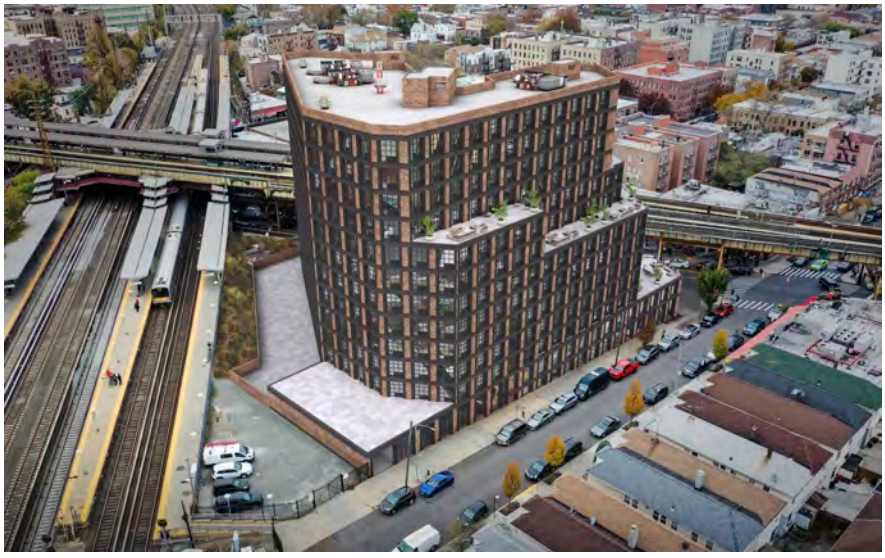
Roosevelt Avenue Rezoning
Environmental Assessment Statement



CEQR #: 19DCP218Q

Prepared for:
VS PBS Venture 1, LLC
Mare Ostrum Elements

Prepared by:
Environmental Studies Corporation

March 31 , 2021

Roosevelt Avenue Rezoning
ENVIRONMENTAL ASSESSMENT STATEMENT

CEQR No.: 19DCP218Q

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SECTION I – EAS FORM

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* Roosevelt Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
19DCP218Q	
ULURP REFERENCE NUMBER (if applicable) 200070ZMQ & N200069ZRQ	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY NYC Department of City Planning Environmental Assessment and Review Division			NAME OF APPLICANT VS PBS Venture 1, LLC and Mare Nostrum Elements, Inc.		
NAME OF LEAD AGENCY CONTACT PERSON Olga Abinader, Director			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Hiram Rothkrug, ESC, Inc.		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 55 Water Mill Road		
CITY New York	STATE NY	ZIP 10271	CITY Great Neck	STATE NY	ZIP 11021
TELEPHONE 212-720-3493	EMAIL oabinad@planning.nyc.gov		TELEPHONE 718-343-0026	EMAIL hrothkrug@environmentalstudiescorp.com	

5. *Project Description*

VS PBS Venture 1, LLC and Mare Nostrum Elements, Inc. are co-applicants (collectively, the "Applicant") seeking a zoning map amendment and zoning text amendment (hereafter, the "Proposed Actions") to rezone the southwest corner of Roosevelt Avenue and 63rd Street (Block 1294, Lots 55, p/o 56, 58, 60, 68, p/o 73 and 76; hereafter, the "Rezoning Area") in the Woodside neighborhood of Queens, Community District 2. The Proposed Actions would rezone an R6 district with a C1-4 overlay measuring 100 feet deep from Roosevelt Avenue to a C4-4 zoning district. The Applicant also seeks a zoning text amendment to designate the Rezoning Area as a Mandatory Inclusionary Housing ("MIH") area.

The Proposed Actions would facilitate the development of a new 13-story mixed-use building on Lots 58, 60, 68 and 73 (the "Proposed Development") to contain 307,388 gsf. The Proposed Development would include 77,594 gross square feet (gsf) of commercial area and 8,013 gsf of community facility space. Residential space would consist of 181,912 gsf of space and 213 dwelling units. 160 accessory off-street parking spaces would be provided. The Applicant is seeking MIH (Options 1 and) and seek to comply with Option 2 of the program, which would require that 30% of the residential floor area (approximately 64 dwelling units) would be reserved as permanently affordable to households with incomes averaging at or below 80% of the Area Median Income (AMI).

Block 1294, Lots 55, p/o 56 and 76 would be directly affected by the Proposed Actions but are not under the Applicant's control

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 2	STREET ADDRESS 62-04 Roosevelt Avenue
TAX BLOCK(S) AND LOT(S) Block 1294, Lots 55, p/o 56, 58, 60, 68, p/o 73 and 76		ZIP CODE 11377
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS SW corner of Roosevelt Avenue and 63rd Street		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6, R6/C1-4		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 Appendix F

Board of Standards and Appeals: ☐ YES ☒ NO
☐ VARIANCE (use)
☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 40,880 (approximately) Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.): Other, describe (sq. ft.):

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 307,388
NUMBER OF BUILDINGS: 1 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 307,388
HEIGHT OF EACH BUILDING (ft.): 135 NUMBER OF STORIES OF EACH BUILDING: 13-Stories

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: 35,330 (approx.)
The total square feet not owned or controlled by the applicant: 5,550 (approx.)

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: n/a sq. ft. (width x length) VOLUME OF DISTURBANCE: 805,524 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 35,330 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.)	181,912	77,594	8,013	

Type (*e.g.,* retail, office, school)	213 units	Retail/Office	Ambulatory Medical	

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 571 NUMBER OF ADDITIONAL WORKERS: 288

Provide a brief explanation of how these numbers were determined: Residents are calculated based on the Proposed Development, a total of 213 dwelling units with an average household size of 2.68 persons per dwelling unit based on 2014-2018 U.S. Census ACS estimates for Queens Community District #2. Worker/employee calculations are as follows: Office = 1/250 sf; Retail/General CF = 1/333 sf; Medical Office = 1/450 sf; 1 employee/25 DU; 1 employee/50 parking spaces

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): 2023

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 20

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: Based on an estimated 12-month approval process and single construction period, which would occur over a 20-month period. The remaining Development Site (discussed below) is anticipated for construction occuring approximately a month following the Proposed Development, to last approximately 12 months. Therefore, the Build Year ("Analysis Year") is assumed as 2023.

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

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

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☒	☐
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. See Section III		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☒	☐
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☒	☐
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		

	YES	NO
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. See Section III		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☐	☒
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☒	☐
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☒	☐
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☒	☐
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: (1) The potential for site impacts, including the potential for a vapor encroachment condition to existing and any future buildings at the site, from past on-site operations involving the use of hazardous substances and/or petroleum products; (2) The possible presence of asbestos-containing building materials and lead-based paints in the subject buildings; and (3) The potential for groundwater contamination in the immediate vicinity of the subject property from potential off-site sources of contamination in the surrounding area.	☒	☐
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?	☐	☒

	YES	NO
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(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): 22,603		
○ 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): 41,840,692		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☒	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☒	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☒	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☒
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See Section III	☒	☐
(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?	☐	☒

	YES	NO
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. See Section III		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. See Section III		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☒	☐
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☒	☐
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. See Section III		

20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	DATE
Justin Jarboe, ESC, Inc.	3/31/2021

SIGNATURE

Justin Jarboe

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

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

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

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

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

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

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

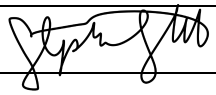
3. Check determination to be issued by the lead agency:

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

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

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

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

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	City Planning Commission
NAME: Stephanie Shellooe	DATE: April 2, 2021
SIGNATURE: 	

NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The proposed actions are a zoning map amendment and zoning text amendment affecting the southwest corner of Roosevelt Avenue and 63rd Street (Block 1294, Lots 55, portion of (p/o) 56, 58, 60, 68, p/o 73 and 76, the Project Area) in the Woodside neighborhood of Queens, Community District 2. The Proposed Actions would rezone an R6 district with a C1-4 overlay to a C4-4 zoning district. The zoning text amendment would designate the Project Area as a Mandatory Inclusionary Housing (MIH) area. The Proposed Actions would facilitate the development of a new 13-story mixed-use building on Lots 58, 60, 68 and 73 (Projected Development Site 1) to contain 307,388 gross square feet (gsf) including commercial, community facility and residential uses (213 dwelling units, up to 64 of which would be affordable pursuant to MIH). 160 accessory off-street parking spaces would be provided. Block 1294, Lots 55 and 56 are analyzed in the EAS as Projected Development Site 2. The proposed C4-4 district would increase the range of permitted uses to include a wider range of commercial uses, which are intended for commercial and transit hubs. The proposed actions are not anticipated to result in land uses that are significantly different from surrounding uses. The proposed district allows commercial and community facilities that would serve the needs of residents and fit within the context of the existing uses along and near Roosevelt Avenue, and would not constitute a significant adverse impact.

Community Facilities

A detailed analysis related to community facilities is included in this EAS. According to the CEQR Technical Manual, a significant impact on schools may occur if the following two conditions are met: (1) a significant impact may occur if the project results in a collective utilization rate of the elementary and/or intermediate schools in the Subdistrict study area that is equal to or greater than 100 percent in the With-Action Condition, and (2) if the project results in an increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions. With the Proposed Actions, the elementary schools in Sub-district 1 would be above capacity at approximately 112% utilization and the intermediate schools would be below capacity at approximately 86% utilization. The difference between the No-Action and With-Action utilization rate within Sub-district 1 of the elementary schools would be an increase of less than one percent, while that of the middle schools would also be less than a percent. Therefore, the Proposed Actions would not be expected to result in a significant adverse impact on elementary or intermediate schools.

Open Space

A detailed analysis related to open space is included in this EAS. The Proposed Actions would not result in any significant direct impacts on any open space resources. While a decrease in the active open space ratio of approximately 1.4% for the Study Area population would occur in an area with a relatively low ratio of active open space, the Proposed Actions would result in new recreational space for the increased population, which would consist of residents for the Proposed Development. For passive open space, the ratio for residents would decrease by less than one percent and pursuant to the CEQR Technical Manual, would not be considered a significant adverse impact. The largest quantitative reduction in public open space would occur through the additional of a new nonresidential population to the Worker Study Area. However, as noted above, the overall ratio of 0.21 would continue to be higher than the planning goal of 0.15. As such, the Proposed Actions would not result in a significant adverse impact on open space resources for the nonresidential population.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-603) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Stephanie Shellooe at 212-720-3328.

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE April 2, 2021
SIGNATURE 	

Project Name: 62-04 Roosevelt Ave Rezoning
CEQR # 19DCP218Q
SEQRA Classification: Unlisted

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE April 5, 2021
SIGNATURE	

Project Name: 62-04 Roosevelt Ave Rezoning
CEQR # 19DCP218Q
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Queens	Block 1294, Lots 58, 60, 68 and 73
Projected Development Site 2	Queens	Block 1294, Lots 55 and 56

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-603**) would be established as part of approval of the proposed actions on **projected development sites** as described below:

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

Hazardous Materials

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

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

Air Quality

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

Block 1294, Lots 58, 60, 68, and 73 (Projected Development Site 1): *Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) and hot water equipment, ensure that the stack is located at the building's highest level and at least 138 feet above the grade, and at least 30 feet from the western lot line facing 61st Street to avoid any potential significant adverse air quality impacts.*

Block 1294, Lot 55 and 56 (Projected Development Site 2): *Any new residential or commercial development on the above-referenced property must ensure that the stack is located at the building's highest level and at least 138 feet above the grade to avoid any potential significant adverse air quality impacts.*

Noise

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

Block 1294, Lots 58, 60, 68, and 73 (Projected Development Site 1): *To ensure an acceptable interior noise environment, future residential/commercial office/community facility uses must provide a closed-window condition with a minimum of 38 dB(A) window/wall attenuation on the northern façades facing Roosevelt Avenue above the elevated rail and the western facades parallel to 62nd Street above the elevated rail and the eastern facades facing 63rd Street within 50 feet of Roosevelt Avenue above the elevated rail and 40 dB(A) of attenuation on the northern façades facing Roosevelt Avenue below the elevated rail and the western facades parallel to 62nd Street below the elevated rail and the eastern facades facing 63rd Street within 50 feet of Roosevelt Avenue below the elevated rail and 33 dBA of attenuation on all southern facades facing the LIRR track and 31 dBA of attenuation on all eastern facades facing 63rd Street beyond 50 feet of Roosevelt Avenue to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

Block 1294, Lot 55 and 56 (Projected Development Site 2): *To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 38 dB(A) window/wall attenuation on all facades above the elevated rail and 40 dB(A) of attenuation on all facades below the elevated rail to maintain an interior noise level not greater than 45 dBA for residential and community facility uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

SECTION II – PROJECT DESCRIPTION

Existing Conditions

The Proposed Project Area (the "Project Area or Rezoning Area") is located in the Woodside area of Queens Community District #2. The Rezoning Area is located on the southwest corner of Roosevelt Avenue and 63rd Street and consists of Block 1294, Lots 55, p/o 56, 58, 60, 68, p/o 73 and 76 for a total affected area of approximately 40,880 square feet. The Project Area is bounded by Roosevelt Avenue to the north, the Long Island Railroad tracks to the southwest, and 63rd Street to the east. The Project Area has approximately 304 feet of frontage on Roosevelt Avenue and approximately 250 feet of frontage on 63rd Street. Frontage along Roosevelt Avenue is zoned R6/C1-4 at 100 feet in depth and the remainder of the Project Area is zoned R6. The Rezoning Area is improved with six buildings as explained in further detail below.

