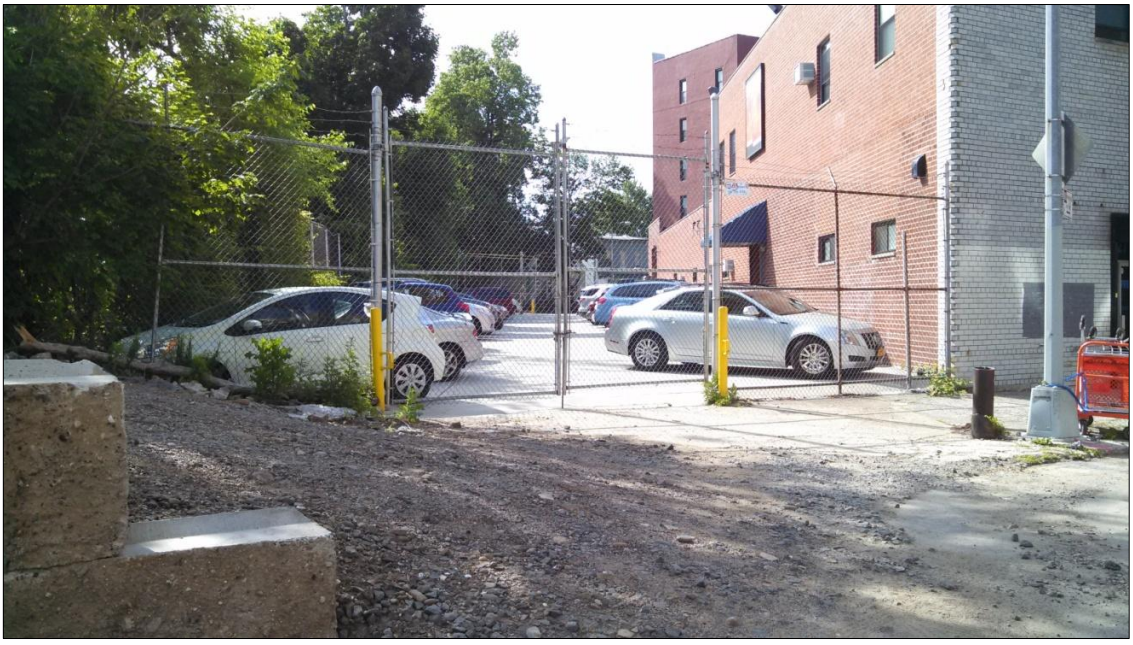
VAUX ROAD DEMAPPING

ENVIRONMENTAL ASSESSMENT STATEMENT

CEQR No. 14DCP154Q

ULURP No. 130383MMQ



Prepared For:

Firecom, Inc.

Prepared By:

Philip Habib & Associates

September 25, 2014

VAUX ROAD DEMAPPING

ENVIRONMENTAL ASSESSMENT STATEMENT

Table of Contents

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* Vaux Road Demapping

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
14DCP154Q	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
130383MMQ	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning (DCP)			Firecom, Inc.		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Robert Dobruskin, AICP, Director, EARD			Kevin Fullington, Herrick Feinstein LLP		
ADDRESS 22 Reade Street, 4E			ADDRESS 2 Park Avenue		
CITY New York	STATE NY	ZIP 10007	CITY New York	STATE NY	ZIP 10016
TELEPHONE 212-720-3420	EMAIL rdobrus@planning.nyc.gov		TELEPHONE 212-592-1483	EMAIL kfullington@herrick.com	

5. *Project Description*

The applicant, Firecom Inc., is proposing a change to the City Map involving the elimination, discontinuance, and closing of Vaux Road between 59th and 60th Streets in the Woodside neighborhood of Queens, Community District 2. Vaux Road is an un-built paper street enclosed by chain link fencing at both ends that has served as a parking lot for Firecom employees since the 1980s. Vaux Road is partially owned by the City and partially owned by the applicant. The proposed demapping would remove the encumbrance that the mapped street has placed on the applicant's property and the proposed disposition of the City owned westerly section of Vaux Road to the applicant would allow the applicant to consolidate its property. The proposed demapping would not result in new in-ground development or expansion of existing structures and would not add any residents or workers to the area. However, for conservative analysis purposes, a RWCDS that consists of a new 32 DU residential development is considered in the EAS. For more detailed information refer to Attachment A, "Project Description."

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 2	STREET ADDRESS 39-27 59th Street
TAX BLOCK(S) AND LOT(S) Block 1230, Lots 70, p/o 35		ZIP CODE 11377
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The area to be demapped is Vaux Road between 59th and 60th Streets		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R5B		ZONING SECTIONAL MAP NUMBER 9d

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): Approx. 23,917 sf (total area of project site)
Waterbody area (sq. ft) and type: N/A
Roads, buildings, and other paved surfaces (sq. ft.): Approx. 11,604 sf (total area of street to be demapped)
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): Approx. 32,288 (Total gsf assumed under RWCDS)
NUMBER OF BUILDINGS: 2
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 12,680 sf, 19,608 sf
HEIGHT OF EACH BUILDING (ft.): 33 ft, 33 ft
NUMBER OF STORIES OF EACH BUILDING: 3, 3

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:
The total square feet non-applicant owned area:

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: sq. ft. (width x length) VOLUME OF DISTURBANCE: cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 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.)	32,288 gsf	N/A	N/A	N/A
Type (*e.g.,* retail, office, school)	32 units	N/A	N/A	N/A

Does the proposed project increase the population of residents and/or on-side workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 83 NUMBER OF ADDITIONAL WORKERS: 1
Provide a brief explanation of how these numbers were determined: Residents: Queens CD 2 average of 2.59 persons per household x 32 DUs. Workers: 1 worker per 25 DUs.

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): 2015

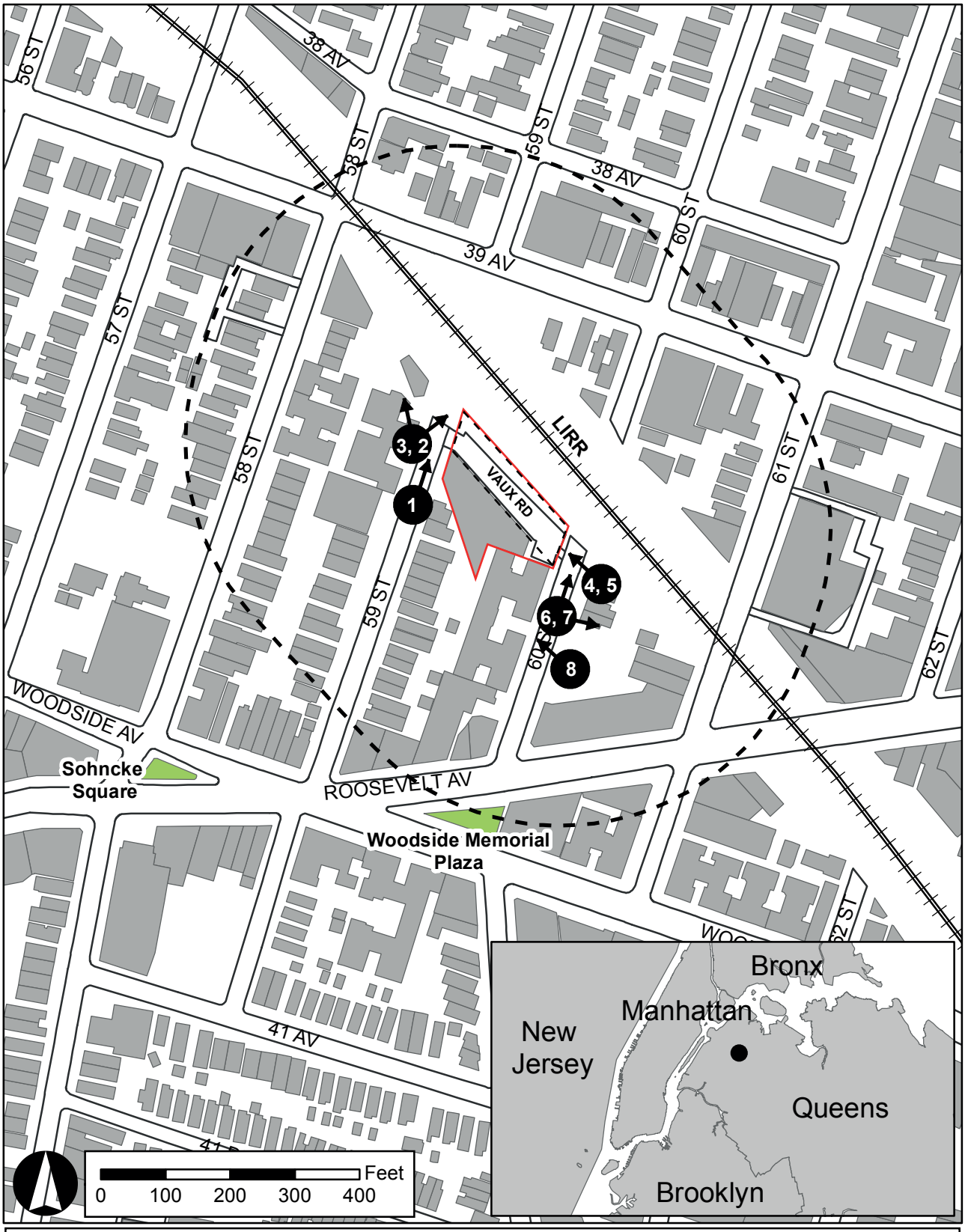
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 16-24 months

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

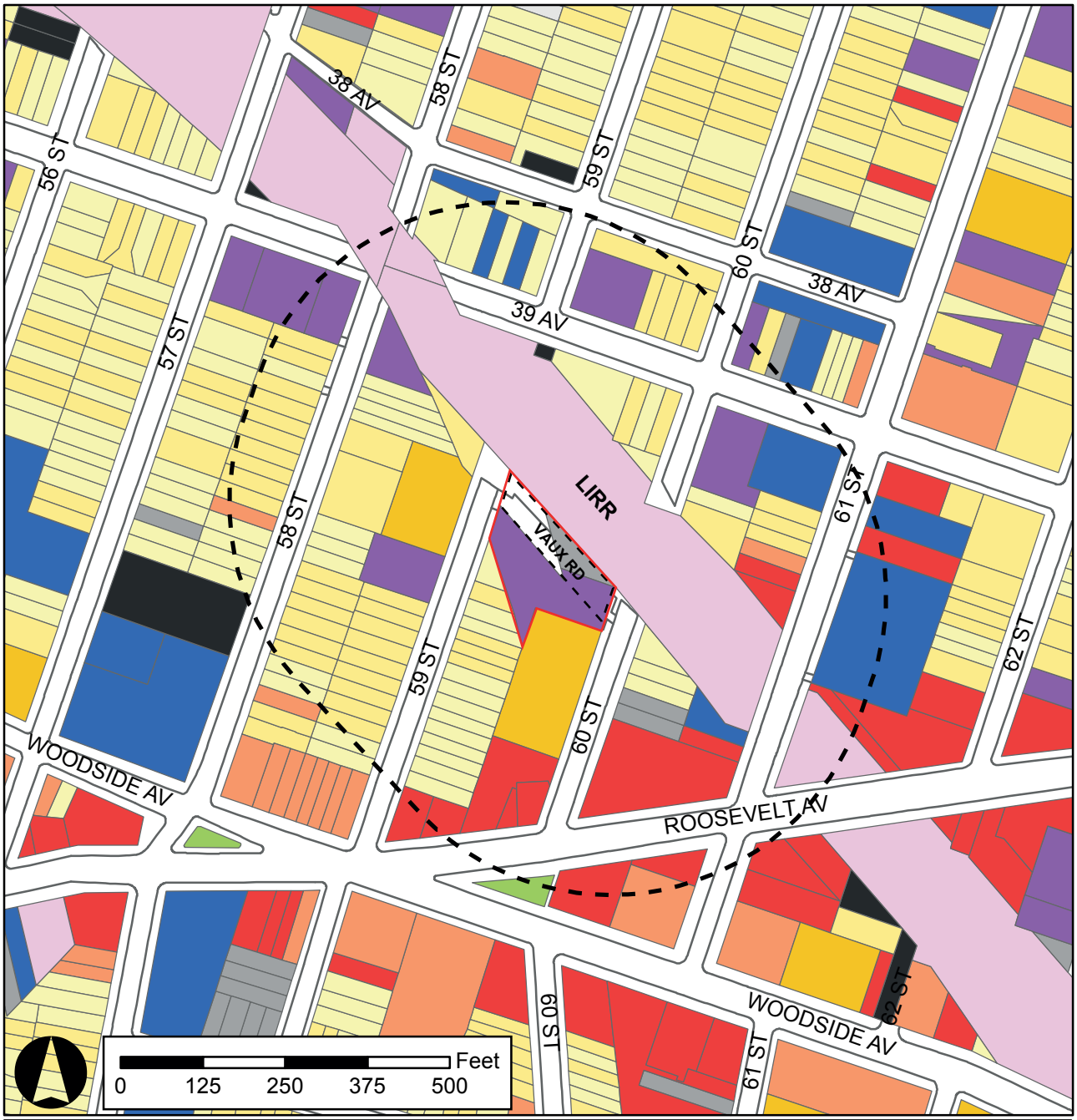
☒ RESIDENTIAL ☒ MANUFACTURING ☐ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Mixed-Use, Institutional, Transportation/Utility



Legend

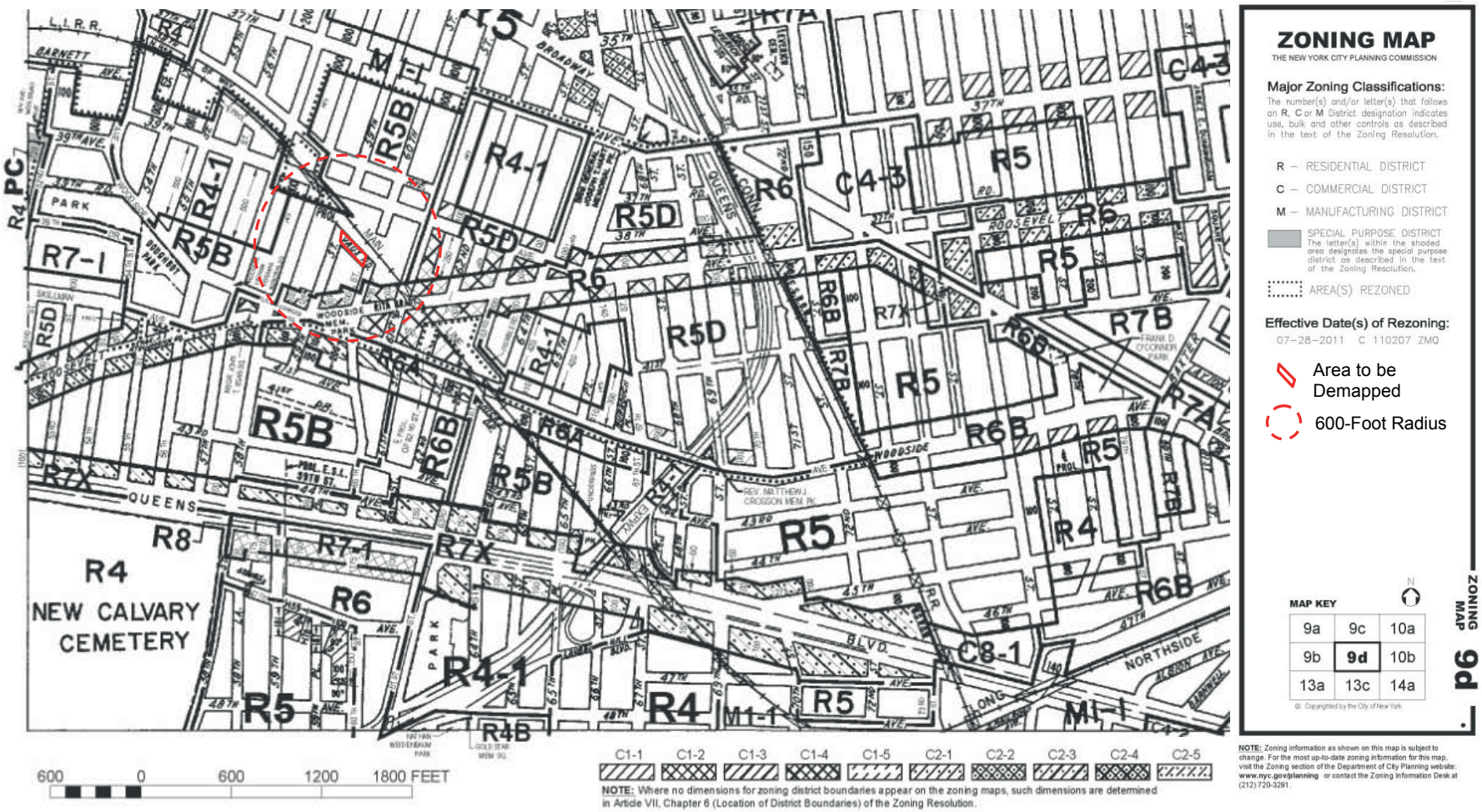
Project Site | Area to be Demapped | 400-Foot Radius

