LASmin	58.1 dB	LAS 90%	60 dB	
Start Date & Time	5/25/2021 12:27:13 PM	Calibration (Before) Date	5/25/2021 12:25:52 PM	
Duration	00:20:52 HH:MM:SS	Calibration (After) Date	5/25/2021 12:48:39 PM	
LAeq	71 dB	Calibration Drift	0.2 dB	
End Date & Time	5/25/2021 12:48:05 PM	Battery Low	No	
Notes				



Casella CEL Ltd.

Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	66.5 dB	Result
LASmax	77.4 dB	LAS 50%	60.5 dB	
LASmin	56.8 dB	LAS 90%	58.5 dB	
Start Date & Time	5/25/2021 4:58:21 PM	Calibration (Before) Date	5/25/2021 4:58:10 PM	
Duration	00:20:37 HH:MM:SS	Calibration (After) Date	5/25/2021 5:19:10 PM	
LAeq	63.1 dB	Calibration Drift	0.2 dB	
End Date & Time	5/25/2021 5:18:58 PM	Battery Low	No	
Notes				



Certificate of Conformity and Calibration



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

Applicable standards:-

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

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

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

Declaration of conformity:-

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

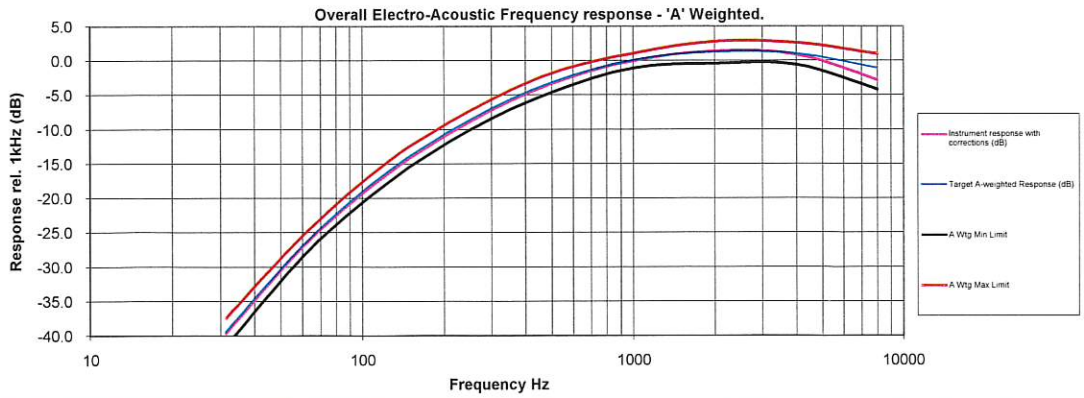
Test Summary:-

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

Combined Electro-Acoustic Frequency Response - A Weighted

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

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



Casella UK
Regent House, Wolseley Road, Kempston, Bedford MK42 7JY United Kingdom
Tel: +44 (0) 1234 844100
Fax: +44(0) 1234 841490
E-mail: info@casellasolutions.com

Casella USA
415 Lawrence Bell Drive, Unit 4 Buffalo, NY 14221, USA
Toll Free (800) 366-2966
Tel: +1 (716) 276 3040
E-mail: info@casellausa.com

Casella India
Ideal Industries India Pvt.Ltd. 229-230, Spazedge, Tower -B Sohna Road, Sector-47, Gurgaon-122001, Haryana , India.
Tel: +91 124 4495100
E-mail: casella.sales@ideal-industries.in

Casella China
Ideal Industries China Room 305, Building 1, No.1279, Chuanqiao Rd, Pudong New District, Shanghai, China
Tel: +86-21-31263188
Fax: +86-21-61605906
Email: info@casellasolutions.cn

Casella Australia
Ideal Industries (Aust) PTY. LTD Unit 17, 35 Dunlop Rd, Mulgrave. Vic. 3170, Australia.
Email: australia@casellasolutions.com

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

Certificate of Conformity and Calibration



Instrument Model:-	**CEL-633C**		
Serial Number	1488256		
Firmware revision	V006-05		
Microphone Type:-	**CEL-251**	**Preamplifier Type:-**	**CEL-495**
Serial Number	3796	Serial Number	004208
Instrument Class/Type:-	1		

Applicable standards:-

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

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

Test Conditions:-	21 °C	**Test Engineer:-**	Paul Blackwell
	41 %RH	**Date of Issue:-**	July 28, 2021
	1002 mBar		

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2015 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

