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

## 103-16 Van Wyck Expressway Rezoning

Queens, NY
Block 9589, Lots 11 and p/o 5, 6, 7, 8, 9
Queens Community District 10

**CEQR Reference No:** 20DCP161Q

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

**Prepared for:**
10316 Van Wyck Exp LLC
56-02 138 Street
Flushing, New York

**Prepared by:**
Equity Environmental Engineering
500 International Drive, Suite 150
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**July 23, 2021**

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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*** 103-16 Van Wyck Expressway Rezoning

**3. *Reference Numbers***

| CEQR REFERENCE NUMBER (to be assigned by lead agency) | BSA REFERENCE NUMBER (if applicable) |
|---|---|
| 20DCP161Q | |
| ULURP REFERENCE NUMBER (if applicable) | OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA) |
| 210164ZMQ; N210165ZRQ | |

| **4a. *Lead Agency Information*** | | | **4b. *Applicant Information*** | | |
|---|---|---|---|---|---|
| NAME OF LEAD AGENCY<br>New York City Department of City Planning | | | NAME OF APPLICANT<br>10316 Van Wyck Exp LLC. | | |
| NAME OF LEAD AGENCY CONTACT PERSON<br>Olga Abinader, Director, EARD | | | NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON<br>Kevin Williams, Equity Environmental Engineering LLC | | |
| ADDRESS 120 Broadway | | | ADDRESS 500 International Drive, Suite 150 | | |
| CITY New York | STATE NY | ZIP 10271 | CITY Mount Olive | STATE NJ | ZIP 07828 |
| TELEPHONE 212-720-3493 | EMAIL<br>oabinad@planning.nyc.gov | | TELEPHONE 973-527-7451x301 | EMAIL kevin.williams@equityenvironmental.com | |

**5. *Project Description***

10316 Van Wyck Exp LLC. (The Applicant) is requesting a zoning map amendment and zoning text amendment (the Proposed Actions) in order to facilitate the redevelopment of a site within the South Richmond Hill section of Queens Community District 10. The Proposed Actions are a Zoning Map Amendment to establish an R6B/C2-3 district within an area currently zoned R3A consisting of Block 9589, Lot 11, and portions of Lots 5, 6, 7, 8, and 9 (the Affected Area), by extending an existing R6B/C2-3 district that is mapped to the north of the affected area, along Liberty Avenue. The Affected Area is on a block bounded by Liberty Avenue to the north, Van Wyck Expressway service road to the east, 105th Avenue to the south, and 135th Street to the west. In its entirety, the Affected Area comprises approximately 10,396 square feet of lot area, of which 10,000 square feet consists of Lot 11, the "Project Site." The Applicant proposes to develop the Project Site with a 4-story plus cellar 45- foot-tall, 23,469 GSF mixed-use commercial and residential building with ground floor commercial space, containing approximately 7,560 GSF of ground floor commercial space and 15,909 GSF of residential space, providing 18 dwelling units, 5 or 6 of which would be permanently affordable per MIH options 1 or 2, both of which would be mapped on the Affected Area. Eight residential parking spaces would be required and would be provided within an enclosed parking garage at cellar level.

***Project Location***

| BOROUGH Queens | COMMUNITY DISTRICT(S) 10 | STREET ADDRESS 103-16 Van Wyck Expressway |
|---|---|---|
| TAX BLOCK(S) AND LOT(S) Affected Area: Block 9589, Lot 11 and p/o Lots 5, 6, 7, 8, and 9. Proposed Development Site, Block 9589, Lot 11 | | ZIP CODE 11419 |
| DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The Affected Area is located on the west side of Van Wyck Expressway on a block bounded by Liberty Avenue to the north, Van Wyck Expressway to the east, 105th Avenue to the south, and 135th Street to the west. | | |
| EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R3A | | ZONING SECTIONAL MAP NUMBER 18c |

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

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

☐ CITY MAP AMENDMENT ☐ ZONING CERTIFICATION ☐ CONCESSION
☒ ZONING MAP AMENDMENT ☐ ZONING AUTHORIZATION ☐ UDAAP
☒ ZONING TEXT AMENDMENT ☐ ACQUISITION—REAL PROPERTY ☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY ☐ DISPOSITION—REAL PROPERTY ☐ FRANCHISE
☐ HOUSING PLAN & PROJECT ☐ OTHER, explain:
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION Appendix F - Map of Queens Community District 10

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

***Other City Approvals Not Subject to CEQR*** (check all that apply)
☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) ☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
☐ OTHER, explain:

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

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

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

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

***Physical Setting*** (both developed and undeveloped areas)
Total directly affected area (sq. ft.): 10,396 within affected area; 10,000 on Proposed Development Site
Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.): approx.5,000 sf
Other, describe (sq. ft.):

**8. *Physical Dimensions and Scale of Project*** (if the project affects multiple sites, provide the total development facilitated by the action)
SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 23,469
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 23,469
HEIGHT OF EACH BUILDING (ft.): 45
NUMBER OF STORIES OF EACH BUILDING: 4

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: 10,000
The total square feet not owned or controlled by the applicant: 396

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: 10,000 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 75,000 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 5,050 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.) | 15,909 | 7,560 | | |
| ***Type*** (*e.g.,* retail, office, school) | 18 units | UG 6 commercial | | |

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 59 NUMBER OF ADDITIONAL WORKERS: 23

Provide a brief explanation of how these numbers were determined: 3.52 persons per dwelling unit based on Queens CD 10 average household size (2017 ACS) and 3 employees per 1,000 square feet 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): 2022

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 conducted over an 18 month period

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

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

## Part II: TECHNICAL ANALYSIS

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

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

| | YES | NO |
|---|---|---|
| **1. *LAND USE, ZONING, AND PUBLIC POLICY***: CEQR Technical Manual Chapter 4 | | |
| **(a)** Would the proposed project result in a change in land use different from surrounding land uses? | ☒ | ☐ |
| **(b)** Would the proposed project result in a change in zoning different from surrounding zoning? | ☐ | ☒ |
| **(c)** Is there the potential to affect an applicable public policy? | ☐ | ☒ |
| **(d)** If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. | | |
| **(e)** Is the project a large, publicly sponsored project? | ☐ | ☒ |
| ○ If "yes," complete a PlaNYC assessment and attach. | | |
| **(f)** Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries? | ☐ | ☒ |
| ○ If "yes," complete the Consistency Assessment Form. | | |
| **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. | | |
| **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): (41*18 + 79*15 = 1,923 pounds per week | | |
| ○ 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): (126.7 x 23,469 = 2,973,522.3 | | |
| **(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 nomograph | ☐ | ☒ |
| **(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. | | |
| **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. . | | |
| **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 |
|---|---|
| Robert Greene | 7/23/2021 |

SIGNATURE 

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

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

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

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

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

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

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

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

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

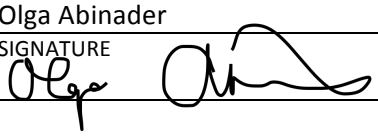
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result.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

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

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

| TITLE | LEAD AGENCY |
|---|---|
| Director, Environmental Assessment and Review Division | Department of City Planning, acting on behalf of the City Planning Commission |
| NAME | DATE |
| Olga Abinader | July 23, 2021 |

SIGNATURE



## NEGATIVE DECLARATION

**Statement of No Significant Effect**

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

**Reasons Supporting this Determination**

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

**Land Use, Zoning, and Public Policy**

A detailed analysis of land use, zoning, and public policy is included in the EAS. The proposed actions are a Zoning Map Amendment to establish an R6B/C2-3 district within an area currently zoned R3A consisting of Block 9589, Lot 11, and portions of Lots 5, 6, 7, 8, and 9 (the Affected Area), by extending an existing R6B/C2-3 district that is mapped to the north of the Affected Area, along Liberty Avenue, and a Zoning Text Amendment to map the Affected Area with MIH Options 1 and 2 in the South Richmond Hill section of Queens Community District 10. The proposed actions would facilitate the development of Lot 11 with a 4-story plus cellar 45-foot tall 23,469 GSF mixed-use commercial and residential building, containing approximately 7,560 GSF of ground floor commercial space and 15,909 GSF of residential space, plus 8 parking spaces. The proposed actions are anticipated to result in a change in land use on Lot 11 that would increase allowable residential density and allow for ground floor commercial use, however, given the existing residential character of the area with many 4-6-story buildings along Liberty Avenue directly north of the Affected Area, the change in land use and zoning would not constitute a significant adverse impact.

**Hazardous Materials and Noise**

An (E) designation (E-600) related to hazardous materials 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 or noise.

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

| TITLE | LEAD AGENCY |
|---|---|
| Director, Environmental Assessment and Review Division | Department of City Planning on behalf of the City Planning Commission<br>120 Broadway, 31st Fl. New York, NY 10271 \| 212.720.3493 |
| NAME<br>Olga Abinader | DATE<br>July 23, 2021 |
| SIGNATURE | |
| TITLE<br>Chair, City Planning Commission | |
| NAME<br>Marisa Lago | DATE<br>July 26, 2021 |
| SIGNATURE | |

**Project Name: 103-16 Van Wyck Expressway Rezoning**
**CEQR # 20DCP161Q**
**SEQRA Classification: Unlisted**

Determination of Significance Appendix

The Proposed Actions 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 | Queens | 9589/11 |

(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-600**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

| Development Site | Hazardous Materials | Air Quality | Noise |
|---|---|---|---|
| Projected Development Site 1 | X | | X |

*Hazardous Materials*

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

*Task 1-Sampling Protocol*

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

*Task 2-Remediation Determination and Protocol*

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

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

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

**Project Name: 103-16 Van Wyck Expressway Rezoning**
**CEQR # 20DCP161Q**
**SEQRA Classification: Unlisted**

*Noise*

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

> ***Projected Development Site 1:*** *To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a 33 dBA window/wall attenuation on all facades to maintain an interior noise level not greater than 45 dBA for residential 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.*

***Figure 1-1: Project Location Map - Aerial***

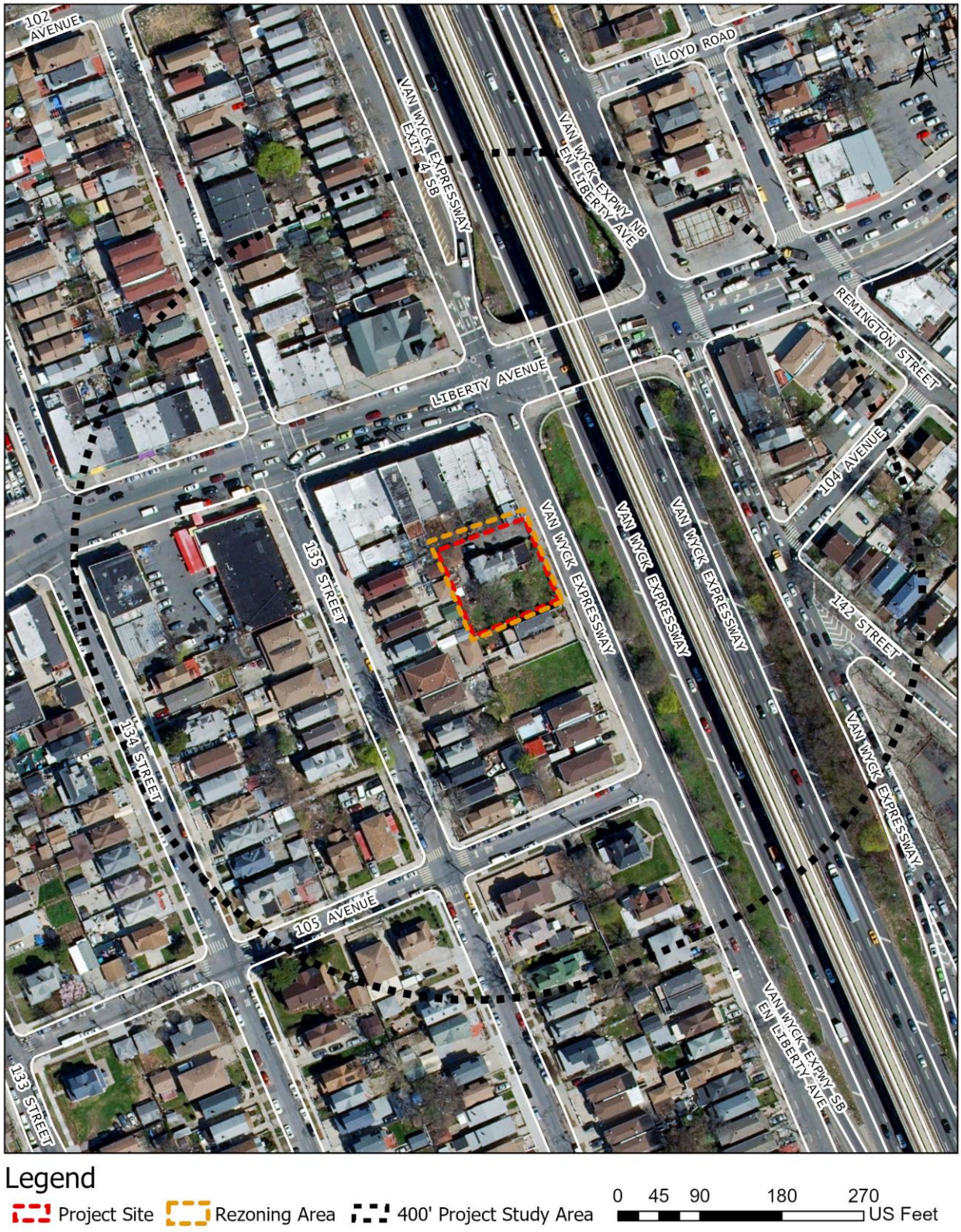


***Figure 1-2: Project Location Map***

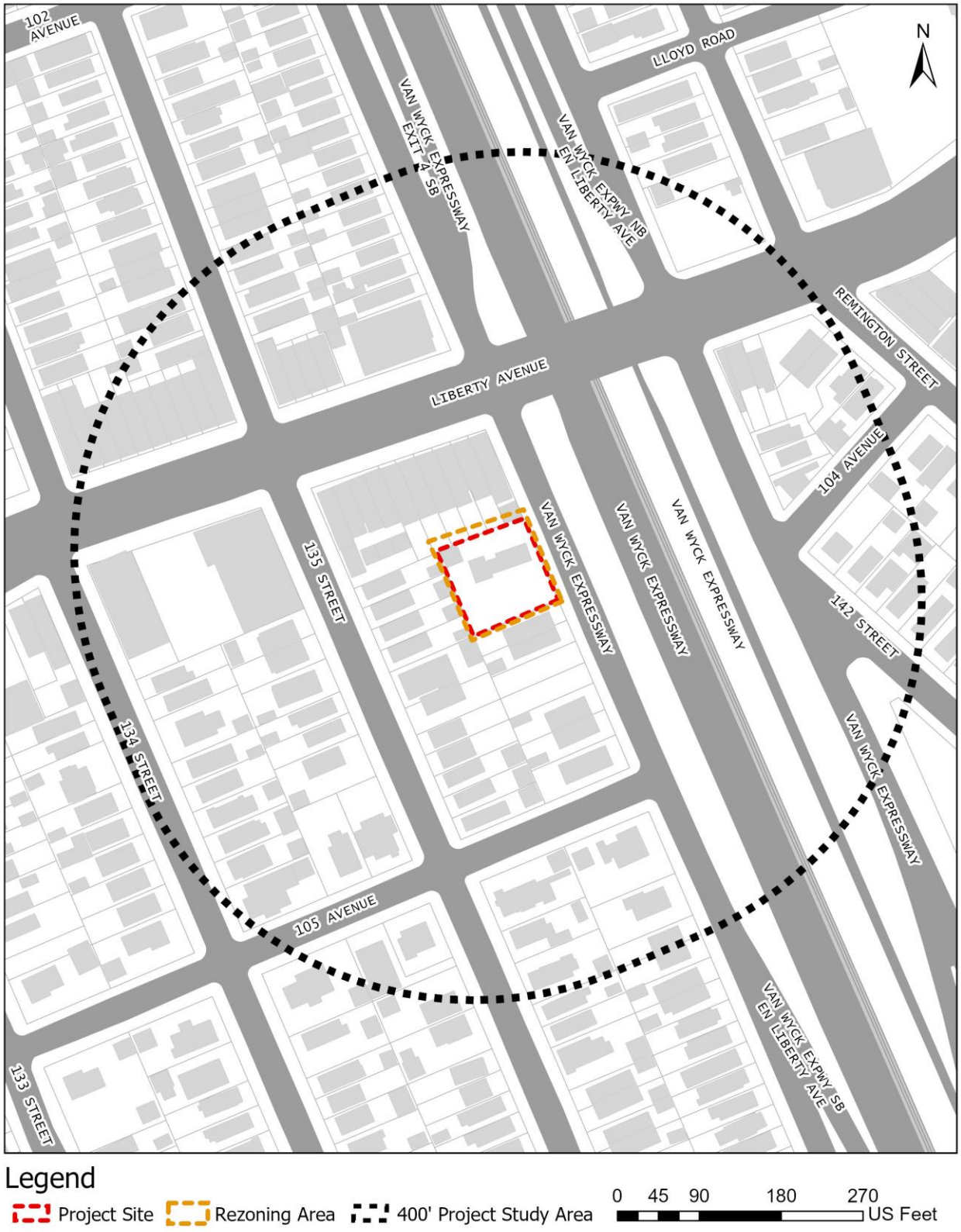


***Figure 1-3: Zoning Map***



***Figure 1-4: Zoning Change Map***



***Figure 1-5: Tax Map***



***Figure 1-6: Land Use Map***

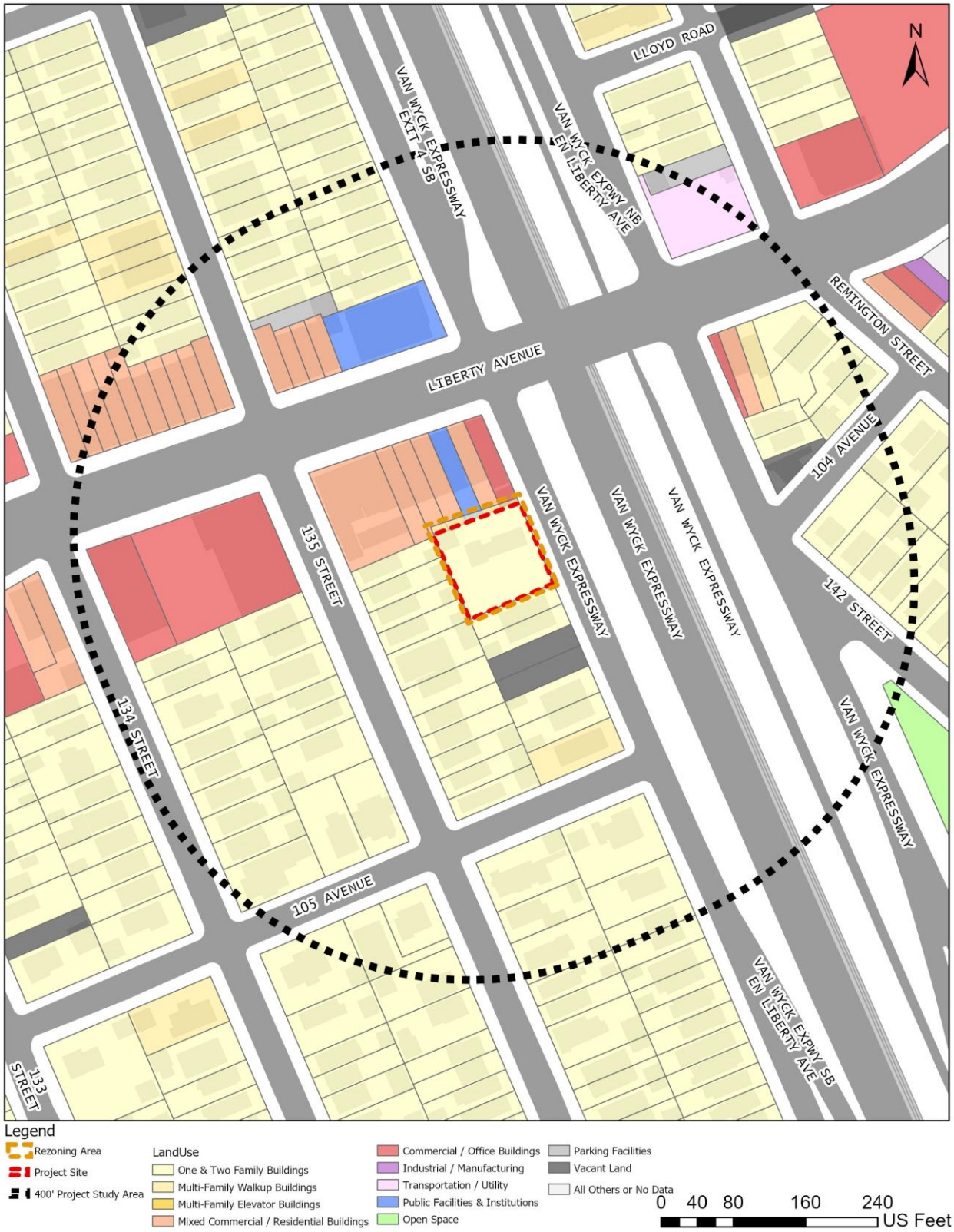


***Figure 1-7: Site Photos***



1. View of the Development Site facing northwest from Van Wyck Expressway.



2. View of Van Wyck Expressway facing northwest (Development Site at left).



3. View of the Development Site facing southwest from Van Wyck Expressway.




**103-16 Van Wyck Expressway, Queens**

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Urban Cartographics
Photographs Taken on July 2, 2021