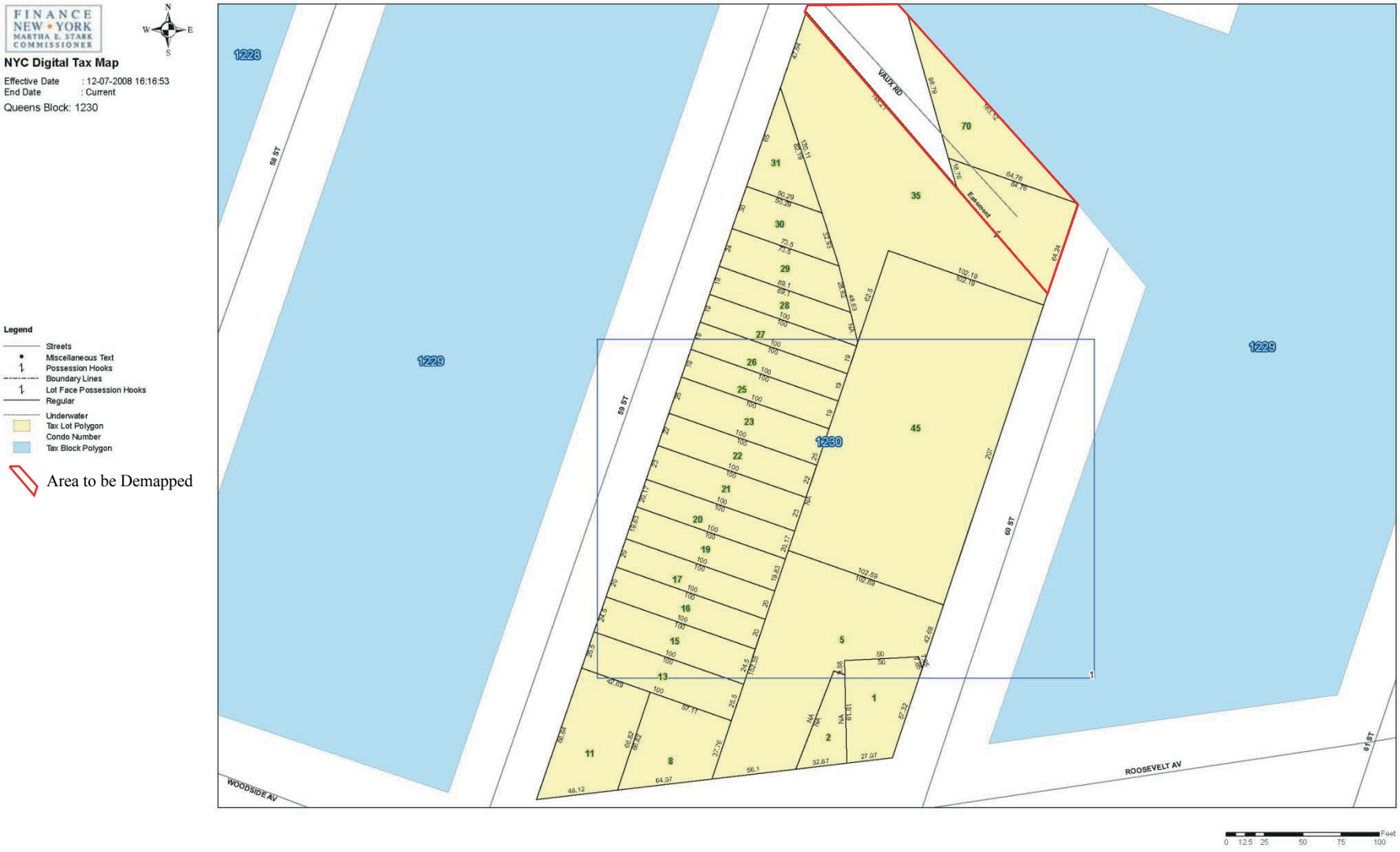
1 Photo Locations (keyed to Figure 5)



Legend

- 400-Foot Radius
- Area to be Demapped
- Project Site
- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data


ZONING MAP
THE NEW YORK CITY PLANNING COMMISSION
Major Zoning Classifications:
The number(s) and/or letter(s) that follows an R, C or M District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.
R – RESIDENTIAL DISTRICT
C – COMMERCIAL DISTRICT
M – MANUFACTURING DISTRICT
SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.
AREA(S) REZONED
Effective Date(s) of Rezoning:
07-28-2011 C 110207 ZMQ
Area to be Demapped
600-Foot Radius
MAP KEY
9a 9c 10a
9b 9d 10b
13a 13c 14a
ZONING MAP 9d
600 0 600 1200 1800 FEET
C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5
NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.
NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: www.nyc.gov/planning or contact the Zoning Information Desk at (212) 720-3291.



Vaux Road Demapping EAS **Figure 4**

Tax Map

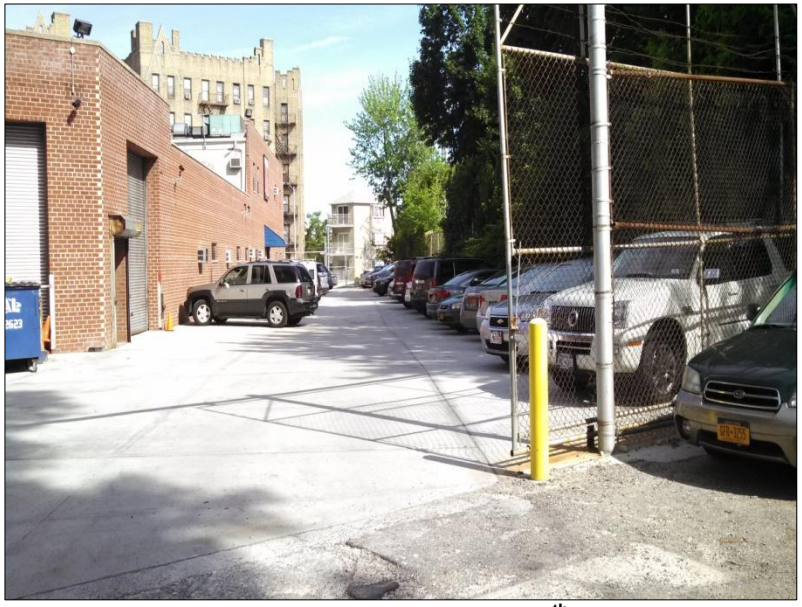
Vaux Road Demapping EAS

Figure 4 (Cont'd)
Tax Map

1. Intersection of 59th Street and Vaux Road

2. Vaux Road as seen from 59th Street

3. New construction on previously demapped area of Vaux Rd.



4. Vaux Road looking towards 59th Street

5. Vaux Road as seen from 60th Street

6. Stairs to Woodside LIRR station at Vaux Rd and 60th St

7. One and two family homes adjacent to Vaux Rd on 60th St

8. Six-story apartment buildings on 60th Street

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 attach supporting information, if needed) 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	☐	☒

	YES	NO
residents or 500 additional employees?		
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☐	☒
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(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: No evidence of RECs, see Attachment B, "Supplemental Screening"	☐	☒
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	☐	☒

	YES	NO
Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?		
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 1,312		
○ 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): 4,057,821		
(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)	☒	☐
(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?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		

	YES	NO
(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. If future development of the demapped property should occur, to avoid the potential for significant adverse impacts with respect to air quality, hazardous materials, and noise, environmental requirements pursuant to the Mapping Agreement entered between the applicant and the City of New York would be enforced. Therefore, an assessment of public health is not warranted.

18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21

(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐

(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. The RWCDS does not have the potential to result in significant adverse impacts to land use, zoning, and public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, or transportation. If future development of the demapped property should occur, to avoid the potential for significant adverse impacts with respect to noise, environmental requirements pursuant to the Mapping Agreement entered between the applicant and the City of New York would be enforced. Therefore, an assessment of neighborhood character is not warranted.

19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22

(a) Would the project's construction activities involve:

○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☒	☐
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒

(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.

Construction of the residential development identified in the RWCDS may result in temporary disruptions, including noise, dust, and traffic associated with the delivery of materials and arrival of workers on the project site. There is also the potential for the operation of several pieces of diesel equipment on the construction site. These effects, however, would be temporary (approximately 15 months) and all applicable city, state, and federal guidelines and regulations would be followed to ensure that any impacts are properly mitigated. Therefore, none of these disruptions should be considered significant. See Attachment B, "Supplemental Screening," for details.

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
Philip Habib	September 25, 2014

SIGNATURE

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
Deputy Director, EARD	New York City Department of City Planning
NAME	DATE
Olga Abinader	09/25/2014

SIGNATURE

ATTACHMENT A
PROJECT DESCRIPTION

I. INTRODUCTION

The applicant, Firecom Inc., a life safety equipment manufacturer, is requesting a change to the City Map (the "proposed action") involving the elimination, discontinuance, and closing of Vaux Road in the Woodside neighborhood of Queens, Community District 2. The mapped street extends approximately 230 linear feet between 59th Street to the west and 60th Street to the east. It is bordered by the MTA/Long Island Railroad (LIRR) Main Line corridor to the north and applicant-owned private property at 39-27 59th Street to the south (see Figure A-1). The mapped street is unbuilt and closed to through traffic by chain link fencing at both ends. Since the 1980s, the mapped street has served as a parking lot for the applicant. The disposition of the City-owned western portion of the mapped street to the applicant is also being sought subsequent to the proposed demapping.

The proposed action is intended to relieve the encumbrance that the mapped street has placed on the applicant's property and the proposed disposition of the City owned westerly section of Vaux Road to the applicant would allow the applicant to consolidate its property (the "proposed project"). The acquisition of the City-owned western portion would not be possible without the demapping of the street.

For conservative assessment purposes, a reasonable worst-case development scenario (RWCDS) that differs from the applicant's proposed project has been identified for the analysis year of 2015. As discussed below, a residential development that would maximize available floor area has been considered for the site of the demapped street and applicant-owned property (the "project site"). The RWCDS for future conditions with the proposed demapping anticipates that the project site would accommodate approximately 32,288 sf of residential floor area (32 DUs) and at-grade accessory parking for 22 spaces. Future conditions without the proposed demapping would remain similar to existing conditions.

This attachment provides a summary and description of the proposed project and its associated RWCDS, including existing conditions of the area affected by the proposed demapping, purpose and need for the proposed project, description of the proposed project and associated development scenario, and the approvals required.

II. BACKGROUND AND EXISTING CONDITIONS

Description of the Surrounding Area

Woodside is a largely residential area comprised of 2- to 6-story apartment buildings with smaller one- and two-family buildings interspersed. Mixed residential/retail buildings can be found along the major east-west avenues. A small number of industrial/manufacturing and transportation/utility uses are also located in the surrounding area. The scale and density of the neighborhood tends to reflect underlying zoning districts. C1 and C2 commercial overlays, which allow local retail and local service establishments, are mapped along major retail corridors, including portions of Roosevelt Avenue, Woodside Avenue, and Queens Boulevard. A small number of publicly accessible open spaces and plazas are located in the surrounding area, including Lawrence Virgillo Playground, Doughboy Plaza, John Vincent Daniels Jr. Square, Steinmann Triangle, Sohncke Square, and the Woodside Memorial. The area is well served by public transportation, including the Woodside – LIRR station and the No. 7 subway line, both of which are located at 61st Street and Roosevelt Avenue.

Project Site Area to be Demapped

Figure A-1
Aerial View of Project Site

Description of the Project Site

The project site is located immediately south of the LIRR between 59th and 60th Streets (see Figure A-2). The applicant, Firecom Inc., is the owner of two contiguous tax lots (Lots 35, 70) that abut and lay beneath the mapped street. The mapped street is approximately 230 linear feet in length and has an area of approximately 11,604 sf.

Lot 35 is an approximately 15,051 sf through lot with frontage on both 59th and 60th Streets. The lot is the site of the applicant's manufacturing and office building, which has a floor area of approximately 14,511 sf, and abuts a portion of the southern boundary of the mapped street (see Figure A-3). The lot also lies beneath the easternmost portion (2,738 sf) of the mapped street. A chain link fence lines the eastern edge of the lot, restricting vehicle access to applicant-only parking.

To the north of the applicant's building is Lot 70, an approximately 3,402 sf parcel that lies beneath the mapped street in its entirety. The lot is bordered to the south and east by Lot 35 and to the north by the LIRR. The entire lot is used for applicant parking (see Figure A-3).

The western City-owned portion of the mapped street totals approximately 5,464 sf. This western portion is bordered to the south by Lot 35, to the east by Lot 70, to the north by the LIRR, and to the west by 59th Street. A chain link fence lines the western edge of the mapped street, closing the street to traffic. The entire western portion is used for applicant parking (see Figure A-3).

The existing ownership structure of the mapped street and the project site are summarized below in Tables A-1 and A-2, respectively, and are illustrated in Figure A-4.

Table A-1
Existing Ownership of Vaux Road

Ownership	Location	Area (sf)*
Firecom Inc.	Lot 35 (portion of)	2,738
	Lot 70	3,402
City of New York	Western Portion	5,464
	TOTAL	**11,604**

*Approximate square footages based on Gallas Surveying Group site survey (1/11/2013) and NYC Department of Finance property records.

Table A-2
Existing Ownership of Overall Project Site

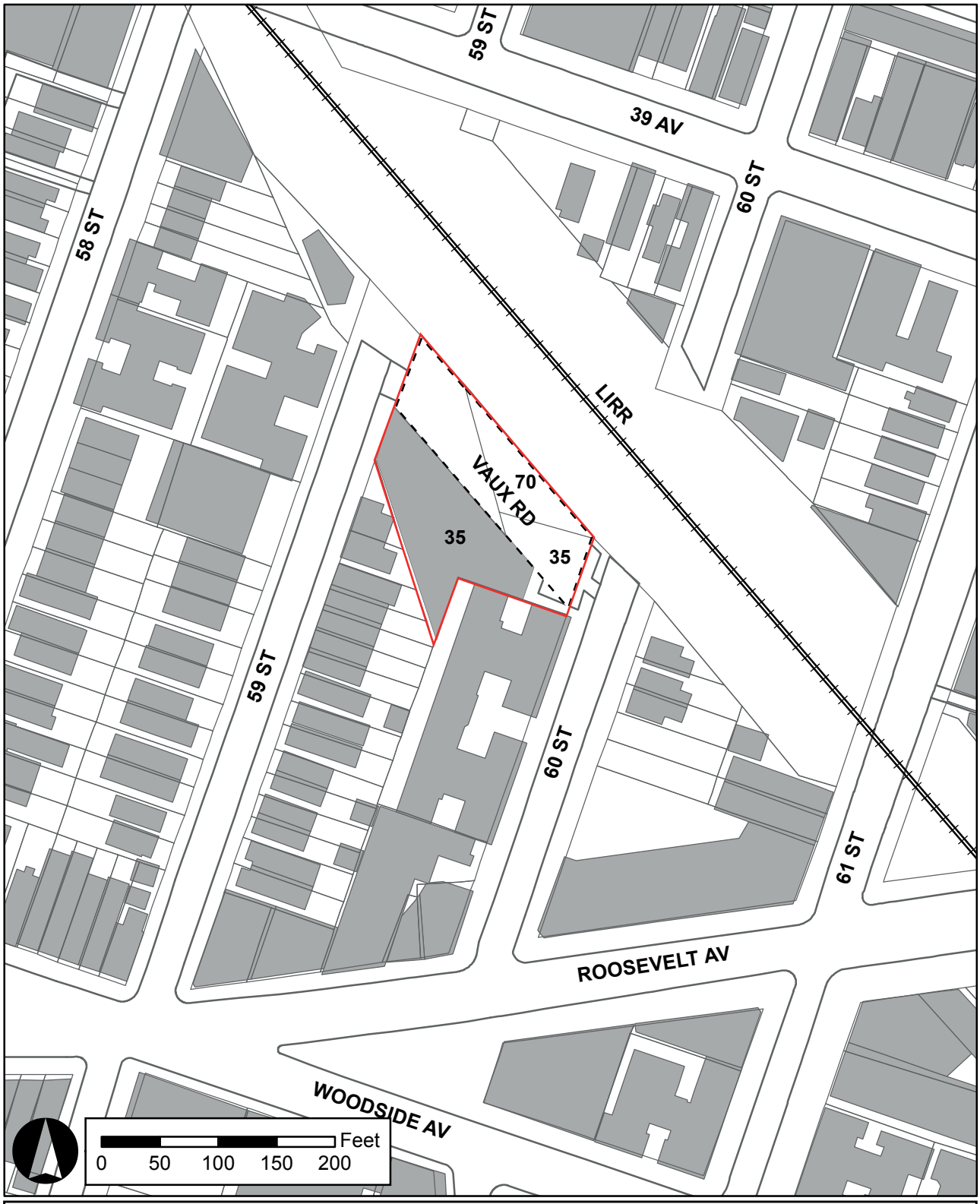
Ownership	Location	Area (sf)*
Firecom Inc.	Lot 35	15,051
	Lot 70	3,402
City of New York	Western Portion	5,464
	TOTAL	**23,917**

*Approximate square footages based on Gallas Surveying Group site survey (1/11/2013) and NYC Department of Finance property records.