Lot 55 (61-26 Roosevelt Avenue) consists of a single-story retail building that contains 1,050 square feet of floor area (1.0 FAR) with two units. The lot contains approximately 46 feet of frontage on Roosevelt. The lot adjoins the Long Island Railroad tracks to the west.

Lot 56 (61-32 Roosevelt Avenue) is improved with a one-story building operating as a hardware store in 1,830 square feet of floor area. The lot has approximately 34 feet of frontage on Roosevelt Avenue. The majority, but not all, of Lot 56 is included within the Rezoning Area.

Lot 58 (62-02 Roosevelt Avenue) is improved with a two-story mixed-use building in 7,667 square feet of floor area. The lot contains approximately 31 feet of frontage on Roosevelt Avenue. The building is currently vacant but formerly contained an eating and drinking establishment on the first floor and offices on the second floor.

Lot 60 (62-04 & 62-26 Roosevelt Avenue) is improved with a one-story building containing 11,900 square feet. The parcel contains 193 feet of frontage on Roosevelt Avenue. The building contains eight local retail commercial tenants including a carpet store, laundry, furniture store, watch and jewelry repair shop, variety store, eating and drinking establishment, barber shop and photography store.

Lot 68 (39-50 63rd Street) is improved with a one-story building that a manufacturer of metal and glass with accessory office space. The building contains 11,960 square feet.

Lot 73 (39-56 63rd Street) is improved with a single-story building that contains 4,900 square feet of manufacturing space for metal stamping. The majority, but not all of, Lot 73 is included within the rezoning area.

Lot 76 (No mapped street address) is owned and operated by the Long Island Railroad and contains 3,088 square feet of area utilized as utility area with some parking.

PROJECT DESCRIPTION

VS PBS Venture 1, LLC and Mare Nostrum Elements, Inc. are co-applicants (collectively, the "Applicant") seeking a zoning map amendment and zoning text amendment (hereafter, the "Proposed Actions") to rezone the southwest corner of Roosevelt Avenue and 63rd Street (Block 1294, Lots 55, p/o 56, 58, 60, 68, p/o 73 and 76; hereafter, the "Rezoning Area") in the Woodside neighborhood of Queens, Community District 2. The Proposed Actions would rezone an R6 district with a C1-4 overlay measuring 100 feet deep from Roosevelt Avenue to a C4-4 zoning district. The Applicant also seeks a zoning text amendment to designate the Rezoning Area as a Mandatory Inclusionary Housing ("MIH") area.

The Proposed Actions would facilitate the development of a new 13-story mixed-use building on Lots 58, 60, 68 and 73 (the "Proposed Development") to contain 307,388 gsf. The Proposed Development would include 213 dwelling units in 181,912 gross square feet ("gsf") with 77,594 gsf of commercial area and 8,013 gsf of community facility space. 160 accessory off-street parking spaces would be provided. MIH Options 1 and 2 would be applied, coterminous with the Rezoning Area with the Applicant seeking to comply with the program through Option 2, which would require that 30% of the residential floor area (approximately 64 dwelling units) would be reserved as permanently affordable to households with incomes averaging at or below 80% of the Area Median Income (AMI).

Block 1294, Lots 55, p/o 56 and 76 would be directly affected by the Proposed Actions but are not under the Applicant's control.

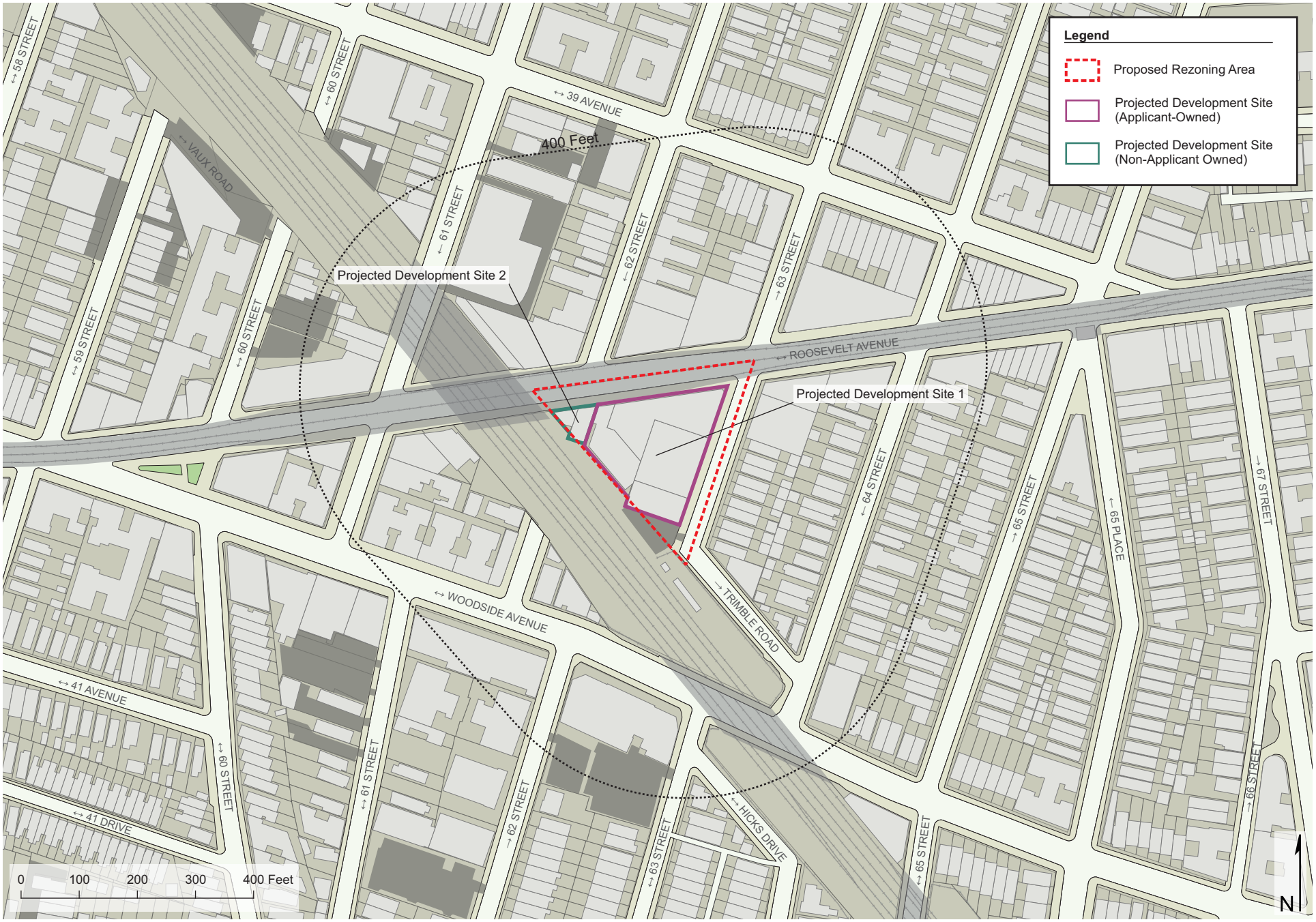
The zoning text amendment to Appendix F of the ZR would establish a Mandatory Inclusionary Housing (MIH) designated area over the Rezoning Area. The Applicant seeks MIH Option 2, under which at least 30 percent of the residential floor area must be associated with income-restricted residential units marketed exclusively to qualifying households, all of whom would have incomes not exceeding 130 percent of the income index cited in ZR Section 23-911, and with the weighted average of the income bands for the affordable units not exceeding 80 percent of the index[1].

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

Purpose and Need

Currently, the affected area is zoned R6 and R6/C1-4. The R6 district only permits residential and community facility uses (Use Groups 1-4) at a maximum of 2.43 (residential only) and 4.8 FAR with the inclusion of community facility space under height factor regulations. Quality housing regulations permit a maximum FAR of 3.0 on a wide street, such as Roosevelt Avenue. Under R6/C1-4 districts, commercial uses are permitted at a maximum of 2.0 FAR on the ground floor only.

[1] For the purposes of a conservative environmental analysis, the With-Action RWCDS assumes that 20% of units would be reserved as permanently affordable to households with incomes averaging at or below 80% of the AMI.


Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
400 Feet
Projected Development Site 2
Projected Development Site 1
↔ ROOSEVELT AVENUE
↔ 39 AVENUE
↔ WOODSIDE AVENUE
↔ 41 AVENUE
↔ 41 DRIVE
↔ VAUX ROAD
→ TRIMBLE ROAD
↔ HICKS DRIVE
← 58 STREET
← 59 STREET
← 60 STREET
← 61 STREET
← 62 STREET
→ 63 STREET
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→ 65 STREET
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→ 67 STREET
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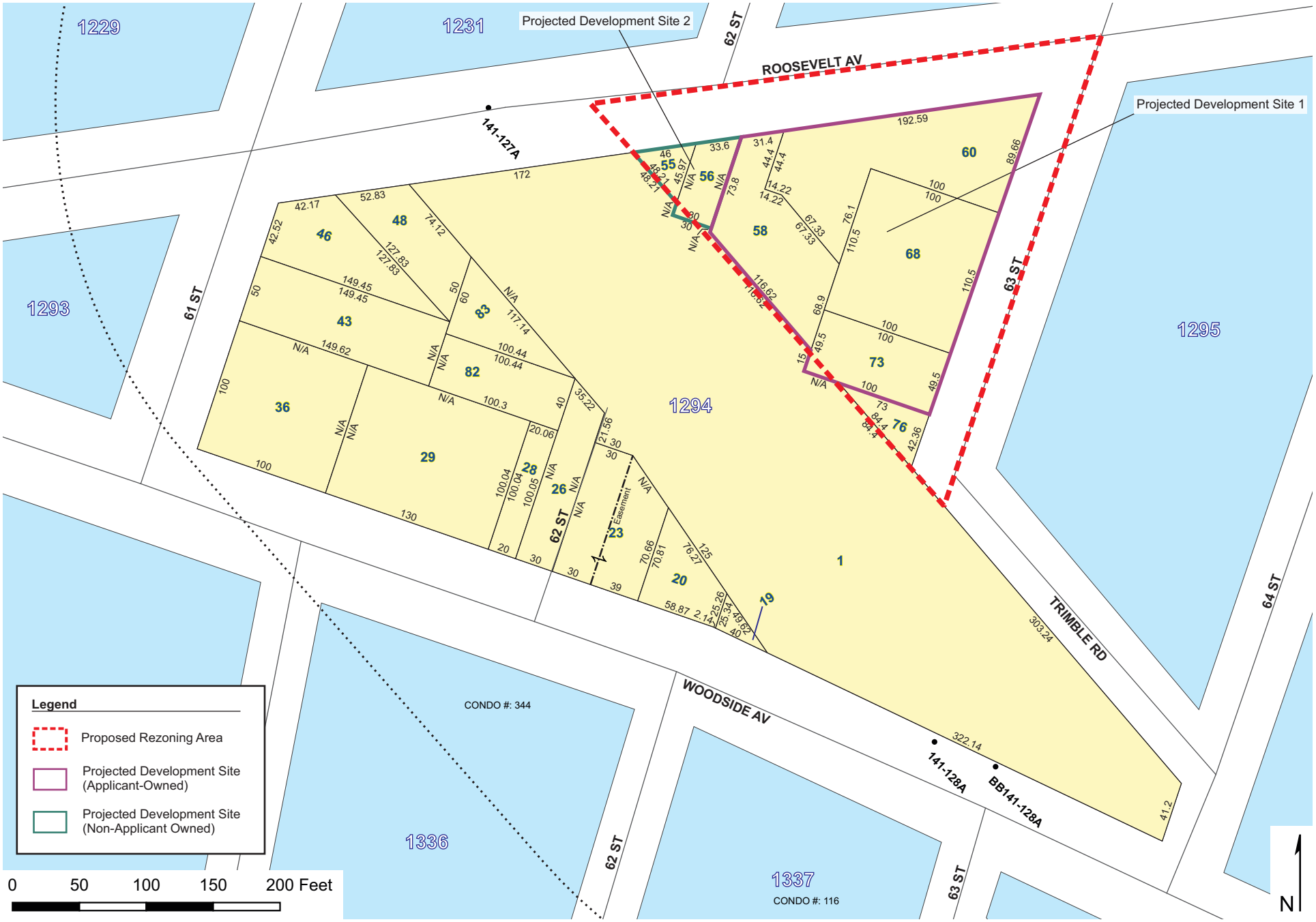
100
200
300
400 Feet
N