4. View of the Development Site facing south from Van Wyck Expressway.



5. View of the west side of Van Wyck Expressway facing west from the Project Area.



6. View of Van Wyck Expressway facing southeast (Development Site at right).




**103-16 Van Wyck Expressway, Queens**

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Urban Cartographics
Photographs Taken on July 2, 2021



7. View of the west side of Van Wyck Expressway facing southwest between Liberty Avenue and 105th Avenue.



8. View of Liberty Avenue facing southwest from Van Wyck Expressway.



9. View of the intersection of Van Wyck Expressway and Liberty Avenue facing south (Development Site far at left).




**103-16 Van Wyck Expressway, Queens**

Urban Cartographics
Photographs Taken on July 2, 2021



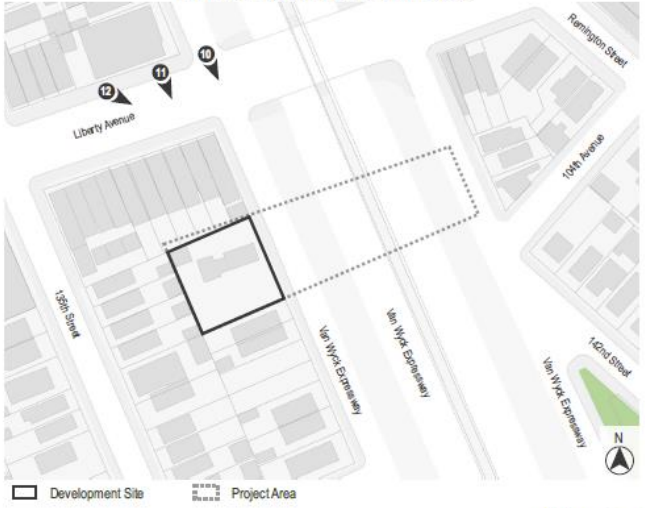

10. View of Van Wyck Expressway facing southeast from Liberty Avenue (Development Site far ahead at right).




11. View of the south side of Liberty Avenue facing southeast between Van Wyck Expressway and 135th Street.



12. View of the south side of Liberty Avenue facing southeast between Van Wyck Expressway and 135th Street..




**103-16 Van Wyck Expressway, Queens**

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Urban Cartographics
Photographs Taken on July 2, 2021



13. View of Liberty Avenue facing northeast between 135th Street and Van Wyck Expressway.



14. View of the sidewalk along the south side of Liberty Avenue facing northeast between 135th Street and Van Wyck Expressway.



15. View of the north side of Liberty Avenue facing northwest.




**103-16 Van Wyck Expressway, Queens**

Urban Cartographics
Photographs Taken on July 2, 2021



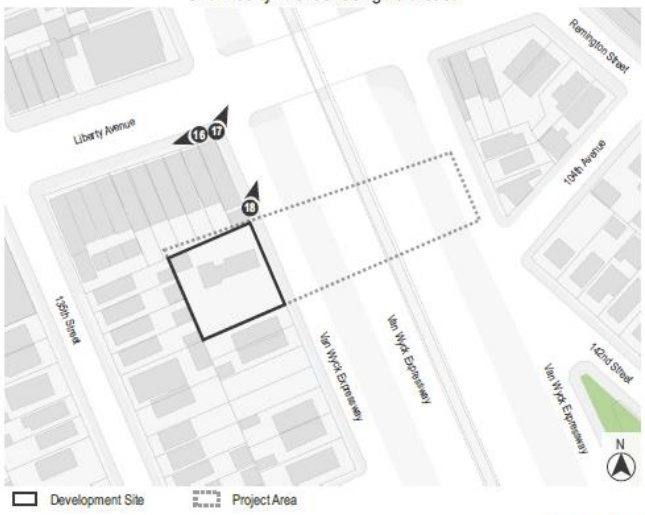

16. View of the sidewalk along the south side of Liberty Avenue facing southwest from Van Wyck Expressway.



17. View of the intersection of Van Wyck Expressway and Liberty Avenue facing northeast.



18. View of the east side of Van Wyck Expressway facing north from the Development Site.




**103-16 Van Wyck Expressway, Queens**

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Urban Cartographics
Photographs Taken on July 2, 2021



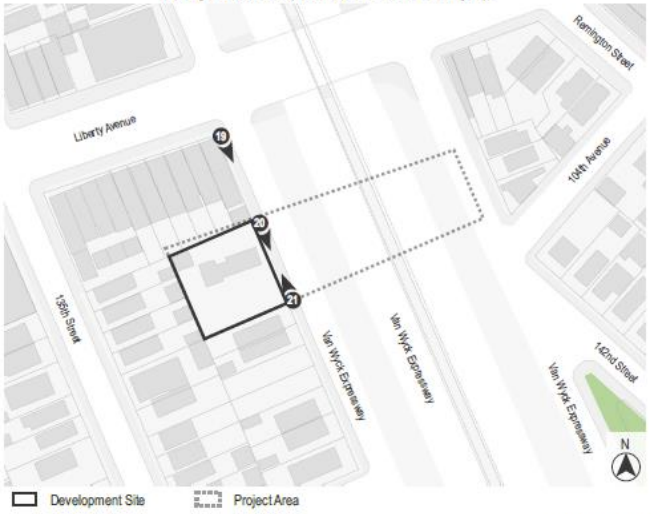

19. View of the sidewalk along the west side of Van Wyck Expressway facing southeast from Liberty Avenue.



20. View of the sidewalk along the west side of Van Wyck Expressway facing southeast (Development Site at right).



21. View of the sidewalk along the west side of Van Wyck Expressway facing northwest (Development Site at left).




**103-16 Van Wyck Expressway, Queens**



Urban Cartographics
Photographs Taken on July 2, 2021

# 1.0 Project Description

## 1.1 Introduction

10316 Van Wyck Exp LLC. (The Applicant) is requesting a zoning map amendment and zoning text amendment (the Proposed Actions) in order to facilitate the redevelopment of a site within the South Richmond Hill section of Queens Community District 10. The Proposed Actions are a Zoning Map Amendment to establish an R6B/C2-3 district within an area currently zoned R3A consisting of Block 9589, Lot 11, and portions of Lots 5, 6, 7, 8, and 9 (the Affected Area), by extending an existing R6B/C2-3 district that is mapped to the north of the Affected Area, along Liberty Avenue, and a Zoning Text Amendment to map the rezoning area with MIH Options 1 and 2. The Affected Area is on a block bounded by Liberty Avenue to the north, Van Wyck Expressway service road to the east, 105th Avenue to the south, and 135th Street to the west. In its entirety, the Affected Area comprises approximately 10,396 square feet of lot area, of which 10,000 square feet consists of Lot 11 (the Project Site).

The Applicant proposes to develop the Project Site with a 4-story plus cellar 45- foot tall 23,469 GSF mixed-use commercial and residential building, containing approximately 7,560 GSF of ground floor commercial space and 15,909 GSF of residential space, providing 18 dwelling units, 5 or 6 of which would be permanently affordable per MIH options 1 and 2, which would both be mapped on the Affected Area. Eight residential parking spaces would be required and would be provided within an enclosed parking garage at cellar level. While the above states the Applicant's intended development under the Proposed Actions, for conservative analysis purposes, a Reasonable Worst-Case Development Scenario (RWCDS) that maximizes development potential within the Affected Area under the Proposed Actions, as described below, is considered for purposes of identifying potential environmental impacts. The Applicant's proposed development maximizes available floor area for the Proposed Development Site under the proposed R6B/C2-3 zoning but does not maximize allowable height. An overall building height of 55 feet, which is permitted within the R6B for a building with a Qualifying First Floor, will be assessed.

## 1.2 Actions Necessary to Facilitate the Project

The actions necessary to facilitate the proposed project are a Zoning Map Amendment to rezone the portion of Block 9589 within 100 feet of Van Wyck Expressway extending from a line 100 feet south of Liberty Avenue to a line 195 feet north of 105$^{th}$ Avenue from R3A to R6B/C2-3, and a Zoning Text Amendment to map an area coterminous with the rezoning area for Mandatory Inclusionary Housing (MIH). The rezoning area would include six separate lots on Block 9589: Lot 11, and portions of Lots 5, 6, 7, 8, and 9.

**Figure 1-4: Zoning Map Change** shows the existing and proposed zoning for the Affected Area. The above-referenced action is subject to approval by the CPC pursuant to the Uniform Land Use Review Procedure (ULURP).

## 1.3 Background

The Affected Area was originally zoned R3-2 in 1961. In 2013, the Affected Area was subject to the Department of City Planning initiated Ozone Park Rezoning (C 140079 ZMQ, effective December 10, 2013). The rezoning was intended to prevent out-of-character development, more

closely reflect established development patterns, and direct opportunities for moderate residential and commercial growth to locations along wide streets and transit resources. The Affected Area was rezoned from an R3-2 zoning district to an R3A zoning as part of this rezoning, which did not increase permitted FAR or height but decreased front yard and side yard requirements.

## 1.4 Description of Surrounding Area

The 400-foot surrounding area is within the South Richmond Hill neighborhood of Queens Community District 10. The area is characterized predominantly by one- and two-family detached and semi-detached residences on the north-south streets, and attached residences with ground-floor commercial uses on Liberty Avenue. Building heights range from one to three stories in height. The Affected Area fronts on the southbound service road of the Van Wyck Expressway. The Van Wyck Expressway main roadway is within an open trench in this area, and the tracks of the AirTrain are built over the expressway median. The Expressway forms a physical barrier with the community to the east. Liberty Avenue, one half-block north of the affected area, crosses the Van Wyck Expressway, however the next crossing to the south is at 109th Avenue, a distance of approximately 1,500 feet (1/4 mile).

The surrounding area is served by the Q112 bus, operating in an east-west direction on Liberty Avenue, and the Q9 bus which operates in a north-south direction on the Van Wyck Expressway service roads.

## 1.5 Description of Affected Area

The Affected Area consists of Block 9589, Lot 11 (the Proposed Development Site) and small portions of Lots 5 (approximately 103 sf), 6 (approximately 189 sf), 7 (approximately 85 sf), 8 (approximately 111 sf), and 9 (approximately 78 sf). The Affected Area is on the west side of Van Wyck Expressway on a block bounded by Liberty Avenue to the north, 105th Avenue to the south, Van Wyck Expressway to the east, and 135th Street to the west.

The Applicant-Owned Proposed Development Site

Block 9589, Lot 11 (the Proposed Development Site) is a 10,000-square foot interior lot with 100 feet of frontage along Van Wyck Expressway at a depth of 100 feet. The lot is currently improved with a two-and-a-half-story, one-family detached home, with an accessory garage at the rear of the lot. The building was constructed around 1920 according to DOB records, and contains 3,265 gross square feet (GSF) of floor area.

Non-Applicant-Owned Sites

The proposed zoning map amendment would affect small areas at the rear of five lots that front on Liberty Avenue (Block 9589, Lots 5, 6, 7, 8, and 9). The R6B/C2-3 district established on Liberty Avenue as part of the 2013 Ozone Park Rezoning was mapped to a depth of 100 feet. These lots are slightly irregular in shape and extend to a depth of greater than 100 feet. The rear portions of these lots are within the R3A district that also encompasses the entire Proposed Development Site. The non-applicant-owned sites are identified in the following table:

**Table 1.5-1: Non-Applicant Sites**

| Address | Block | Lot | Existing Use | Lot Size | Floor Area |
|---|---|---|---|---|---|
| 135-12 Liberty Ave | 9589 | p/o 5 | Upper residential/Ground floor commercial | 2,239 SF (approx. 121 SF within Affected Area | 2,200 ZSF, 3,000 GSF |
| 135-14 Liberty Ave | 9589 | p/o 6 | Upper residential/Ground floor commercial | 2,206 SF (approx. 122 SF within Affected Area) | 2,200 ZSF, 3,000 GSF |
| 135-16 Liberty Ave | 9589 | 7 | Church (Primera Iglesia Evangelica de Jesu Cristo) | 2,165 SF (approx. 84.4 SF within Affected Area) | 2,200 ZSF, 3,000 GSF |
| 135-18 Liberty Ave | 9589 | 8 | Upper residential/Ground floor commercial) | 2,159 SF {approx. 51 SF within Affected Area) | 2,520 ZSF, 3,000 GSF |
| 135-20 Liberty Ave | 9589 | 9 | Commercial Office | 2,084 SF (approx. 17 SF within Affected Area) | 3,224 ZSF, 5,000 GSF |

Lots 5, 6, 7, 8, and 9 front on the south side of Liberty Avenue, and the front 100 feet of their depth is within the existing R6B/C2-3 district. The proposed rezoning would rezone a small portion at the rear of each lot.

## 1.6 Purpose and Need

The Applicant believes that the Proposed Development Site is underutilized and presents an opportunity for new residential dwelling units in furtherance of city policy goals. The building occupying the Proposed Development Site is a vacant single-family home. The Applicant believes that the Proposed Actions would allow multi-family housing and additional dwelling units, along with local-serving commercial use, at a bulk and density that is compatible with the surrounding community.

## 1.7 Analysis Framework

The analysis which follows compares the difference between future conditions with the proposed establishment of the R6B/C2-3 district within the Affected Area (With-Action) and the development which could reasonably be expected to occur under the existing R3A zoning (No-Action). This EAS studies the potential for individual and cumulative environmental impacts related to the Proposed Actions occurring in a study area of approximately 400-feet around the Affected Area. This study radius may vary for different aspects on environmental review, depending on the distance at which environmental impacts attributable to the Proposed Actions may be experienced. The analysis framework is described below.

Build Year

The Proposed Development Site is occupied with a one-family residential structure. The proposed rezoning would allow for a new four-story multi-family residential structure to be built on-site. Factoring the Environmental Approval process and ULURP process of 18 months and an 18-month construction schedule for the Projected Development Site, a projected build year of 2023 is assumed.

Reasonable Worst-Case Development Scenario

In order to assess the possible effects of the Proposed Actions, a Reasonable Worst-Case Development Scenario ("RWCDS") was developed for both the future without the Proposed Actions (Future No-Action) and the future with the Proposed Actions (Future With-Action) for the build year of 2023. The framework for analysis considers the difference between the future absent the Proposed Actions (the "Future No-Action Condition") and the future with the Proposed Actions ("the Future With-Action Condition") in the 2023 build year.

The development of the no-action scenario and with-action scenario follow the soft site criteria as established in Sections 2-6 and 2-7 of the *CEQR Technical Manual*. Only one Projected Development Site was identified under these conditions—applicant-owned Block 9589, Lot 11 (Projected Development Site 1).

The Applicant's proposed development of a four-story building with ground floor commercial space and 2nd through 4th floor residences would maximize allowable floor area under the proposed zoning. For the purposes of a more conservative analysis, development of the Projected Development Site is assumed to maximize allowable height under R6B/C2-3. A building with a qualifying ground floor may be up to 55 feet in height, whereas the Applicant's proposed development would be 45 feet tall. This assumption maximizes potential development under the proposed R6B/C2-3 zoning and would provide for a more conservative assessment of potential environmental impacts.

Future Without the Proposed Actions

Projected Development Site 1 is currently improved with a vacant two-and-a-half-story one-family detached home, with an accessory garage at the rear of the lot. The building was constructed around 1920 according to DOB records, and is 3,265 GSF. Although the building is currently vacant, in the future without the Proposed Actions it is expected that the building would be retenanted.

No other changes are expected to occur in the Affected Area in the absence of the Proposed Actions. The lots fronting on Liberty Avenue that are predominantly within the R6B/C2-3 district with small portions within the Affected Area are developed and occupied, and no changes are anticipated.

Future With the Proposed Actions

Under the With-Action scenario the Projected Development Site (Block 9589, Lot 11; 103-16 Van Wyck Expressway) would be developed with a 23,469 GSF (22,000 ZSF; 2.20 FAR) 5-story, 55-foot-tall mixed-use building. Such development would maximize allowable height and floor area under the proposed R6B/C2-3 zoning. The structure would include 7,560 GSF of ground floor commercial (local retail) uses. Floors 2 through 5 would include 15,909 GSF of residential uses, with 18 total dwelling units, 4 of which would be permanently affordable in accordance with MIH options 1 or 2 (20% of floor area is considered set aside for affordable dwelling units for conservative CEQR analysis purposes). Eight residential parking spaces would be required and would be provided in an enclosed garage at cellar level. As an interior lot within an R6B zoning district, the projected building can have a maximum lot coverage of 60% and must have a minimum rear yard of 30 feet. For maximum flexibility The Applicant will map the area with MIH options 1 and 2.

The other lots within the rezoning area are not expected to redevelop as a result of the Proposed Actions. Block 9589, Lots 5, 6, 7, 8, and 9 are already mapped within an R6B/C2-3 zoning district, and the rezoning would remove their split lot conditions. There would be no increase in permitted bulk or height, nor would there be an introduction of new use groups to these lots.