As presented in Table A-1 above and Figure A-4, existing ownership of the mapped street is distributed approximately evenly between the City (5,464 sf) and the applicant (6,140 sf). Currently, the roadbed does not occupy the entire area of the mapped street, as the pavement stops short of the northern mapped boundary in order to accommodate trees and a fence, which serve as a buffer from the LIRR. This configuration is large enough to accommodate approximately 40 parked vehicles (see Figure A-3).

Historical maps have shown that at one point in time, Vaux Road extended across 59th Street and intersected with 58th Street to the west. This portion of the road was demapped prior to the 1930s, and a 3-story apartment building (Block 1229, Lot 54) was constructed in 2011. At the other end of Vaux Road

Figure A-2
Project Site



Legend

Project Site

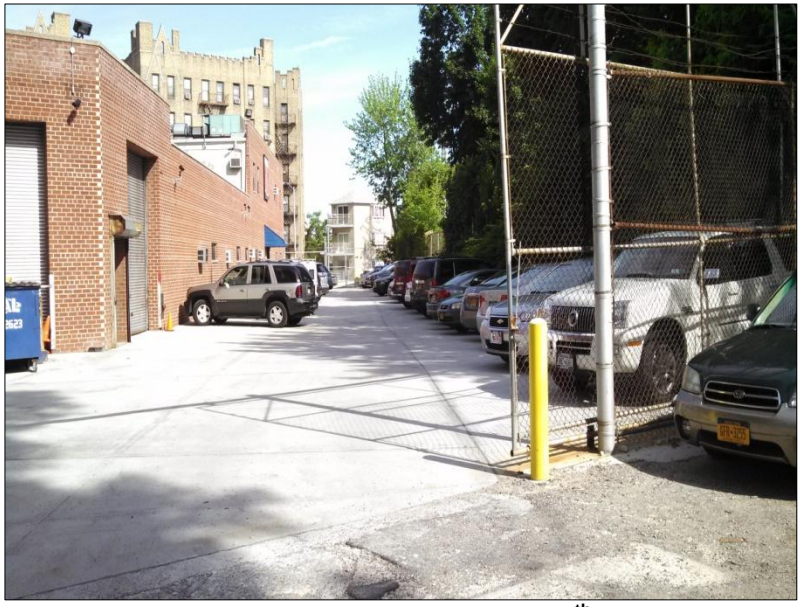
Area to be Demapped

35 Tax Lot

1. Intersection of 59th Street and Vaux Road

2. Vaux Road as seen from 59th Street

3. New construction on previously demapped area of Vaux Rd.



4. Vaux Road looking towards 59th St.

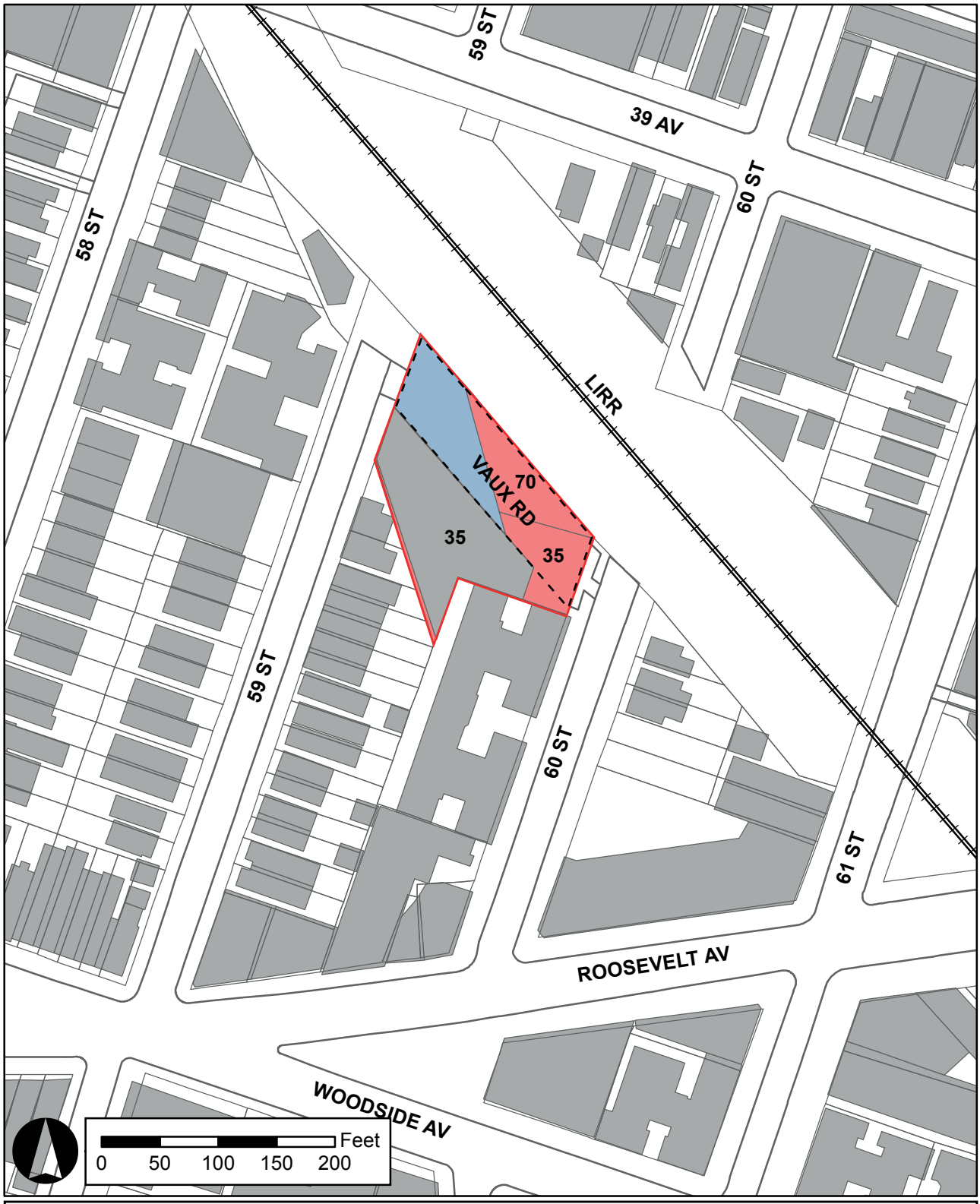
5. Vaux Road as seen from 60th Street

6. Stairs to Woodside LIRR station at Vaux Rd and 60th St

7. One and two family homes adjacent to Vaux Rd on 60th St

8. Six-story apartment buildings on 60th Street

Existing Ownership of Project Site



Legend

Applicant Owned

City Owned

35 Tax Lot

on 60th Street, a stairwell to the Woodside – LIRR station platform was built, extending approximately 28 feet into the street. These external factors, in addition to Vaux Road's existing condition as a fenced-off parking lot, have effectively dead-ended both 59th and 60th Streets (see Figure A-3).

The applicant's manufacturing and office building at 39-27 59th Street (Block 1230, Lot 35) is one of many examples of a nonconforming use in the Woodside neighborhood. Presently classified as a manufacturing use, the applicant's location within an R5B zoning district is only possible because of the subsequent rezonings since its construction in 1961. Thus, any proposed expansion or construction of a manufacturing use would be discretionary and subject to review by City agencies.

III. PROPOSED PROJECT

The proposed elimination, discontinuance, and closing of Vaux Road between 59th and 60th Streets would allow for the City-owned western portion (approximately 5,464 sf) to be disposed of and acquired by the applicant in order to consolidate the applicant's property. As a result, the applicant's total lot area would increase from approximately 18,453 sf to 23,917 sf but would not have the potential to result in expansion or new construction of a manufacturing use (nonconforming use). The proposed project would not result in the addition of any residents or workers to the area. However, as discussed in Section V below, for conservative analysis purposes, a RWCDS that consists of a new 32 DU residential development is considered.

IV. PROJECT PURPOSE AND NEED

The proposed project is intended to remove the encumbrance that the mapped street has placed on the applicant's property and the proposed disposition of the City owned westerly section of Vaux Road to the applicant would allow the applicant to consolidate its property.

V. REASONABLE WORST-CASE DEVELOPMENT SCENARIO (RWCDS)

For conservative analysis purposes, a Reasonable Worst-Case Development Scenario (RWCDS) that differs from the applicant's proposed project has been identified for the analysis year of 2015. The incremental difference between the Future No-Action and Future With-Action scenarios are the basis for the impact category analyses of this Environmental Assessment Statement.

To determine the scenarios, standard methodologies have been used following *2014 CEQR Technical Manual* guidelines and employing reasonable, worst-case assumptions. These methodologies have been used to identify the amount and location of future development, as discussed below.

The Future Without the Proposed Action (No-Action Scenario)

In the future without the proposed action, the project site would remain the same as under existing conditions. Vaux Road would not be demapped and the western approximately 5,464 sf portion would not be disposed of and acquired by the applicant. The road would continue to function as a paper street and a private parking lot, fenced off at both ends, impassable to pedestrian and through traffic. The No-Action scenario would not result in any in-ground development or expansion. No residents or workers would be added to the area as a result of the No-Action scenario.

The Future With the Proposed Action (With-Action Scenario)

As a result of the proposed change to the City Map and other controls, a range of new development could potentially occur on the project site in the future. For conservative analysis purposes, a RWCDS that differs from the applicant's proposed project has been identified for the site. Given the site's dimensions and applicable zoning setbacks and regulations, this RWCDS for the Future With-Action scenario represents the upper bounds of potential residential development (maximum 1.35 FAR under R5B zoning) and ensures that the proposed action's impacts would be no worse than those considered in this Environmental Assessment Statement.

In the future with the proposed action, the project site could reasonably accommodate approximately 32,288 sf of floor area. This With-Action scenario would consist of approximately 32,288 sf of residential floor area (32 DUs) and at-grade accessory parking (22 spaces). Table A-3 below provides a summary of the With-Action development program and maximum allowable square footages. As seen in Figure A-5, the With-Action development would be comprised of the following components:

- 59th Street Building: Along the western edge of the project site, the applicant's building would be demolished and replaced with a 12,680 sf residential building. The building would be 3-stories in height and consist of 13 DUs. The building would be setback 5 feet from the lot line and would rise to a height of 30 feet, above which the building would slope back or set back to a maximum height of 33 feet.

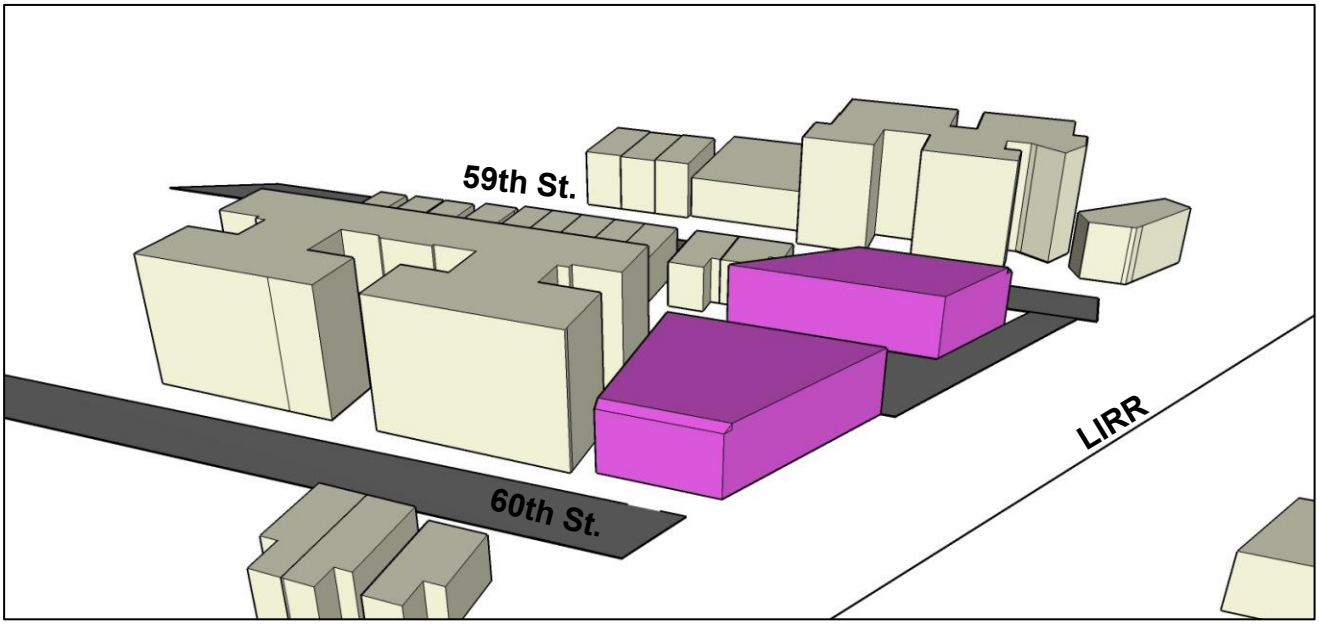
- 60th Street Building: On the 60th Street frontage of the project site, the applicant's building would be demolished and replaced with a 19,608 sf residential building. The building would be 3-stories in height and consist of 19 DUs. The building would be setback 5 feet from the lot line and would rise to a height of 30 feet, above which the building would slope back or set back to a maximum height of 33 feet.

Required accessory parking would be provided at-grade in a shared rear yard between the two buildings. Due to the presence of a stairwell servicing the LIRR within the mapped street on 60th Street, it is reasonable to assume that the entrance and exit to the parking lot would be located on 59th Street. Pursuant to R5B zoning, accessory parking must be provided for 66 percent of DUs. Therefore, parking for approximately 22 vehicles would be provided.