Data Source: MapPLUTO 2018v2, NYC DOF Digital Tax Map 02-19 downloaded from https://nycopendata.socrata.com

The proposed C4-4 zoning map amendment would permit a maximum residential FAR of 4.6 FAR with MIH (R7-2 equivalent) and would permit a greater range of commercial uses (Use Groups 5-6, 8-10 & 12) at a higher-density, with 3.4 FAR permitted for commercial uses, that would be more consistent with the increasingly vibrant and dense character of Roosevelt Avenue, while still permitting residential and community facility uses (Use Groups 1-4).

MIH would increase the maximum permitted residential FAR to 4.6 FAR (from 4.0 under quality housing) and permit a maximum height of 135 feet/13-stories (compared to 85 feet/8-stories) with the inclusion of affordable units pursuant to MIH requirements, a demonstrated local need.

As such, the Proposed Actions would facilitate the Proposed Development, which would result in a higher level of density consistent with the surrounding area, be located along a wide vibrant mixed-use thoroughfare in close proximity to transit and would facilitate new dwelling units for a range of incomes.

Analysis year

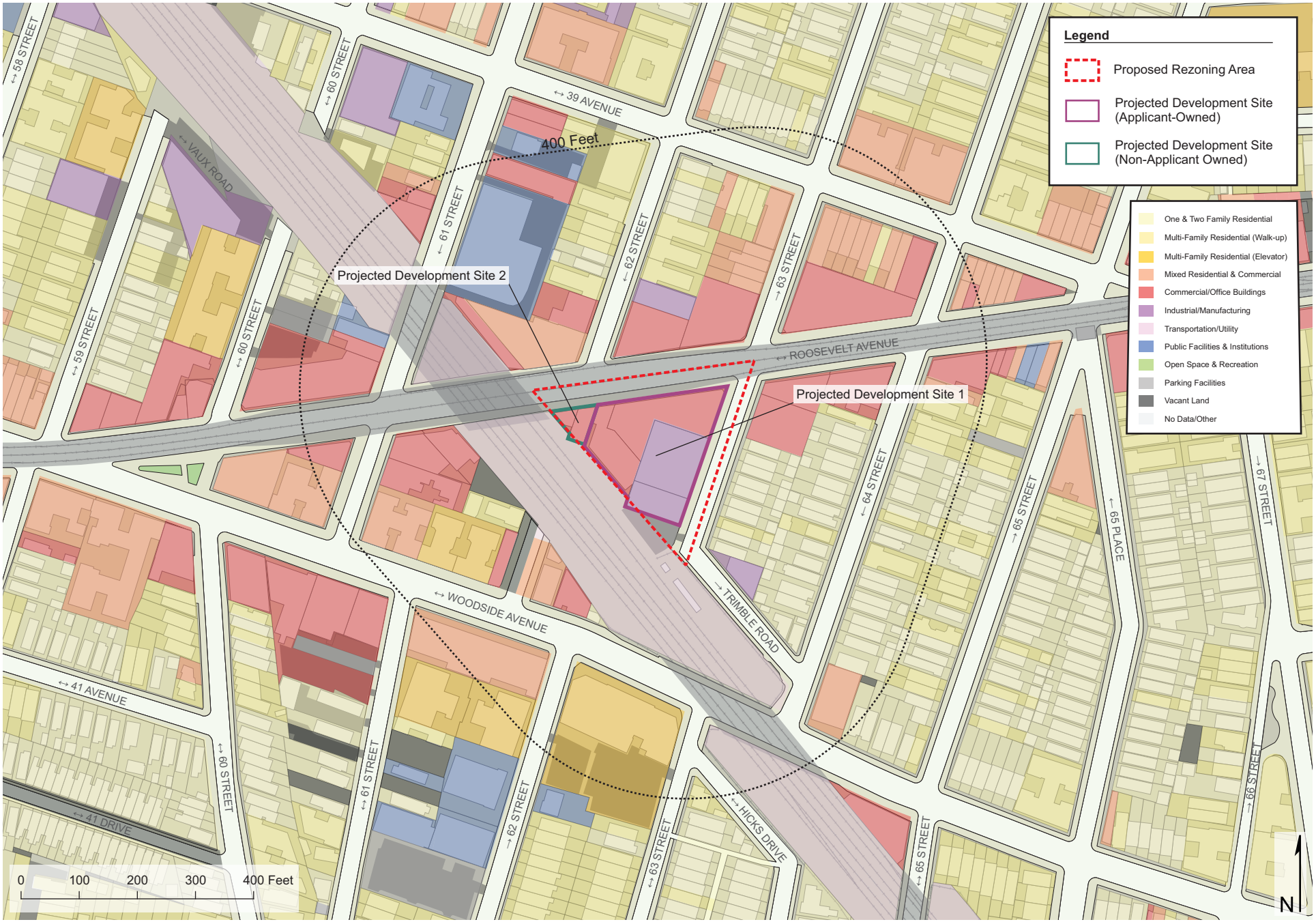
The approval process lasts approximately 12 months. Construction is anticipated to begin shortly after, lasting approximately 20 months for the Proposed Development. Approximately a month following the completion of the Proposed Development, it is anticipated that the remaining parcels within the Rezoning Area would begin construction lasting 12 months. Therefore, full occupation of all properties within the Rezoning Area is assumed as 2023.

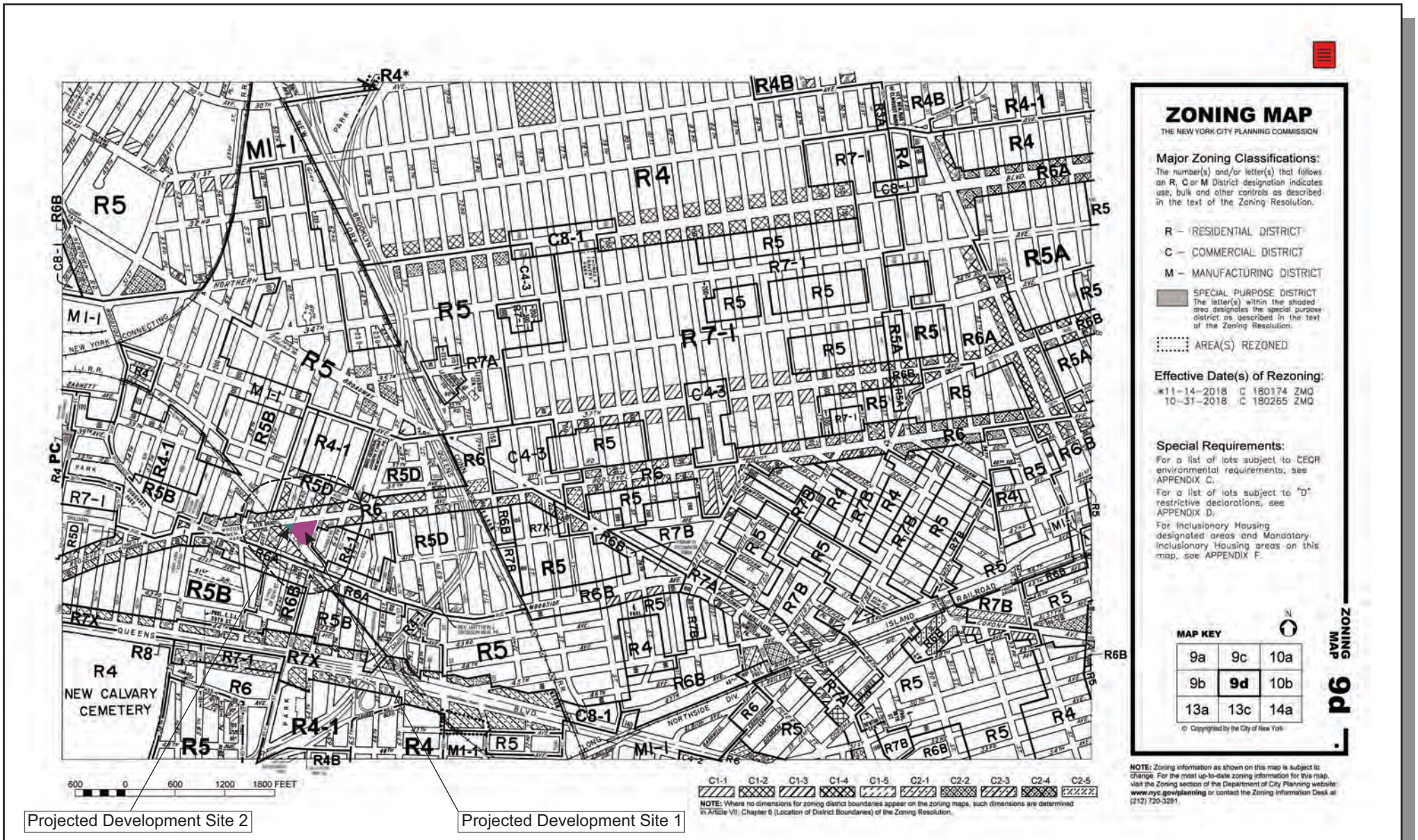
Development Sites

The Applicant seeks to redevelop their property with a mixed-use development. In addition to the Applicant's property, two additional (non-Applicant owned) lots are anticipated for development (Projected Development Site) as a result of the proposed rezoning. These sites consist of merged tax and zoning lots and are discussed further below.

Proposed & Projected Development Site No.	Block	Lot(s)[2]
Projected Development Site 1	1294	58, 60, 68 & 73
Projected Development Site 2	1294	55 & 56

[2] Lot 76 is not anticipated for development as a result of the Proposed Actions and is discussed in greater detail below.


Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
One & Two Family Residential
Multi-Family Residential (Walk-up)
Multi-Family Residential (Elevator)
Mixed Residential & Commercial
Commercial/Office Buildings
Industrial/Manufacturing
Transportation/Utility
Public Facilities & Institutions
Open Space & Recreation
Parking Facilities
Vacant Land
No Data/Other
400 Feet
Projected Development Site 2
Projected Development Site 1
↔ ROOSEVELT AVENUE
↔ 39 AVENUE
↔ WOODSIDE AVENUE
↔ 41 AVENUE
↔ 41 DRIVE
↔ VAUX ROAD
↔ HICKS DRIVE
→ TRIMBLE ROAD
↔ 58 STREET
↔ 59 STREET
↔ 60 STREET
↔ 61 STREET
↔ 62 STREET
→ 63 STREET
↔ 64 STREET
→ 65 STREET
↔ 65 PLACE
→ 66 STREET
→ 67 STREET
0 100 200 300 400 Feet
N


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:
*11-14-2018 C 180174 ZMQ
10-31-2018 C 180265 ZMQ
Special Requirements:
For a list of lots subject to CEQR environmental requirements, see APPENDIX C.
For a list of lots subject to "D" restrictive declarations, see APPENDIX D.
For Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas on this map, see APPENDIX F.
MAP KEY
9a 9c 10a
9b 9d 10b
13a 13c 14a
© Copyrighted by the City of New York
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.
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.
Projected Development Site 2
Projected Development Site 1


Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Projected Development Site 1
Projected Development Site 2
400 Feet
ROOSEVELT AVENUE
39 AVENUE
41 AVENUE
41 DRIVE
WOODSIDE AVENUE
TRIMBLE ROAD
HICKS DRIVE
VAUX ROAD
58 STREET
59 STREET
60 STREET
61 STREET
62 STREET
63 STREET
64 STREET
65 STREET
65 PLACE
66 STREET
67 STREET
0 100 200 300 400 Feet
N

Table 1 – Existing Conditions[3]

Block	Lot	Lot Area (sf)	Address	Land Use	# of Floors	Gross FA (sf)	FAR	Workers
1294	55	943	61-26 Roosevelt Avenue	Commercial	1	1,050	1.11	3
1294	56	1,830	61-32 Roosevelt Avenue	Commercial	1	1,830	1.00	5
1294	58	7,500	62-02 Roosevelt Avenue	Commercial (Vacant)	2	7,667	1.02	0
1294	60	11,950	62-04 & 62-26 Roosevelt Avenue	Commercial	1	11,900	1.00	46
1294	68	11,050	39-50 63rd Street	Industrial/Manufacturing	1	11,960	1.08	30
1294	73	4,950	39-56 63rd Street	Industrial/Manufacturing	1	4,900	0.99	5
1294	76	3,088	No Mapped Address	Transportation/Utility	0	0	0	0

Future No-Action Scenario

In the future without the Proposed Actions, the conditions are anticipated to remain. As such, the Future No-Action Scenario consists of the Existing Conditions, as noted in Table 1.

Future With-Action Scenario

In the future with the Proposed Actions, development is expected to occur within the rezoning area both on the applicant-owned site (Projected Development Site 1) and on a non-applicant-owned site (Projected Development Site 2) as described above in the section "Development Sites". In order to ensure a conservative environmental assessment, the analysis framework considers two with-action scenarios: a mixed-use scenario with residential, community facility and commercial uses (Scenario 1) and a mixed commercial and community facility use scenario (Scenario 2) that does not contain residential use. The scenarios below project development on all affected parcels of the Rezoning Area except Lot 76, which is owned and operated the Long Island Railroad. As such, this parcel is not anticipated for redevelopment in the future with the proposed actions. The Scenarios are outlined in greater detail below.

Scenario 1 (Mixed-Use: Residential-Commercial-Community Facility)

Projected Development Site 1 (the "Proposed Development"): Scenario 1 assess a 13-story mixed-use building (307,388 gsf) to contain 213 residential units (181,912 gsf), 77,584 gsf of commercial space (assumed as retail), and 8,013 gsf of community facility space (assumed as medical office) on Projected Development Site 1. Accessory parking would be provided in the building cellar: 75 residential accessory spaces, 78 commercial accessory spaces, and 8 community facility accessory spaces. The total FAR would be 5.70 where a mixed-use building of 6.5 is permitted (with the maximum inclusion of

[3] Worker assumptions include the following: Retail 1/333 sf; Office 1/250sf; Industrial 1/1000 sf; and Fast Food 1/100sf.

community facility space). This would include a residential FAR of 4.6 where 4.6 is permitted, a commercial FAR of 1.1 where 3.4 is permitted, and a community facility FAR of 0.01 where 6.5 is permitted. The building would rise to a maximum height of 135 feet.

Projected Development Site 2: Scenario 1 assesses a 13-story mixed-used building (16,132 gsf) to contain 12 residential units (14,443 gsf), 1,189 gsf of commercial space (assumed as retail), and 500 gsf of community facility space (assumed as a community meeting area) on Projected Development Site 2. The total FAR would be 4.99, with a residential FAR of 4.3 where 4.6 is permitted, a commercial FAR of 0.48 where 3.4 is permitted, and a community facility FAR of 0.2 where 6.5 is permitted. The building would rise to a maximum height of 135 feet. Off-street accessory parking requirements would be waived for this site.

It should be noted that the above two developments would not achieve the maximum amount of permitted FAR (6.5 FAR) with the inclusion of community facility space. This is due to lot coverage and maximum height restrictions under the proposed C4-4 district, with the buildings occupying the maximum building envelope at 135 feet prior to achieving the maximum FAR of 6.5 FAR. See Table 2 for further details.

Table 2 – Scenario 1[4]

Site 1	***Use***	***Workers***
24,287	Retail (GSF)	73
27,558	Retail (GSF)	83
25,749	Office (GSF)	103
8,013	Med-Office (GSF)	18
213	Residential (Units)	9
161	Parking (Spaces)	3
	Sub-total	**288**
Site 2	***Use***	***Workers***
1,189	Retail (GSF)	4
500	Community Facility (GSF)	2
12	Residential (Units)	1
-	Parking (Spaces)	0
	Sub-total	**5**
Total		**293**

[4] Worker assumptions include the following: Retail 1/333 sf; Office 1/250sf; General CF 1/333sf; Medical Office 1/450 sf; 1 superintendent per 25 dwelling units and 1 employee per 50 accessory parking spaces.

Scenario 2 (Commercial-Community Facility)

Projected Development Site 1: Scenario 2 assesses 12-story mixed-use building (297,745 gsf) to contain 87,589 gsf of commercial space (assumed as retail) and 169,687 gsf of community facility space (assumed as medical office) on Projected Development Site 1. Accessory parking would be provided in the building cellar. The total FAR would be 6.5 FAR where 6.5 FAR is permitted for a mixed-use building, with a commercial FAR of 1.7 where 3.4 is permitted, and a community facility FAR of 4.8 where 6.5 is permitted. The building would rise to a maximum height of 135 feet with 12-stories. 279 off-street accessory parking spaces would be provided at the cellar level (109 for commercial and 170 for medical office).

Projected Development Site 2: Scenario 2 assesses a 13-story mixed-used building (16,132 gsf) to contain 4,381 gsf of commercial space (assumed as retail), and 11,751 gsf of community facility space (assumed as medical office) on Projected Development Site 2. The total FAR would be 5.55 where 6.5 FAR is permitted, with a commercial FAR of 0.77 where 3.4 is permitted, and a community facility FAR of 4.77 where 6.5 is permitted. The building would rise to a maximum height of 135 feet. The building would not reach the maximum permitted FAR of 6.5 due to limitations on permitted bulk. Off-street accessory parking requirements would be waived for this site.

It should be noted that the above two developments would not achieve the maximum amount of permitted FAR (6.5 FAR) with the inclusion of community facility space. This is due to lot coverage and maximum height restrictions under the proposed C4-4 district, with the buildings occupying the maximum building envelope at 135 feet prior to achieving the maximum FAR of 6.5 FAR. See Table 3 for further details.

Table 3 – Scenario 2[5]

Site 1	***Use***	***Workers***
27,630	Retail (GSF)	83
31,995	Retail (GSF)	96
27,964	Office (GSF)	112
169,687	Med-Office (GSF)	377
-	Residential (Units)	0
279	Parking (Spaces)	6
	Sub-total	**674**
Site 2	***Use***	***Workers***
4,381	Retail (GSF)	13
11,751	Med-Office (GSF)	26
-	Residential (Units)	0
-	Parking (Spaces)	0
	Sub-total	**39**
Total		**713**

Affordability

For CEQR purposes, dwelling units are considered "affordable" if they are available exclusively to low- and moderate-income households with income not exceeding 80 percent of the Area Median Income (AMI). Because the income-restricted Inclusionary Housing units may include units available to middle-income households within specified income bands, not all of the income-restricted units would be considered affordable housing. It is conservatively assumed that 20 percent of the projected 225 dwelling units would be affordable - or 45 dwelling units.

Analysis Framework

Based on the two scenarios described above, the Proposed Actions would result in a net increase of 225 dwelling units, 45 of which would be affordable under Scenario 1, which represents the most conservative scenario for residential use. In terms of nonresidential uses, Scenario 2 consists of an incremental increase of 69,523 gsf of commercial use (local retail/office space) and 181,438 gsf of community facility use (medical office), which represents the most conservative scenario for nonresidential uses. Both scenarios would also result in a net loss of 16,860 square feet of manufacturing/industrial space. Scenario 2 would result in 279 off-street accessory parking spaces, which is greater than an increment of 161 accessory parking spaces under Scenario 1.

[5] Worker assumptions include the following: Retail 1/333 sf; Office 1/250sf; General CF 1/333sf; Medical Office 1/450 sf; 1 superintendent per 25 dwelling units and 1 employee per 50 accessory parking spaces.

In terms of additional residents and workers, Scenario 1 would generate a net increment of 603 new residents[6], while Scenario 2 would result in an increment of 623 new employees, as further detailed in the socioeconomics chapter (Chapter 5). See Table 4 below for further information.

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

Scenario 1				
Use (GSF)	**Existing Conditions**	**No-Action Condition**	**With-Action Condition**	**Increment**
Residential	0	0	196,335 (225 DU)	196,335 (225 DU)
Commercial	22,447	22,447	78,783	56,336
Community Facility	0	0	8,513	8,513
Industrial/Manufacturing	16,860	16,860	0	-16,860
Transportation/Utility	0	0	0	0
Workers	90	90	674	584
Residents	0	0	597	597

Scenario 2				
Use (GSF)	**Existing Conditions**	**No-Action Condition**	**With-Action Condition**	**Increment**
Residential	0	0		0
Commercial	22,447	22,447	91,970	69,523
Community Facility	0	0	181,438	181,438
Industrial/Manufacturing	16,860	16,860	0	-16,860
Transportation/Utility	0	0	0	0
Workers	90	90	713	623
Residents	0	0	0	0

[6] Residents are calculated based on 225 dwelling units with an average household size of 2.68 persons (based Queens Community Board 2, U.S. Census ACS 2014-2018). This study area was utilized as it most closely aligns with the boundaries of the study area, as further noted in the chapters of the EAS.



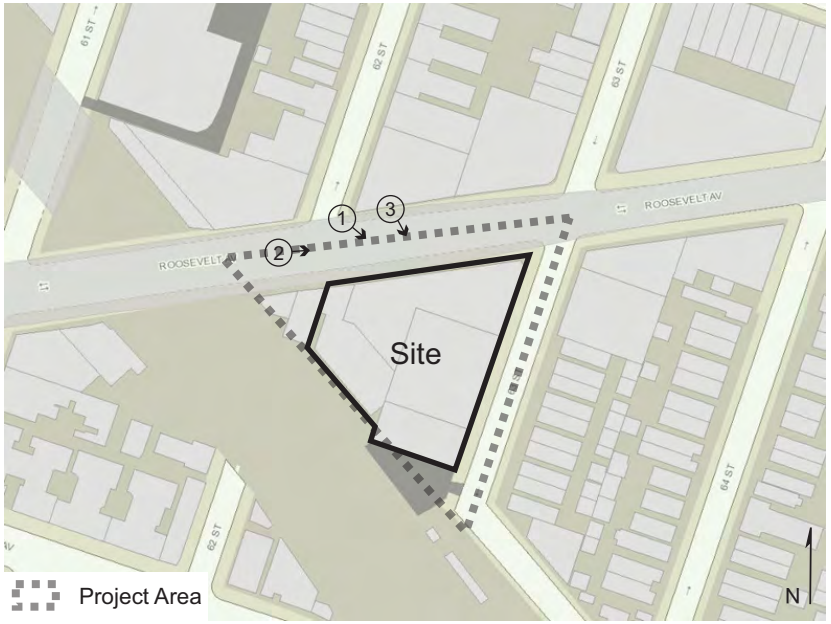
1. View of the Site facing southeast from Roosevelt Avenue.