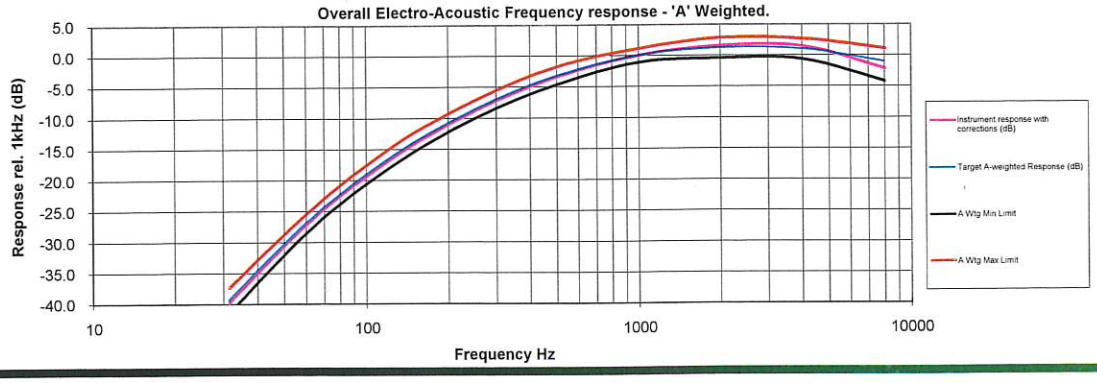
Test Summary:-

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
Fax: +44(0) 1234 841490
E-mail: info@casellasolutions.com

Casella US
13 Pratts Junction Road,
Sterling, MA 01564-2305
USA
Toll Free: (800) 366-2966
E-mail: info-us@casellasolutions.com

Casella India
Ideal Industries India Pvt.Ltd
229-230, Spazedge, Tower -B Sohna Road,
Sector-47, Gurgaon-122001, Haryana (India)
Tel: +91 124 4495100
E-mail: casella.sales@ideal-industries.in

Casella China
Room 305, Building 1, No. 1295, Chuanqiao
Road, Pudong District, Shanghai, China
Telephone: +86-21-31263188
Email: info@casellasolutions.cn

Certificate of Conformity and Calibration



Instrument Model:- CEL-633C

Serial Number 4278006
Firmware revision V006-03

Microphone Type:- CEL-251
Serial Number 3796

Preamplifier Type:- CEL-495
Serial Number 004208

Instrument Class/Type:- 1

Applicable standards:-

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

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

Test Conditions:- 22.7 °C, 51.3 %RH, 1000.9 mBar

Test Engineer:- Stephen Adams
Date of Issue:- September 22, 2020

Declaration of conformity:-

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

Test Summary:-

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

Combined Electro-Acoustic Frequency Response - A Weighted

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

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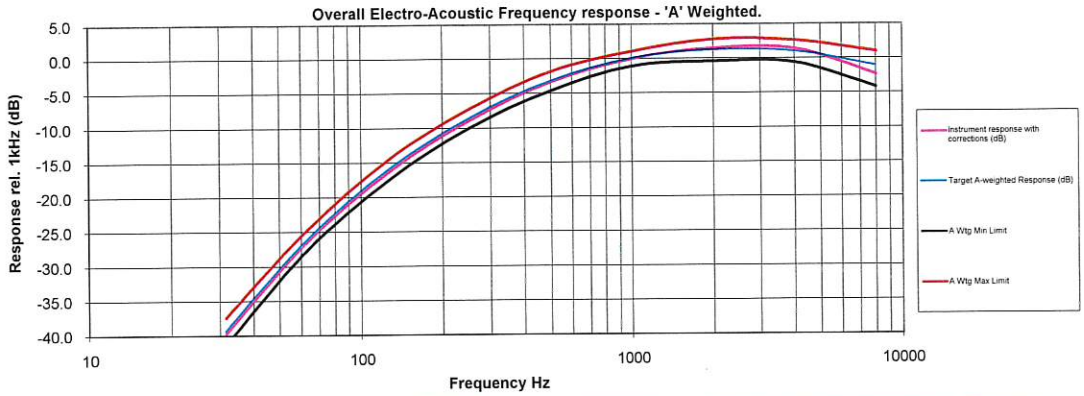

Casella UK
Regent House, Wolseley Road, Kempston, Bedford MK42 7JY United Kingdom
Tel: +44 (0) 1234 844100
Fax: +44(0) 1234 841490
E-mail: info@casellasolutions.com

Casella USA
415 Lawrence Bell Drive, Unit 4 Buffalo, NY 14221, USA
Toll Free (800) 366-2966
Tel: +1 (716) 276 3040
E-mail: info@casellausa.com

Casella India
Ideal Industries India Pvt.Ltd. 229-230, Spazedge, Tower -B Sohna Road, Sector-47, Gurgaon-122001, Haryana , India.
Tel. +91 124 4495100
E-mail: casella.sales@ideal-industries.in

Casella China
Ideal Industries China Room 305, Building 1, No.1279, Chuanqiao Rd, Pudong New District, Shanghai, China
Tel: +86-21-31263188
Fax: +86-21-61605906
Email: info@casellasolutions.cn

Casella Australia
Ideal Industries (Aust) PTY. LTD Unit 17, 35 Dunlop Rd, Mulgrave. Vic. 3170, Australia.
Email: australia@casellasolutions.com

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