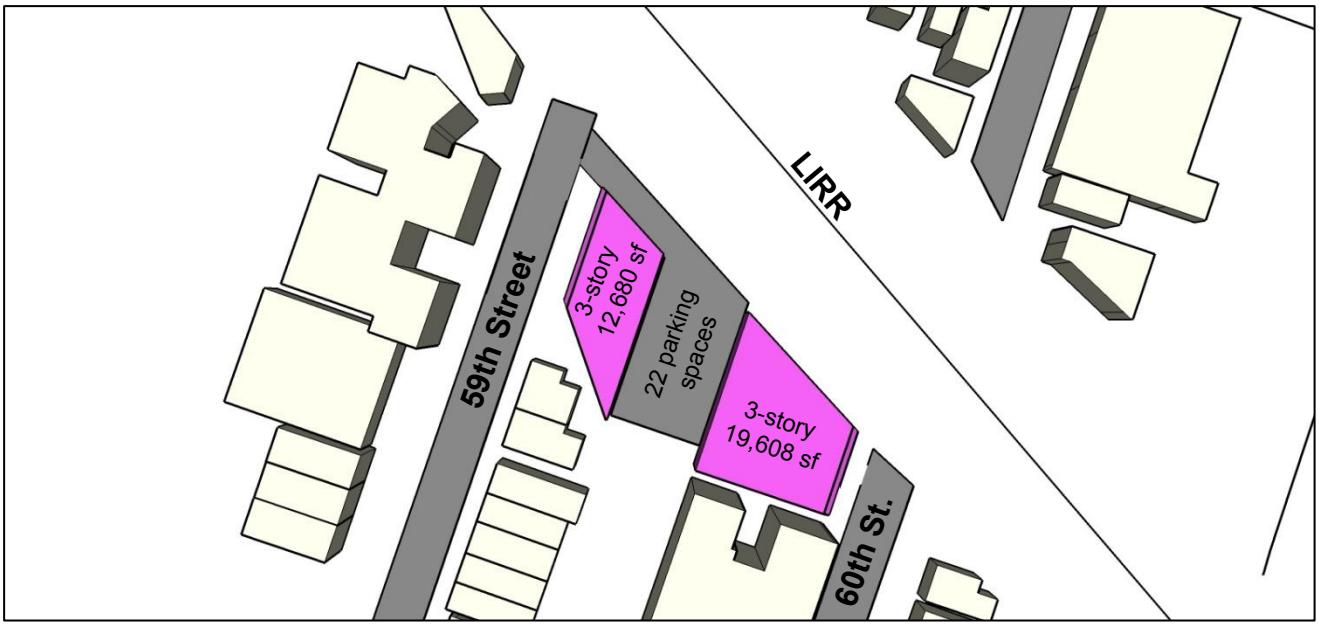
Table A-3
With-Action Scenario Development Program

Building	Lot Area (sf)	Building Size (sf)	Residential (sf)	DUs	Parking Spaces
59th Street	23,917	12,680	12,680	13	22
60th Street		19,608	19,608	19	
	23,917	32,288	32,288	32	22

Table A-4 below provides a comparison of the No-Action and With-Action scenarios identified in this RWCDS for the proposed project. As shown, the incremental difference between the No-Action and the With-Action scenarios would be 32,288 sf of residential uses (32 DUs) and a loss of 14,411 sf of manufacturing uses.



View from Northeast



Aerial View

Table A-4
RWCDS Comparison of No-Action and With-Action Scenarios

Use	No-Action Scenario	With-Action Scenario	Increment (1)
Residential	0 sf (0 DUs)	32,288 sf (32 DUs)	**32,288 sf (32 DUs)**
Manufacturing	14,411 sf	0 sf	**-14,411 sf**
Population/Employment (2)	**No-Action Development**	**With-Action Development**	**Increment** (2)
Residents	0 residents	83 residents	**83 residents**
Workers	175 workers	1 worker	**-174 workers**

(1) Assumes a DU size of 1,000 sf for CEQR analysis purposes
(2) Assumes 2.59 persons per DU (based on 2010 Census Data for Queens Community District 2) and 1 employee per 25 DUs.

Based on 2010 census data, Queens Community District 2 has an average of 2.59 persons per household. Using this ratio, and other standard ratios for estimating employment for residential uses, Table A-4 also provides an estimate of the number of residents and workers generated by the RWCDS.

VI. REQUIRED APPROVALS AND REVIEW PROCEDURES

The proposed project requires approval of the New York City Planning Commission (CPC) for the demapping of Vaux Road and related disposition of City-owned property. The proposed demapping is a discretionary public action subject to both the Uniform Land Use Review Procedure (ULURP), as well as the City Environmental Quality Review (CEQR).

ATTACHMENT B
SUPPLEMENTAL SCREENING

I. INTRODUCTION

This Environmental Assessment Statement (EAS) has been prepared in accordance with the guidelines and methodologies presented in the *2014 City Environmental Quality Review (CEQR) Technical Manual*. For each technical area, thresholds are defined which if met or exceeded, require that a detailed technical analysis be undertaken. Using these guidelines, preliminary screening assessments were conducted for the proposed action to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. The technical areas that warranted a "Yes" answer in Part II of the EAS form were Land Use, Zoning, and Public Policy, Hazardous Materials, Air Quality, Noise, and Construction. As such, a supplemental screening assessment for each area is provided in this attachment. In addition, a supplemental screening of Socioeconomic Conditions is provided because the conditions outlined in the EAS form were not directly applicable to the proposed project and did not rule out the possibility for a significant adverse impact. All remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial CEQR thresholds and/or are unlikely to result in significant adverse impacts.

The supplemental screening assessment contained herein identified that a detailed assessment is required in the areas of Air Quality and Noise. These analyses are provided in Attachments C and D, respectively, and are summarized herein. Table B-1 identifies for each CEQR technical area whether (a) the potential for impacts can be screened out based on the EAS Form, Part II, Technical Analyses; (b) the potential for impacts can be screened out based on a supplemental screening per the *CEQR Technical Manual*, (c) or whether a more detailed assessment is required to make an impact determination.

Table B-1
Summary of CEQR Technical Areas Screening

TECHNICAL AREA	SCREENED OUT PER EAS FORM	SCREENED OUT PER SUPPLEMENTAL SCREENING	DETAILED ANALYSIS REQUIRED
Land Use, Zoning, & Public Policy		X	
Socioeconomic Conditions		X	
Community Facilities	X		
Open Space	X		
Shadows	X		
Historic & Cultural Resources	X		
Urban Design & Visual Resources	X		
Natural Resources	X		
Hazardous Materials		X	
Infrastructure	X		
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation	X		
Air Quality			X
Greenhouse Gas Emissions	X		
Noise			X
Public Health	X		
Neighborhood Character	X		
Construction		X	

As described in Attachment A, "Project Description," the applicant, Firecom Inc., is proposing a change to the City Map involving the elimination, discontinuance, and closing of Vaux Road between 59th and 60th Streets in the Woodside neighborhood of Queens, Community District 2 (the "proposed action"). The proposed action would allow the City-owned western portion of the road (approximately 5,464 sf) to be disposed of and acquired by the applicant in order to consolidate the applicant's property. The applicant's total lot area would increase from approximately 18,453 sf to 23,917 sf. This additional area would not have the potential to result in expansion or new construction of a manufacturing use (nonconforming use).

Compared to the No-Action scenario, the incremental difference between the No-Action and the With-Action scenarios would be 32,288 sf of residential uses (32 DUs) and a loss of 14,411 sf of manufacturing uses. The proposed project would result in 83 incremental residents and a reduction of 174 workers. These incremental differences are presented below and serve as the basis for the impact category analyses of this Environmental Assessment Statement.

Table B-1
RWCDS Comparison of No-Action and With-Action Scenarios

Use	No-Action Scenario	With-Action Scenario	Increment (1)
Residential	0 sf (0 DUs)	32,288 sf (32 DUs)	**32,288 sf (32 DUs)**
Manufacturing	14,411 sf	0 sf	**-14,411 sf**
Population/Employment (2)	**No-Action Development**	**With-Action Development**	**Increment** (2)
Residents	0 residents	83 residents	**83 residents**
Workers	175 workers	1 worker	**-174 workers**

(1) Assumes a DU size of 1,000 sf for CEQR analysis purposes
(2) Assumes 2.59 persons per DU (based on 2010 Census Data for Queens Community District 2) and 1 employee per 25 DUs.

II. SUPPLEMENTAL SCREENING

LAND USE, ZONING, AND PUBLIC POLICY

A land use analysis evaluates the uses and development trends in the surrounding area that may be affected by a proposed project, and determines whether that proposed project is compatible with those conditions or may affect them. Similarly, the analysis considers the action's compliance with, and effect on, the area's zoning and other applicable public policies.

Existing Conditions

Land Use

The project site encompasses two contiguous tax lots (Lots 35, 70), as well as an approximately 5,464 sf City-owned parcel, that abut and lay beneath the mapped street. Lot 35 is the site of the applicant's two-story manufacturing and office building (14,511 gsf). The remainder of the project site is not open to traffic and functions as employee parking for the applicant.

The area within an approximate 400-foot radius of the project site contains a mix of uses, the most predominant of which are residential, with several manufacturing, institutional, and commercial uses. Residential buildings are primarily multi-family homes and small- to medium-sized apartment buildings, as well as single-family detached and semi-detached homes, and range in height from 1 to 6-stories. Manufacturing uses generally include warehouses and light industrial uses, such as repair shops. Commercial uses are primarily located along Roosevelt Avenue and Woodside Avenue, and include a number of restaurants, grocery stores, and bars. Also located along Roosevelt Avenue are the primary entrances to Woodside Station, providing access to the LIRR and the 7 subway line.

Zoning

The project site is located within an R5-B contextual zoning district. R5-B zoning allows detached and semi-detached residential buildings with a maximum allowable FAR of 1.35 as well as community facility uses with a maximum allowable FAR of 2.0. Buildings cannot exceed 33 feet in height and 3-story row houses are common. Front yards must have a minimum depth of 5 feet. Off-street parking is required for 66% of residential units.

Zoning classifications within an approximate 400-foot radius of the project site are predominantly R5-B. C1-4 and C2-3 commercial overlay districts can be found along Roosevelt Avenue in close proximity to the project site. The C1 and C2 overlays typically allow for local retail uses including neighborhood grocery stores, restaurants, and beauty parlors. When mapped in an R5 district, the maximum commercial FAR is 1.0. C1-4 and C2-3 districts are generally well served by transit and require less parking than other commercial overlay districts.

The Future Without the Proposed Action (No-Action Scenario)

As discussed in Attachment A, "Project Description," in the future without the proposed action (No-Action), the project site would remain the same as under existing conditions. Vaux Road would not be demapped and the western approximately 5,464 sf portion would not be disposed of and acquired by the applicant. The road would continue to function as a paper street and a parking lot, fenced off at both ends, impassable to pedestrian and through traffic. The No-Action scenario would not result in any in-ground development or expansion. No residents or workers would be added to the area as a result of the No-Action scenario.

Land Use

In the future without the proposed action, it is expected that no change in land use would occur at the project site or within an approximate 400-foot radius. Land uses at the project site would remain manufacturing and office with at-grade parking, and the surrounding area would continue to be predominantly residential. There are no known development projects in the surrounding area that would occur before the analysis year of 2015. Therefore, the overall land use is anticipated to remain similar to existing conditions in the future without the proposed action.

Zoning

In the future without the proposed action, there are no anticipated zoning changes or known rezoning proposals affecting the project site or the surrounding area within an approximate 400-foot radius. Zoning at the project site and within the surrounding area would remain predominantly R5-B with C1-4 and C2-3 commercial overlay districts along Roosevelt Avenue.

The Future With the Proposed Action (With-Action Scenario)

As discussed in Attachment A, "Project Description," the RWCDS, which differs from the applicant's proposed project, assumes that in the future with the proposed action (With-Action) the site would be redeveloped with approximately 32,288 sf of residential floor area (32 DUs) and at-grade accessory parking (22 spaces). Residential floor area would be accommodated in two small buildings, located on the edges of the project site along 59th Street (approximately 12,680 sf) and 60th Street (approximately 19,608 sf).

Land Use

As discussed above, in the future with the proposed action, it is expected that the project site would be redeveloped with approximately 32,288 sf (32 DUs) and 22 at-grade accessory parking spaces. While this residential development would represent a change in land use at the project site, it would be consistent with uses in the surrounding area, which are predominantly residential. The proposed action would only result in changes to land use conditions at the project site and would not have the potential to affect land use over a broader area. Therefore, the proposed action is not expected to adversely affect land use on the project site or in the surrounding area.

Zoning

In the future with the proposed action, there are no anticipated zoning changes or known rezoning proposals affecting the project site or the surrounding area within an approximate 400-foot radius. Zoning at the project site and within the surrounding area would remain predominantly R5-B with C1-4 and C2-3 commercial overlay districts along Roosevelt Avenue. Therefore, the proposed action would be consistent with zoning regulations under future conditions.

Public Policy

Aside from zoning regulations, there are no adopted City public policies applicable to the project site or area within an approximate 400-foot radius: there are no 197-a plans, urban renewal areas, or designated industrial business zones, and no areas falling within the coastal boundary. Furthermore, the proposed action does not involve the siting of a public facility (Fair Share). Therefore, the proposed action would not alter or conflict with City public policies under future conditions.

SOCIOECONOMIC CONDITIONS

A socioeconomic assessment may be necessary if an action is expected to directly or indirectly create substantial socioeconomic changes within an area, otherwise not expected to occur. Such changes include the direct displacement of residential population; direct displacement of a substantial number of businesses, institutional uses, or employees; changes to conditions in the area's real estate market, adverse effects to the economic conditions in a specific industry; and substantial new development that is markedly different from existing uses, development and activities within the neighborhood, which could lead to indirect displacement. The *CEQR Technical Manual* defines direct displacement as the "involuntary displacement of residents or businesses from a site or sites directly affected by a proposed project" and states that a residential development of 200 units or less, or a commercial development of 200,000 sf or less typically does not cause significant socioeconomic impacts, unless it generates conditions very different from those currently existing.

The RWCDS assumes that in the future with the proposed action the applicant's building would be demolished and replaced with a 32,288 sf residential development (32 DUs). While this would result in a reduction of 174 workers to the project site compared to No-Action conditions, it would not meet the requirements of direct displacement as defined by the *CEQR Technical Manual*, as the applicant owns the property and would be required to voluntarily relocate in order for the residential scenario analyzed under the RWCDS to occur. Therefore, the proposed action would not adversely affect the economic conditions of a specific industry and would not result in any significant adverse impacts to socioeconomic conditions.

HAZARDOUS MATERIALS

A Phase I Environmental Site Assessment (ESA) was conducted for 39-27 59th Street (Lots 35 and 70) by Fenley & Nicol Environmental, Inc. and is described in a report dated June 29, 2010 (Appendix B-1). The report outlines the findings of the site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies.

The report indicates that the 2-story building at 39-27 59th Street was built in 1961 and has historically been used as an industrial outlet for the manufacturing of life safety equipment. Firecom and its subsidiaries have owned the building since the mid 1970s and continue to use the facility for the manufacturing of life safety equipment (first floor) and office space (second floor). The assessment found no evidence of recognized environmental conditions (RECs) or environmental issues in connection with the subject property or any of the adjoining properties to the north, south, east, or west.

Upon review of the Phase I, the New York City Department of Environmental Protection (NYCDEP) made its determination of no objection in letters dated August 26, 2013 and April 1, 2014 (see Appendix B-2). NYCDEP also recommended that a Phase II ESA be prepared prior to any future on-site development that would require soil disturbance. A Phase II Investigative Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities should be submitted to the New York City Office of Environmental Remediation (OER) for review and approval. As the applicant has stated that the project would not involve soil disturbance, no further hazardous materials analysis and testing is required. However, if future development of the demapped property (including soil disturbance) should occur, a Phase II Subsurface Site Investigation of the property would be conducted for DEP review and approval. The preparation of the Phase II and Investigative Health and Safety Plan (HASP) would be required pursuant to the Mapping Agreement entered between the applicant and the City of New York in connection with the proposed action.

AIR QUALITY

Under CEQR, an air quality analysis determines whether a proposed project would result in stationary or mobile sources of pollutant emissions that could have a significant adverse impact on ambient air quality, and also considers the potential of existing sources of air pollutant emissions to impact the proposed uses.

Mobile Sources

Localized increases in pollutant levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of a proposed project. According to the screening threshold criteria outlined in Section 210 of Chapter 17 of the *CEQR Technical Manual*, detailed analysis is required for this area of the City if 170 or more auto-trips are generated in any given peak period as a result of the proposed action. Compared to the No-Action scenario, the With-Action scenario would have the potential to generate an incremental increase of 32 DUs and 22 at-grade accessory parking spaces. These incremental changes would fall well below the CEQR screening threshold for all peak periods. Therefore, no detailed mobile source air quality analysis is required and no significant mobile source air quality impacts are expected as a result of the With-Action development.