2. View of Roosevelt Avenue facing east from 62nd Street (Site at right).



3. View of the Site facing southeast from Roosevelt Avenue.





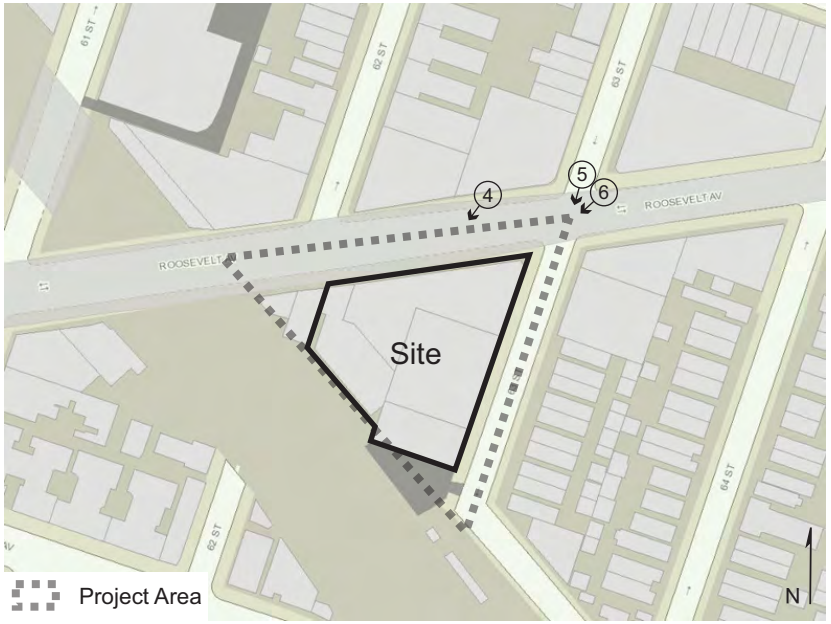
4. View of the Site facing southwest from Roosevelt Avenue.



5. View of 63rd Street facing south from Roosevelt Avenue (Site at right).



6. View of the Site facing southwest from the intersection of Roosevelt Avenue and 63rd Street.





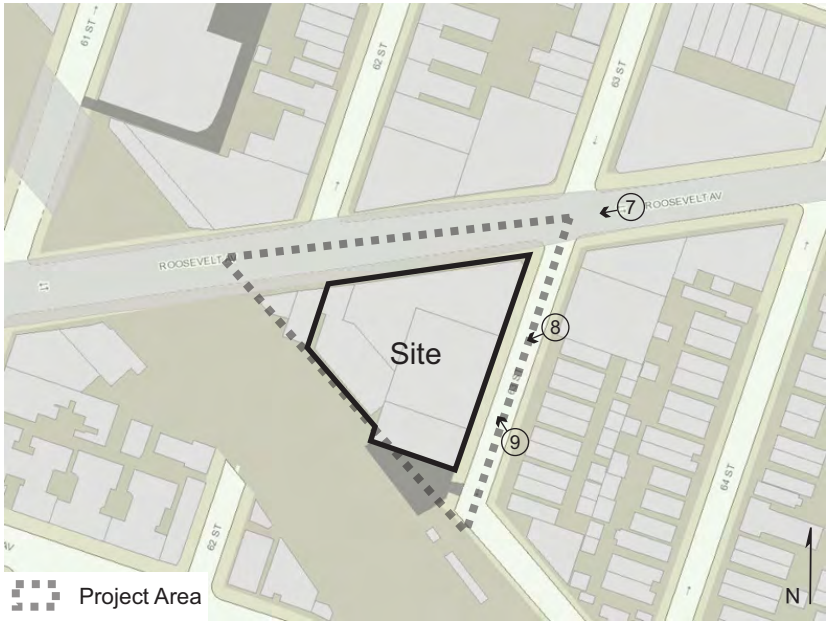
7. View of Roosevelt Avenue facing southwest from 63rd Street.



8. View of the Site facing southwest from 63rd Street.



9. View of the Site facing northwest from 63rd Street.





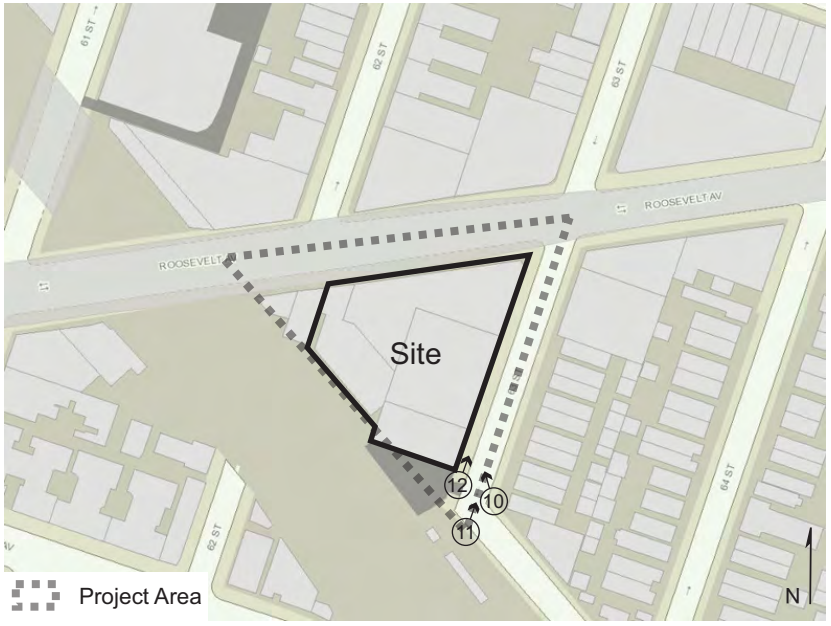
10. View of the Site facing northwest from the intersection of 63rd Street and Trimble Road.



11. View of 63rd Street facing northeast from Trimble Road (Site at left).



12. View of the sidewalk along the west side of 63rd Street facing north (Site at left).





13. View of Trimble Road facing southeast from the Site.



14. View of the east side of 63rd Street facing east from the Site.



15. View of the sidewalk along the west side of 63rd Street facing south from Roosevelt Avenue (Site at right).





16. View of the intersection of Roosevelt Avenue and 63rd Street facing northeast from the Site.



17. View of the sidewalk along the south side of Roosevelt Avenue facing west from 63rd Street (Site at left).



18. View of the north side of Roosevelt Avenue facing northwest from the Site.





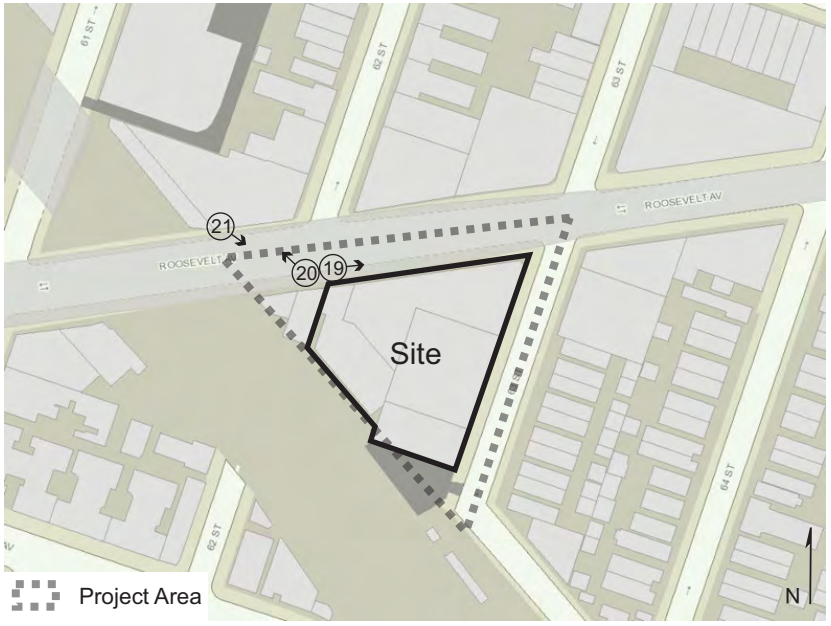
19. View of the north side of Roosevelt Avenue facing northwest from the Site.



20. View of the sidewalk along the south side of Roosevelt Avenue facing east (Site at left).



21. View of the Project Area facing southeast from Roosevelt Avenue.





22. View of the Project Area facing south from Roosevelt Avenue.



23. View of the Project Area facing southwest from Roosevelt Avenue.



SECTION III – TECHNICAL ANALYSES

INTRODUCTION

Based on the analysis and the screens contained in the Environmental Assessment Statement Short Form, the analysis areas that require further explanation include Land Use, Zoning, and Public Policy; Socioeconomics; Community Facilities; Open Space, Shadows; Historic and Cultural Resources; Urban Design and Visual Resources; Hazardous Materials; Transportation; Air Quality; Noise; Neighborhood Character; Public Health; and Construction as further detailed below. The subject heading numbers below correlate with the relevant chapters of the *CEQR Technical Manual*.

4. LAND USE, ZONING AND PUBLIC POLICY

I. INTRODUCTION

The analysis of land use, zoning and public policy characterizes the existing conditions of the Development Sites and the surrounding study area; anticipates and evaluates those changes in land use, zoning and public policy that are expected to occur independently of the proposed project; and identifies and addresses any potential impacts related to land use, zoning and public policy resulting from the project. Various sources have been used to prepare a comprehensive analysis of land use, zoning and public policy characteristics of the area, including field surveys, studies of the neighborhood, census data, and land use and zoning maps.

Land Use Study Area

In order to assess the potential for project related impacts, the land use study area has been defined as the area located within a 400-foot radius of the site, which is an area within which the proposed project has the potential to affect land use or land use trends. The 400-foot radius study area is generally bounded by an area with 39th Avenue to the north; 60th Street to the west; Woodside Avenue to the south; and 65th Street to the east (See **Figure 4-1** – Land Use Map).

II. Land Use

Site Description

As noted in the Project Description, the Project Area is bounded by Roosevelt Avenue to the north, the Long Island Railroad tracks to the southwest, and 63rd Street to the east. The Project Area affects 7 tax and zoning lots (Block 1294, Lots 55, 56, 58, 60, 68, 73 and 76). See **Table 4-1** more detailed about the specific affected properties of the Rezoning Area.

Table 4-1 – Existing Conditions

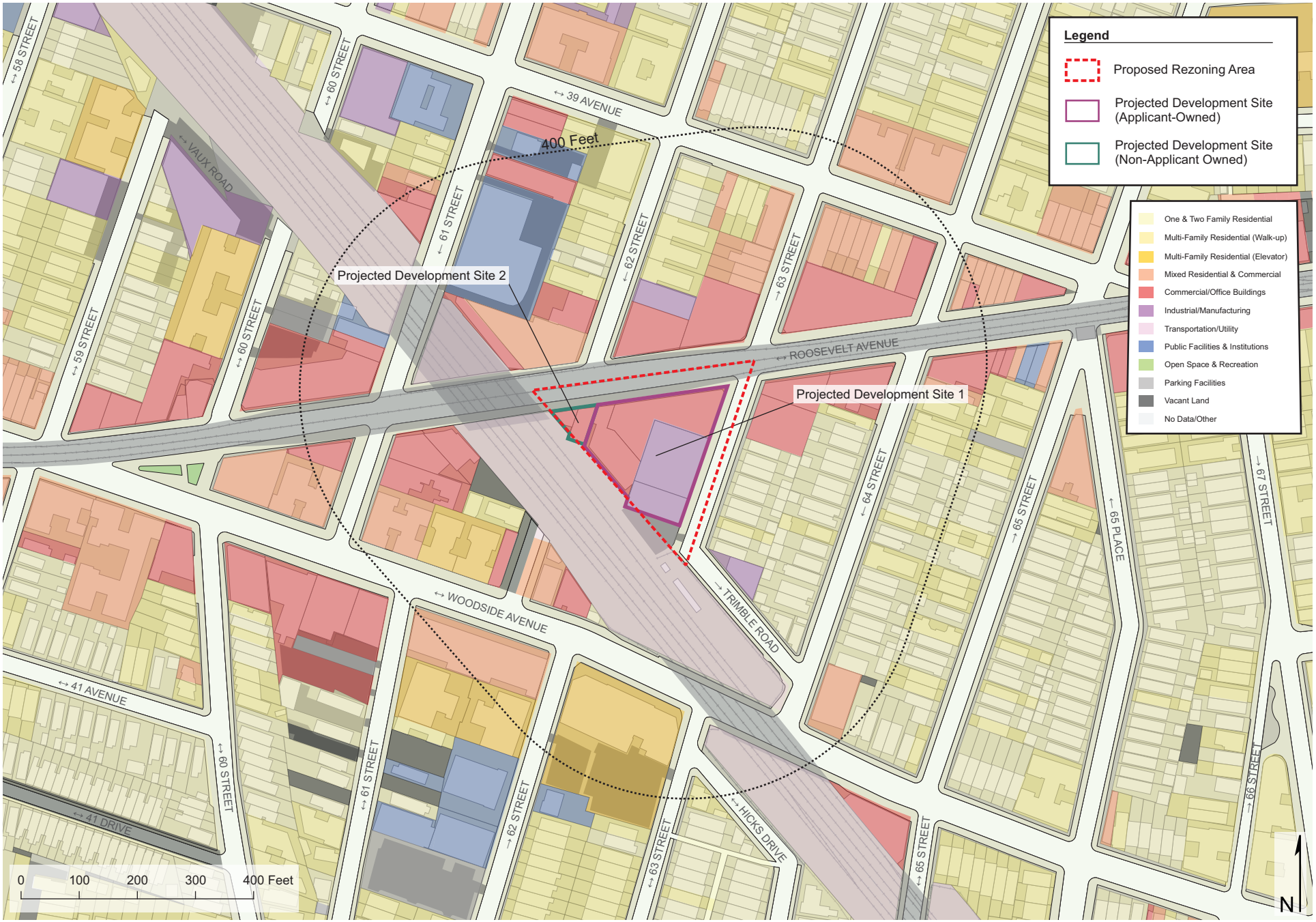
Block	Lot	Lot Area (sf)	Address	Land Use	# of Floors	Gross FA (sf)	FAR
1294	55	943	61-26 Roosevelt Avenue	Commercial	1	1,050	1.11
1294	56	1,830	61-32 Roosevelt Avenue	Commercial	1	1,830	1.00
1294	58	7,500	62-02 Roosevelt Avenue	Commercial (Vacant)	2	7,667	1.02
1294	60	11,950	62-04 & 62-26 Roosevelt Avenue	Commercial	1	11,900	1.00
1294	68	11,050	39-50 63rd Street	Industrial/Manufacturing	1	11,960	1.08
1294	73	4,950	39-56 63rd Street	Industrial/Manufacturing	1	4,900	0.99
1294	76	3,088	No Mapped Address	Transportation/Utility	0	0	0