The RWCDS Analysis Framework described above is shown in **Table 1.7-1.**

The existing, no-action, and with-action conditions on the lots within the Affected Area are presented in the **Table 1.7-2 Incremental Analysis Table.**

## Table 1.7-1: RWCDS Analysis Framework – Existing, No-Action and With-Action Calculations (Projected Sites)

### Part III - RWCDS Analysis Framework Spreadsheet (Projected Sites)

**Existing**

| | Address | Block | Lot | Lot Size SF | Projected Site Lot Size SF | Existing Zoning | | TOTAL FAR | | Residential FAR | | Commercial FAR | | Community Facility FAR | | Manufacturing FAR | | # of Stories | | Height | | TOTAL SF | | Residential SF | | Commercial SF | | Community Facility SF | | Manufacturing SF | | Parking SF | Total DU (Market + Affordable) | Affordable DU | | Market-rate DU | Parking | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Exist. | Max. | Exist. | Max. | Exist. | Max. | Exist. | Max. | Exist. | Max. | Exist. | Max. | Exist. | Max. | GSF | ZSF | GSF | ZSF | GSF | ZSF | GSF | ZSF | GSF | ZSF | | | | | | Residential | Commercial | Community |
| Projected Development Site 1 | 103-16 Van Wyck Expy | 9589 | 11 | 10,000 | 10,000 | R3A | | 0.30 | 1.00 | 0.30 | 0.60 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | N/A | 2.5 | N/A | 35 | 35 | 3,265 | 3,023 | 3,265 | 3,023 | 0 | 0 | 0 | 0 | 0 | 0 | | 1 | | | 1 | 1 | | |
| TOTAL | | | | 10,000 | 10,000 | | | | | | | | | | | | | | | | | 3,265 | 3,023 | 3,265 | 3,023 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 |

**No-Action Scenario**

| | Address | Block | Lot | Lot Size SF | Projected Site Lot Size SF | Existing Zoning | | TOTAL FAR | | Residential FAR | | Commercial FAR | | Community Facility FAR | | Manufacturing FAR | | # of Stories | | Height | | TOTAL SF | | Residential SF | | Commercial SF | | Community Facility SF | | Manufacturing SF | | Parking SF | Total DU (Market + Affordable) | Affordable DU | | Market-rate DU | Parking | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | GSF | ZSF | GSF | ZSF | GSF | ZSF | GSF | ZSF | GSF | ZSF | | | | | | Residential | Commercial | Community |
| Projected Development Site 1 | 103-16 Van Wyck Expy | 9589 | 11 | 10,000 | 10,000 | R3A | | 0.30 | 1.00 | 0.30 | 0.60 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | N/A | 2.5 | N/A | 35 | 35 | 3,265 | 3,023 | 3,265 | 3,023 | 0 | 0 | 0 | 0 | 0 | 0 | | 1 | | | 1 | 1 | | |
| TOTAL | | | | 10,000 | 10,000 | | | | | | | | | | | | | | | | | 3,265 | 3,023 | 3,265 | 3,023 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 |

**With-Action Scenario**

| | Address | Block | Lot | Lot Size SF | Projected Site Lot Size SF | Existing Zoning | Proposed Zoning | TOTAL FAR | | Residential FAR | | Commercial FAR | | Community Facility FAR | | Manufacturing FAR | | # of Stories | | Height | | TOTAL SF | | Residential SF | | Commercial SF | | Community Facility SF | | Manufacturing SF | | Parking SF | Total DU (Market + Affordable) | Affordable DU (100% per HPD) | Affordable DU (@ 80% AMI) | Market-rate DU | Parking | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | GSF | ZSF | GSF | ZSF | GSF | ZSF | GSF | ZSF | GSF | ZSF | | | | | | Residential | Commercial | Community |
| Projected Development Site 1 | 103-16 Van Wyck Expy | 9589 | 11 | 10,000 | 10,000 | R3A | R6B/C2-3 | 2.20 | 2.20 | 1.47 | 2.20 | 0.73 | 2.00 | 0.00 | 3.00 | 0.00 | N/A | 5 | 5 | 55 | 55 (w/QGF) | 23,469 | 22,000 | 15,909 | 14,731 | 7,560 | 7,269 | 0 | 0 | | | 18 | 0 | 4 | 14 | 8 | 0 | 0 |
| TOTAL | | | | 10,000 | 10,000 | | | | | | | | | | | | | | | | | 23,469 | 22,000 | 15,909 | 14,731 | 7,560 | 7,269 | 0 | 0 | 0 | 0 | 18 | 0 | 4 | 14 | 8 | 0 | 0 |
| INCREMENT | | | | 0 | 0 | | | | | | | | | | | | | | | | | 20,204 | 18,977 | 12,645 | 11,708 | 7,560 | 7,269 | 0 | 0 | 0 | 0 | 17 | 0 | 4 | 13 | 7 | 0 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50% Mkt | 1/400 sf | 1/800 sf |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 25% affordable | | |

**Other Sites Not Expected To Be Affected By The Proposed Actions**

| | Address | Block | Lot | Lot Size SF | Projected Site Lot Size SF | Existing Zoning | | TOTAL FAR | | Residential FAR | | Commercial FAR | | Community Facility FAR | | Manufacturing FAR | | # of Stories | | Height | | TOTAL SF | | Residential SF | | Commercial SF | | Community Facility SF | | Manufacturing SF | | Rationale for Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | Prop. | Max. | GSF | ZSF | GSF | ZSF | GSF | ZSF | GSF | ZSF | GSF | ZSF | |
| Other Site 1 | 135-12 Liberty Ave | 9589 | 5 | 2,239 | 2,239 | R6B/C2-3 | | 0.98 | 2.00 | 0.54 | 2.00 | 0.45 | 2.00 | 0.00 | 3.00 | 0.00 | N/A | 2 | 5 | 30 | 55 | 2,200 | 2,200 | 1,200 | 1,200 | 1,000 | 1,000 | | | | | A small portion of this lot is included in the rezoning area. Based on the 25-foot rule, this lot is already under R6B/C2-3 zoning regulations, and the rezoning would not result in an increase in permitted bulk or height. Redevelopment as a result of the Proposed Actions is not anctipated. |
| Other Site 2 | 135-14 Liberty Ave | | 6 | 2,206 | 2,206 | | | 1.00 | | 0.50 | | 0.50 | | 0.00 | | 0.00 | | 2 | | 30 | | 2,200 | 2,200 | 1,100 | 1,100 | 1,100 | 1,100 | | | | | A small portion of this lot is included in the rezoning area. Based on the 25-foot rule, this lot is already under R6B/C2-3 zoning regulations, and the rezoning would not result in an increase in permitted bulk or height. Redevelopment as a result of the Proposed Actions is not anctipated. |
| Other Site 3 | 135-16 Liberty Ave | | 7 | 2,165 | 2,165 | | | 1.02 | | 0.00 | | 0.00 | | 1.02 | | 0.00 | | 2 | | 30 | | 2,200 | 2,200 | | | | | 2,200 | 2,200 | | | A small portion of this lot is included in the rezoning area. Based on the 25-foot rule, this lot is already under R6B/C2-3 zoning regulations, and the rezoning would not result in an increase in permitted bulk or height. Redevelopment as a result of the Proposed Actions is not anctipated. |
| Other Site 4 | 135-18 Liberty Ave | | 8 | 2,159 | 2,159 | | | 1.17 | | 0.47 | | 0.69 | | 0.00 | | 0.00 | | 2 | | 30 | | 2,520 | 2,520 | 1,020 | 1,020 | 1,500 | 1,500 | | | | | A small portion of this lot is included in the rezoning area. Based on the 25-foot rule, this lot is already under R6B/C2-3 zoning regulations, and the rezoning would not result in an increase in permitted bulk or height. Redevelopment as a result of the Proposed Actions is not anctipated. |
| Other Site 5 | 135-20 Liberty Ave | | 9 | 2,084 | 2,084 | | | 1.55 | | 0.00 | | 1.55 | | 0.00 | | 0.00 | | 2 | | 30 | | 3,224 | 3,224 | | | 3,224 | 3,224 | | | | | A small portion of this lot is included in the rezoning area. Based on the 25-foot rule, this lot is already under R6B/C2-3 zoning regulations, and the rezoning would not result in an increase in permitted bulk or height. Redevelopment as a result of the Proposed Actions is not anctipated. |
| TOTAL | | | | 10,853 | 10,853 | | | | | | | | | | | | | | | | | 12,344 | 12,344 | 3,320 | 3,320 | 6,824 | 6,824 | 2,200 | 2,200 | 0 | 0 | |

## Table 1.7-2: RWCDS Incremental Analysis Table

**Description of Existing and Proposed Conditions** **Part II - RWCDS Analysis Framework Table**

| | 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 | Vacant Single Family Home | Occupied Single Family Home | 5-story multi-family building | |
| No. of dwelling units | 0 | 1 | 18 | 17 |
| No. of low- to moderate-income units | 0 | 0 | 4 | 4 |
| Gross floor area (sq. ft.) | 3,265 | 3,265 | 15,909 | 12,644 |
| **Commercial** | ☐ Yes ☑ No | ☐ Yes ☑ No | ☑ Yes ☐ No | |
| If "yes," specify the following: | | | | |
| Describe type (retail, office, other) | N/A | N/A | Local Retail | |
| Gross floor area (sq. ft.) | N/A | N/A | 7,560 | 7,560 |
| Manufacturing/Industrial | N/A | N/A | N/A | |
| 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: | N/A | N/A | 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 | |
| No. of accessory spaces | N/A | N/A | 8 | 8 |
| 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 | |
| **Other** (includes street parking) | ☐ Yes ☑ No | ☐ Yes ☑ No | ☐ Yes ☑ No | |
| If "yes," describe: | N/A | N/A | N/A | |
| **Population** | | | | |

**Description of Existing and Proposed Conditions** **Part II - RWCDS Analysis Framework Table**

| | EXISTING CONDITION | NO-ACTION CONDITION | WITH-ACTION CONDITION | INCREMENT |
|---|---|---|---|---|
| **Residents** | ☐ Yes ☑ No | ☑ Yes ☐ No | ☑ Yes ☐ No | |
| If "yes," specify number: | 0 | 4 | 63 | 59 |
| Briefly explain how the number of residents was calculated: | Queens CD 10 avg. household size of 3.52 | | | |
| **Businesses** | ☐ Yes ☑ No | ☐ Yes ☑ No | ☑ Yes ☐ No | |
| If "yes," specify the following: | | | | |
| No. and type | N/A | N/A | 3 local retail | |
| No. and type of workers by business | N/A | N/A | 23 workers | 23 |
| No. and type of non-residents who are not workers | N/A | N/A | 1,538 | 1,538 |
| Briefly explain how the number of businesses was calculated: | Local Retail = 1 per 2,000 GSF | | | |
| **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: | 3 employees/1,000 GSF of local retail. 205 patrons per 1,000 GSF local retail use. | | | |
| **Zoning** | | | | |
| Zoning classification | R3A | R3A | R6B/C2-3 | |
| Maximum amount of floor area that can be developed | 1.00 | 1.00 | 2.20 | 1.20 |
| Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project | Land Use: Residential, commercial. Zoning: R6B, R5, R4, R3A, R3-2, C2-3, C2-4. | Land Use: Residential, commercial. Zoning: R6B, R5, R4, R3A, R3-2, C2-3, C2-4. | Land Use: Residential, commercial. Zoning: R6B, R5, R4, R3A, R3-2, C2-3, C2-4. | |
| Attach any additional information that may be needed to describe the project.<br><br>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

## 2.1 Land Use, Zoning, and Public Policy

The *CEQR Technical Manual* recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the surrounding area. Land use, zoning and public policy are described in detail below. This section considers existing conditions, development trends, and zoning and other public policies in relation to the Projected Development Site and the surrounding area as well as the larger area in which the Proposed Actions may have an effect. Because the Proposed Actions would permit development of uses (multiple family residential and local commercial) that are not permitted as of right under the Proposed Development Site's existing R3A zoning, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

### Methodology

Existing land uses were determined by reference to the New York City Zoning and Land Use (Zola) database and PLUTOTM 20v1 shapefiles. These uses were then confirmed through site visits. The evaluation of lots within the 400-foot Study Area were performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No Action and Future With-Action Conditions. Public Policy research was performed through an evaluation of New York City Department of City Planning (NYCDCP) and other city agencies programs and documentation.

## 2.1 Land Use, Zoning, and Public Policy

The *CEQR Technical Manual* suggests that a land use, zoning and public policy study area should 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 2.1-1.** The proposed zoning map amendment would affect the following lots: Block 9589, Lot 11 (the Proposed Development Site); and portions of Block 9589, Lots 5, 6, 7, 8, and 9.

### Existing Conditions

The Proposed Project Area is located in the South Richmond Hill neighborhood within Queens Community District 10 and consists of Block 9589, Lot 11, and portions of Lots 5, 6, 7, 8, and 9. The area is on a block bounded by Liberty Avenue to the north, Van Wyck Expressway service road to the east, 105th Avenue to the south, and 135th Street to the west. Liberty Avenue is an east-west, four lane road, with two moving lanes of traffic in each direction and curbside parking. The Van Wyck Expressway service road is a southbound one lane local road with curbside parking. The Van Wyck Expressway (Interstate 678), is approximately 200 feet to the east of the Affected Area below grade and is a six-lane highway running from JFK Airport in the south to Northern Boulevard in the north. North of Northern Boulevard, I 678 continues as the Whitestone Expressway. The Proposed Development Site consists of Block 9589, Lot 11. The lot is a 10,000 square foot lot with 100 feet of frontage along Van Wyck Expressway service road and a depth of 100 feet. The lot is currently improved with a two-and-a-half-story one-family detached home, with an accessory garage at the rear of the lot. The building was constructed around 1920 according to DOB records, and is 3,265 GSF.

Land Use within 400 feet of the Affected Area consists primarily of one- and two-family residences on the north-south side streets, and commercial buildings, some with upper residential use, along Liberty Avenue. Houses of worship are also located on Liberty Avenue within the Land Use study area. A gasoline service station is located on the north side of Liberty Avenue on the eastern side of the Van Wyck Expressway, nearly 400 feet from the Affected Area.

**Analysis**

Future No-Action Scenario

Existing uses within the Affected Area are expected to remain in the future without the Proposed Actions. Within the Land Use study area, there is one active construction project, located at 134-02 Liberty Avenue. The construction would enlarge an existing building and add 5,282 GSF of commercial space; currently the building is a mixed-use commercial and residential building with three residential dwelling units.

No other changes are expected to occur within the Affected Area or the Land Use study area in the absence of the Proposed Actions.

Future With-Action Scenario

The proposed R6B/C2-3 zoning district for the Affected Area allows residential and community facility development at a FAR of 2.2 and a maximum height of 50 feet (55 feet with a qualifying ground floor). The C2-3 overlay allows local commercial service and retail uses at up to 2.0 FAR.

*Development Site*

The Applicant's site would be developed with a 23,469 GSF (22,000 ZSF; 2.20 FAR) 5-story, 55-foot-tall mixed-use building. The structure would include 7,560 GSF of ground floor commercial (local retail) uses. Floors 2 through 5 would include 15,909 GSF of residential uses, with 18 total dwelling units, 4 of which would be permanently affordable. Eight residential parking spaces would be required and would be provided in an enclosed garage at cellar level.

**Conclusion**

The Proposed Rezoning would allow a change in land use that would permit slightly higher residential densities in a neighborhood characterized by a mix of multi-family residential apartments and one- and two-family houses. The surrounding area already contains a large and enduring residential population in four- to six-story apartment buildings and public institutions such as schools and religious facilities. The proposed rezoning would allow for the redevelopment of an underutilized lot, which would be redeveloped with a new mixed-use 5-story, 55-foot-tall residential and commercial structure with locally serving ground floor retail uses. This land use is similar to the surrounding area and would therefore not result in a significant adverse environmental impact.

**Zoning**

Existing zoning districts within approximately 400 feet of the Affected Area are presented in **Figure 2.1-2.** The proposed zoning map amendment would affect the following lots: Block 15785, Lots 55, 4, p/o Lot 7, and p/o Lot 54; Block 15737, Lots 1 and 10. Collectively these lots are

identified as the Affected Area. The existing zoning designation of R4-1 would change to R5D under the Proposed Actions.

**Existing Conditions**

Zoning Study Area

The zoning districts within 400 feet of the Affected Area are R3A, R3-2, R4, R4A, R5, R6A, R6B, and C2-3 and C2-4 commercial overlays.

**Table 2.1-2: Summary of Existing Zoning Regulations**

| Zoning District | Type and Use Group | Floor Area Ratio | Parking (Required Spaces) |
|---|---|---|---|
| **R3A** | Residential UGs 1-4 | 0.60 FAR – Residential plus attic allowance<br>1.00 FAR – Community Facility | 1 per Dwelling Unit |
| **R3-2** | Residential UGs 1-4 | 0.60 FAR – Residential plus attic allowance<br>1.00 FAR – Community Facility | 1 per Dwelling Unit |
| **R4** | Residential UGs 1-4 | 0.90 FAR – Residential plus attic allowance<br>2.00 FAR – Community Facility | 1 per Dwelling Unit; 50% of IRHU |
| **R4A** | Residential UGs 1-4 | 0.90 FAR – Residential plus attic allowance<br>2.00 FAR – Community Facility | 1 per Dwelling Unit; 50% of IRHU |
| **R5** | Residential UGs 1-4 | 1.25 FAR – Residential<br>2.00 FAR – Community Facility | 85% of Dwelling Units; 42.5% of IRHU |
| **R6A** | Residential UGs 1-4 | 3.00 FAR – Residential<br>3.00 FAR – Community Facility | 50% of Dwelling Units; 25% of IRHU |
| **R6B** | Residential UGs 1-4 | 2.00 FAR – Residential<br>2.00 FAR – Community Facility | 50% of Dwelling Units; 25% of IRHU |
| **C2-3** | Commercial UGs 1-9, 14 | 1.00 FAR – Commercial within R1-R5<br>2.00 FAR – Commercial within R6-R10 | 1 per 400 SF |
| **C2-4** | Commercial UGs 1-9, 14 | 1.00 FAR – Commercial within R1-R5<br>2.00 FAR – Commercial within R6-R10 | 1 per 1,000 SF |

**Source**: Zoning Handbook, New York City Department of City Planning, January 2018

Existing zoning districts in the surrounding area include:

**R3A**

Characteristic of many of the city's older neighborhoods, R3A contextual districts feature modest single- and two-family detached residences on zoning lots as narrow as 25 feet in width. Parts of College Point and Whitestone in Queens, City Island in the Bronx and Port Richmond in Staten Island are typical R3A neighborhoods.

The amount of required open space on residential lots in R3A districts is governed by yard requirements. New detached homes must have two side yards totaling at least eight feet, but there is no minimum width requirement for either one. R3A districts also permit zero lot line buildings which are set along a side lot line and have one side yard at least eight feet wide. The front yard of a new home must be at least 10 feet deep and, to promote a unified streetscape, it must be as deep as an adjacent front yard but need not exceed a depth of 20 feet. The maximum floor area ratio (FAR) of 0.5 may be increased up to 20%

by an attic allowance for the inclusion of space beneath a pitched roof. The perimeter wall may rise to 21 feet before sloping or being set back to a maximum building height of 35 feet. Parking is in the side or rear yard but an in-house garage is allowed if the lot is 35 feet or wider, provided the driveway is at least 18 feet deep. One off-street parking space is required for each dwelling unit.

**R3-2**

R3-2 districts are general residence districts that allow a variety of housing types, including low-rise attached houses, small multi-family apartment houses, and detached and semi-detached one- and two-family residences. It is the lowest density zoning district in which multiple dwellings are permitted. Because of their flexibility, R3-2 districts are mapped widely in all boroughs except Manhattan.