Stationary Sources

Actions can result in stationary source air quality impacts when they (1) create new stationary sources of pollutants such as emission stacks from industrial plants, hospital, or other large institutional uses, or building's boiler stack(s) used for heating/hot water, ventilation, or air conditioning systems (HVAC) that

can affect surrounding uses; (2) introduce new sensitive receptors near existing (or planned future) emissions stacks that may adversely affect the new use; or (3) introduce potentially significant odors. No odors are associated with the With-Action development. However, the With-Action development would be expected to use fossil fuels for HVAC purposes. Therefore, a preliminary screening for heat and hot water systems is required by CEQR and has been provided below.

Heat and Hot Water Systems

Emissions from the HVAC systems of the buildings within the With-Action development may affect air quality levels at other development sites and nearby existing land uses. According to CEQR guidelines, the impacts of these emissions would be a function of fuel type, stack height, building size, and location of each emission source relative to a nearby sensitive land use.

The preliminary screening analysis was conducted using Figure 17-5 of the *CEQR Technical Manual – Air Quality Appendix*, which was specifically developed to predict the threshold of development size below which a project would not likely have a significant impact. Figure 17-5 indicates the size of the proposed development and distance to the nearest building of a height similar to or greater than the stack height of the proposed building. The figure is only applicable for sources that are at least 30 feet from nearest building of similar or greater height. Otherwise, a more detailed analysis using AERMOD modeling is required.

If the distance between source and receptor building is less than or equal to the threshold distance (i.e., falls above the curve on the nomographs), further analysis is required using EPA's AERSCREEN or AERMOD models. If the source building is taller than the receptor building or the distance between the two buildings falls below the applicable curve provided in the CEQR nomographs, a potential significant impact due to boiler stack emissions is unlikely and no further analysis is needed.

Effects of Existing Land Uses on With-Action Development (Existing-on-Project Impacts)

According to the *CEQR Technical Manual*, projects that would result in new uses within 400 feet of a stack associated with large commercial, institutional, or residential developments and where the height of the new structures would be similar to or greater that the height of existing emission stacks require stationary source analysis. However, based on review of existing land uses, it was determined that no large commercial, institutional or residential developments with 20 million BTU/hour or higher are located within 400 feet of the project site. A field survey conducted in May 2014 and a property record search of available NYCDEP permits also revealed that there are no active large manufacturing/industrial uses within a 400-foot radius. This finding was confirmed by DEP on May 16, 2014. In addition, no existing large combustion sources, such as power plant, cogeneration facilities, etc., which may contribute to the pollutant concentration at the identified receptors, were found within 1,000 feet of the proposed buildings. As no large emission sources were identified, no existing land uses are expected to have a significant impact on the With-Action development and no further analysis is warranted.

Effects of With-Action Development on Existing Land Uses (Project-on-Existing Impact)

A survey of existing residential land uses and other sensitive receptor sites within approximately 400 feet of the project site was conducted through field observation and use of the New York City OASIS mapping network system. The area surrounding the project site contains predominantly low-rise (2- to 3-story) residential buildings. However, two nearby residential buildings of greater height to the With-Action development were identified, including the approximately 65-foot tall apartment building at 39-30 59th Street (Block 1229, Lot 55) and the approximately 65-foot tall apartment building at 39-50 60th Street (Block 1230, Lot 45). These two buildings are the closest existing sensitive receptors of similar or greater

height. Therefore, if the With-Action development would not cause significant impacts to these two sites, they would not cause impacts to other sites that are farther away. Table B-2 provides a summary of the With-Action development's affect on existing buildings.

Table B-2
Screening for Impact of With-Action Development on Existing Land Uses

Building	Heated Area (sq. ft.)	Stack Height (feet)	Distance to Nearest Building(s) (feet)	Source and Receptor Sites	CEQR Screening Results for Fuel Oil
With-Action Development					
1. 59th Street Building	12,680	36	60	1 on A	Pass
2. 60th Street Building	19,608	36	9	2 on B	Not Applicable
Existing Buildings in Surrounding Area					
A. 39-30 59th Street		68			
B. 39-50 60th Street		68			

As shown in Table B-2, the proposed 59th Street Building is approximately 60 feet from the existing building at 39-30 59th Street (Block 1229, Lot 55) while the threshold distance for the 12,680 square-foot 59th Street Building is approximately 30 feet (Figure 17-5 in Air Quality Appendix). As such, no potential significant impacts due to boiler stack emissions from the proposed 59th Street Building are expected to occur. 60th Street Building is less than 30 feet from the existing building at 39-50 60th Street (Block 1230, Lot 45) and CEQR figures are not applicable. Therefore, a detailed analysis with AERMOD is required and has been provided in Attachment C, "Air Quality." As indicated in Attachment C, if future development of the demapped property should occur, to avoid the potential for significant adverse impacts with respect to air quality, a stack set back distance and a requirement for the use of natural gas fuel will be required pursuant to the Mapping Agreement entered between the applicant and the City of New York in connection with the proposed action.

Project-on-Project Impacts

The two buildings of the With-Action development would be the same height. Therefore, a screening assessment is required to evaluate the potential impact of stack emissions from the two buildings on each other. Table B-3 provides a summary of project-on-project impacts. As shown in Table B-3, each building of the With-Action development would pass the preliminary screening for fuel oil. Therefore, the buildings of the With-Action development are not expected to have a significant impact on one another and no further analysis is warranted.

Table B-3
Screening for Project-on-Project Impacts

Building	Heated Area (sq. ft.)	Stack Height (feet)	Distance to Nearest Building(s) (feet)	Source and Receptor Sites	CEQR Screening Results for Fuel Oil
With-Action Development					
1. 59th Street Building	12,680	36	60	1 on 2	Pass
2. 60th Street Building	19,608	36	60	2 on 1	Pass

NOISE

The purpose of a noise analysis is to determine both a proposed project's potential effects on sensitive noise receptors and the effects of ambient noise levels on new sensitive uses introduced by the proposed project. The principal types of noise sources affecting the New York City environment are mobile sources (primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with manufacturing operations or building heating, ventilating, and air conditioning systems or above-

grade subways) and construction noise. As the With-Action development would introduce new sensitive receptors within 1,500 feet of an existing rail line with a direct line of sight to that receptor, a preliminary assessment of noise is warranted.

Mobile Source Screening

According to the *CEQR Technical Manual*, a detailed mobile source analysis is generally performed if the proposed action would increase noise passenger car equivalent (Noise PCE) values by 100 percent or more. Compared to the No-Action scenario, the With-Action scenario would have the potential to generate a net increase of up to approximately 32 DUs and 22 above grade parking spaces. These incremental changes would not have the potential to double PCE values. Therefore, no significant mobile source noise impacts are expected as a result of the With-Action development and no further analysis is warranted.

Stationary Source Screening

According to the *CEQR Technical Manual*, a detailed stationary source analysis is generally performed if the proposed action would cause a substantial stationary source (i.e. unenclosed equipment for building ventilation purposes) 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.

The With-Action development would not meet either of these criteria. It is expected that the rooftop mechanical equipment would be located within enclosed mechanical bulkheads or would be designed to meet all applicable noise regulations and to avoid producing levels that would result in any significant adverse noise impacts. The new residential buildings would also not be located within an area with high ambient noise levels resulting from stationary sources and would be approximately ½ mile from the closest manufacturing zone. Therefore, the With-Action development would not result in any stationary noise sources and no further analysis is warranted.

Sensitive Receptor Analysis

According to the *CEQR Technical Manual*, a detailed noise analysis may be warranted if the With-Action development would introduce a new noise-sensitive location in an area with high ambient noise levels. As the With-Action development would introduce new dwelling units within 1,500 feet of an existing rail line with a direct line of sight to that receptor, a detailed assessment of train noise has been provided in Attachment D, "Noise." As indicated in Attachment D, if future development of the demapped property should occur, to avoid the potential for significant adverse impacts with respect to noise, an attenuation level of 31 dBA would be required pursuant to the Mapping Agreement entered between the applicant and the City of New York in connection with the proposed action.

CONSTRUCTION

Although usually temporary, construction impacts can include noticeable and disruptive effects from an action that is associated with construction or could induce construction. The With-Action development would result in the construction of two new residential buildings at the project site. It is expected that any construction associated with the proposed action would be completed within approximately 15 months, with most construction activity occurring between 7:00 AM and 5:00 PM on weekdays.

Construction activities may result in short-term disruption of both traffic and pedestrian movements in the vicinity of the project site. This would occur primarily due to the potential temporary loss of curbside lanes from the staging of equipment and the movement of materials to and from the site. Additionally, construction may at times result in temporary closings of sidewalks adjacent to the site. However, these conditions would not result in significant adverse impacts on traffic and transportation conditions given the limited duration of any obstructions. Noise associated with construction would be limited to typical construction activities, and would be subject to compliance with the New York City Noise Code and by EPA noise emission standards for construction equipment. These controls and the temporary nature of construction activity will assure that there would be no significant adverse noise impacts associated with construction activity.

Construction of the With-Action development would result in temporary disruption to the surrounding area, including noise, dust, and traffic associated with the delivery of materials and arrival of workers on the project site, the incremental effects of the With-Action development, if any, would be negligible. Therefore, no impacts from construction are expected from the With-Action development.

APPENDIX B-1
PHASE I ESA SUMMARY

"SOLUTIONS AT WORK"®

Fenley & Nicol Environmental, Inc.

445 Brook Avenue, Deer Park, NY 11729 (631) 586-4900 · NYC (718) 204-4993 FAX (631) 586-4920

Privileged & Confidential

Phase I Environmental Site Assessment Report

39-27 59th Street Woodside, New York 11377

Prepared For:	Sterling National Bank C/O Mr. Leonard Rudolph 500 7th Avenue New York, New York 10018-4502
Prepared By:	Fenley & Nicol Environmental 445 Brook Avenue Deer Park, New York
Senior Geologist:	David Oloke
F&N Job No.:	10-0543-7
Date:	June 29, 2010

Fenley & Nicol Environmental, Inc.

EXECUTIVE SUMMARY

Fenley & Nicol Environmental, Inc. (F&N) has conducted a Phase I Environmental Site Assessment of the Property located at 39-27 59th Street, Woodside, New York. The property will subsequently be referred to in this report as "the *subject property*" or "the *subject site*". The Phase I Environmental Site Assessment was performed to meet the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Assessment Process (ASTM Designation: E 1527-05).

The subject property consists of approximately 11,000 square feet of land and is currently developed with a two (2) story irregular shaped building built 1961. The building is approximately 8,500 square feet in area and is currently occupied by Firecom Inc. Firecom is engaged with the manufacture of life safety equipments. The building is constructed of masonry blocks and red bricks. The subject property is bounded to the north by Long Island Railroad and to the east by 60th Street. To the south are residential properties and to the west is 59th Street.

A review of historical records indicates that Firecom and its subsidiaries occupied the subject property since the 1980s. The historical use of the subject property for the manufacture of life safety equipments (fire alarms) is not considered as a Recognized Environmental Condition.

No effort has been made to perform any investigation beyond what is included in this report. The observations included herein summarize the apparent environmental integrity of the subject property up to the date of the visual inspection of the property and the date of this report.

7.0 SUMMARY OF FINDINGS

Based on the site reconnaissance, interviews with appropriate personnel, a review of the database and available regulatory information, the findings of this assessment has not revealed any RECs:

8.0 OPINION

No recognized environmental condition was identified at the subject property.

9.0 DATA GAPS

A title report was not obtained for this assessment and this could represent a data gap though F&N is of the opinion that the lack of the title report in this case is insignificant. However, data obtained by F&N dates back to 1930 (Sanborn Maps).

10.0 CONCLUSIONS

Fenley & Nicol Environmental, Inc. has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of 39-27 59th Street, Queens NY, the subject property. Any exceptions to or deletions from this practice are described in Section 10 of this report.

This assessment has not revealed any recognized environmental condition.

APPENDIX B-2

DEP CORRESPONDENCE LETTERS

NYC Environmental Protection

Carter H. Strickland, Jr.
Commissioner

Angela Licata
Deputy Commissioner
of Sustainability
alicata@dep.nyc.gov

59-17 Junction Boulevard
Flushing, NY 11373
T: (718) 595-4398
F: (718) 595-4479

August 26th , 2013

Mr. Robert Dobruskin
Director, Environmental Assessment and Review Division
Department of City Planning
22 Reade Street, Room 4E
New York, New York 10007-1216

Re: Vaux Road Demapping
39-27 59th Street
Block 1230, Lots 70 and P/O Lot 35
DEP # 14DEPTECH009Q / CEQR # 77DCP125Q
Queens, New York

Dear Mr. Dobruskin:

The New York City Department of Environmental Protection, Bureau of Environmental Planning and Analysis (DEP) has reviewed the April 2013 Environmental Assessment Statement prepare by Philip Habib & Associates and the June 2010 Phase I Environmental Site Assessment Report conducted by Fenley & Nicola Environmental Inc., on behalf of Firecom Inc., (applicant) for the above referenced project. It is our understanding that the applicant is proposing a change to the City Map from the New York City Department of City Planning (DCP) involving the elimination, discontinuance and closing of Vaux Road between 59th and 60th Streets in the Woodside neighborhood of Queens, Community District 2. Vaux Road is an un-built street enclosed by chain link fencing at both ends that served as a parking lot for Firecom employees since the 1080s. In 2012, the City began charging rent on the western approximately 5,253 square feet portion of the road. As part of the proposed action, the applicant is seeking the disposition of the western portion of Vaux Road for continued use as accessory parking. As currently proposed, the proposed action would not result in any new in-ground development or expansion of existing structures and would not add any residents or workers to the area.

The June 2013 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses. The New York State Department of Environmental Conservation (NYSDEC) Spills database identified 10 closed spills within a 1/4-mile radius of the project site and 43 Leaking Storage Tanks (LTANKS) sites within a 1/2-mile radius of the project site.

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

The proposed Vaux Road Demapping action would not result in any new in-ground development or expansion of existing structures and would not add any residents or workers to the area. Therefore, DEP has no objective to the proposed Vaux Road Demapping.

Future correspondence and submittals related to this project should include the following tracking number **14DEPTECH009Q**. If you have any questions, you may contact Maurice Winter at (718) 595-4514.

Sincerely,

Maurice S. Winter
Deputy Director, Site Assessment

c: E. Mahoney
M. Winter
W. Yu
T. Estesen
M. Wimbish
C. Evans- DCP
File

NYC Environmental Protection

Emily Lloyd
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4479
alicata@dep.nyc.gov

April 1st, 2014

Mr. Robert Dobruskin
Director, Environmental Assessment and Review Division
Department of City Planning
22 Reade Street, Room 4E
New York, New York 10007-1216

Re: Vaux Road Demapping
39-27 59th Street
Block 1230, Lots 70 and P/O Lot 35
DEP # 14DEPTECH009Q / CEQR # 14DCP154Q
Queens, New York

Dear Mr. Dobruskin:

The New York City Department of Environmental Protection, Bureau of Environmental Planning and Analysis (DEP) has reviewed the March 2014 Environmental Assessment Statement prepare by Philip Habib & Associates and the June 2010 Phase I Environmental Site Assessment Report conducted by Fenley & Nicola Environmental Inc., on behalf of Firecom Inc., (applicant) for the above referenced project. It is our understanding that the applicant is proposing a change to the City Map from the New York City Department of City Planning (DCP) involving the elimination, discontinuance and closing of Vaux Road between 59th and 60th Streets in the Woodside neighborhood of Queens, Community District 2. Vaux Road is an un-built street enclosed by chain link fencing at both ends that served as a parking lot for Firecom employees since the 1980s. In 2012, the City began charging rent on the western approximately 5,253 square feet portion of the road. As part of the proposed action, the applicant is seeking the disposition of the western portion of Vaux Road for continued use as accessory parking. As currently proposed, the proposed action would not result in any new in-ground development or expansion of existing structures and would not add any residents or workers to the area. However, for environmental assessment purposes, a reasonable worst-case development scenario (RWCDS) that differ from the applicant's proposed project has been identified for the analysis year of 2015. It should be noted that a residential development that would maximize available floor area has been considered for the site of the demapped street and applicant-owned property. The RWCDS for the future condition with the proposed demapping anticipates that the project site would accommodate approximately 32,288 square feet of residential floor area (32 dwelling units) and at- grade accessory parking for 22 spaces.