Surrounding Area

The affected area is located in the Woodside neighborhood of Queens Community District 2. The Project Area's block is comprised of mixed residential and commercial uses. The larger surrounding area includes commercial and transportation-related uses, multiple dwellings, one- and two-family residences and public facilities and institutions.

Properties to the west along both sides of Roosevelt Avenue consist of one-story convenience retail and service establishments located in an R6/C1-4 district, including a bakery, beauty salons, eating and drinking establishments, a hardware store and office buildings. Several six-story buildings exist one block west of the Project Area in R6, R6/C1-4 and R5B districts. Along or near Woodside Avenue are four six-story multiple dwellings in an R6/C1-4 district. Two blocks west of the Project Area, in an R5B district, is another six-story multiple dwelling containing 105 dwelling units.

Two blocks south of the Project Area, in an R6B district, are two additional six-story multiple dwellings each containing 56 units, fronting on 61st and 62nd Streets. Also, to the south in an R6A/C1-3 district, are four- and five-story multiple dwellings and a four-story office building fronting on Woodside Avenue in the area between 61st and 63rd Streets. To the south is a parking lot owned by the Long Island Railroad (LIRR), along with a right-of-way area, and the LIRR Woodside station.


Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
One & Two Family Residential
Multi-Family Residential (Walk-up)
Multi-Family Residential (Elevator)
Mixed Residential & Commercial
Commercial/Office Buildings
Industrial/Manufacturing
Transportation/Utility
Public Facilities & Institutions
Open Space & Recreation
Parking Facilities
Vacant Land
No Data/Other
400 Feet
Projected Development Site 2
Projected Development Site 1
↔ ROOSEVELT AVENUE
↔ 39 AVENUE
↔ WOODSIDE AVENUE
↔ 41 AVENUE
↔ 41 DRIVE
↔ VAUX ROAD
↔ HICKS DRIVE
→ TRIMBLE ROAD
↔ 58 STREET
↔ 59 STREET
↔ 60 STREET
↔ 61 STREET
↔ 62 STREET
→ 63 STREET
↔ 64 STREET
→ 65 STREET
↔ 65 PLACE
→ 66 STREET
→ 67 STREET
0 100 200 300 400 Feet
N

Properties to the east along both sides of Roosevelt Avenue consist of one- and two-story convenience retail and service establishments in an R6/C1-4 district, including grocery stores, a supermarket, a liquor store and drug stores. The two blocks to the west of the Project Area consist mainly of two-family semi-detached residential buildings in an R4-1 district.

North of the Project Area beyond Roosevelt Avenue are multiple dwellings ranging in height between three and five-stories and some one- and two-family residences, along with some three-story attached residences in an R5D district.

Along 39th Avenue are three multiple dwellings ranging in height between four and six-stories containing 42 dwelling units, 41 dwelling units and 85 dwelling units, respectively, in an R5D and R5D/C1-4 district. A single-story branch of the U.S. Postal Service and house of worship are located on 61st Street in an R5D/C1-4 district.

In terms of open space, small pedestrian plazas, the Carl L. Sohncke Square and Woodside Plaza, are located at the east and west sides of 59th Street at the intersection of Woodside Avenue and Roosevelt Avenue. Public parkland managed by the Department of Parks and Recreation (DPR) includes Doughnoy Park, a 1.71-acre park, and the adjoining Lawrence Virgilio Playground, a 3.01-acre park, which are approximately a half mile northwest of the Project Area on Woodside Avenue 56th Street and 39th Road. Hart Playground is also approximately a half mile northeast of the Project Area at 37th Avenue and 65th Street. Big Bush Park, a 2.5-acre park, is located approximately a half mile from the Project Area on Laurel Hill Boulevard between 61st and 64th Streets. In terms of private open space, Calvary Cemetery is located about one mile southwest of the Project Area at Queens Boulevard between 51st and 58th Streets.

The elevated No. 7 subway train runs above Roosevelt Avenue and has a station at Woodside – 61st Street. The LIRR Woodside station is also located nearby at Roosevelt Avenue and 61st Street. The westbound Q32, and the terminus for the Q53 and Q70-SBS express service, are on Roosevelt Avenue west of the intersection. The eastbound Q32 is across 63rd Street on the south side of Roosevelt Avenue. Accordingly, the Project Area is located within a Transit Zone.

Future No-Action (No-Build) Scenario

Absent the proposed action, the properties within the Project Area would remain in their current condition and the Project Area would continue to contain a mix of commercial and industrial uses.

No major new developments are anticipated within the land use study area by the project Analysis Year of 2023. The surrounding land uses include residential, commercial, community facility and some light manufacturing/industrial uses. These uses are expected to remain unchanged by the Projected Analysis year of 2023 absent the Proposed Actions.

With-Action (Build) Scenario

In the future with the Proposed Actions, the Project Area is anticipated for redevelopment with higher density commercial, community facility and residential uses. The Proposed Actions include a zoning map amendment from R6 and R6/C1-4 to C4-4, as well as a zoning text amendment to make the affected area subject to the MIH Program. The Proposed C4-4 district would increase the range of uses for the entire Project Area from residential, community facility and limited neighborhood retail uses (Use Groups 1-6) to include those uses as well as a wider range of commercial uses, including uses classified under Use Groups 8, 9, 10 and 12, which are intended for commercial and transit hubs. Given the range of uses permitted under this new density, two scenarios are assumed, as noted above in the Project Description. The first scenario (Scenario 1) would consist of two mixed-use buildings that would consist of 196,335 square feet of residential use (225 dwelling units), 78,783 square feet of commercial use (office and local retail), as well as 8,513 square feet of medical office use. The second scenario (Scenario 2) would consist of 91,970 square feet of commercial use (office and local retail) and 181,438 square feet of medical office use.

Conclusion

The Proposed Actions are not anticipated to result in land uses that are significantly different from surrounding uses. The proposed district allows commercial and community facility uses that serve the needs of residents and fit within the context of the existing uses along and near Roosevelt Avenue, a commercial corridor that includes restaurants, retail stores and supermarkets.

Table 4-2 - Zoning Comparison Table

Roosevelt Rezoning

	Existing Zoning (R6)		Existing Zoning (R6/C1-4)		Proposed Zoning C4-4 (Under MIH Zoning)	
	ZR Section #	**R6**	**ZR Section #**	**R6/C1-4**	**ZR Section #**	**C4-4**
USE GROUPS	22-10	1, 2, 3, 4	22-10/32-10	1-6	22-10/32-10	1-10
MAXIMUM FAR						
Residential	23-153/23-151	3.0[1] (QH), 2.2[2] (QH), 2.36 (HF)	23-153/23-151	3.0[1] (QH), 2.2[2] (QH), 2.36 (HF)	35-20/23-154*	4.6
Affordable Independent Residences for Seniors	23-155	3.9	23-155	3.9	35-012/23-155	5.01
Community Facility	24-11	4.8	33-121	4.8	35-31/33-123	6.5
Commercial	n/a	n/a	33-121	2	35-31/33-122	3.4
Commercial and Community Facility	n/a	n/a	33-121	4.8	35-31/33-123	6.5
Manufacturing	n/a	n/a	n/a	n/a	n/a	n/a
YARDS						
Minimum Front Yard	n/a	n/a	n/a	n/a	n/a	n/a
Minimum Side Yard	23-462	None or 8'	34-232/23-462	None or 8'	34-232/23-462	None or 8'
Minimum Rear Yard	23-47	30'	33-26/23-47	30', 20' (Commercial)	33-26/23-47	30' / 20' (Commecial)
HEIGHT AND SETBACKS						
Minimum Base Height	23-662	40' (QH)[1], 30' (QH)[2]	35-22/35-65/35-652/23-662	40' (QH)[1], 30' (QH)[2]	35-65/35-652/23-662	40'
Maximum Base Height	23-662	65' (QH)[1], 45' (QH)[2]	35-22/35-65/35-652/23-662	65' (QH)[1], 45' (QH)[2]	35-65/35-652/23-664*	75'
Maximum Building Height	23-662	70' (QH)[1], 55' (QH)[2]	35-22/35-65/35-652/23-662	70' (QH)[1], 55' (QH)[2]	35-65/35-652/23-664*	135'/13-Stories
Maximum Height of Front Wall	23-662	65' (QH)[1], 45' (QH)[2]	35-22/35-65/35-652/23-662	65' (QH)[1], 45' (QH)[2]	35-65/35-652/23-664*	75'
Sky Exposure Plane	23-641	2.7:1 narrow / 5.6:1 wide (HF)	35-22/23-641	2.7:1 narrow / 5.6:1 wide (HF)	n/a	n/a
Setbacks from Narrow Streets	23-641/23-662	15' (QH), 20' (HF)	35-22/23-641/23-662	15' (QH), 20' (HF)	35-65/35-652/23-662	15'
Setbacks from Wide Streets	23-641/23-662	10' (QH), 15' (HF)	35-22/23-641/23-662	10' (QH), 15' (HF)	35-65/35-652/23-662	10'
OPEN SPACE						
Minimum Open Space Ratio	23-151	Varies	35-22/23-151	Varies	n/a	n/a
LOT COVERAGE						
Interior/Through Lot	23-153	65% (QH)	35-23/23-153	65% (QH)	35-23/23-153	65% (QH)
Corner Lot	23-153	100% (QH)	35-23/23-153	100% (QH)	35-23/23-153	100% (QH)
DENSITY						
Maximum Number of Dwelling Units	23-22	680 sf/DU max	35-40/23-22	680 sf/DU max	35-40/23-22	680 sf/DU
Affordable Independent Residences for Seniors	23-23	325 sf/DU max	35-40/23-23	325 sf/DU max	35-40/23-23	325 sf/DU max
PARKING						
Residential	25-23	50% (QH), 70% (HF)	25-23	50% (QH), 70% (HF)	25-23	50%
Commercial	n/a	n/a	36-21	By Use	36-21	By Use
Income-Restricted Housing Units	12-10/25-251	None (Transit Zone)	12-10/25-251	None (Transit Zone)	12-10/25-251	None (Transit Zone)
Affordable Independent Residences for Seniors	12-10/25-252	None (Transit Zone)	12-10/25-252	None (Transit Zone)	12-10/25-252	None (Transit Zone)
Government Assisted Dwelling Units	12-10/25-253	35% (QH) / 55% (HF)	12-10/25-253	35% (QH) / 55% (HF)	12-10/25-253	25%
LOADING						
Commercial	n/a	n/a	36-62	By Use	36-62	By Use
Bicycle Parking (Residential)	25-80	1 per 2 dwelling units (UG-2)	25-80	1 per 2 dwelling units (UG-2)	25-80	1 per 2 dwelling units (UG-2)
Bicycle Parking (AIRS)	25-80	1 per 10,000 sf	25-80	1 per 10,000 sf	25-80	1 per 10,000 sf
Bicycle Parking (Commercial/Manufacturing)	n/a	n/a	36-70	By Use	36-70	By Use

* When providing affordable housing pursuant to the Inclusionary Housing Program as set forth in ZR Section 23-90

[1] Within 100' of a wide street

[2] Beyond 100' of a wide street

The Project Area is an appropriate location for additional density because it is located at a significant transit nexus. The Project Area lies within a Transit Zone, which is an area of the city beyond the Manhattan Core within one-half mile of a subway station where auto ownership rates are among the lowest in the city. The elevated No. 7 subway train is easily reached on Roosevelt Avenue at the Woodside – 61st Street station. The LIRR Woodside station is located nearby at Roosevelt Avenue and 61st Street. The westbound Q32, and the terminus for the Q53 and Q70-SBS stop, are on Roosevelt Avenue west of the intersection. The eastbound Q32 is across 63rd Street on the south side of Roosevelt Avenue. In addition, as outlined above, the surrounding area contains a range of densities and the proposed density would be consistent with a high concentration of multi-unit residential buildings in close proximity.