The 0.5 floor area ratio (FAR) may be increased by an attic allowance of up to 20% for the inclusion of space beneath a pitched roof. The perimeter wall may rise to 21 feet before sloping or being set back to a maximum building height of 35 feet. Lots with detached homes must be at least 40 feet wide; if occupied by semi-detached and attached buildings, lots must be at least 18 feet wide. The maximum street wall length for a building on a zoning lot is 125 feet. The maximum lot coverage of any residence is 35%. Front yards must be at least 15 feet deep. 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. One off-street parking space is required for each dwelling unit. However, requirements are lower for income-restricted housing units (IRHU) and are further modified within the Transit Zone.

**R4**

R4 districts allow all types of -housing at a slightly higher density than permit-ted in R3-2 districts. The floor area ratio (FAR) of 0.75, plus an attic allowance of up to 20% for inclusion of space under the pitched roof common to these districts, -usually produces buildings with three stories instead of the two-story homes characteristic of R3 districts. Much of the residential development in North Corona in Queens and Arden Heights in Staten Island is typical of R4 districts.

To accommodate a potential third floor beneath a pitched roof, the perimeter wall in R4 districts may rise to 25 feet before being set back to the maximum building height of 35 feet. Front yards must be 10 feet deep or, if deeper, a minimum of 18 feet to provide sufficient space for on-site parking. Cars may park in the side or rear yard, in the garage or in the front yard within the side lot ribbon; the driveway must be within the side lot ribbon unless the lot is wider than 35 feet. Detached houses must have two side yards that total at least 13 feet and each one must be at least five feet wide. Semi-detached buildings need one side yard with a minimum width of eight feet. The maximum street wall length for a building on a single zoning lot is 185 feet. One off-street parking space is required for each dwelling unit. However, requirements are lower for income-restricted housing units (IRHU) and are further modified within the Transit Zone.

**R4A**

R4A contextual districts are similar to R3A and R3X districts in that only one- and two-family detached residences are permitted. Differences in the maximum permitted floor

area ratio (FAR) and minimum required lot size, however, result in variations in the typical building envelope found in each district. Characterized by houses with two stories and an attic beneath a pitched roof, R4A districts have an FAR of up to 0.75 (plus an attic allowance) and a minimum lot width of 30 feet. The districts are usually mapped in older neighborhoods, such as Woodlawn and Throgs Neck in the Bronx.

As in R3A and R3X districts, the perimeter wall of a house may rise to 21 feet before sloping or being set back to the maximum building height of 35 feet. A front yard must be at least as deep as an adjacent front yard and at least 10 feet deep, but it need not exceed a depth of 20 feet. A 30-foot-deep rear yard, and two side yards that total at least 10 feet with a minimum width of two feet each are also required. There must be at least eight feet between buildings on adjacent lots. Parking must be located in the side or rear yard and the driveway must be within the side lot ribbon. If the lot is 35 feet or wider, a garage is permitted within the house, provided the driveway is at least 18 feet deep to prevent cars from jutting onto the sidewalk. One off-street parking space is required for each dwelling unit.

**R5**

R5 districts allow a variety of housing at a higher density than permitted in R3-2 and R4 districts. 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 are widely mapped in Brooklyn, Queens and the Bronx. Portions of Windsor Terrace and Ocean Parkway in Brooklyn are R5 districts.

To ensure compatibility with neighborhood scale, the maximum street wallheight 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, but requirements are lower for income-restricted housing units (IRHU) and are further modified within the Transit Zone.

**R6A**

R6A is a contextual district where the Quality Housing bulk regulations are mandatory. These regulations produce high lot coverage, six- to eight-story apartment buildings set at or near the street line. Designed to be compatible with older buildings found in medium-density neighborhoods, R6A districts are mapped in the Bronx, Brooklyn and Queens. Parts of Kingsbridge in the Bronx and Williamsburg in Brooklyn are typical R6A areas.

The floor area ratio (FAR) in R6A districts is 3.0. Above a minimum base height of 40 feet, the building must set back by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 70 feet, or 75 feet if providing a qualifying

ground floor. To preserve the traditional streetscape, the street wall of a new building can be no closer to the street line than any adjacent street wall, but need not be farther than 10 feet. The area between a building's street wall and the street line must be planted. R6A 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 income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core, or for lots less than 10,000 square feet. Parking can be waived if five or fewer spaces are required. Off-street parking is not allowed in front of a building.

**R6B**

R6B districts are often traditional row house districts, which preserve the scale and harmonious streetscape of neighborhoods of four-story attached buildings developed during the 19th century. Many of these houses are set back from the street with stoops and small front yards that are typical of Brooklyn's "brownstone" neighborhoods, such as Park Slope, Boerum Hill and Bedford Stuyvesant.

The Floor Area Ratio (FAR) of 2.0 and the mandatory Quality Housing regulations also accommodate apartment buildings at a similar four- to five-story scale. The base height of a new building before setback must be between 30 and 40 feet and the maximum height is 50 feet. For buildings providing a qualifying ground floor, the maximum base height and overall height increase by five feet. Curb cuts are prohibited on zoning lot frontages less than 40 feet. The street wall of a new building, on any lot up to 50 feet wide, must be as deep as one adjacent street wall but no deeper than the other. Buildings must have interior amenities for the residents pursuant to the Quality Housing Program.

Higher maximum FAR 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 income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core, or for lots less than 10,000 square feet. Parking can be waived if five or fewer spaces are required. Off-street parking is not allowed in front of a building.

**C2-3 and C2-4 Commercial Overlays**

C1-1 through C1-5 and C2-1 through C2-5 districts are commercial overlays mapped within residence 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.

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

Generally, the lower the numerical suffix, the more off-street parking is required. For example, in C1-1 districts, typically mapped in outlying areas of the city, a large food store would require one parking space for every 100 square feet of floor area, whereas no parking is required in C1-5 districts, which are well served by mass transit.

**Analysis**

Future No-Action Condition

*Zoning Study Area*
No changes to zoning are anticipated in the future without the Proposed Actions in the surrounding area. The Projected Development Site would continue to be zoned R3A in the future without the Proposed Actions.

Future With-Action Condition

Outside of the Affected Area, no changes to zoning would occur in the surrounding area in the future with the Proposed Actions. The Proposed Actions would establish an R6B/C2-3 zoning district in the Affected Area. R6B districts are medium-density contextual residence districts that permit up to 2.20 FAR (with inclusionary housing) residential and 3.00 FAR community facility uses. With a qualifying ground floor, a building may be 55 feet in height at 5 stories, and parking spaces are required for 50% of market rate dwelling units and 25% of IRHU.

**Conclusion**

The Proposed Rezoning would allow a change in zoning that would permit higher residential densities than what is currently allowed. The Proposed Actions would not generate uses that are incompatible with surrounding uses, and would extend the existing R6B/C2-3 zoning district that is currently mapped along Liberty Avenue immediately to the north. As the Proposed Actions would induce the development of uses at a scale similar in nature to immediately adjacent lots, no significant impacts to zoning are anticipated.

**Public Policy**

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 2030 for sustainability is not warranted.

## 2.2 Shadows

The *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 project 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 towards the south than shadows cast in early and late winter months.

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

The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. In general, shadows on city streets and sidewalks or 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, contain no seating areas and no vegetation, no unusual or historic plantings, or contain 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 the *CEQR Technical Manual*.

### Methodology

A preliminary analysis of shadows follows the guidelines set forth in Chapter 8, Section 310 of *the 2020 CEQR Technical Manual*. According to the *2020 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. 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 found, no further analysis would be needed. 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.

**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 project site and projected development sites to determine whether they fall within the range of maximum possible shadow cast on potential sunlight sensitive resources as described above. To determine this, a Tier 1 Screening Assessment was performed in accordance with the *CEQR Technical Manual*.

1) A map, as shown in **Figure 2.2-1**, was prepared placing NYC Department of Parks Resources, as well as Selected Facilities and Program Sites, provided on NYC.gov Department of City Planning GIS portal, a list of park and public spaces provided from NYC.gov DOITT- GIS and Mapping Portal, and a screen of SHPO and NYC Landmark Listed Properties. A buffer map was placed on the map to display the maximum possible shadow that could be cast from the Proposed Development. This shadow cast was derived by multiplying 70 feet (the total height of the proposed building, which is 55 feet tall, 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). While the proposed development would be 45 feet tall, the RWCDS assumes a building height of 55 feet tall for a conservative analysis under CEQR.

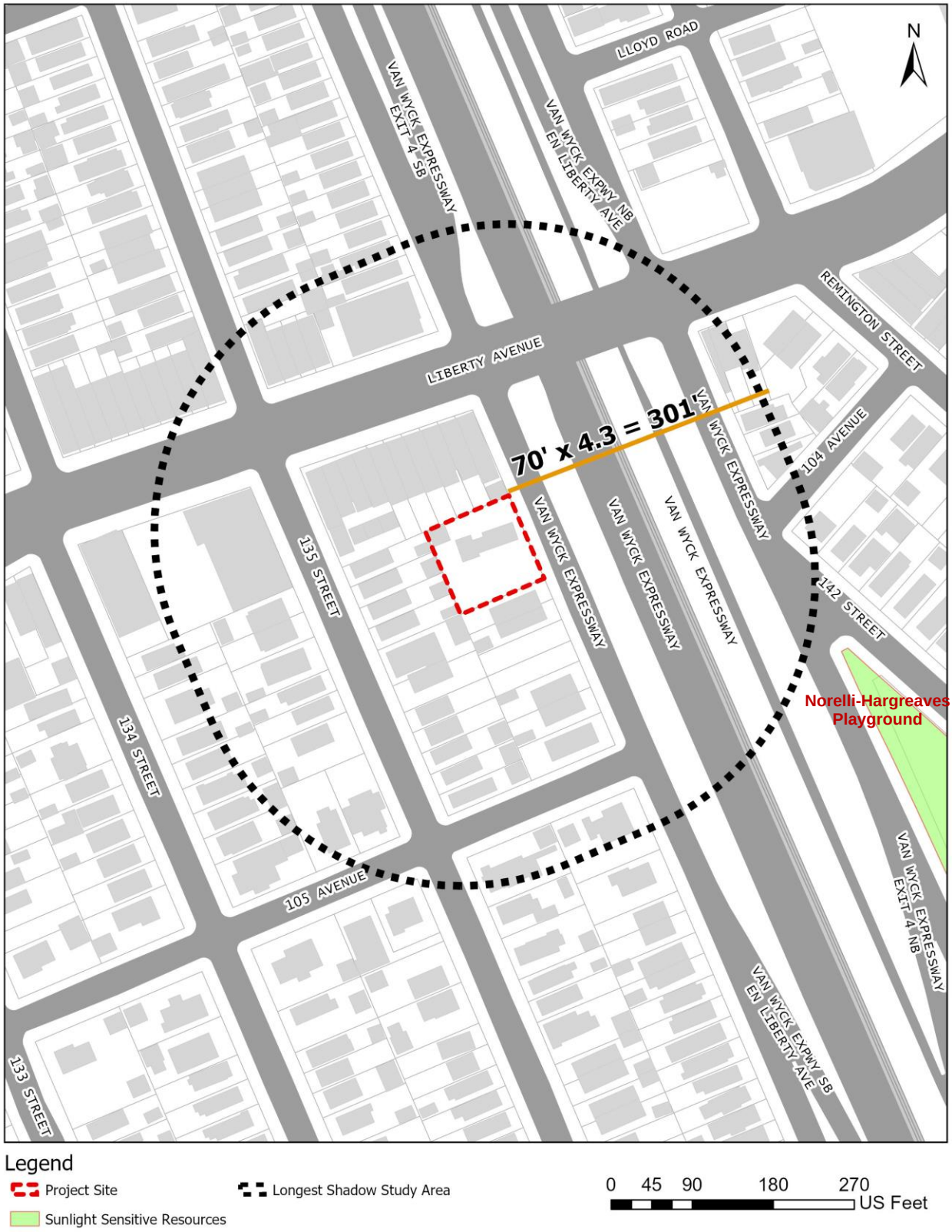
2) The potentially impacted area of shadow from each projected site was then compared to those resources identified below to see if any fell within the shadow cast area.

Based on the Tier 1 Analysis shown in **Figure 2.2-1: Tier 1 Shadows Screening**, it was determined that no sunlight sensitive resources are within reach of the longest possible shadow that could be cast from the Projected Development Site.

**Conclusion**

As there are no sunlight-sensitive resources within the longest shadow study area, significant adverse impacts from shadows would not result from the Proposed Actions and no further analysis is required.

**Figure 2.2-1: Tier 1 Shadows Screening**



## 2.3 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 inground disturbance unless such disturbance occurs in an area that has been formerly excavated. 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.

### Architectural Resources

Per *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. Generally, architectural resources should be surveyed and assessed if the proposed project would result in any of the following, whether or not any known historic resources are located near the site of the project:

- New construction, demolition, or significant physical alteration to any building, structure, or object.
- A change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature. Visual prominence is generally the way in which a building, structure, object, or landscape feature is viewed. For example, a building may be part of an open setting, such as a tower within a plaza, which is either conforming or non-conforming with the street wall in terms of its height, footprint, and/or setback. Visual context is the character of the surrounding built or natural environment. This may include the following: the architectural components of an area's buildings (e.g., height, scale, proportion, massing, fenestration, ground-floor configuration, style), streetscapes, skyline, landforms, vegetation, and openness to the sky.
- Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects.
- Additions to or significant removal, grading, or replanting of significant historic landscape features.
- Screening or elimination of publicly accessible views.
- Introduction of significant new shadows or significant lengthening of the duration of existing shadows on a historic landscape or on a historic structure if the features that make the structure significant depend on sunlight.

The Architectural resources study area is defined as the project site, plus an approximately 400-foot radius around the Affected Area. To determine whether the Proposed Development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. No significant architectural resources were identified within the study area. 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 July 24, 2020,

indicating that the Proposed Development would not affect any known architectural or archeological resource (see **Appendix A**).

### Archaeological Resources

Unlike the architectural evaluation of a Study Area that extends beyond a project's property lines, the analysis of potential and/or projected impacts to archaeological resources is limited to the actual extent 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 project would result in an in-ground disturbance to develop the proposed mixed-use building. 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 July 24, 2020, (see **Appendix A**). The LPC has indicated that no archaeological significance is associated with the Proposed Development. Therefore, significant adverse impacts to archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

### Conclusion

The LPC was consulted for their review of the Proposed Actions' potential to affect Historic and Cultural Resources and indicated that no historic architectural or archaeological resources would be impacted. Therefore, significant adverse impacts are not expected as a result of the Proposed Actions, and further analysis is not required.

## 2.4 Urban Design and Visual Resources

According to the 2020 *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 2020 *CEQR Technical Manual*, an assessment of Urban Design may be warranted when a Proposed Actions 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. As stated in the *CEQR Technical Manual*, the Study Area for urban design is the area where the project may influence land use patterns and the built environment and is generally consistent with the study area used for the land use analysis (i.e., 400 feet around the project sites). For visual resources, existing publicly accessible view corridors within the Study Area should be identified. The purpose of the preliminary assessment is to determine whether any physical changes proposed by a project may raise the potential to significantly and adversely affect elements of urban design, which would warrant the need for a detailed urban design and visual resources assessment.

### Urban Design

This analysis focuses on the components of the proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment. The analysis relies on drawings, maps, renderings, photographs and photo montages taken from the pedestrian eye level.

Chapter 10 of the CEQR Technical Manual addresses whether and how a project might change the experience of a pedestrian in the study area. More precisely, this section is concerned with "the arrangement, appearance, and functionality of the built environment." The projected development is a 5-story multi-family residential apartment building with ground floor commercial use. This use is consistent with the uses that characterize the neighborhood.

An analysis of the impact on urban design requires consideration of the degree to which a project would result in a change to the built environment's arrangement, appearance, or functionality and whether the change would negatively affect a pedestrian's experience of the area. One important consideration is a project's context, such as the scale and use of surrounding buildings. However, matching context is not necessarily the sole benchmark for measuring urban design impacts.

Photographic evaluation of the Affected Area as well as a photo-montage with project massing is provided to illustrate the built form of the project in context of surrounding conditions. A narrative describing the existing built environment, and the proposed development's relationship to the surrounding area is included as part of this technical section**.**

#### *Existing Conditions - Projected Development Site*

Block 9589, Lot 11 is Applicant-owned and located at 103-16 Van Wyck Expressway. The lot is an approximately 10,000 SF interior lot and is improved with a 3,265 GSF, .30 FAR, 2.5-story single-family home.

**Table 2.4-1: No-Action and With-Action Zoning Controls**

| | No-Action | With-Action |
|---|---|---|
| Zoning | R3A | R6B/C2-3 |
| Permitted Uses | Residential<br>Community Facility | Residential<br>Community Facility<br>Commercial |
| Maximum FAR | Residential: .60 | Residential: 2.20<br>Commercial: 2.00 |
| | Community Facility: 1.00 | Community Facility: 3.00 |
| Maximum Height | Street Wall: 21 feet | Base Height: 45 Feet |
| | Building Height: 35 feet | Building Height: 55 feet |
| Lot Coverage | 100% | 60% |

### *Existing Conditions-Surrounding Area*

A ground level photograph map key is provided in the previously presented **Figure 1-7**, with ground-level photographs of the Project Site and the immediate surrounding area. As illustrated by **Figure 1-7,** there are no significant visual resources or natural features located in or around the Projected Development Site, as defined by the 2020 CEQR Technical Manual, nor are there any visual or physical resources that connect the public realm to natural or built features of any significance.

The area is defined by the commercial corridor along Liberty Avenue and the below-grade Van Wyck Expressway and elevated train tracks that intersect it. The area is developed with detached and semi-detached one- and two-family homes along the north-south numbered streets, with multi-family, commercial, and mixed-use commercial and residential buildings developed along Liberty Avenue.

The residential areas along the north-south numbered streets feature sidewalks in good repair, regular street plantings and generally feature fenced-in one- and two-family homes with front yards. Along Liberty Avenue there are irregular tree plantings, wide sidewalks, and numerous vacant storefronts.

Future Without the Proposed Actions

No changes to urban design elements are anticipated in the future without the Proposed Actions. The existing two-and-a-half-story one-family detached home would remain on the Project Site, and surrounding land uses would continue to be regulated by the underlying zoning regulations.

Future With the Proposed Actions

*Projected Development Site*
Under the With-Action scenario the Projected Development Site (Block 9589, Lot 11; 103-16 Van Wyck Expressway) would be developed with a 23,469 GSF (22,000 ZSF; 2.20 FAR) 5-story, 55-foot-tall mixed-use building. Such development would maximize allowable height and floor area under the proposed R6B/C2-3 zoning. The structure would include 7,560 GSF of ground floor commercial (local retail) uses. Floors 2 through 5 would include 15,909 GSF of residential uses, with 18 total dwelling units, 4 of which would be permanently affordable in accordance with MIH options 1 or 2 (20% of floor area is considered set aside for affordable dwelling units for

conservative CEQR analysis purposes). Eight residential parking spaces would be required and would be provided in an enclosed garage. As an interior lot within an R6B zoning district, the projected building can have a maximum lot coverage of 60% and must have a minimum rear yard of 30 feet.

## Conclusion

The development induced by the Proposed Actions would be marginally taller than surrounding buildings, but within context of surrounding zoning regulations. The Projected Development Site is located along a local service road of the Van Wyck Expressway and would not be located near any significant visual resources, nor would it obstruct any visual resources permanently, seasonally, or temporarily. There are several vacant lots within the surrounding area, and The Applicant believes that the development of a new mixed-use multi-family building would improve the pedestrian experience. No significant impacts to urban design elements are anticipated as a result of the Proposed Actions.