The June 2013 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses. The New York State Department of Environmental Conservation

(NYSDEC) Spills database identified 10 closed spills within a 1/4-mile radius of the project site and 43 Leaking Storage Tanks (LTANKS) sites within a 1/2-mile radius of the project site.

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

The proposed Vaux Road Demapping action would not result in any new in-ground development or expansion of existing structures and would not add any residents or workers to the area. Therefore, DEP has no objective to the proposed Vaux Road Demapping. However, the RWCDS for the future condition with the proposed demapping anticipates that the project site would accommodate approximately 32,288 square feet of residential floor area (32 dwelling units) and at-grade accessory parking for 22 spaces. For the RWCDS, DEP recommend that a Phase II Environmental Site Assessment (Phase II) is necessary to adequately identify/characterize the surface and subsurface soils of the subject parcels prior to on-site soil disturbance. A Phase II Investigative Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities should be submitted to DEP for review and approval. The Work Plan should include blueprints and/or site plans displaying the current surface grade and sub-grade elevations and a site map depicting the proposed soil boring locations and soil vapor sampling locations. Soil and groundwater samples should be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for the presence of volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds by EPA Method 8270, pesticides by EPA Method 8081, PCBs by EPA Method 8082, Target Analyte List metals (filtered and unfiltered for groundwater samples), and soil vapor samples by EPA Method TO-15. The soil vapor sampling should be conducted in accordance with NYSDOH's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The soil vapor samples should be collected and analyzed by a NYSDOH ELAP certified laboratory for the presence of VOCs by EPA Method TO-15. An Investigative Health and Safety Plan (HASP) should also be submitted to DEP for review and approval.

Future correspondence and submittals related to this project should include the following tracking number 14DEPTECH009Q. If you have any questions, you may contact Maurice Winter at (718) 595-4514.

Sincerely,

Maurice S. Winter
Deputy Director, Site Assessment

c: E. Mahoney; M. Winter; W. Yu; T. Estesen; M. Wimbish; C. Evans- DCP; File

ATTACHMENT C
AIR QUALITY

I. INTRODUCTION

As detailed in Attachment A, "Project Description," the proposed action is a change to the City Map involving the elimination, discontinuance, and closing of Vaux Road between 59th and 60th Streets in the Woodside neighborhood of Queens, Community District 2. For environmental assessment purposes, a residential development that would maximize available floor area has been considered on the site of the demapped street and applicant's property. As the With-Action development would introduce heating/hot water, ventilation, and air conditioning (HVAC) systems that would burn fossil fuels, air quality could be affected by the With-Action development. A preliminary analysis pursuant to the requirements of the *2014 CEQR Technical Manual* determined that a detailed analysis is warranted. The potential air quality impact that is addressed in this detailed analysis is the potential for HVAC emissions of the With-Action development to significantly impact existing land uses (project-on-existing impacts).

The following analyses were conducted in accordance with the procedures and methodologies outlined in the *CEQR Technical Manual* to determine whether the With-Action development would result in violations of ambient air quality standards or exceedances of health-related guideline values. The methodologies and procedures utilized are described below.

II. STANDARDS AND GUIDELINES

National Ambient Air Quality Standards

National Ambient Air Quality Standards (NAAQS) were promulgated by the US Environmental Protection Agency (EPA) for six major pollutants, deemed "criteria" pollutants, because threshold criteria can be established for determining adverse effects on human health. They consist of primary standards, established to protect public health, and secondary standards, established to protect plants and animals and to prevent economic damage. The six pollutants are:

- *Carbon Monoxide (CO),* which is a colorless, odorless gas produced from the incomplete combustion of gasoline and other fossil fuels.

- *Lead (Pb)* is a heavy metal principally associated with industrial sources.

- *Nitrogen dioxide (NO_2),* which is formed by chemical conversion from nitric oxide (NO), which is emitted primarily by industrial furnaces, power plants, and motor vehicles.

- *Ozone (O_3),* a principal component of smog, is formed through a series of chemical reactions between hydrocarbons and nitrogen oxides in the presence of sunlight.

- *Inhalable Particulates (PM_{10}/$PM_{2.5}$)* are primarily generated by diesel fuel combustion, brake and tire wear on motor vehicles, and the disturbance of dust on roadways. The PM_{10} standard covers those particulates with diameters of 10

micrometers or less. The $PM_{2.5}$ standard covers particulates with diameters of 2.5 micrometers or less.

- *Sulfur dioxides (SO_2)* are heavy gases primarily associated with the combustion of sulfur-containing fuels such as coal and oil.

As the With-Action development is expected to use natural gas for HVAC systems, the two critical pollutants associated with natural gas combustion – nitrogen dioxide (NO_2) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) – were considered for analysis. This analysis addresses compliance of the potential impacts of the HVAC emissions of the With-Action development with 1-hour and annual NO_2 NAAQS, and the 24-hour and annual $PM_{2.5}$ significant thresholds values (STVs) specified in the *CEQR Technical Manual*.

NAAQS for Nitrogen Dioxide

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. In the presence of ozone and sunlight, the NO_x in these emissions are then gradually converted to NO_2 (the pollutant of concern) in the atmosphere.

The recently promulgated 1-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NO_x/NO_2 ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model.

With background concentrations included, the model internally adds up the 8th highest daily maximum NO_2 concentrations and the hourly NO_2 background concentrations, and averages these values over the numbers of the years modeled. Total estimated concentrations are then generated in the statistical form of the 1-hour NO_2 NAAQS format and can be directly compared with the 1-hour NO_2 NAAQS standard. This approach was applied in this analysis.

EPA has retained the annual NO_2 standard of 0.053 ppm (100 ug/m3). Based on DCP guidance, Tier 1, as the most conservative approach, should initially be applied as a preliminary screening tool to determine whether violations of the NAAQS would occur and/or whether overly conservative stack set-back distances would be required. If exceedances of the 1-hour NO_2 NAAQS were estimated or if unacceptable stack set-back locations are required, the less conservative Tier 3 approach could be applied.

For conservatively estimating annual NO_2 impacts at nearby receptor locations, a NO_2 to NO_x ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO_2 analysis, was applied.

$PM_{2.5}$ Significant Impact Criteria

2014 CEQR guidance includes the following criteria for evaluating significant adverse $PM_{2.5}$ incremental impacts:

> *Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour $PM_{2.5}$ background concentration and the 24-hour standard.*

For annual average adverse $PM_{2.5}$ incremental impact, according to CEQR guidance:

> *Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 ug/m^3 at any receptor location for stationary sources.*

The above 24-hour and annual significant impact criteria were used to evaluate the significance of the predicted $PM_{2.5}$ impacts on the proposed development.

III. ANALYSIS OF HEATING SYSTEM EMISSIONS

Existing Conditions

Background Concentrations

Pollutant background concentrations for 2008-2012 were developed from monitoring data collected by the NYSDEC at the Queens College monitoring station.

The 24-hour $PM_{2.5}$ background concentrations are provided in Table C-1 below. As seen in Table C-1, the most recent three-year average 24-hour $PM_{2.5}$ background concentration is 24 ug/m^3, half of the difference between the NAAQS (35 ug/m^3) and this background value is 5.5 ug/m^3. As such, STV of 5.5 ug/m^3 was used for determining whether potential 24-hour $PM_{2.5}$ impact is considered to be significant.

Table C-1
Monitored 24-hour $PM_{2.5}$ Values

Year	First Max	Second Max	Third Max	Fourth Max	98th Percentile
2010	39.0	36.9	29.2	28.4	**26**
2011	34.9	32.3	26.4	26.0	**25**
2012	29.8	28.4	25.7	23.7	**21**
				AVERAGE	**24**

If Tier 3 is used for 1-hour NO_2 analysis, hourly ozone and NO_2 background concentrations need to be developed. These background concentrations were developed for 2008-2012 from monitoring data collected by the NYSDEC at Queens College monitoring station, and were compiled into AERMOD's required hourly emission (NO_2) and concentration (ozone) data format. The 5-year average of annual NO_2 background concentrations (42 ug/m^3) from the Queens College monitoring station was used in the analysis.

Methodology

As discussed in Attachment B, "Supplemental Screening," a detailed dispersion analysis was conducted to estimate impacts of the HVAC emissions using the latest version of EPA's AERMOD dispersion model (EPA version 12345) for building sites that did not pass the screening-level analysis for the With-Action development on existing land uses. Thus, the detailed analysis evaluates the potential of the 60th Street building (building site 2) to adversely affect the existing residential apartment building at 39-50 60th Street (Block 1230, Lot 45).

AERMOD is a steady-state plume model that is applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). It can be used to calculate pollutant concentrations from one or more points (e.g., exhaust stacks) based on hourly meteorological data, and has the capability of calculating pollutant concentrations in a cavity region and at locations when the plume from the exhaust stack is affected by the aerodynamic wakes and eddies (downwash) produced by nearby structures. AERMOD's Plume Volume Molar Ratio Method (PVMRM) module was utilized for the Tier 3 1-hour NO_2 analysis to account for NOx to NO_2 conversion.

The AERMOD Building Profile Input Parameters (BPIP) algorithm was employed in this analysis to estimate building profile input parameters for downwash effect calculation. In accordance with CEQR guidance, the analysis was conducted with and without building downwash, urban dispersion surface roughness length, and the elimination of calms. Regulatory default options of the AERMOD model were used for the 24-hour and annual $PM_{2.5}$ and annual NO_2 analysis.

Pollutant Emission and Fuel Usage Rates

It was assumed that the 60th Street building would use natural gas for HVAC. 24-hour $PM_{2.5}$ and PM_{10} emission rates for the analysis were developed using natural gas fuel usage factors from the *CEQR Technical Manual* Air Quality Appendix, fuel consumption rates for building size, and $PM_{2.5}$ and NO_2 emission factors from EPA's "Compilation of Air Pollutant Emission Factors" (AP-42), as follows:

- $PM_{2.5}$ emission factors from natural gas combustion: 7.6 pounds per million standard cubic feet of fuel (0.0076 MMBTU per hour of heat input) which includes filterable (1.9 pounds per million standard cubic feet) and condensable (5.7 pounds per million standard cubic feet) particles (Table 1.4-2);

- Uncontrolled NO_x emission factor for natural gas combustion: 100 pounds per million cubic feet of natural gas (Table 1.4-1);

- 24-hour $PM_{2.5}$ and 1-hour NO_2 emission rates: estimated based on assumption that all fuel will be consumed in a 100 days (3 coldest months of the year or 2,400 hours) of winter heating season, with no emissions for the rest of the year;

- The natural gas fuel usage factor: 58.5 cubic foot per square foot per year (Table US1, Total Energy Consumption, Expenditures and Intensities, 2005, Part I: Housing Unit Characteristics and Energy Use Indicators of 60.3 thousand Btu per square foot, applicable for New York, were divided by the natural gas heating value, in Btu per cubic feet, and multiplied by 1,000); and;

- Annual NO_2 concentrations: estimated using a NO_2 to NO_x ratio of 0.75 percent, which is recommended by the NYCDEP for conducting an annual NO_2 impact analysis.

Stack Parameters and Boiler Capacity

The boiler size for the 60th Street building in the RWCDS was estimated based on a fuel consumption rate of 1,020 BTU/cubic feet and the assumption that all fuel would be consumed during the 100 day (or 2,400 hour) heating season. Stack diameter and exit velocity were estimated based on values obtained from the NYCDEP "CA Permit" database for the corresponding boiler size (i.e., rated heat input or million BTUs per hour). Stack exit temperature was assumed to be 300^oF (423^o K).

Table C-2 contains estimated pollutant emission rates and boiler and stack parameters used in the dispersion analysis.

Table C-2
Stack Parameters and Pollutant Emission Rates Used in the Analysis

Building ID	Total Floor Area (gsf)	Building Height (feet)	Estimated Boiler Capacity (MMBTU/hr)	$PM_{2.5}$ Emission Rates		NO_2 Emission Rates		Stack Parameters		
				24-hour (g/sec)	Annual (g/sec)	1-hour (g/sec)	Annual (g/sec)	Diameter (feet)	Exit Velocity (ft/sec)	Temp (deg K)
60th Street Building	19,608	33	0.5	4.58E-04	1.25E-04	6.02E-03	1.65E-03	1.0	25.5	423

Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2008-2012). Surface data were obtained from La Guardia Airport and upper air data were obtained from Brookhaven station, New York. Data were processed using the current EPA AERMET version 12345 and the EPA procedure. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Meteorological data were combined together to develop a 5-year set of meteorological conditions, which was used for all AERMOD modeling runs.

Stack Parameters and Locations for the HVAC Analysis

Stack heights, building sizes (square footages and heights) were obtained from the project's Reasonable Worst Case Development Scenario (RWCDS) as presented in Attachment A, "Project Description." It was conservatively assumed that emissions from the 60th Street building would be released through a single stack with a height 3 feet above the roof (per CEQR guidelines) located 10 feet from the edge of the southerly building line adjacent to the existing residential building at 39-50 60th Street. If potentially significant impacts are estimated at this stack location, stack set-backs required to comply with the applicable standards and/or thresholds were determined.

IV. RESULTS

Analyses were run with and without downwash effects on plume dispersion, and the highest results are reported below. The stack for the 60th Street building was initially set back 10 feet (i.e., the NYC Department of Building's minimum distance) from the lot line facing existing building. However, the maximum 24-hour $PM_{2.5}$ impact was found to be higher than the *2014 CEQR Technical Manual* significant threshold value of 5.5 ug/m^3. Therefore, the stack was set back to 30 feet from the lot line in order not to have a significant impact. At this distance, the results for $PM_{2.5}$ are as follows:

- The maximum *2014 CEQR Technical Manual* significant threshold value of 5.5 ug/m^3. Therefore, $PM_{2.5}$ emissions would not significantly impact receptors on the existing building.

- The maximum annual $PM_{2.5}$ impact was estimated to be 0.09 ug/m^3, which is below the *2014 CEQR Technical Manual* significant threshold value of 0.3 ug/m^3. As such,

this impact is also not considered to be significant.

- Because the maximum annual $PM_{2.5}$ impact was found to be minimal, an analysis of the annual impacts on a neighborhood scale was not warranted.

A Tier 3 1-hour NO_2 analysis was conducted with the stack set back 30 feet from the lot line (as was considered in the $PM_{2.5}$ analysis). The results of this analysis are as follows:

- The total maximum daily 8th highest 1-hour NO_2 concentration averaged over 5-years was estimated to be 164.5 ug/m^3, which is less than the 1-hour NO_2 NAAQS of 188 ug/m^3. Therefore, 1-hour NO_2 emissions would not significantly impact receptors on the nearby building.

- The maximum annual NO_2 impact was estimated to be 0.9 ug/m^3, which, with the added annual NO_2 background concentration, results in a total pollutant concentration that is less than the annual NO_2 NAAQS of 100 ug/m^3. As such, no significant annual NO_2 impacts are estimated.

The results of the $PM_{2.5}$ and NO_2 analyses, which are summarized in Table C-3, are that neither the applicable NAAQS nor the applicable significant impact criteria will be exceeded.

Table C-3
Summary of Results

Pollutant/ Time Period	Maximum Estimated Impact (ug/m^3)	Background (ug/m^3)	Maximum Impact/Concentration (ug/m^3)	Evaluation Criteria (ug/m^3)
24-hr $PM_{2.5}$	4.78 without Downwash 4.1 with Downwash	N/A	4.78	5.5 (significant impact criteria)
Annual $PM_{2.5}$	0.09 without Downwash 0.04 with Downwash	N/A	0.09	0.3 (significant impact criteria)
1-hr NO_2	164.5 without Downwash 118.4 with Downwash	*	164.5	188 (NAAQS)
Annual NO_2	0.9 without Downwash 1.5 without Downwash	42	43.5	100 (NAAQS)

*The 1-hour NO2 background concentration was added to estimated impacts on an hour-by-hour basis within the dispersion model.