No potentially significant adverse impacts related to land use are expected to occur as a result of the Proposed Actions. Therefore, further analysis of land use is not warranted.

III. Zoning

Existing Conditions

The Rezoning Area includes an R6 and R6/C1-4 district. Within 400-feet are R4-1, R5B, R5D, R6B, R6A districts as well as R5D/C1-4 and R6A/C1-3 mixed-use districts.

R6 is a residential district widely mapped in built-up, medium density areas of the city. The R6 zoning district under Height Factor regulations allows a maximum FAR from 0.78 to 2.43 for residential use; the required open space ratio (OSR) ranges from 27.5 to 37.5 percent. The height factor regulations for R6 districts encourage small apartment buildings on small zoning lots, and tall, narrow buildings that are set back from the street on larger lots. Quality Housing regulations encourage buildings with higher lot coverage set at or near the street line. Height limitations ensure that these buildings are often more compatible with older buildings in the neighborhood. As an incentive for developers to choose the Quality Housing option, a higher floor area ratio (3.0 FAR), and therefore, more apartments, is permitted for buildings on or within 100 feet of a wide street than would be permitted under height factor regulations. For height factor buildings, 70% of dwelling units require parking, while for Quality Housing buildings, 50% of dwelling units require parking.

The R4-1 district primarily permits contextual one and two-family detached and semi-detached houses at a maximum FAR of 0.75, with an attic allowance of 20%. Front yards of 10 feet and rear yards 30 feet are required, with side yards of at least four feet. The maximum building height is 35 feet and one parking space is required per dwelling unit.

The R5B contextual zoning district is a residential district that primarily consists of three-story row houses. It also permits detached and semi-detached buildings. The R5B district allows a maximum FAR of 1.35 for residential use; the maximum allowable lot coverage is 55 percent. The maximum height is 33 feet and parking is required for approximately 66% of dwelling units.

R5D is a contextual district mapped along growth corridors and in some auto-dependent areas of the city. They serve as a transition between lower-density districts and moderate-density districts by incorporating the lot area, lot width and building envelope of R5B districts with certain aspects of the Quality Housing Program available. R5D districts have a maximum floor area ratio (FAR) of 2.0, a height limitation of 40 feet. The minimum lot width for single- and two-family detached houses is 25 feet; side yards are not required for lots less than 30 feet wide. Zero lot line buildings are permitted. Off-street parking, which is not permitted in front of the building, is required for 66% of all dwelling units. Curb cuts are not permitted on a wide street if the zoning lot also fronts on a narrow street.

The R6A zoning district is a contextual district with a maximum residential FAR of 3.0. Quality Housing regulations are mandatory in this district. Above a maximum base height of 60 feet, the building must set back by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 70 feet. Off-street parking is required for 50% of a building's dwelling units or can be waived if five or fewer spaces are required. R6B districts are similar to R6A districts but have a maximum FAR of 2.0 and are set back from the street with stoops and small front yards. R6B districts typically produce four to five-story buildings. The base height of a new building before setback must be between 30 and 40 feet before rising to a maximum height of 50 feet.

R5D/C1-4, R6/C1-4 district and R6A/C1-3 are mixed-use districts that permit the underlying residential and community facility regulations, in addition to limited

neighborhood commercial uses (Use Groups 5 & 6). The R5D/C1-4 district permits a commercial FAR of 1.0, while the R6/C1-4 district and R6A/C1-3 districts permit a commercial FAR of 2.0. C1-3 districts require one accessory off-street parking space per 150 square feet of commercial floor area, while C1-4 districts require one accessory off-street parking space per 100 square feet of commercial floor area.

A portion of the 400-foot study area (to east across 65th Street) is within the boundaries of the Food Retail Expansion to Support Health (FRESH) program and qualifies for zoning and tax incentives. The City has established the FRESH program in response to the issues raised in neighborhoods that are underserved by grocery stores. FRESH provides zoning and financial incentives to promote the establishment and retention of neighborhood grocery stores in underserved communities throughout the five boroughs. The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator.

Future No-Action (No-Build) Scenario

In the future and absent the action, development within the Project Area would continue to be governed by the provisions of the existing R6 and R6/C1-4 zoning districts. Additionally, the proposed developments and uses are anticipated to remain in their existing condition in the Rezoning Area and surrounding area. No changes are anticipated to the zoning districts and zoning regulations relating to the Rezoning Area or the surrounding 400-foot radius by the project Analysis Year of 2023.

Future With-Action (Build) Scenario

In the future with the Proposed Actions, the Rezoning Area is anticipated for redevelopment under the proposed C4-4 zoning district with MIH. The proposed C4-4 district allows for the development of a building envelope with a low base height and setbacks that are compatible with the adjacent elevated subway line. The applicable residential bulk regulations in C4-4 districts are the bulk regulations for R7-2 districts. Maximum FAR for an MIH development is 4.6. The maximum allowable community facility FAR is 6.5. The maximum allowable commercial FAR is 3.4. In C4-4 districts, the height of a MIH development within 10' of a wide street and 15' of a narrow street is limited to a maximum base height of 75' and a maximum building height of 135', or 13

stories, whichever is less. Maximum lot coverage is 100% on corner lots and 65% on the interior and through lot portions of the zoning lot.

Front yards are not required. Side yards are not required; however, an open area must have a minimum width of 8'. A rear yard measuring a minimum depth of 30 feet must be provided for buildings containing residential or community facility uses, except that no rear yard is required within 100 feet of a corner. A rear yard measuring a minimum depth of 20 feet must be provided for commercial uses, except that no rear yard is required within 100 feet of a corner and portions of buildings used for permitted uses other than residences not exceeding one story or 23' above curb level is a permitted obstruction within the rear yard.

Accessory off-street parking spaces are required for at least 50% of the dwelling units in a Quality Housing building and for 70% of the dwelling units in all other buildings, except that no accessory off-street parking spaces are required for income restricted housing units within a Transit Zone. Required parking for community facility uses varies according to the use; one space required for every 1,000 square feet of floor area in medical offices classified under Use Group 4. One parking space is required for every 1,000 square feet of general retail or service use floor area.

In the future with the Proposed Actions, the Project Are is anticipated for redevelopment with two mixed-use buildings, pursuant to the proposed C4-4 zoning district under MIH. As noted above and in the Project Description, two scenarios are assumed. The first, (Scenario 1) would comply with the proposed C4-4 zoning district with 213 residential units (181,912 gsf), 77,584 gsf of commercial space (assumed as retail), and 8,013 gsf of community facility space (assumed as medical office). Accessory parking would be provided in the building cellar: 75 residential accessory spaces, 78 commercial accessory spaces, and 8 community facility accessory spaces. The total FAR would be 5.70 where a mixed-use building of 6.5 is permitted (with the maximum inclusion of community facility space). This would include a residential FAR of 4.6 where 4.6 is permitted, a commercial FAR of 1.1 where 3.4 is permitted, and a community facility FAR of 0.01 where 6.5 is permitted. The building would rise to a maximum height of 135 feet. The second building (Projected Development Site 2) would contain 17 residential units (14,443 gsf), 1,189 gsf of commercial space (assumed as retail), and 500 gsf of community facility space (assumed as a community meeting area) on a 2,461 square foot lot. The total FAR would be 4.99, with a residential FAR of 4.3 where 4.6 is permitted, a commercial FAR of

0.48 where 3.4 is permitted, and a community facility FAR of 0.2 where 6.5 is permitted. The building would rise to a maximum height of 135 feet.

Under a second scenario (Scenario 2), two mixed-use buildings containing commercial and community facility use are anticipated for development. The first building on Projected Development Site one would contain 87,589 gsf of commercial space (assumed as retail) and 169,687 gsf of community facility space (assumed as medical office). Accessory parking would be provided in the building cellar. The total FAR would be 6.5 FAR where 6.5 FAR is permitted for a mixed-use building, with a commercial FAR of 1.7 where 3.4 is permitted, and a community facility FAR of 4.8 where 6.5 is permitted. The building would rise to a maximum height of 135 feet with 12-stories. 279 off-street accessory parking spaces would be provided at the cellar level (109 for commercial and 170 for medical office).A second building (Projected Development Site 2) would contain 4,381 gsf of commercial space (assumed as retail), and 11,751 gsf of community facility space (assumed as medical office) The total FAR for Projected Development Site 2 would be 5.55 where 6.5 FAR is permitted, with a commercial FAR of 0.77 where 3.4 is permitted, and a community facility FAR of 4.77 where 6.5 is permitted. The building would rise to a maximum height of 135 feet. The building would not reach the maximum permitted FAR of 6.5 due to limitations on permitted bulk. Off-street accessory parking requirements would be waived for this site.

The required zoning text amendment to Appendix F of the ZR (Option 2) would establish a Mandatory Inclusionary Housing (MIH) designated area over the Rezoning Area. MIH Options 1 and 2 would be mapped. The Proposed Development would satisfy the requirements of MIH Option 2, under which at least 30 percent of the residential floor area must be associated with income-restricted residential units marketed exclusively to qualifying households, all of whom would have incomes not exceeding 130 percent of the income index cited in ZR Section 23-911, and with the weighted average of the income bands for the affordable units not exceeding 80 percent of the index. This would result in approximately 64 permanently affordable dwelling units for compliance under the Proposed Development with the regulations of Section 23-154 of the Zoning Resolution.

However, for analysis purposes (as further detailed under the analysis framework), it is conservatively assumed that 20 percent of the anticipated 225 dwelling units would be affordable - or 45 dwelling units.

Conclusion

No significant impacts to zoning patterns in the area would be expected. The proposed C4-4 district will appropriately allow moderate residential and commercial growth at the location of a wide street along a commercial corridor with convenient access to several public transportation options. The proposed C4-4 district contains a residential equivalent of R7-1, which is consistent with the pre-existing R6 district, which permits high density residential buildings on larger lots. The C4-4 district would also be consistent with the existing C1-3 and C1-4 commercial overlays in the immediate area but would permit an increased range of commercial uses with reduced parking requirements, appropriate for an area with a high concentration of transit options. The Proposed Development will comply and conform to the applicable proposed district regulations and will facilitate the development of a number of affordable dwelling units.

Therefore, the Proposed Actions will not have a significant impact on the extent of conformity with the current zoning in the surrounding area, and it would not adversely affect the viability of conforming uses on nearby properties. Potential significant adverse impacts related to zoning are not expected to occur as a result of the Proposed Actions, and further assessment of zoning is not warranted.

IV. Public Policy

Existing Conditions

The Rezoning Area and 400-foot study radius is within the Woodside neighborhood of Queens Community District 2. As noted above, the area includes a mix of residential densities, commercial retail, community facility, older industrial/manufacturing and some utility/transportation related uses.

The 400-foot area is located in a FRESH Program Area (as noted in the zoning section) and is eligible for zoning as well as tax incentives for the development of a grocery store that sells fresh fruits and vegetables. At this time, The Project Area is not located within an inclusionary housing (IH) or a Mandatory Inclusionary Housing (MIH) area (see below). The Project Area is not located within the City's Coastal Zone Boundary and is therefore not subject to the New York City Waterfront Revitalization Program (WRP).