### Visual Resources

As per Chapter 10 of the CEQR manual, a visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

As illustrated by **Figure 1-7,** there are no significant visual resources or natural features located in or around the Proposed Site, as defined by the 2020 CEQR Technical Manual, nor are there any visual or physical resources that connect the public realm to natural or built features of any significance. Therefore, the Proposed Actions will not have any adverse or detrimental impacts on the surrounding area. In addition, the proposed building, even with the increased height, will not block any views of consequence in the area.

**Figure 2.4-1: Urban Design Massing Locations**

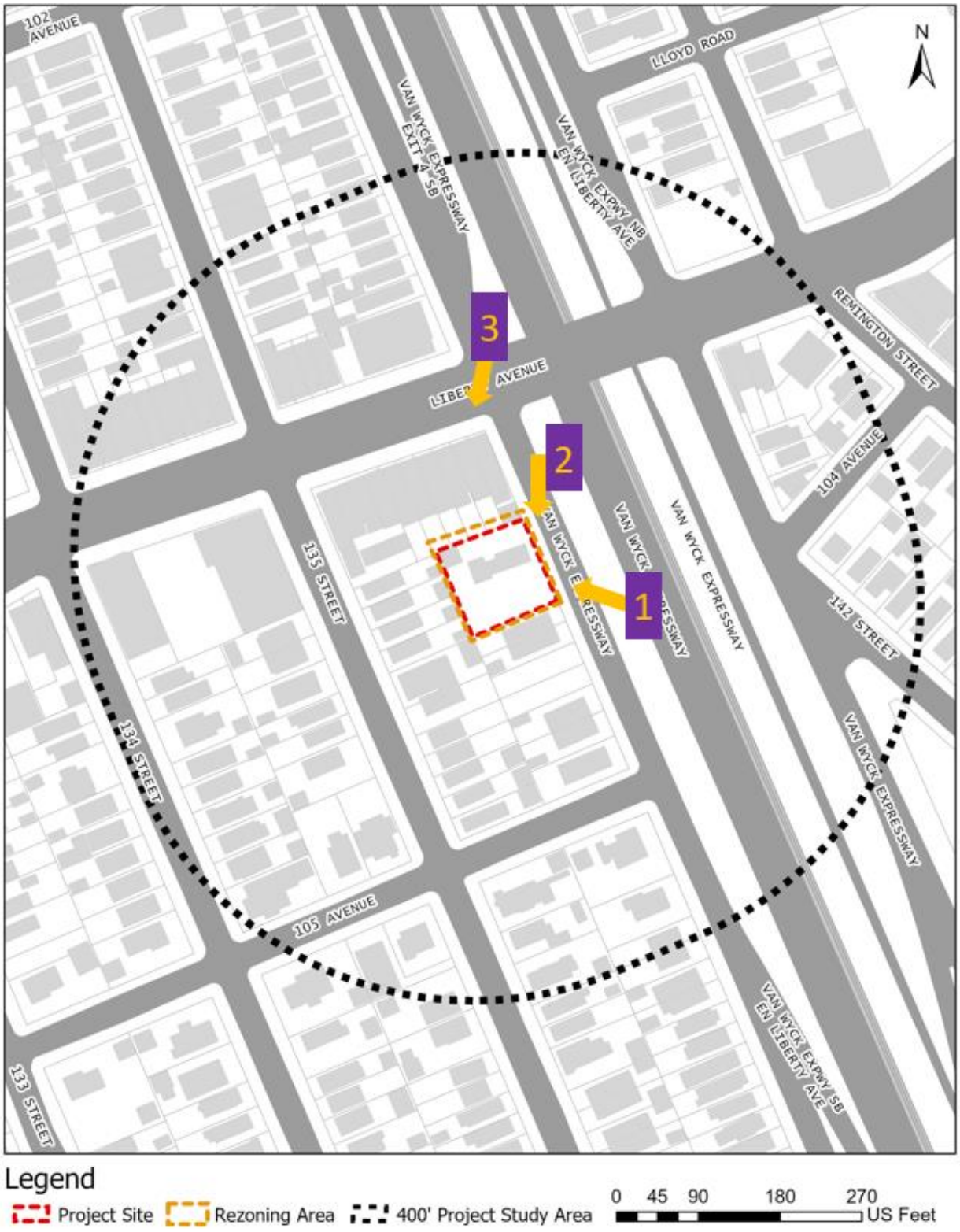


**Figure 2.4-2: No Action Conditions (View 1)**
***Van Wyck Expressway Looking North***



**Figure 2.4-3: With Action Conditions (View 1)**
***Van Wyck Expressway Looking North***



**Figure 2.4-4: No Action Conditions (View 2)**
***Van Wyck Expressway Looking South***



**Figure 2.4-5: With Action Conditions (View 2)**
***Van Wyck Expressway Looking South***

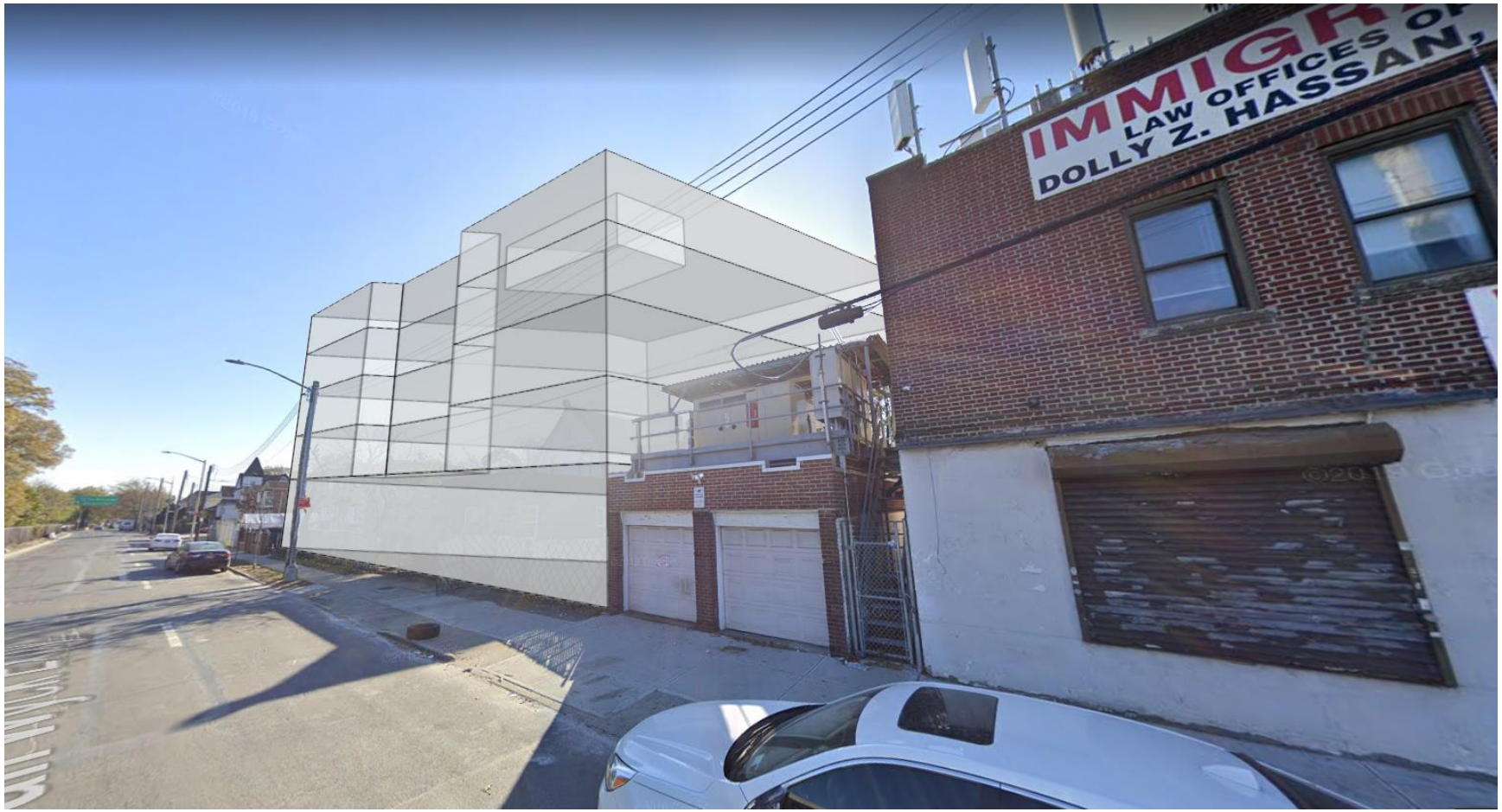


**Figure 2.4-6: No Action Conditions (View 3)**
***Van Wyck Expressway and Liberty Avenue***



**Figure 2.4-7: With Action Conditions (View 3)**
***Van Wyck Expressway and Liberty Avenue***



## 2.5 Hazardous Materials

Per the *2020 CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi- volatile organic compounds (VOCs and SVOCs), methane, polychlorinated biphenyls (PCBs), and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). Per the *CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when: a) hazardous materials exist on a site; and b) action would increase pathways to their exposure; or c) an action would introduce new activities or processes using hazardous materials.

Pursuant to *CEQR Technical Manual* methodology, actions that would result in ground disturbance in an area where current or past uses on or near the site raise the potential for the presence of hazardous materials should be assessed for hazardous materials.

***Methodology***

The hazardous materials assessment generally begins with a Phase 1 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 *2020 CEQR Technical Manual*, the Phase 1 ESA is conducted in accordance with the standards established by the current ASTM Phase 1 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.

**Introduction**

The Applicant proposes to develop the Proposed Development Site with a 4-story plus cellar 45-foot tall residential building with ground floor commercial space, containing approximately 7,560 GSF of ground floor commercial space and 15,909 GSF of residential space, providing 18 dwelling units.

**Summary of Phase I Environmental Site Assessment**

Conditions at the project site resulting from previous and existing uses and those in surrounding areas were determined from a review of a Phase 1 Environmental Site Assessment (ESA) prepared by Equity Environmental Engineering, LLC (Equity) in November 2019. The Phase I ESA was performed pursuant to ASTM Standard E-1527-05. The purpose of this Phase I ESA is to determine whether any type of hazardous substance or petroleum product exists within or adjacent to the property in question. Environmental hazards would include, but not be 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; and identification of potential off-site sources of hazardous waste contamination, such as industrial facilities adjacent to the subject property.

The Projected Development Site consists of approximately 10,000 square feet and is located at 103-16 Van Wyck Expressway within the South Richmond Hill neighborhood in Jamaica, Queens.

**Scope of Work**

The Phase I ESA conducted at the Subject Property was in general accordance with ASTM Standard E 1527-13 and included the following:

- Site and vicinity reconnaissance;
- Description of current site operations;
- Historical source review and description of historical site conditions;
- Interviews with owners, operators, and/or occupants of the Site, and/or local officials, as applicable;
- Review of environmental databases and regulatory agency records;
- Review of previous environmental reports/documentation, as applicable;
- Review of environmental liens, if provided or authorized to be obtained by the user; and
- Preparation of a report summarizing findings, opinions, and conclusions

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this Phase I ESA, no additions to the ASTM E 1527-13 standard were made.

**Standard Environmental Records Sources**

Equity Environmental Engineering, LLC contracted Environmental Data Resources, Inc. (EDR) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided below, along with an opinion about the significance of the listing to the analysis of recognized environmental conditions in connection with the subject property.

The database search is a tool to identify various environmental situations and/or activities within the required radius of the subject property. Many of these databases will only acknowledge the presence of a specific item on a property such as an underground storage tank or a dry cleaner. They do not determine the potential impact to the to the subject property and cannot consider natural and man-made impediments that would limit or prevent the migration of contaminants from on site to another. Other databases provide sufficient knowledge to determine if there was an incident and what the severity of that incident was. For example, the majority of items within the LTANKS (leaking tanks) and/or HIST LTANKS (historic leaking tanks) deal with tank test failure's that have de minimus releases or small enough quantity releases that are addressed by the owner/operator and do not migrate beyond the location of the tank.

**Findings of the Phase I ESA**

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. Historic RECs (HRECs) are RECs previously remediated to government standards. Controlled RECs (CRECs) are RECs in which some form or institutional or engineering control has been implemented to contain the REC. 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. A Vapor Encroachment Condition (VEC) is 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. All RECs and VECs are discussed below. The Phase I ESA has revealed the following environmental conditions:

- **RECs** - Equity found no RECs associated with the property.
- **HRECs** - Equity found no HRECs associated with the property.
- **CRECs** - Equity found no CRECs associated with the property.
- **VECs** - The EDR Vapor Encroachment database identified numerous VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property that are not closed and are related to historic dry cleaners, gas station spills, etc. Based on these findings, a possible vapor encroachment cannot be ruled out.

**Conclusion**

Because the Phase I ESA was not able to rule out the presence of VECs, a Phase II will need to be prepared and submitted to DEP for their review and approval prior to construction activities. The Phase II cannot be prepared until the vacant building on site is demolished, and The Applicant must wait for construction loans before proceeding with demolition. Therefore, an E-Designation will need to be placed on the site to ensure compliance with all DEP requirements.

**E-Designation (Projected Development Site 1; Block 9589, Lot 11)**

The text for the (E) designations related to hazardous materials is as follows:

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

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

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

A construction-related health and safety plan should be submitted to OER and would be

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

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

## 2.6 Air Quality

### Introduction

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered. The analysis frame work, as mandated by the State Environmental Review Act, follows the *New York City Environmental Quality Review 2020 Technical Manual.* Per the *CEQR Technical Manual*, the potential for significant adverse air quality impacts are predicted for the following emission sources:

- Vehicular emission resulting from increased vehicular traffic and/or changes to traffic pattern.
- Vehicular emission associated with off-street parking facilities.
- Vehicular emission generated at an atypical (*e.g.*, not at-grade) roadway.
- Emission from the burning of fossil fuels in the heating, ventilation and air conditioning (HVAC) equipment of the proposed developments.
- Air toxics emission released from industrial or manufacturing facilities.
- Stationary source emission of facilities that require Prevention of Significant Deterioration permits (Title V), and facilities which require a state facility permit.
- Facilities' malodorous emissions to unreasonably interfere with the proposed project's occupant's comfortable enjoyment of life or their property.

### Project Description

The Projected Development Site (Block 9589, Lot 11; 103-16 Van Wyck Expressway) would be developed with a 23,469 GSF (22,000 ZSF; 2.20 FAR) 5-story, 55-foot-tall mixed-use building. The structure would include 7,560 GSF of ground floor commercial (local retail) uses. Floors 2 through 5 would include 15,909 GSF of residential uses.

### Mobile Sources

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

- *Projects that would result in the placement of operable windows, balconies, air intakes or intake vents generally within 200 feet of an atypical source of vehicular pollutants;*
- *Projects that would result in the creation of a fully or partially covered roadway, would exacerbate traffic conditions on such a roadway or would add new uses near such a roadway;*

- *Projects that would generate peak hour auto traffic or divert existing peak hour traffic of 170 or more auto trips in this area of the City;*
- *Projects that would generate peak hour heavy-duty diesel vehicle traffic or its equivalent in vehicular emissions resulting from 12 or more heavy-duty diesel vehicles (HDDVs) for paved roads with average daily traffic of fewer than 5,000 vehicles, 19 or more HDDVs for collector roads, 23 or more HDDVs for principal and minor arterials, or 23 or more HDDVs for expressways and limited-access roads;*
- *Projects that would result in new sensitive uses (e.g., schools or hospitals) adjacent to large existing parking facilities or parking garage exhaust vents;*
- *Projects that would result in parking facilities or applications requesting the grant of a special permit or authorization for parking facilities; or projects that would result in a sizable number of other mobile sources of pollution (e.g., a heliport or a new railroad terminal); and/or*
- *Projects that would substantially increase the vehicle miles traveled in a large area.*

The Proposed Actions would result in operable windows or air intakes within 200 feet of an atypical roadway, and will require an assessment of potential mobile source air quality impacts. It would not result in the creation of a covered roadway or affect any covered roadway. Peak hour trip generation is far below the 170-car threshold identified in Section 17-210 of the CEQR Technical Manual as potentially warranting further assessment. The project would not generate diesel traffic. The project would not create a new sensitive receptor adjacent to large parking facilities. The project would not result in the creation of a new parking facility. The project would not result in any other mobile sources of pollution and would not significantly increase vehicle miles traveled in a large area.

**Traffic Impact**

Mobile Source emissions require a detailed PM2.5 impact analysis when 12 to 23 HDDV or equivalent vehicular emissions, based on the type road, are expected. The Proposed Actions are located along an expressway; therefore, the screening HDDV equivalent value is 23. Using a conservative estimate of 50 passenger cars as the incremental trip-ends and the CEQR Technical Manual Section 210 worksheet, the screening calculations were completed. The resulting equivalent HDDV trips is 2 and below the screening value. Therefore a detailed PM2.5 screening is not required for the Proposed Action.

**Atypical Roadway Detailed Analysis**

Methodology and Databases

Mobile source impacts are a function of vehicular related emissions and the pollutants' dispersion. Emissions of vehicular mechanical components (exhaust, crank case, break ware, and tire wear) were generated with the latest EPA's Mobile Vehicle Emission Simulator 2014. Fugitive road dust emissions were added to estimate total particulate matter emissions. The pollutants' concentrations at sensitive receptors were modeled with the EPA's CAL3QHCR Gaussian dispersion model.

The Van Wyck Expressway (I-678) is a three lane in each direction restricted roadway. The highway is approximately 17 feet below grade near the Projected Development Site 1[1]. The elevation points of the highway at 1,000 feet in each direction from the Projected Development Site 1 were used to calculate the highway's gradient.

Hourly traffic counts and classifications were obtained from the New York State Department of Transportation (NYSDOT) for station 050066, which is the Van Wyck Expressway between Rockaway Boulevard and Atlantic Avenue. The traffic data report included the average weekly count and classification, and annual average counts. The CEQR Technical Manual, Table 16-4: Annual Background Growth Rates, of 0.250% was used to account for the general background traffic growth in the area. The speeds of Vehicles traveling on the highway were obtained from UBER Movement for periods of the weekday[2]. The traffic conditions compiled for the analysis are shown in **Table 17-2**.

**Table 2.6-1: Van Wyck Expressway (I-678) Traffic Conditions**

| | Northbound | | Southbound | |
|---|---|---|---|---|
| | **Volume (veh/hr)** | **Speed (mph)** | **Volume (veh/hr)** | **Speed (mph)** |
| Peak Hour (1) | 5,009 | 13 | 6,485 | 25 |
| AADT | 1,298[2], 3,673[3], 3,309[4], 4,046[5], 3,128[6] | 43, 18, 19, 25, 31 | 1,225[2], 3,363[3], 3,331[4], 4,062[5], 3,523[6] | 46, 18, 19, 25, 31 |

1. PM Peak Hour Period of 6:00-7:00
2. Annual Early Morning
3. Annual AM
4. Annual MD
5. Annual PM
6. Annual Evening

Modeling of the 24-hour $PM_{2.5}$ and CO applied the peak hour traffic. Average emission of the annual $PM_{2.5}$ was calculated as the weighted average emission per period of the day.