V. CONCLUSION

As shown above, no exceedances of the 24-hour $PM_{2.5}$/annual significant impact criteria or 1-hour/annual NO_2 NAAQS are projected from the 60th Street building on the existing residential building at 39-50 60th Street, provided that the With-Action building adheres to the recommended stack setback and height requirements.

In order to avoid any potential significant adverse impacts with respect to air quality, the future Mapping Agreement between the Applicant and the City of New York in connection with the proposed demapping shall set forth the environmental requirements as outlined below concerning the applicant and city-owned property at (Block 1230, Lots 70 and 35).

- Any new development or enlargement on the above-referenced property that has frontage on 60th Street must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) and ensure that HVAC stack(s) are located at least 30 feet from the lot line facing Roosevelt Avenue to avoid any potential significant adverse air quality impacts.

ATTACHMENT D

NOISE

I. INTRODUCTION

Noise pollution in an urban area comes from many sources. Some sources are activities essential to the health, safety, and welfare of a city's inhabitants, such as noise from emergency vehicle sirens, garbage collection operations, and construction and maintenance equipment. Other sources, such as traffic, are essential to the viability of a city as a place to live and do business. Although these and other noise-producing activities are necessary to a city, the noise they produce is undesirable. Urban noise detracts from the quality of the living environment, and there is increasing evidence that excessive noise represents a threat to public health.

The proposed action is a change to the City Map involving the elimination, discontinuance, and closing of Vaux Road between 59th and 60th Streets in the Woodside neighborhood of Queens, Community District 2. For conservative assessment purposes, a residential development that would maximize available floor area has been considered on the site of the demapped street and applicant's property. Noise emissions from exposed rail lines in close proximity to the site, including the MTA/Long Island Railroad (LIRR), have the potential to impact the residential land uses analyzed in the RWCDS. Therefore, a noise analysis was conducted to determine ambient noise levels and the level of building attenuation necessary, if any, to ensure that interior noise levels of the With-Action development satisfy applicable interior noise criteria.

Noise analyses were conducted following the procedures outlined in the *2014 CEQR Technical Manual* to determine whether introducing the With-Action development to the project site would result in significant adverse noise impacts.

II. NOISE FUNDAMENTALS

Noise is considered unwanted sound. Sound is a fluctuation in air pressure. Sound pressure levels are measured in units called "decibels" (dB). The particular character of the sound that we hear (a whistle compared with a French horn, for example) is determined by the speed, or "frequency," at which the air pressure fluctuates or "oscillates." Frequency defines the oscillation of sound pressure in terms of cycles per second (cps). One cycle per second is known as 1 Hertz (Hz). People can hear sound over a relatively limited range of frequencies, generally between 20 Hz and 20,000 Hz. Furthermore, the human ear does not perceive all frequencies equally well. High frequencies (e.g., a whistle) are more easily discernible and therefore more intrusive than many of the lower frequencies (e.g., the lower notes on the French horn).

A-Weighted Sound Level (dBA)

In order to establish a uniform noise measurement that simulates people's perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human hearing range. This is known as the A-weighted sound level, or "dBA," and it is the descriptor of noise levels most often used for community noise. As shown in Table D-1, the threshold of human hearing is defined as 0 dBA; very quiet conditions (as in a rural area at night, for example) are approximately 30-40 dBA; levels between 50 dBA and 70 dBA define the range of noise levels generated

by normal daily activity; levels above 70 dBA would be considered noisy, and then loud, intrusive, and deafening, as the scale approaches 120 dBA.

Table D-1
Common Noise Levels

Sound Source	(dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Soft Whisper at 5 meters	30
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Note: A 10 dBA increase appears to double the loudness, and a 10 dBA decrease appears to halve the apparent loudness.
Source: *2014 CEQR Technical Manual*/Cowan, James P. Handbook of Environmental Acoustics. Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

Community Response to Changes in Noise Levels

Table D-2 shows the average ability of an individual to perceive changes in noise. It is important to note that the dBA scale is logarithmic, meaning that each increase of 10 dBA describes a doubling of perceived loudness. Thus, the noise on a platform with a passing subway train, at 100 dBA, is perceived as twice as loud as passing heavy trucks at 90 dBA. For most people to perceive an increase in noise, it must be at least 3 dBA. At 5 dBA, the change will be readily noticeable. These guidelines permit direct estimation of an individual's probable perception of changes in noise levels.

Table D-2
Average Ability to Perceive Changes in Noise Levels

Change (dBA)	Human Perception of Sound
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	A dramatic change
40	Difference between a faintly audible sound and a very loud sound

Source: Bolt Beranek and Neuman, Inc., Fundamentals and Abatement of Highway Traffic Noise, Report No. PB-222-703. Prepared for Federal Highway Administration, June 1973.

Noise Descriptors Used In Impact Assessment

Because the sound pressure level unit, dBA, describes a noise level at just one moment, and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level", L_{eq}, can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$, or 24 hours, denoted as $L_{eq(24)}$), conveys the same sound-energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and "x" percent of the time, respectively. Discrete

event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

The relationship between L_{eq} and levels of exceedance is worth noting. Because L_{eq} is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little, L_{eq} will approximate L_{50} or the median level. If the noise fluctuates broadly, the L_{eq} will be approximately equal to the L_{10} value. If extreme fluctuations are present, the L_{eq} will exceed L_{90} or the background level by 10 or more decibels. Thus the relationship between L_{eq} and the levels of exceedance will depend on the character of the noise. In community noise measurements, it has been observed that the L_{eq} is generally between L_{10} and L_{50}. The relationship between L_{eq} and exceedance levels has been used in this analysis to characterize the noise sources and to determine the nature and extent of their impact at both monitoring locations.

For the purposes of this analysis, the maximum 1-hour equivalent sound level ($L_{eq\,(1)}$) has been selected as the noise descriptor to be used in the noise impact evaluation. $L_{eq\,(1)}$ is the noise descriptor used in the *CEQR Technical Manual* for noise impact evaluation, and is used to provide an indication of highest expected sound levels. $L_{10\,(1)}$ is the noise descriptor used in the *CEQR Technical Manual* for building attenuation. Hourly statistical noise levels (particularly L_{10} and L_{eq} levels) were used to characterize the relevant noise sources and their relative importance at Receptor 1 (59th Street) and Receptor 2 (60th Street).

The Day-Night sound level (L_{dn}) describes a receptor's cumulative noise exposure from all events over 24 hours. It may be thought of as a noise dose, totaled after increasing all nighttime L_{eq} noise levels between 10:00 PM and 7:00 AM by 10 dBA to reflect the greater intrusiveness of noise experienced during these hours. Pursuant to the Federal Transit Authority (FTA) noise impact analysis methodology, the L_{dn} is adopted to assess noise generated by trains.[1] However, because the L_{dn} descriptor tends to average out high hourly values over 24 hours, the *CEQR Technical Manual* recommends that the L_{eq} descriptor be used for purposes of impact analysis.

Applicable Noise Codes and Impact Criteria

New York City Noise Code

The New York City Noise Code, amended in 2007, contains prohibitions regarding unreasonable noise and specific noise standards, including plainly audible criteria for specific noise sources. In addition, the amended code specifies that no sound source operating in connection with any commercial or business enterprise may exceed the decibel levels in the designated octave bands at specified receiving properties.

New York 2014 CEQR Technical Manual Noise Standards

The New York City Department of Environmental Protection (DEP) has set external noise exposure standards. These standards are shown below in Table D-3.

[1] Source: Report "Transit Noise and Vibration Impact Assessment", 2006, Federal Transportation Authority, Office of Planning and Environment.

Table D-3
Noise Exposure Guidelines for Use in City Environmental Impact Review

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

Notes:
(i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;
[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.
[2] Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and old-age homes.
[3] One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.
[4] External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).
Source: New York City Department of Environmental Protection (adopted policy 1983).

Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. The standards shown are based on maintaining an interior noise level for the worst-case hour L_{10} of less than or equal to 45 dBA. Attenuation requirements are shown in Table D-4 below.

Table D-4
Required Attenuation Values to Achieve Acceptable Interior Noise Levels

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

Note: [A] The above composite window-wall attenuation values are for residential dwellings. 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.
[B] Required attenuation values increase by 1 dB (A) increments for L_{10} values greater than 80 dBA.
Source: New York City Department of Environmental Protection /*2014 CEQR Technical Manual*

In addition, the *CEQR Technical Manual* uses the following criteria to determine whether a proposed residential and/or community facility development would be subject to a significant adverse noise impact. The impact assessments compare the projected future With-Action scenario $L_{eq(1)}$ noise levels to those calculated for the No-Action scenario. If the No-Action levels are less than 60 dBA $L_{eq(1)}$ and the analysis period is not a nighttime period, the threshold for a significant impact would be an increase of at least 5 dBA $L_{eq(1)}$. For the 5 dBA threshold to be valid, the resultant With-Action scenario noise level would have to be equal to or less than 65 dBA. If the No-Action noise level is equal to or greater than 62 dBA $L_{eq(1)}$, or if the analysis period is a nighttime period (defined in the CEQR standards as being between 10:00 PM and 7:00 AM), the incremental significant impact threshold would be 3 dBA $L_{eq(1)}$. However, if the No-Action noise level is 61 dBA $L_{eq(1)}$, the maximum incremental increase would be 4 dBA, since an increase higher than this would result in a noise level higher than the 65 dBA $L_{eq(1)}$ threshold.

III. NOISE PREDICTION METHODOLOGY

Reasonable Worst-Case Development Scenario

As discussed in Attachment A, "Project Description," for conservative environmental analysis purposes, a Reasonable Worst-Case Development Scenario (RWCDS) which differs from the applicant's proposed project has been identified. This With-Action scenario would consist of approximately 32,288 sf of residential floor area (32 DUs) split between two buildings and at-grade accessory parking (22 spaces) as seen in Figure A-5 of Attachment A, "Project Description". The With-Action development would be comprised of the following components:

- 59th Street Building: Along the western edge of the project site, the applicant's building would be demolished and replaced with a 12,680 sf residential building. The building would be 3-stories in height and consist of 13 DUs. The building would be setback 5 feet from the lot line and would rise to a height of 30 feet, above which the building would slope back or set back to a maximum height of 33 feet.

- 60th Street Building: On the 60th Street frontage of the project site, the applicant's building would be demolished and replaced with a 19,608 sf residential building. The building would be 3-stories in height and consist of 19 DUs. The building would be setback 5 feet from the lot line and would rise to a height of 30 feet, above which the building would slope back or set back to a maximum height of 33 feet.

Required accessory parking would be provided at-grade in a shared rear yard between the two buildings. The entrance and exit to the parking lot would be located on 59th Street.

Train Noise Modeling

As the project site is located in close proximity to exposed rail lines, including the MTA/Long Island Railroad (LIRR) Main Line corridor, noise emissions from train operations have the potential to impact the residential land uses analyzed in the RWCDS. Pursuant to the guidelines of the *CEQR Technical Manual* Section 332.3 "Train Noise," noise from train operations are calculated using the detailed noise analysis methodology contained in the Federal Transit Administration (FTA) guidance manual, Transit Noise and Vibration Impact Assessment (May 2006). Using this methodology, $L_{eq(1)}$ values may be calculated as a function of a number of factors, including the distance between the track and receptor, number of trains, average number of cars per train, train speed, track conditions, whether the track is on grade or on structure. Values calculated using the FTA methodology may either be used directly or, based

upon measurements, adjustment factors may be developed to account for site-specific differences between measured and model-predicted values.

The FTA analysis starts with predicting the source noise levels, expressed in terms of Sound Exposure Level (SEL) at a reference distance and a reference speed. These are given in Table 5-1 of the FTA guidance manual and are reproduced in Table D-5 below.

Table D-5
Reference SEL's at 50 feet from Track and 50 mph

Source / Type		Reference Conditions	Reference SEL (SEL_{ref}), dBA
Commuter Rail, At-Grade	Locomotives	Diesel-electric, 3000 hp, throttle 5	92
		Electric	90
	Diesel Multiple Unit (DMU)	Diesel-powered, 1200 hp	85
	Horns	Within ¼ mile of grade crossing	110
	Cars	Ballast, welded rail	82
Rail Transit		At-grade, ballast, welded rail	82
Transit whistles / warning devices		Within 1/8 mile of grade crossing	93
AGT	Steel wheel	Aerial, concrete, welded rail	80
	Rubber Tire	Aerial, concrete guideway	78
Monorail		Aerial straddle beam	82
Maglev		Aerial, open guideway	72

The reference SEL's are used in the equations of Table 5-2 of the FTA guidance manual (reproduced below in Table D-6) to predict the noise exposure at 50 feet. Also shown in Table D-6 are rough estimates of the noise reduction available from wayside noise barriers, the most common noise mitigation measure.

After determining the reference levels for each of the noise sources, the next step is to determine the noise exposure at 50 feet expressed in terms of $L_{eq}(h)$ and L_{dn}. The additional data needed include: number of train passbys during the day (defined as 7 AM to 10 PM) and night (defined as 10 PM to 7 AM); peak hour train volume; number of vehicles per train; maximum speed; guideway configuration; noise barrier location; location of highway and street grade crossings, if any. These data are used in the equations in Table D-6 to obtain adjustment factors to calculate $L_{eq}(h)$ and L_{dn} at 50 feet.

Table D-6
Computation of Noise Exposure at 50 feet for Fixed-Guideway General Assessment