Emission Rates

The EPA's MOVES2014b emission factor algorithm was used to compile the CO, $PM_{10}$, and $PM_{2.5}$ emission rates. MOVES can be used to calculate emission rates of criteria air pollutants, greenhouse gas emissions, and some hazardous air pollutants for both on-road motor vehicles and non-road equipment. MOVES models calculate emissions at the national, county, and project level by use of databases and by specifying the characteristics (Run Specification) of the scenario that is modeled. For project level analyses, MOVES require the use of site-specific input data of traffic volume and speed, vehicle types, fuel parameters, age distribution, and meteorology conditions, rather than the use of national default data. The MOVES model was run for primary total CO, $PM_{2.5}$, and $PM_{10}$ and primary $PM_{2.5}$ species running and crankcase exhaust, with primary $PM_{2.5}$ and $PM_{10}$ brake and tire wear emissions, and in inventory mode.

All vehicle source types were selected except motor homes. All fuel types and engine technology were selected except electric fuel (currently, this is not a viable option in MOVES). The NYSDEC MOVES database was used to further categorize the NYSDOT vehicle classification.

[1] https://data.cityofnewyork.us/Transportation/Elevation-points/szwg-xci6
[2] https://movement.uber.com/?lang=en-US

MOVES inputs of inspection/maintenance, fuel data, age distribution, meteorology, etc., were all obtained from the NYSDEC for the borough of Queens. Links (roadway segments) in MOVES for the expressway (I-678) specified lengths of 2,000 feet. The links' gradients were accounted for in the MOVES input. The emission rates for the five periods of the day (early morning, AM, Midday, PM, and evening) were compiled in the MOVES models. The MOVES models of PM were run during the winter season as that is when PM emission is worst. CO emission was run during the summer season (for the same reason as PM).

In addition to exhaust running $PM_{2.5}$ emissions, vehicle related $PM_{10}$ and $PM_{2.5}$ emissions of dust generated by vehicles traveling on paved roadways were added to estimate total particulate matter emission for the short-term analysis (per DEP, annual fugitive dust emission is negligible). Per the *CEQR Technical Manual*, a slit loading factor of 0.015 $g/m^2$ (for expressways) was applied. The fugitive dust emission rates were calculated according to Section 13.2.1-3 of the EPA's AP-42 manual. In addition, based on DEP guidance, the conservative assumptions of "dry" road condition was used for the short-term calculation (precipitation reduced silt loading).

Gaussian Dispersion

Dispersion analysis of the traffic emissions concentration on the Projected Development Site 1 was conducted using the EPA's CAL3QHCR dispersion model version 13196. $PM_{2.5}$ concentrations were predicted with model-ready meteorology data, obtained from Breeze Software / Trinity Consultants. 1-hour CO and 1-hour $PM_{10}$ concentrations were predicted using the emulate CAL3QHC meteorology data, specifying 10-deg incremental wind vector direction, 1-meter per second wind speed, natural stability, and 285.5 Kelvin, and 1,000-meter mixing height. All models specified settling and deposition velocities of 0-meter per second, 60-minute averaging time, and urban surface roughness of 175-centimeter.

Separate links were specified for the northbound and southbound traffic. Each link specified 17-meter widths, which is the width of the 3 lanes plus 6-meter. The highway was model as 5.18-meter depressed links, per elevation point data. Links were modeled as free flowing links, 2,000 feet long.

Persistence factor of 0.7 was applied to the 1-hour CO concentration to predict the 8-hour CO concentration. Persistence factor of 0.4 was applied to the 1-hour $PM_{10}$ concentration to predict the 24-hour $PM_{10}$ concentration.

Receptors at the Projected Development Site 1 were placed around the lot outer perimeter, in 10 feet horizontal increment at the sides closer to the highway and in 20 feet horizontal increment otherwise. These receptors were placed at heights of 6-21 feet above grade every 5 feet and 10 feet increment between 21-51 feet.

Atypical Roadway Analysis Results

The predicted concentrations of the 24-hour $PM_{2.5}$ and CO 8-hour were evaluated with the NYC Guideline (*de minimis*); the 24-hour $PM_{10}$, annual $PM_{2.5}$ and CO 1-hour predicted concentrations were added to the background concentrations, and results evaluated with the NAAQS. **Table 17-3** shows the dispersion analysis results.

**Table 2.6-2. Dispersion Analysis Results**

| Pollutant and Averaging Time | Modeled Concentration | Background Concentration | Evaluated Concentration | Threshold Concentration | Threshold Standard |
|---|---|---|---|---|---|
| **$PM_{2.5}$ 24-hour Tier 1** | 3.41 µg/$m^3$ | N.A. | **3.41 µg/$m^3$** | **8.65 µg/$m^3$** | *de minimis* |
| **$PM_{2.5}$ Annual** | 0.309 µg/$m^3$ | 7.0 | **7.3 µg/$m^3$** | **12 µg/$m^3$** | NAAQS |
| **$PM_{10}$ 24-hour** | 7 µg/$m^3$ | 38 | **45 µg/$m^3$** | **150 µg/$m^3$** | NAAQS |
| **CO 1-hour** | 0.396 ppm | 1.95 | **2.35 ppm** | **35 ppm** | NAAQS |
| **CO 8-hour** | 0.277 ppm | N.A. | **0.277 ppm** | **3.85 ppm** | *de minimis* |

As seen in **Table 17-3**, the 24-hour $PM_{2.5}$ and 8-hour CO concentrations do not exceed the *de minimis,* and the $PM_{10}$, annual $PM_{2.5}$, and CO 1-hour concentrations are within the NAAQS. Therefore, no significant adverse air quality impacts are expected to the proposed school building from the emissions associated with the vehicular traffic on the Van Wyck Expressway.

**Conclusion**

Based on this assessment, there is no reason to believe that the emissions generated at the Van Wyck Expressway would result in significant adverse air quality impacts.

**Stationary Sources**

According to the *2020 CEQR Technical Manual*, projects may result in stationary source air quality impacts when one or more of the following occurs:

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

- *"Non-point" sources that could result in fugitive dust are created;*
- *New uses near nonpoint sources are created; and/or*
- *A generic or programmatic action is introduced that would change or create a stationary source or that would expose new populations to such a station*

Impacts from boiler emissions at Projected Development Sites are a function of fuel oil type, stack height, minimum distance from the source to the nearest building, and square footage of the development. Per the project sponsor, the existing building utilizes natural gas. Additionally, an HVAC Design Plan was designed by the architect, so details about the HVAC system are provided in the plans.

A survey of the land use map indicates the closest building of equal or greater height is located at 143-18 Pinegrove Street (Block 10041, Lot 6) and is approximately 585 feet to the northeast of the Projected Development Site. Therefore, the nearest operable window of equal or greater height from the proposed HVAC stack location is approximately 585 feet. An Air Quality Screening based on this information is shown below in **Figure 2.6-1.**

Screening Analysis

A screening analysis was performed, using the methodology described in the *CEQR Technical Manual*, to determine if the heat and hot water system of the proposed building would result in potential air quality impacts to another building in the area. This methodology determines the threshold of development size below which the action would not have a significant impact.

As outlined in the *CEQR Technical Manual,* the potential for stationary source emissions from heat and hot water systems to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used, the building's residential or non-residential use, the square footage of the development that would be served by the system, the height of the building served by the HVAC system and the distance to the nearest building whose height is at least as great as the building served by the HVAC system. The *CEQR Technical Manual* provides a screening analysis based on these factors, which was utilized to determine the potential for significant impacts from the projected buildings' HVAC systems.

If the actual distance between a stack and the affected building is greater than the threshold distance for a building size, than that building passes the screening analysis (and no significant impact is predicted). However, if the actual distance is less than the threshold distance for a building, then there is a potential for a significant impact and a detailed analysis would be required.

The anticipated development within the proposed rezoning area would consist of just one building equipped with its own heat and hot water system. It is assumed that the use of Fuel Oil #2 is the worst-case scenario as no new boiler permits will be issued to boilers using any fuel oil other than Fuel Oil #2 in accordance with 15 RCNY 2-15.

As previously mentioned, the screening analysis is only applicable to a single smokestack, and this CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. The project-on-existing screening analysis considered the impact of the proposed project assuming residential occupancy, building height of 45 feet including a 3-foot HVAC stack, and 32,231 GSF of floor area.

The CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendix* for a 30-foot stack height was applied as the 30 feet curve height is closest to but not higher than the

proposed stack height of the projected building. The Stationary Source Screen Figure 17-5 referenced in the *Appendices* of the *CEQR Technical manual* is a generic screen assuming the HVAC system is fueled by Fuel Oil #2.

**Figure 2.6-1. The Proposed Project - HVAC Screen Fuel Oil #2 Nomograph**

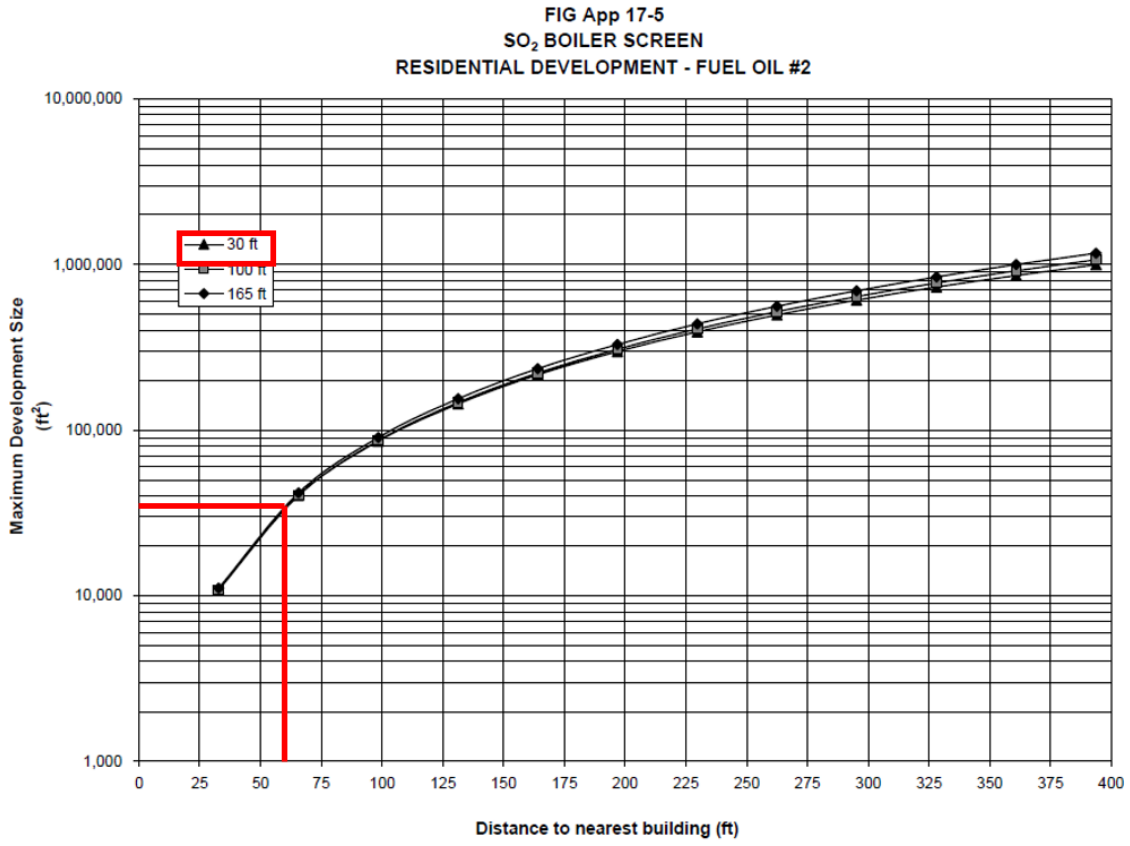



**Figure 2.6-1** screening analysis shows that a detailed analysis would be required for any existing or planned land uses that are 55 feet or higher and at a distance of less than 65 feet from the proposed project. The closest building that is 55 feet or higher is approximately 585 feet away from the Projected Development Site, and no HVAC air quality impacts would occur at this distance.

## Conclusion

Emissions from project-related heating, ventilation, and air conditioning systems (HVACs) would not cause significant air quality impacts to receptors at the local scale.

### Industrial Emissions

Per the CEQR Technical Manual, projects that would introduce new uses near industrial sources may result in potentially significant adverse air quality impacts. The study area considers industrial sources within 400-feet of the proposed project and Title V emitters within 1000-feet. Industrial sources are categorized as the operation of manufacturing or processing facilities.

The screening analysis for industrial sources was started by reviewing the NYC Planning's PLUTO data for land use in the surrounding 400-feet of the Proposed Action. No industrial/manufacturing properties were found within the search area. The area is primarily composed of one- and two-family residences, several commercial and parking properties, and one transportation/utility property.

To verify that no industrial emissions or air toxic emissions were present in the area, the NYC DEP CATS database was reviewed for all properties within 400 feet. Only one permit was registered in the search area. The permit is a current registration for a gas station at the transportation/utility land use property.

A search for any possible unpermitted sources of industrial emissions was also conducted. This search included a virtual walkabout of the 400-foot search area via Google Street View. During the time of the search, November 2019 images of the area were available. The search showed no signs of evidence for any unpermitted activities and verified the presence of a gas station at the address of the one available permit.

Lastly, a search was also conducted for Title V emitters using the EPA's Envirofacts website. A review of the 1000 feet search area showed no large-scale emitters were present.

## Conclusion

No evidence of industrial emissions or Title V emitters are present within 400-feet or 1000-feet of the Proposed Action, respectively. Therefore, there is no significant chance for impact from industrial sources and no further analysis is required.

## 2.7 Noise

### Introduction

Noise Monitoring was conducted by Equity Environmental Engineering, LLC (equity) personnel to support the rezoning located at 103-16 Van Wyck Expressway (Block 9589 / Lot 11 & p/o lots 1, 4, 5, 6, 7, 8, 9). Vehicular traffic and elevated rail movements are the predominant sources of noise in this area. Therefore, the proposed development warrants an assessment of the potential for adverse effects on the occupants from ambient noise. The proposed development would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. This noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development.

***Methodology***

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

In terms of hearing, humans are less sensitive to low frequencies (<250 Hz) than mid-frequencies (500-1,000 Hz). Humans are most sensitive to frequencies in the 1,000 to 5,000 Hz range. Since ambient noise contains many different frequencies all mixed together, measures of human response to noise assign more weight to frequencies in this range. This is known as the A-weighted sound level.

Noise is measured in sound pressure level (SPL), which is converted to a decibel scale. The decibel is a relative measure of the sound level pressure with respect to a standardized reference quantity. Decibels on the A-weighted scale are termed “dB(A).” The A-weighted scale is used for evaluating the effects of noise in the environment because it most closely approximates the response of the human ear. On this scale, the threshold of discomfort is 120 dB(A), and the threshold of pain is about 140 dB(A). **Table 2.7-1** shows the range of noise levels for a variety of indoor and outdoor noise levels.

Because the scale is logarithmic, a relative increase of 10 decibels represents a sound pressure level that is 10 times higher. However, humans do not perceive a 10 dB(A) increase as 10 times louder; they perceive it as twice as loud. The following are typical human perceptions of dB(A) relative to changes in noise level:

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

The *CEQR Technical Manual* recommends an analysis of two principal types of noise sources: mobile sources; and stationary sources. Both types of noise sources are examined in the following sections.

### Mobile Sources

Mobile noise sources are those which move in relation to receptors. The mobile source screening analysis addresses potential noise impacts associated with vehicular traffic and a raised railway generated by the Proposed Actions.

Per the *CEQR Technical Manual*, if existing passenger car equivalent (PCE) values are increased by 100 percent or more due to a Proposed Actions, a detailed analysis is generally performed. No significant adverse mobile source noise impacts due to vehicular traffic are anticipated because of the Proposed Actions as it would not increase existing passenger equivalent values by more than 100 percent.

The *CEQR Technical Manual* provides noise exposure guidelines in terms of $L_{eq}$ and $L_{10}$ for the maximum amount of allowable noise under existing regulations. $L_{eq}$ is the continuous equivalent sound level. The sound energy from the fluctuating sound pressure levels 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 greater effect on the $L_{eq}$ than low noise levels. The $L_{eq}$ has an advantage over other descriptors because $L_{eq}$ values from different noise sources can be added and subtracted to determine cumulative noise levels. In comparison, $L_{10}$ is the SPL exceeded 10 percent of the time. Similar descriptors include the $L_{50}$, $L_{01}$, and $L_{90}$ values.

**Table 2.7-1 Sound Pressure Level & Loudness of Typical Noises in Indoor & Outdoor Environments**

| Noise Level dB(A) | Subjective Impression | Typical Sources | | Relative Loudness (Human Response) |
|---|---|---|---|---|
| | | Outdoor | Indoor | |
| 120-130 | Uncomfortably Loud | Air raid siren at 50 feet (threshold of pain) | Oxygen torch | 32 times as loud |
| 110-120 | Uncomfortably Loud | Turbo-fan aircraft at take-off power at 200 feet | Riveting machine Rock band | 16 times as loud |
| 100-110 | Uncomfortably Loud | Jackhammer at 3 feet | | 8 times as loud |
| 90-100 | Very Loud | Gas lawn mower at 3 feet Subway train at 30 feet Train whistle at crossing Wood chipper shredding trees Chain saw cutting trees at 10 feet | Newspaper press | 4 times as loud |
| 80-90 | Very Loud | Passing freight train at 30 feet Steamroller at 30 feet Leaf blower at 5 feet Power lawn mower at 5 feet | Food blender Milling machine Garbage disposal Crowd noise at sports event | 2 times as loud |
| 70-80 | Moderately Loud | NJ Turnpike at 50 feet Truck idling at 30 feet Traffic in downtown urban area | Loud stereo Vacuum cleaner Food blender | Reference loudness (70 dB(A)) |
| 60-70 | Moderately Loud | Residential air conditioner at 100 feet Gas lawn mower at 100 feet Waves breaking on beach at 65 feet | Cash register Dishwasher Theater lobby Normal speech at 3 feet | 2 times as loud |
| 50-60 | Quiet | Large tranSFormers at 100 feet Traffic in suburban area | Living room with TV on Classroom Business office Dehumidifier Normal speech at 10 feet | 1/4 as loud |
| 40-50 | Quiet | Bird calls Trees rustling Crickets Water flowing in brook | Folding clothes Using computer | 1/8 as loud |
| 30-40 | Very quiet | | Walking on carpet Clock ticking in adjacent room | 1/16 as loud |
| 20-30 | Very quiet | | Bedroom at night | 1/32 as loud |
| 10-20 | Extremely quiet | | Broadcast and recording studio | |
| 0-10 | Threshold of Hearing | | | |

**Sources**: Noise Assessment Guidelines Technical Background, by Theodore J. Schultz, Bolt Beranek and Newman, Inc., prepared for the US Department of Housing and Urban Development, Office of Research and Technology, Washington, D.C., undated; Sandstone Environmental Associates, Inc.; Highway Noise Fundamentals, prepared by the Federal Highway Administration, US Department of Transportation, September 1980; Handbook of Environmental Acoustics, by James P. Cowan, Van Nostrand Reinhold, 1994.

**Stationary Sources**

The *CEQR Technical Manual* states that based upon previous studies, unless existing ambient noise levels are very low and/or stationary source levels are very high (and there are no structures that provide shielding), it is unusual for stationary sources to have significant impacts at distances beyond 1,500 feet. A detailed analysis may be appropriate if the proposed project would: cause a substantial stationary source (i.e., unenclosed mechanical equipment for manufacturing or building ventilation purposes, playground, etc.) to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses. Machinery, mechanical equipment, heating, ventilating and air-conditioning units, loudspeakers, new loading docks, and other noise associated with building structures may also be considered in a stationary source noise analysis. Impacts may occur when a stationary noise source is near a sensitive receptor, and is unenclosed. No unenclosed specific stationary noise sources of concern were observed during field inspection. As the project site is not subject to high ambient noise levels from any nearby stationary source, no stationary source noise impacts from surrounding uses are anticipated. Additionally, as the proposed project would not introduce a new stationary noise source, no significant adverse stationary source impacts are anticipated because of the Proposed Actions, and no further analysis is warranted.

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEPO-CEQR) noise standards at the exterior façade to achieve interior noise levels of 45 dB(A) or below. CEPO-CEQR Noise Standards classify noise exposure into four categories: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable. As noted in the *CEQR Technical Manual*, these standards are the basis for classifying noise exposure into the following categories based on the $L_{10}$ measured directly outside the projected development site:

**Table 2.7-2 Attenuation Values to Achieve Acceptable Interior Noise Levels**

| | Marginally Unacceptable | | | | Clearly Unacceptable |
|---|---|---|---|---|---|
| Noise Level with Proposed Project | 70 < L10 ≤ 73 | 73 < L10 ≤ 76 | 76 < L10 ≤ 78 | 78 < L10 ≤ 80 | 80 < L10 |
| Attenuation[1] | (I) 28 dB(A) | (II) 31 dB(A) | (III) 33 dB(A) | (IV) 35 dB(A) | 36 + (L10 – 80)[2] dB(A) |

**Source**: *CEQR Technical Manual*
**Notes:**
[1] The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.
[2] Required attenuation values increase by 1 dB(A) increments for L10 values greater than 80 dBA.

| Table 19-1 Noise Levels of Common Sources | |
|---|---|
| **Sound Source** | **SPL (dB(A))** |
| Air Raid Siren at 50 feet | 120 |
| Maximum Levels at Rock Concerts (Rear | 110 |
| On Platform by Passing Subway Train | 100 |
| On Sidewalk by Passing Heavy Truck or Bus | 90 |
| On Sidewalk by Typical Highway | 80 |
| On Sidewalk by Passing Automobiles with | 70 |
| Typical Urban Area | 60-70 |
| Typical Suburban Area | 50-60 |
| Quiet Suburban Area at Night | 40-50 |
| Typical Rural Area at Night | 30-40 |
| Isolated Broadcast Studio | 20 |
| Audiometric (Hearing Testing) Booth | 10 |
| Threshold of Hearing | 0 |

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

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

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

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

- $L_{eq}$ is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity, level.

High noise levels during a measurement period will have a greater effect on the $L_{eq}$ than low noise levels. $L_{eq}$ has an advantage over other descriptors because $L_{eq}$ values from various noise sources can be added and subtracted to determine cumulative noise levels.

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

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

**Measurement Location and Equipment**

Because the predominant noise sources in the area of the proposed project are vehicular and elevated train movements, noise monitoring was conducted during peak vehicular travel periods, 07:30 am-09:00 am, 12:00 pm-1:30 pm, and 4:30 pm-6:00 pm. Noise Monitoring Location One (1) was conducted at ground level on the sidewalk in front of the Project Site. Noise Monitoring Location Two (2) was conducted on the roof of the current building located on the Project Site. Pursuant to CEQR Technical Manual methodology, readings on all frontages were conducted for periods of 1-hour during three peak periods of vehicular travel. Noise monitoring was conducted using a Type 1 Casella CEL-633 sound meter with wind screen. The monitor was placed on a tripod at a height of approximately five feet above the ground, away from any other noise-reflective surfaces. The monitor was calibrated prior to and following each monitoring session. Periods of

peak vehicular around the subject site constitute a worst-case condition for noise at the project site. Noise monitoring locations are shown below in **Figure 2.7-1.**

**Figure 2.7-1: Noise Monitoring Locations**



**Location 1**: *On the sidewalk in Front of the Project Site (Van Wyck Expressway)*




**Location 2**: *On the roof of the Project Site*



**Measurement Conditions**
Monitoring was conducted during typical midweek conditions, on Tuesday, October 8th, 2019. The weather was approximately $55^0$-$65^0$ Fahrenheit and wind speeds were mild during monitoring. Traffic volumes and vehicle classification were documented during the noise monitoring.

**Existing Conditions**
Based on the noise measurements taken at the Projected Development Site, the predominant source of noise at the site is vehicular traffic and elevated rail movements.

***Table Noise-1 and Noise-2*** *below contains the results for the measurements taken at the subject site:*

| **Table Noise-1**<br>*Noise Levels (dB) at Location 1* | | | |
|---|---|---|---|
| *Tuesday, October 8th, 2019* | | | |
| Time | **7:36 am – 8:36 am** | **12:01 pm – 1:01 pm** | **4:31 pm – 5:31 pm** |
| $L_{max}$ | 92.3 | 86.4 | 96.0 |
| $L_{10}$ | **76.0** | **73.0** | **76.0** |
| $L_{eq}$ | **73.7** | **71.2** | **74.6** |
| $L_{50}$ | 71.5 | 70.0 | 72.0 |
| $L_{90}$ | 68.0 | 67.5 | 68.0 |
| $L_{min}$ | 51.8 | 64.2 | 63.8 |

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

| **Table Noise-2**<br>*Noise Levels (dB) at Location 2* | | | |
|---|---|---|---|
| *Tuesday, October 8th, 2019* | | | |
| Time | **7:30 am – 8:30 am** | **12:00 pm – 1:00 pm** | **4:30 pm – 5:30 pm** |
| $L_{max}$ | 89.6 | 86.9 | 90.3 |
| $L_{10}$ | **75.0** | **75.0** | **74.0** |
| $L_{eq}$ | **72.9** | **73.5** | **72.3** |
| $L_{50}$ | 71.5 | 72.5 | 70.0 |
| $L_{90}$ | 69.5 | 70.5 | 68.0 |
| $L_{min}$ | 66.5 | 67.6 | 63.4 |

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

***Table Noise-3*** *below contains the traffic volumes (vehicle counts) during each monitoring period for 1-hour.*

| **Table Noise-3**<br>***Location 1:*** *Traffic volumes and vehicle classifications* | | | |
|---|---|---|---|
| | **7:36 am – 8:36 am** | **12:01 pm – 1:01 pm** | **4:31 pm – 5:31 pm** |
| **Car/ Taxi** | 331 | 298 | 329 |
| **Van/Light Truck/SUV** | 515 | 425 | 502 |
| **Medium Truck** | 41 | 31 | 29 |
| **Heavy Truck** | 9 | 3 | 7 |
| **Bus** | 18 | 10 | 18 |
| **Train** | 6 | 6 | 8 |

## Conclusion

The 2020 *CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the Proposed Actions, an $L_{10}$ or $L_{eq}$ of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An $L_{10}$ or $L_{eq}$ of between 70 and 80 dB(A) is identified as marginally unacceptable general external exposure. The highest recorded $L_{10}$ at Location One (1) was 76.0 dB(A) during the AM and PM peak periods. The highest recorded $L_{10}$ at Location Two (2) was 75.0 dB(A) during the AM and Midday peak period. Based on the results, a window-wall attenuation of 33 dB(A) will be required for the Project Site because the highest future noise levels would likely exceed 76 dB(A). With this level of attenuation, no adverse impacts related to noise are expected.

An E-Designation (E-XXX) will be placed on the Project Site as follows:

**Block 9589, Lot 11**: To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a 33 dBA window/wall attenuation on all facades to maintain an interior noise level not greater than 45 dBA for residential 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.

## *Appendix A: LPC Correspondence*

NYC Landmarks Preservation Commission

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

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

# ENVIRONMENTAL REVIEW

**Project number:** LA-CEQR-Q (DEPARTMENT OF CITY PLANNING)
**Project:**
**Address:** 103-16 VAN WYCK EXPRESSWAY BBL: 4095890011
**Date Received:** 7/22/2020

---

**[**X**] No architectural significance**

**[**X**] No archaeological significance**

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

**[ ] Listed on National Register of Historic Places**

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

**[ ] May be archaeologically significant; requesting additional materials**

Gina Santucci 7/24/2020

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

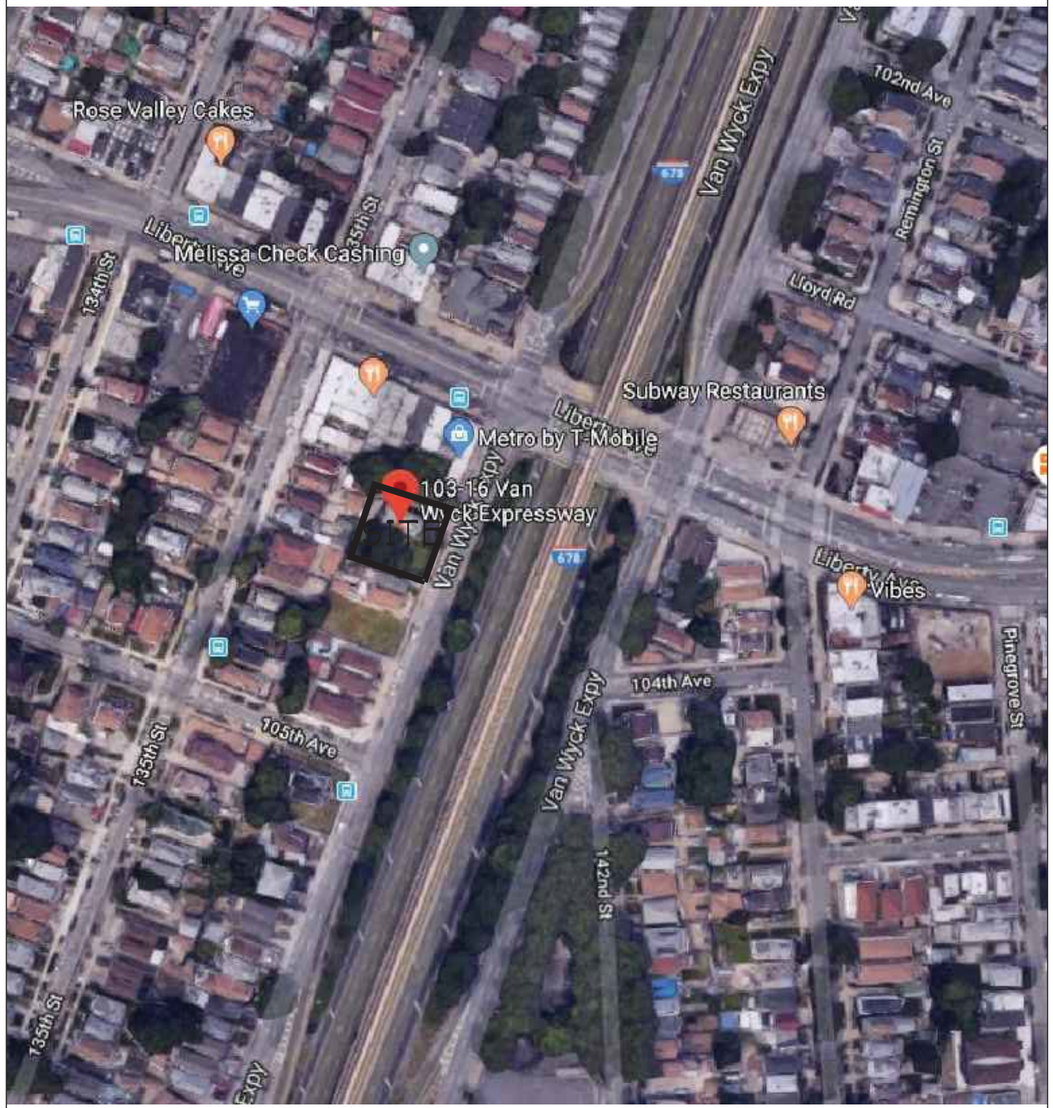
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## *Appendix B: Architectural Drawings*

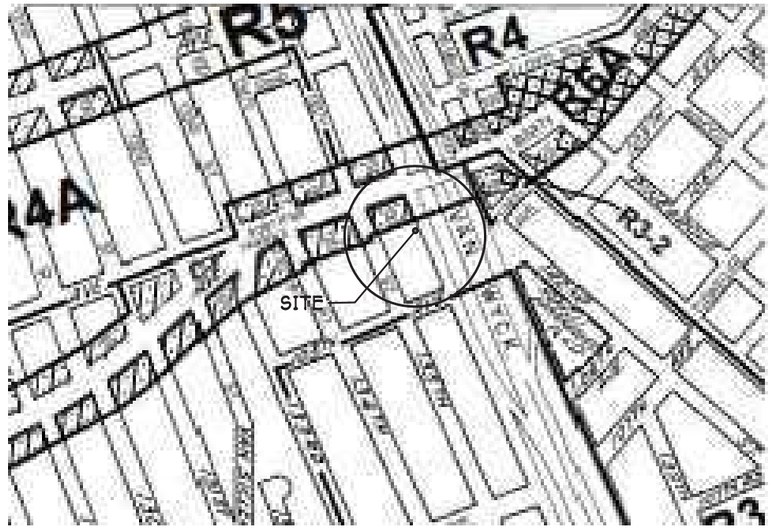
# ZONING ANALYSIS

## 103-16 VAN WYCK EXPWY.

## JAMAICA, NY




AERIAL PHOTO




ZONING MAP No. 18c




AREA MAP

THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTIONS WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE SCALED. GERALD J. CALIENDO ARCHITECT, P.C. AND ITS PRINCIPAL/EMPLOYEES WERE NOT RETAINED FOR ANY CONSTRUCTION SUPERVISION.

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Briarwood N.Y. 11435
Tel. (718) 268-9098
Fax (718) 268-9097
www.caliendoarchitects.com

DRAWING TITLE: ZONING ANALYSIS C2-3 / R6B

PREMISES: 103-16 VAN WYCK EXPWY. JAMAICA, NY

| | |
|---|---|
| DRAWN BY: | N.M.H. |
| CHECKED BY: | GJC |
| JOB No: | 19021 |
| SCALE: | AS NOTED |
| DATE: | 3-20-19 |

REGISTERED ARCHITECT GERALD J. CALIENDO 020241 STATE OF NEW YORK

DRAWING No: 1 OF 5

Z-001.00

# Zoning Analysis

| Site Data | | List of Required Actions |
|---|---|---|
| Block(s) | 9589 | 1. Zoning Map Amendment |
| Lot(s) | 11 | |
| Street Address(es) | 103-16 Van Wyck Expwy. | |
| Existing Zoning: R3A | C2-3 / R6B | |
| Community District | 410 | |
| Zoning Section Map No. | 18c | |
| Total Zoning Lot Area | 10,000 sf | |

| Item | Zoning Section | Permitted/Required | Proposed | Compliance/Notes |
|---|---|---|---|---|
| | | | | |
| Uses Permitted | 22-00 & 33-00 | 1 - 9 & 14 | 2 & 6 | Yes |
| **Max. F.A.R.** | | | | |
| Commercial | 33-121 | 2.00 | 0.73 | Yes |
| Residential (QH) | 23-154 & 35-65 | 2.20 | 1.47 | Yes |
| Total F.A.R. | | 2.20 | 2.20 | Yes |
| **Max. Floor Area** | | | | |
| Commercial | 33-121 | 20,000 sf | 7,269 sf | Yes |
| Residential (MIH) | 23-154 & 35-65 | 22,000 sf | *14,731 sf | Yes |
| Total Floor Area | | 22,000 sf | 22,000 sf | Yes |
| **Max. Lot Coverage** | | | | |
| Residential | 23-153 | 60% = 6,000 sf | 5,049.2 sf or 50% | Yes |
| **Yards** | | | | |
| Front | 35-51 | N.A. | N.A. | Yes |
| Side | 35-52 | 0 or 8'-0" min. | 0 & 8'-0" | Yes |
| Rear | 33-26 & 35-53 | 30 ft. (Res.) & ***20 ft. (Commercial) | 40'-0" (Res.) & ***0 & 30'-0" (Commercial) | Yes |
| Req'd. yard along district boundary | 35-54 | 8'-0" | 13'-0" | Yes |
| **Density** | | | | |
| No. of D.U's | 23-22 & 35-40 | 20 | 18 | Yes |
| **Max. Height & Setback** | | | | |
| Min. Base Height | 23-662 & 35-652 | 30'-0" | N.A. | Yes |
| Max. Base Height | | 45'-0" | 45'-0" | |
| Max. Building Height | | 55'-0" - 5 stories | 45'-0" or 4 stories | |
| Setback Narrow Street | 23-662 & 35-652 | 15'-0" | N.A. | |
| Setback Wide Street | | 10'-0" | N.A. | |
| **Req'd. Parking - In Transit Zone** | | | | |
| Commercial (General Retail) | 36-20 | 1 per 400 sf = 7,269 / 1,000 = 7 spaces** | None required | Yes |
| Residential - Market rate units | 25-251 & 36-35 | 50% x 13 units = 7 spaces | 8 | Yes |
| Affordable units | | 25% x 5 units = 1 spaces | | |
| **Req'd. Bicycle Parking** | | | | |
| Commercial (General Retail) | 36-70 | 1 per 10,000 sf = 1 | 1 | Yes |
| Residential | | 1 per 2 D.U.'s = 9 bikes | 9 | Yes |
| **Req'd. Loading** | | | | |
| Retail or Service Uses | 36-62 | First 8,000 sf = None | 0 | Yes |

*Reflects Zoning Floor Area (gross F.A. reduced by Quality Housing and mechanical deductions)