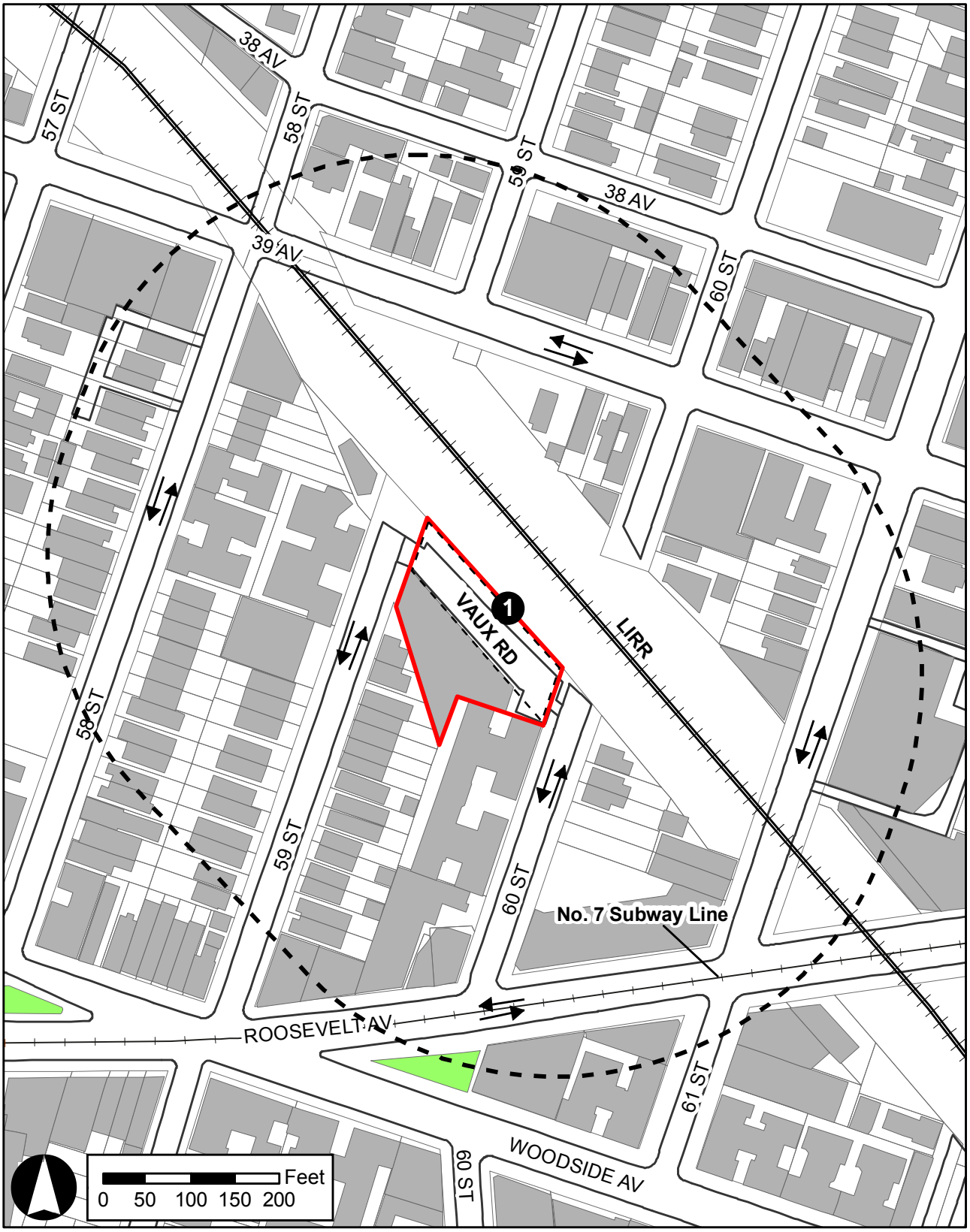
LOCOMOTIVES[†] Hourly L_{eq} at 50 ft:	$L_{eq}(h) = SEL_{ref} + 10\log(N_{locos}) + K\log\left(\frac{S}{50}\right) + 10\log(V) - 35.6$ Where K = -10 for passenger diesel; = 0 for DMU; = +10 for electric
LOCOMOTIVE WARNING HORNS[†††] Hourly L_{eq} at 50 ft:	$L_{eq}(h) = SEL_{ref} + 10\log(V) - 35.6$
RAIL VEHICLES[††] Hourly L_{eq} at 50 ft:	$L_{eq}(h) = SEL_{ref} + 10\log(N_{cars}) + 20\log\left(\frac{S}{50}\right) + 10\log(V) - 35.6$ use the following adjustments as applicable: + 5 → JOINTED TRACK + 3 → EMBEDDED TRACK ON GRADE + 4 → AERIAL STRUCTURE WITH SLAB TRACK (except AGT & monorail) - 5 → if a NOISE BARRIER blocks the line of sight
TRANSIT WARNING HORNS[†††] Hourly L_{eq} at 50 ft:	$L_{eq}(h) = SEL_{ref} - 10\log\left(\frac{S}{50}\right) + 10\log(V) - 35.6$
COMBINED Hourly L_{eq} at 50 ft:	$L_{eq}(h) = 10\log\left[10^{(L_{eq}/10)} + 10^{(L_{eq}/10)}\right]$
Daytime L_{eq} at 50 ft:	$L_{eq}(day) = L_{eq}(h)\Big\vert\ v = v_d$
Nighttime L_{eq} at 50 ft:	$L_{eq}(night) = L_{eq}(h)\Big\vert\ v = v_n$
L_{dn} at 50 ft:	$L_{dn} = 10\log\left[(15)\times10^{(L_{eq}(day)/10)} + (9)\times10^{(L_{eq}(night)+10/10)}\right] - 13.8$
N_{locos} = average number of locomotives per train N_{cars} = average number of cars per train S = train speed, in miles per hour V = average hourly volume of train traffic, in trains per hour V_d = average hourly daytime volume of train traffic, in trains per hour = $\frac{number\ of\ trains,7am\ to10pm}{15}$ V_n = average hourly nighttime volumes of train traffic, in trains per hour = $\frac{number\ of\ trains,10pm\ to7am}{9}$	
† Assumes a passenger diesel locomotive power rating at approximately 3000 hp †† Includes all commuter rail cars, transit cars, AGT and monorail ††† Based on FRA's horn noise model (www.fra.dot.gov/downloads/RRDev/hornmodel.xls)	

IV. EXISTING CONDITIONS

Selection of Noise Monitoring Receptor Locations

In order to collect existing baseline volumes at the project site, existing noise levels from the LIRR tracks to the north of the project site were monitored at the halfway point of Vaux Road. This noise monitoring location is located along the northern edge of the project site – the halfway point of Vaux Road facing the railroad tracks, set back approximately 34 feet (see Figure D-1). Measurements performed at this receptor location were conducted as part of the impact identification and building attenuation analyses. This location is representative of where maximum impacts from railroad traffic would be expected.

Noise Receptor Location



Legend

- Project Site
- Building Footprint
- 1 Noise Receptor Location (Refer to Table D-7)

Noise Monitoring

At the selected noise monitoring location, 20-minute spot measurements of existing noise levels were performed to establish existing noise levels for three analysis time periods, including: weekday AM peak hour (8:00 to 9:00 AM), midday (MD) peak hour (12:00 to 1:00 PM), and weekday PM peak hour (5:00 to 6:00 PM). Noise monitoring was performed on August 27, 2013. The weather was sunny, with temperatures in the high 80s.

Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by the American National Standards Institute) sound level meter. This assembly was mounted at a height of 5 feet above the ground surface on a tripod and at least 6 feet away from any sound-reflecting surfaces to avoid major interference with source sound levels being measured. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at each location were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. Only LIRR-related noise was measured; noise from other sources (e.g., emergency sirens, aircraft flyovers, etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14^{o}F and below 122^{o}F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at Monitoring Locations

The principle sources of rail system noise are the interaction between wheels and rails, the propulsion system of the railcars, breaks, and auxiliary equipment (ventilation and horns). The dominant cause of railcar noise over most of the typical speed range is interaction between the wheels and rails. Generally, noise levels increase with increases in train speed and length.

Noise levels are also dependent upon the railway configuration (i.e., whether the track is at-grade, welded rail, joined track, embedded track on grade, or aerial structures with slab track) and whether there are any noise barriers or berms in place. When railcars travel on tight curves, the dominant noise emitted may be a high pitched squeal or screech. This is usually caused by metal wheels sliding on the rail and scraping metal on metal when the train negotiates a curve.

As described previously, the existing tracks of the LIRR are approximately 34 feet away from the northern edge of the project site. The train tracks are located on a raised railbed and are fully exposed above the ground. The noise monitoring results are shown in Table D-7 below. Railroad traffic was the dominant noise source at this location.

Table D-7
Existing Noise Levels (dBA) at Receptor 1

#	Noise Receptor Location	Time	L_{eq}	L_{max}	L_{min}	L_1	L_{10}	L_{50}	L_{90}	CEQR Noise Exposure Category
1	Northern edge of Vaux Road	AM	65.5	83.1	50.3	76.9	**69.6**	56.9	53.6	**Marginally Acceptable**
		MD	59.6	87.8	52.3	70.2	61.0	55.6	54.0	
		PM	64.4	81.8	51.8	75.5	68.7	57.6	53.9	

Notes: Field measurements at Receptor 1 were performed by Philip Habib & Associates on August 27, 2013

As shown in Table D-7, the highest existing L_{10} value was measured in the AM peak hour (69.6 dBA). During this time, 14 trains passed by the project site with an average number of approximately 8 cars per train. Pursuant to CEQR guidelines, this value places Receptor 1 in the marginally acceptable category under existing conditions.

V. FUTURE WITHOUT THE PROPOSED ACTION (NO-ACTION SCENARIO)

In the future without the proposed action, the project site would remain the same as under existing conditions. Vaux Road would not be demapped and the western approximately 5,464 sf portion would not be disposed of and acquired by the applicant. The road would continue to function as a paper street and a private parking lot, fenced off at both ends, impassable to pedestrian and through traffic.

Thus, in the future without the proposed action, noise levels at the project site would remain the same as those under existing conditions. Comparing future No-Action noise levels with existing noise levels, no increases in $L_{eq(1)}$ noise levels would occur at the receptor location during any peak hours. Noise levels would remain in the same noise exposure category (Marginally Unacceptable) as under existing conditions during all peak hours.

VI. FUTURE WITH THE PROPOSED ACTION (WITH-ACTION SCENARIO)

Using the methodology previously described, noise levels in the future with the proposed action were calculated for the weekday AM, MD, and PM peak periods in the 2015 analysis year (see Appendix D-1). By using the most conservative reading at the receptor location for the L_{eq} AM peak hour (65.5 dBA), the L_{10} value was generated as 75.9 dBA. This places the receptor location under the Marginally Unacceptable (II) category per *CEQR Technical Manual* guidelines.

VII. ATTENUATION REQUIREMENTS

The *CEQR Technical Manual* has set noise attenuation requirements for buildings based on exterior noise levels. Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for retail, and office uses, and are determined based on exterior $L_{10(1)}$ noise levels.

To avoid any potential significant adverse impacts with respect to noise, the Mapping Agreement between the applicant and the City of New York, in connection with the proposed demapping, shall set forth the environmental requirements outlined below concerning the applicant and city-owned properties at Block 1230, Lots 70 and 35. The environmental requirement related to noise is as follows:

> **In order to ensure an acceptable interior noise environment if future development of the demapped property should occur, future residential uses must provide a closed window condition with a minimum of 31 dB(A) window/wall attenuation on all facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning.**

VIII. OTHER NOISE CONCERNS

Mechanical Equipment

No detailed designs of the residential building's mechanical systems (i.e., heating, ventilation, and air conditioning systems) are available at this time. However, those systems would be designed to meet all applicable noise regulations and requirements, and would be designed to produce noise levels which would not result in any significant increases in ambient noise levels.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptor would be located within one mile of an existing flight path, or cause aircraft to fly through existing or new flight paths over or within one mile of a receptor. Since the proposed development sites are not within one mile of an existing flight path, no initial aircraft noise impact screening analysis is warranted.

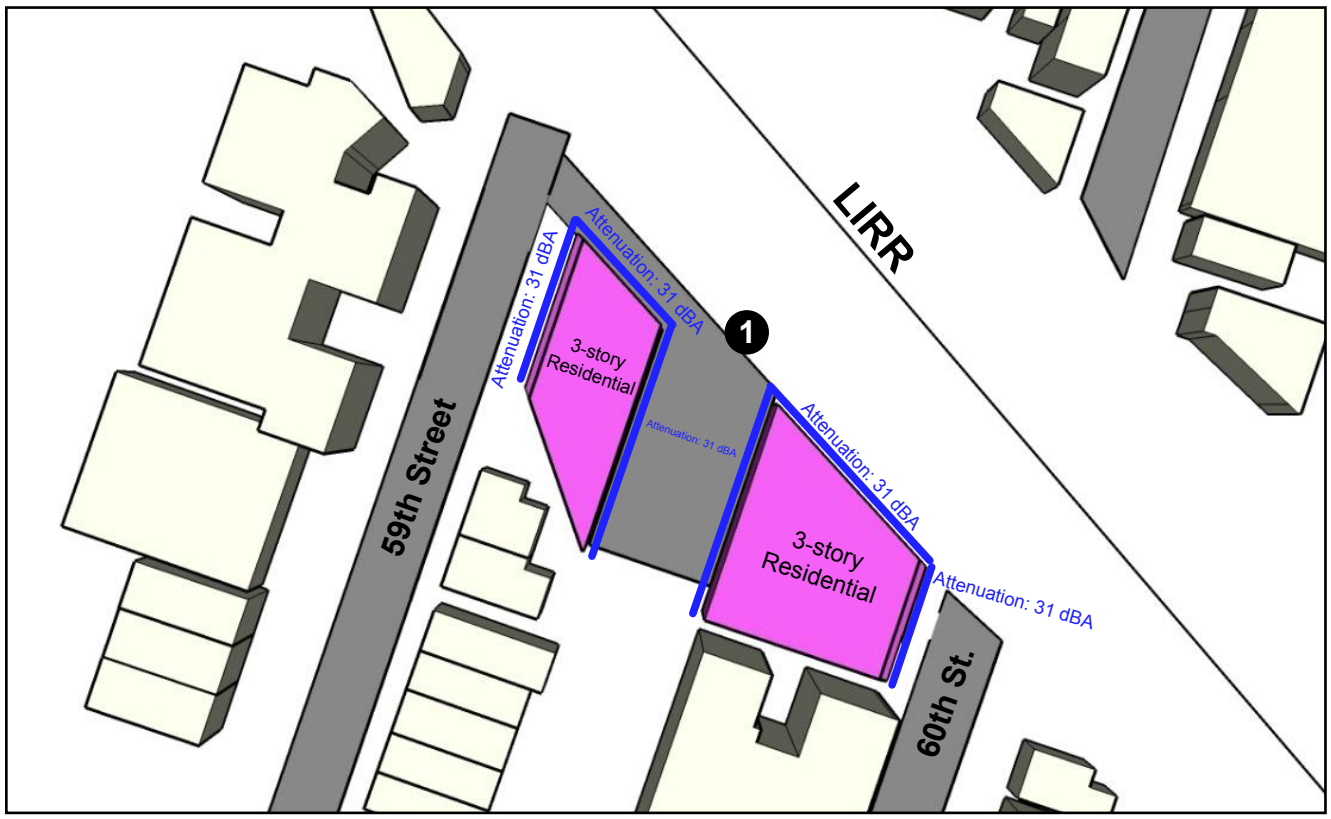
IX. CONCLUSION

To determine the potential for the proposed action to result in significant noise impacts related to train noise sources, a detailed analysis was performed pursuant to the methodologies identified in the *CEQR Technical Manual* (see Appendix D-1). Specifically, noise from existing LIRR train operations was calculated using the detailed noise analysis methodology contained in the Federal Transit Administration (FTA) guidance manual, Transit Noise and Vibration Impact Assessment (May 2006).[2] $L_{eq(1)}$ values were calculated as a function of the distance between the track and the development sites, the number of trains, the average number of cars per train, average train speed, etc. From these calculations, it was determined that LIRR trains contribute an additional 75.9 dBA of noise (L_{10}) to the developments analyzed as part of the RWCDS, placing them in the ***Marginally Unacceptable (II)*** category as per Table 19-3 of the *CEQR Technical Manual*. If future development of the demapped property should occur, an attenuation level of 31 dBA would be required to achieve the desired residential interior noise levels at the project site (see Figure D-2).

As stated above, to avoid any potential significant adverse impacts with respect to noise, all environmental requirements shall be set forth in the Mapping Agreement between the applicant and the City of New York, in connection with the proposed demapping. Therefore, no significant adverse noise impacts are expected to occur as a result of the proposed action.

[2] This analysis is based on data received September 5, 2008 from the Strategic Investment Department.

Required Noise Attenuation - With-Action Development



Legend

1 Noise Receptor Location (see Table D-7)

Required Attenuation Level (dBA)

APPENDIX D-1
FTA TRAIN NOISE VARIABLES

VARIABLES			
Nlocos	average number of locomotives per train	2	Diesel
		1	Electric
Ncars	average number of cars per train	4	Diesel
		10	Electric
S	Train speed, in miles per hour	40	MPH
v	Average hourly volume of train traffic, in trains per hour	2	Diesel
		20.08333333	Electric
vd	average hourly daytime volume of train traffic, in trains per	3.133333333	Diesel
	(Number of trains, 7 am to 10 pm)/15	25.13333333	Electric
vn	average nighttime volumes of train traffic, in trains per hou	0.111111111	Diesel
	(number of trains 10 pm to 7 am)/9	11.66666667	Electric
SELref (locomotives)		92	Diesel
		90	Electric
SELref (rail vehicles)		82	

CALCULATED VALUES						
	All Day		**Day (7 AM to 10 PM)**		**Night (10 PM to 7 AM)**	
Diesel	LeqL	63.38970	LeqL	65.33947	LeqL	50.83697
Electric	LeqL	66.45926	LeqL	67.43340	LeqL	64.10037
Diesel	LeqH	0	LeqH	0	LeqH	0
Electric	LeqH	0	LeqH	0	LeqH	0
Diesel	LeqC	57.49270	LeqC	59.44247	LeqC	44.93997
Electric	LeqC	71.49016	LeqC	72.46430	LeqC	69.13127
Diesel	Leq	64.38380	Leq	66.33357	Leq	51.83108
Electric	Leq	72.67606	Leq	73.65021	Leq	70.31717

Diesel	Ldn	65.13225
Electric	Ldn	77.39195

Measured Leq for Receptor Location 1 65.5 *

TOTAL Leq 73.9463792

L10 = Leq + 2

L10 75.9463792

Notes:

* This is the higest Leq value monitored at Receptor Location 1 during the three peak periods (AM/MD/PM).

1. No monitoring was conducted from 10PM to 7AM
2. The NYCT #7 Subway line is not included in the calcuations.