**Waiver (36-231 ZR) - 7 < 25; therefore, none required.

*** Permitted obstruction [33-23 (b)(3) ZR] up to 23' high - 1 story

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DRAWING TITLE: ZONING CALCULATIONS FOR ILLUSTRATIVE PURPOSES

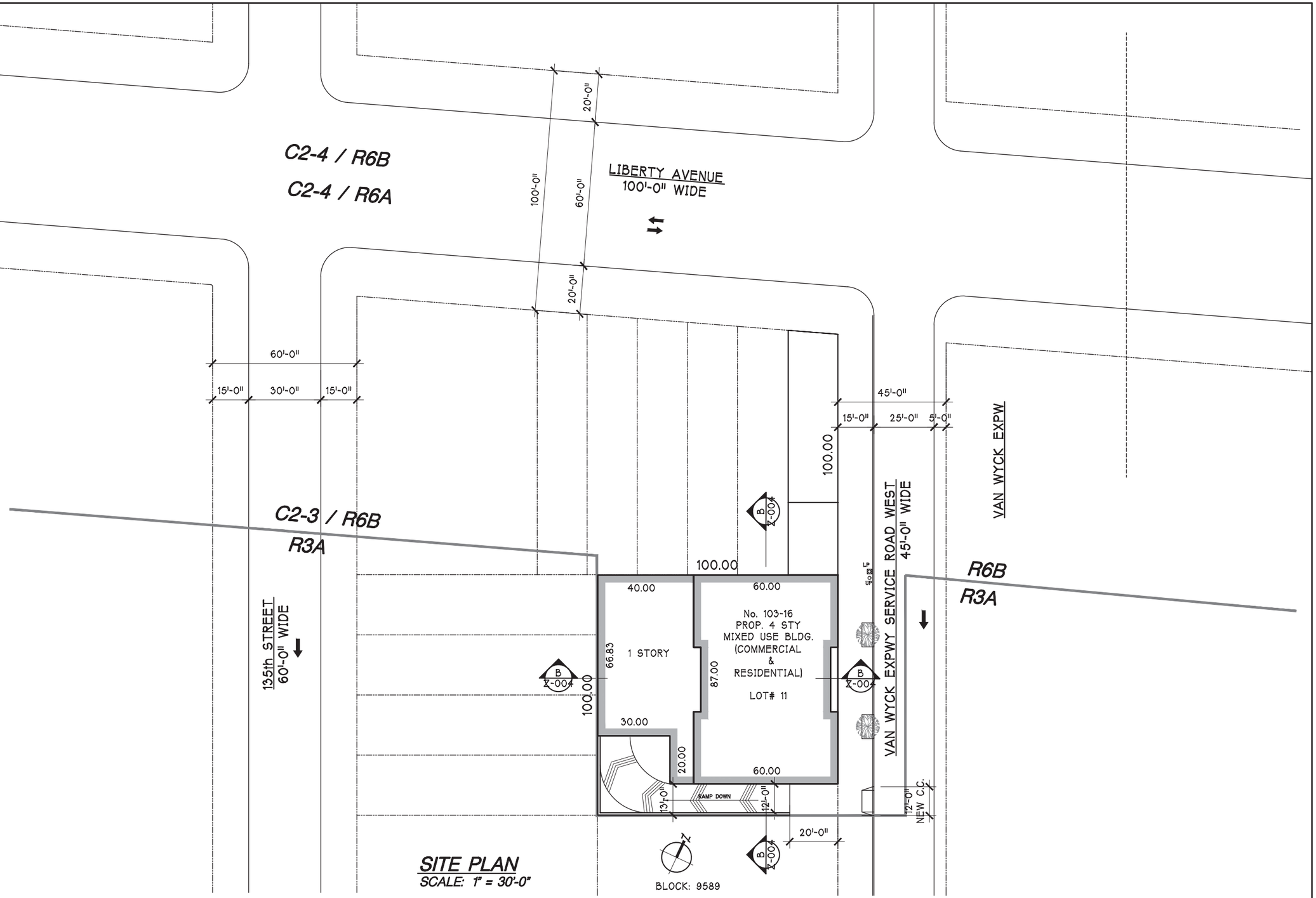
PREMISES: 103-16 VAN WYCK EXPWY. JAMAICA, NY

| DRAWN BY: | CHECKED BY: | JOB No: | SCALE: | DATE: |
|---|---|---|---|---|
| N.M.H. | GJC | 19021 | AS NOTED | 3-20-19 |

SEAL: REGISTERED ARCHITECT GERALD J. CALIENDO 020241 STATE OF NEW YORK

DRAWING No: 2 OF 5

Z-002.00




## SITE PLAN
SCALE: 1" = 30'-0"

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DRAWING TITLE: SITE PLAN - C2-3 / R6B
FOR ILLUSTRATIVE PURPOSES

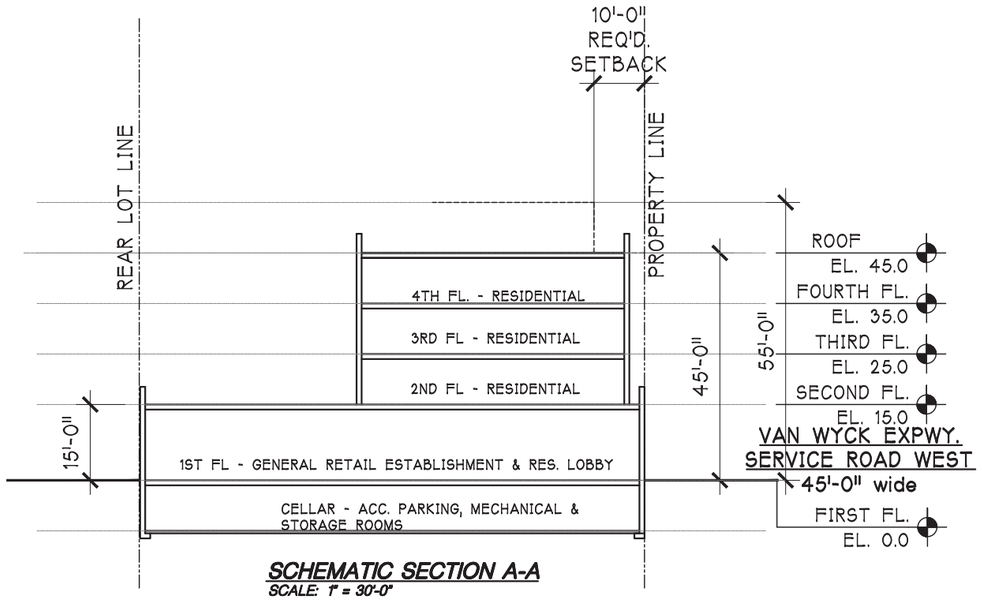
PREMISES: 103-16
VAN WYCK EXPWY.
JAMAICA, NY

| DRAWN BY: | CHECKED BY: | JOB No: | SCALE: | DATE: |
|---|---|---|---|---|
| N.M.H. | GJC | 19021 | AS NOTED | 3-20-19 |

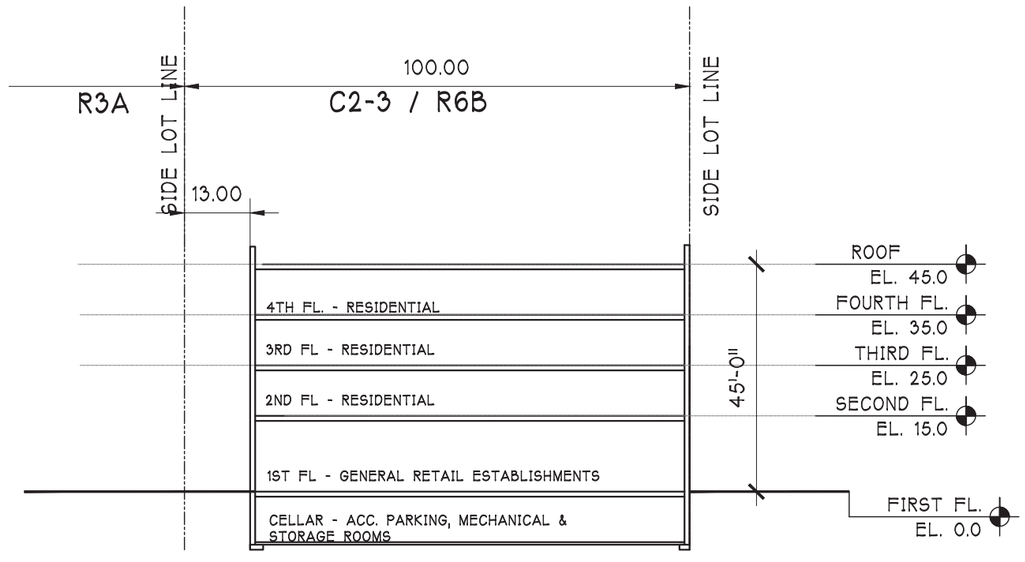
SEAL: REGISTERED ARCHITECT GERALD J. CALIENDO 020241 STATE OF NEW YORK

DRAWING No: 3 OF 5

Z-003.00




***SCHEMATIC SECTION A-A***
*SCALE: 1" = 30'-0"*




***SCHEMATIC SECTION B-B***
*SCALE: 1" = 30'-0"*

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DRAWING TITLE: SECTIONS FOR ILLUSTRATIVE PURPOSES

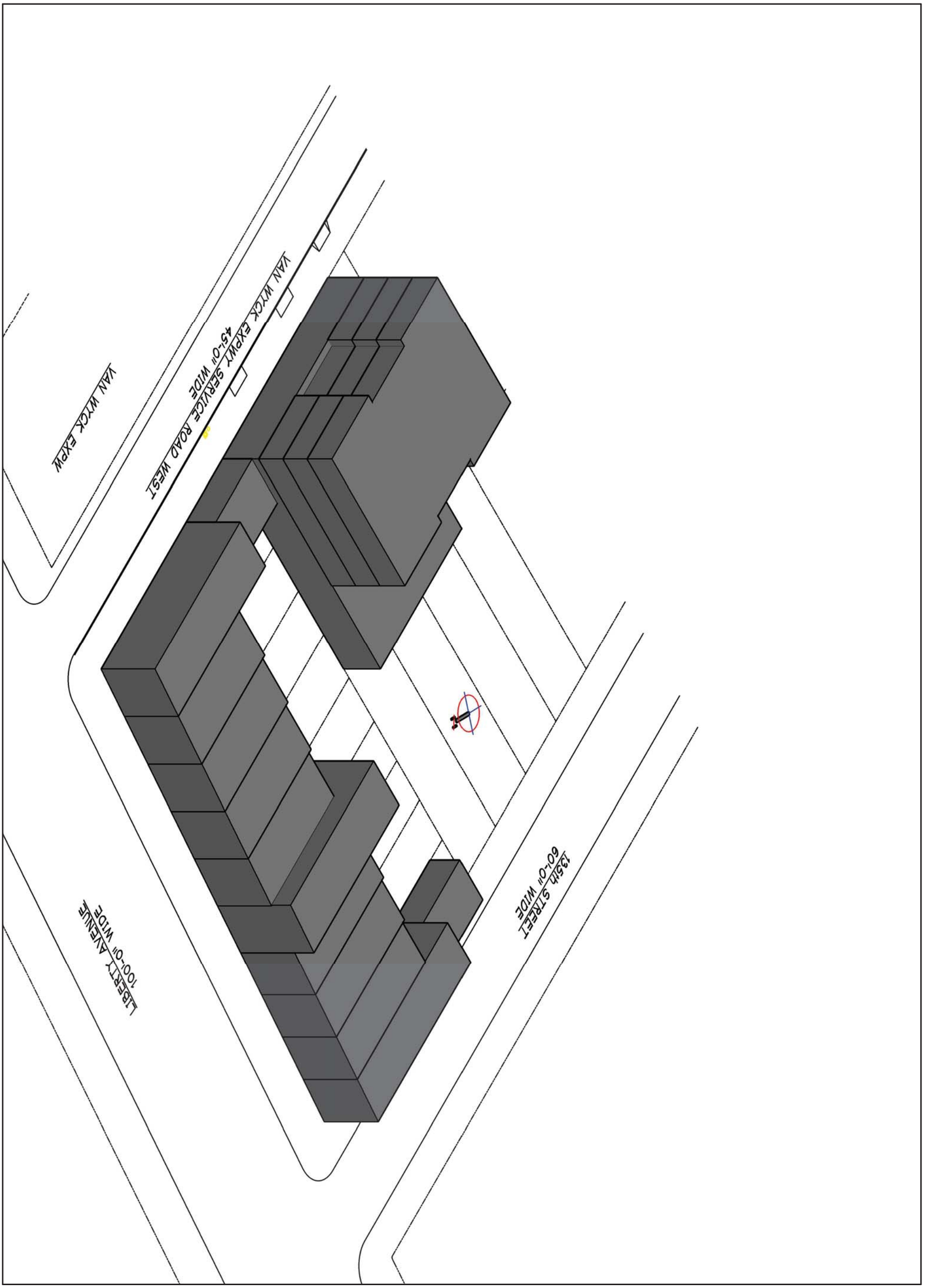
PREMISES: 103-16 VAN WYCK AVENUE JAMAICA, NY

| | |
|---|---|
| DRAWN BY: | N.M.H. |
| CHECKED BY: | GJC |
| JOB No: | 19021 |
| SCALE: | AS NOTED |
| DATE: | 3-20-19 |

SEAL: REGISTERED ARCHITECT GERALD J. CALIENDO 020241 STATE OF NEW YORK

DRAWING No: 4 OF 5

Z-004.00




THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRIUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTIONS WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE SCALED. GERALD J. CALIENDO ARCHITECT, P.C. AND ITS PRINCIPAL/EMPLOYEES WERE NOT RETAINED FOR ANY CONSTRUCTION SUPERVISION.

Z-005.00

DRAWING No: 5 OF 5

SEAL: REGISTERED ARCHITECT GERALD J. CALIENDO 020241 STATE OF NEW YORK

| | |
|---|---|
| DRAWN BY: | N.M.H. |
| CHECKED BY: | GJC |
| JOB No: | 19021 |
| SCALE: | AS NOTED |
| DATE: | 3-20-19 |

DRAWING TITLE: MASSING DIAGRAM FOR ILLUSTRATIVE PURPOSES

PREMISES: 103-16 VAN WYCK EXPWY. JAMAICA, NY

Gerald J. Caliendo, R.A., A.I.A.
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Interior Design
Code Consultant
Building Dept.
Expediting

*Appendix C: DEP Correspondence*

## *Appendix D: Noise Back-Up Data*

**Casella CEL Ltd.**

**Report On CEL-63X**

| | | | | |
|---|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | | |
| Serial Number | 4278006 | LAS 10% | 76 dB | Result |
| LASmax | 96 dB | LAS 50% | 72 dB | |
| LASmin | 63.8 dB | LAS 90% | 68 dB | |
| Start Date & Time | 10/8/2019 4:31:18 PM | Calibration (Before) Date | 10/8/2019 4:21:09 PM | |
| Duration | 01:00:08 HH:MM:SS | Calibration (After) Date | 10/8/2019 5:32:09 PM | |
| LAeq | 74.6 dB | Calibration Drift | 0.1 dB | |
| End Date & Time | 10/8/2019 5:31:26 PM | Battery Low | No | |
| Notes | | | | |

| | | | | |
|---|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | | |
| Serial Number | 4278006 | LAS 10% | 73 dB | Result |
| LASmax | 86.4 dB | LAS 50% | 70 dB | |
| LASmin | 64.2 dB | LAS 90% | 67.5 dB | |
| Start Date & Time | 10/8/2019 12:01:40 PM | Calibration (Before) Date | 10/8/2019 11:47:03 AM | |
| Duration | 01:00:05 HH:MM:SS | Calibration (After) Date | 10/8/2019 1:07:54 PM | |
| LAeq | 71.2 dB | Calibration Drift | -0.1 dB | |
| End Date & Time | 10/8/2019 1:01:45 PM | Battery Low | No | |
| Notes | | | | |

| | | | | |
|---|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | | |
| Serial Number | 4278006 | LAS 10% | 76 dB | Result |
| LASmax | 92.3 dB | LAS 50% | 71.5 dB | |
| LASmin | 51.8 dB | LAS 90% | 68 dB | |
| Start Date & Time | 10/8/2019 7:36:41 AM | Calibration (Before) Date | 10/8/2019 7:04:13 AM | |
| Duration | 01:00:01 HH:MM:SS | Calibration (After) Date | 10/8/2019 11:46:57 AM | |
| LAeq | 73.7 dB | Calibration Drift | -0.1 dB | |
| End Date & Time | 10/8/2019 8:36:42 AM | Battery Low | No | |
| Notes | | | | |

**Report On CEL-63X**

| | | | | |
|---|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | | |
| Serial Number | 1488256 | LAS 10% | 74 dB | Result |
| LASmax | 90.3 dB | LAS 50% | 70 dB | |
| LASmin | 63.4 dB | LAS 90% | 68 dB | |
| Start Date & Time | 10/8/2019 4:30:02 PM | Calibration (Before) Date | 10/8/2019 4:21:13 PM | |
| Duration | 01:00:02 HH:MM:SS | Calibration (After) Date | 10/8/2019 5:32:36 PM | |
| LAeq | 72.3 dB | Calibration Drift | 0.2 dB | |
| End Date & Time | 10/8/2019 5:30:04 PM | Battery Low | No | |
| Notes | | | | |

| | | | | |
|---|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | | |
| Serial Number | 1488256 | LAS 10% | 75 dB | Result |
| LASmax | 86.9 dB | LAS 50% | 72.5 dB | |
| LASmin | 67.6 dB | LAS 90% | 70.5 dB | |
| Start Date & Time | 10/8/2019 12:00:08 PM | Calibration (Before) Date | 10/8/2019 11:45:37 AM | |
| Duration | 01:00:12 HH:MM:SS | Calibration (After) Date | 10/8/2019 1:07:14 PM | |
| LAeq | 73.5 dB | Calibration Drift | 0.0 dB | |
| End Date & Time | 10/8/2019 1:00:20 PM | Battery Low | No | |
| Notes | | | | |

| | | | | |
|---|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | | |
| Serial Number | 1488256 | LAS 10% | 75 dB | Result |
| LASmax | 89.6 dB | LAS 50% | 71.5 dB | |
| LASmin | 66.5 dB | LAS 90% | 69.5 dB | |
| Start Date & Time | 10/8/2019 7:30:52 AM | Calibration (Before) Date | 10/8/2019 7:05:51 AM | |
| Duration | 01:00:02 HH:MM:SS | Calibration (After) Date | 10/8/2019 11:45:26 AM | |
| LAeq | 72.9 dB | Calibration Drift | -0.3 dB | |
| End Date & Time | 10/8/2019 8:30:54 AM | Battery Low | No | |
| Notes | | | | |

equity environmental engineering

WORKING TOGETHER TO DESIGN SOLUTIONS

## Noise Job Field Sheet

Name of Project: 103-06 Van Wyck Expressway

Project Address: 103-16 Van Wyck Expressway Richmond Hill, Queens, New York

Date(s) of Field Work: 10/8/19

Personnel: John Vrabel

Project Specific Scope of Work:

1 x 1-hour AM, Midday, PM
Phase I Inspection 3PM
Site Contact: ~~Eric Zeng~~ Tony - 917-345-8999

Maximum Billable Hours for the Day: 15

### I. Start of Noise Monitoring Day

Departure Time: 5:00 Arrival Time: 6:30

Weather Conditions (temp, wind speed, precipitation): cloudy / moderate wind / 60's

Meter Type: Casella (1) Meter Serial #: 1488256 (1) Meter Location: 1A (elevated) (1)
Casella 4278006 1

Calibrator Serial #: 2383985 Meters used on: AM

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 #: 1483256 / 4278006 Time: 7:04 Calibration Passed at 114 dB? (Y) / N

After Measurement:

Meter Serial #: 1483256 / 4278006 Time: 11:45 Calibration Passed at 114 dB? (Y) / N

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

| Location # | Start Time | End Time |
|---|---|---|
| 1 | 7:36 | 8:36 |
| 1A | 7:30 | 8:30 |

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

| Location # | Car | SUV | Medium Truck | Heavy Truck | Bus | Train |
|---|---|---|---|---|---|---|
| 1 + 1A | 331 | 515 | 41 | 9 | 18 | 6 |

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

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

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

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

Before Measurement:

Meter Serial #: 1483256 / 4278006 Time: 11:45 Calibration Passed at 114 dB? (Y) / N

After Measurement:

Meter Serial #: 1483256 / 4278006 Time: 13:07 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 |
|---|---|---|
| 1A | 12:00 / 12:02 | 13:02 / 13:00 |

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

| Location # | Car | SUV | Medium Truck | Heavy Truck | Bus | Train |
|---|---|---|---|---|---|---|
| 1 + 1A | 218 | 425 | 31 | 3 | 10 | 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):

*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 #: 1488256 Time: 16:20 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 4273006 Time: 16:20 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
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 1488256 Time: 17:32 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 4273006 Time: 17:32 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
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 |
|---|---|---|
| | | |

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

| Location # | Car | SUV | Medium Truck | Heavy Truck | Bus | Train |
|---|---|---|---|---|---|---|
| 1+1A | 329 | 502 | 29 | 7 | 18 | 8 |

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

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

_____

_____

_____

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

## V. End of Noise Monitoring Day

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

Anything of note/concern for the day: _____

_____

_____

Departure Time: 17:40 Arrival Time: 15:45

Total Time to Be Billed: 15




Legend

Project Site | Rezoning Area | Noise Monitoring Locations

0 12.5 25 50 75 US Feet