In terms of housing policy, the goals of *Housing New York: A Five-Borough, Ten-Year Plan* are the current plan under Mayor Bill De Blasio to build or preserve 200,000 units of affordable housing in New York City within ten years of the start of his mayoralty.

No other public policies relate to Rezoning Area or to the surrounding 400-foot radius study area. The Project Area is not located within a Federal Empowerment Zone nor is covered by any 197-a Community Development Plans, and is not located within a critical environmental area, a significant coastal fish and wildlife habitat, a wildlife refuge, or a special natural waterfront area.

Future No-Action (No-Build) Scenario
No new public policy initiatives or changes to existing initiatives are anticipated to affect the Rezoning Area or to the 400-foot study area surrounding the Rezoning Area by the project Analysis Year of 2023.

Future With-Action (Build) Scenario
The Proposed Actions include a zoning text amendment to establish a Mandatory Inclusionary Housing (MIH) Area for the entire Rezoning Area. This is anticipated to result in at least 45 permanently affordable dwelling units. The proposed new dwelling units would contribute to Mayor Bill De Blasio's goal of building or preserving 200,000 units of affordable housing in New York City within ten years of the start of his mayoralty.

As noted within the land use analysis above, the proposed uses would be compatible with the existing land uses within a 400-foot radius of the Project Area.

The Proposed Actions are required in order to allow the Proposed Development to be developed on the Development Site. The Proposed Development would meet The City's public policy goals as explained above related to the provision of affordable housing.

Therefore, no adverse impact to public policies would occur as a result of the Proposed Actions.

Conclusion

The Proposed Actions would facilitate what the Applicant feels is an appropriate level of

development within the Rezoning Area, would be a positive addition to the surrounding neighborhood, and would serve to further the goals of the existing public policies for the area as discussed above.

No potentially significant adverse impacts related to public policy are anticipated to occur as a result of the Proposed Actions, and further assessment of public policy is not warranted.

No significant adverse impacts related to Land Use, Zoning, and Public Policy are anticipated to occur as a result of the action. The action is not expected to result in any of the conditions that warrant the need for further assessment of land use, zoning, or public policy.

5. SOCIOECONOMIC CONDITIONS

Introduction

According to the *CEQR Technical Manual,* the socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Even when socioeconomic changes would not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area. In some cases, these changes may be substantial but not adverse. In other cases, these changes may be good for some groups but bad for others. The objective of the CEQR analysis is to disclose whether any changes created by the project would have a significant impact compared to what would happen in the future without the project.

In the future with the Proposed Actions, the Rezoning Area is anticipated for redevelopment with two new buildings. Based on the two scenarios described in the analysis framework, the Proposed Actions would result in a net increase of 225 dwelling units, 68 of which would be affordable under Scenario 1, which represents the most conservative scenario for residential use. In terms of nonresidential uses, Scenario 2 consists of an incremental increase of 69,523 gsf of commercial use (local retail/office space) and 181,438 gsf of community facility use (medical office), which represents the most conservative scenario for nonresidential uses. Both scenarios would also result in a net loss and the displacement of 16,860 square feet of manufacturing/industrial space and 22,447 square feet of local retail space, as further discussed below. In terms of additional residents and workers, Scenario 1 would generate a net increment of 603 new residents[7], while Scenario 2 would result in an increment of 623 new employees.

Direct and Indirect Displacement

Direct displacement (sometimes called primary displacement) is the involuntary displacement of residents or businesses from a site or sites directly affected by a proposed

[7] Residents are calculated based on 225 dwelling units with an average household size of 2.68 persons (based on Queens Community District 2 via the U.S. Census ACS 2014-2018).

project. Examples include a proposed redevelopment of a currently occupied site for new uses or structures, or a proposed easement or right-of-way that would take a portion of a parcel and thus render it unfit for its current use. The occupants and the extent of displacement are usually known, and the disclosure of direct displacement can therefore focus on specific businesses and a known number of residents and workers.

Indirect displacement (also known as secondary displacement) is the involuntary displacement of residents, businesses, or employees that results from a change in socioeconomic conditions created by the proposed project. Examples include lower-income residents forced out due to rising rents caused by a new concentration of higher-income housing introduced by a proposed project; a similar turnover of industrial to higher-paying commercial tenants spurred by the introduction of a successful office project in the area or the introduction of a new use, such as residential; or increased retail vacancy resulting from business closure when a new large retailer saturates the market for particular categories of goods. The assessment of indirect displacement usually identifies the size and type of groups of residents, businesses, or employees affected. In keeping with general *CEQR* practice, the assessment of indirect displacement assumes that the mechanisms for such displacement are legal.

A socioeconomic assessment should be conducted if a project may be reasonably expected to create socioeconomic changes within the area affected by the project that would not be expected to occur without the project. The following circumstances want further socioeconomic assessment:

- Displacement of over 500 existing residents. For projects exceeding this threshold, assessments of the direct residential displacement, indirect residential displacement, and indirect business displacement are appropriate.
- Direct displacement more than 100 employees. For projects exceeding this threshold, assessments of direct business displacement and indirect business displacement are appropriate.
- The project would directly displace a business that is unusually important because its products or services are uniquely dependent on its location. If this is considered likely, assessments of direct business displacement and indirect business displacement are appropriate.
- Residential development of 200 or more new residential units or more than 200,000 square feet of commercial development. For projects exceeding these thresholds,

assessments of indirect residential displacement and indirect business displacement are appropriate.

- An action would add to, or create, a retail concentration that may draw a substantial amount of sales from existing businesses within the study area to the extent that certain categories of business close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets. Projects resulting in less than 200,000 square feet of retail on a single development site would not typically result in socioeconomic impacts
- If the project is expected to affect conditions within a specific industry, an assessment is appropriate.

The Proposed Actions and resulting development would not result in the direct loss of 500 residents and would not directly displace over 100 employees. As described in the Project Description, the rezoning area is not developed with any residential uses under existing conditions. Therefore, the Proposed Actions do not have the potential to result in direct residential displacement and no further analysis is warranted (see Table 5-1 and 5-2: Existing Conditions, No-Action Scenario and With-Action Scenario).

Table 5-1 – Existing Conditions, No-Action Scenario, With-Action Scenario and Incremental Development (Scenario 1)

Scenario 1				
Use (GSF)	**Existing Conditions**	**No-Action Condition**	**With-Action Condition**	**Increment**
Residential	0	0	196,335 (225 DU)	196,335 (225 DU)
Commercial	22,447	22,447	78,783	56,336
Community Facility	0	0	8,513	8,513
Industrial/Manufacturing	16,860	16,860	0	-16,860
Transportation/Utility	0	0	0	0
Workers	90	90	674	584
Residents	0	0	603	603

Table 5-2 – Existing Conditions, No-Action Scenario, With-Action Scenario and Incremental Development (Scenario 2)

Scenario 2				
Use (GSF)	**Existing Conditions**	**No-Action Condition**	**With-Action Condition**	**Increment**
Residential	0	0		0
Commercial	22,447	22,447	91,970	69,523
Community Facility	0	0	181,438	181,438
Industrial/Manufacturing	16,860	16,860	0	-16,860
Transportation/Utility	0	0	0	0
Workers	90	90	713	623
Residents	0	0	0	0

The Proposed Actions are anticipated to directly displace 11 small local retail businesses and 2 industrial businesses, resulting in a total of 90 displaced employees (see Table 5-2). Worker numbers under the existing/no-action conditions were estimated based on a site survey of the rezoning area and established assumptions regarding the density of workers associated with specific businesses types based on the square footage of the space those businesses occupy. As the estimated number of existing employees who would be directly displaced as result of the proposed actions is fewer than 100 and because the 11 existing businesses which are expected to be displaced as a result of the Proposed Actions are not considered to be unusually important, no further analysis is warranted and the proposed actions would not have the potential to result in significant adverse impacts related to direct business displacement.

With Action Scenario 2 would result in the worst-case scenario for indirect business displacement because it would introduce a greater amount of commercial development to the rezoning area than Scenario 1 (see Table 5-1 and 5-2). The Future With-Action development under Scenario 2 would result in approximately 64,006 square feet of new local commercial retail and 27,964 square feet of new office space, which is less than the above threshold of 200,000 square feet for consideration of indirect business displacement.

Figure 5-1: Socioeconomic Analysis Map



While the Proposed Actions could result in the addition of 181,438 square feet of new medical office space, this development is considered an institutional/community facility use and is not anticipated to indirectly displace existing commercial businesses. Furthermore, this additional scenario was included in this Environmental Assessment Statement to conservatively analyze other technical sections of this document (Transportation and Air Quality) and it is not the intention of the Applicant to develop such a facility. Despite this, a qualitative assessment of the uses associated with Scenario 2 are included further below.

Table 5-3: Existing Conditions - Businesses & Employees

Block	Lot	Lot Area (sf)	Address	Land Use	Businesses	Gross Floor Area (sf)	Workers*	Notes**
1294	55	943	61-26 Roosevelt Avenue	Local Retail	2 Retail	1,050	3	100% General Retail
1294	56	1,830	61-32 Roosevelt Avenue	Local Retail	Retail (Hardware)	1,830	5	100% General Retail
1294	58	7,500	62-02 Roosevelt Avenue	Local Retail/Office	Vacant	7,667	0	Vacant
1294	60	11,950	62-04 & 62-26 Roosevelt Avenue	Local Retail	7 Retail; 1 Fast Food	11,900	46	7 units retail and 1 unit as fast food
1294	68	11,050	39-50 63rd Street	Industrial	FL Metal Glass	11,960	30	50% Industrial / 50% Office
1294	73	4,950	39-56 63rd Street	Industrial	Baldwin Metal Stamping	4,900	5	100% Industrial
1294	76	3,088	No Mapped Address	Transportation /Utility	LIRR	0	0	Vacant
						TOTAL	90	

*Office = 1 employee per 250 sf
General Retail = 1 employee per 333 sf
Industrial = 1 employee per 1,000 sf
Fast Food = 1 employee per 100 s
**Information obtained via field survey on August 1st, 2018

As indicated above, the Proposed Action could potentially generate a net increase of 225 residential units, as compared to the No-Action condition (See Table 5-1). This would exceed the 200-unit threshold established for further assessment of potential indirect residential displacement. Therefore, the following provides a preliminary assessment of the potential for the Proposed Action to result in any significant adverse impacts related to indirect residential displacement.

Indirect Residential Displacement

As indicated in the *CEQR Technical Manual,* "the objective of the indirect residential displacement analysis is to determine whether the proposed project may either introduce a trend or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change." The risk of indirect residential displacement is typically associated with rising rents caused by new higher -income housing that may contribute to increased area housing costs to an extent that could potentially force lower-income residents out of the neighborhood. The potential for impact is generally limited to households in unprotected, private rental units.

This preliminary assessment follows the step-by-step preliminary assessment guidance described in Section 322.1 of the *2020 CEQR Technical Manual*.

Step 1: Determine if the proposed project would add new population with higher average incomes compared to the average incomes of the existing populations and any new population expected to reside in the study area in the future without the proposed project.

As shown in Tables 5-4, the residents of the half-mile study area (the "Study Area") have lower average (mean) household incomes compared to Queens and the City as whole. In addition, there is a trend of household incomes not growing between 2006-2010 estimates and 2014-2018 estimates.

Table 5-4: Household Income Characteristics in the Study Area, Queens and New York City (2013-2017)

	Mean Household Income	
	2006-2010	2014-2018*
Study Area	$71,130	$71,016
Queens	$68,601	$85,330
New York City	$76,300	$97,647

Notes: Income values reflect inflation adjusted 2018 dollars.
* The difference between the Study Area and Queens or New York City is statistically significant since the margin of error of the difference is less than a third of the total difference.
Source: Bureau of the Census, 2006-2010 and 2014-2018 Five-Year ACS Estimates

According to the 2014-2018 Five-Year American Community Survey (ACS) data, the Study Area had a mean household income of $71,016 (in 2018 dollars), lower than the overall borough ($85,330) and the City as a whole ($97,647; see Table 5-4). According to the same census data, median gross rent in the Study Area is estimated at $1,503 a month (see Table 5-5).

Correspondingly, as noted in Table 5-5, an upward trend is indicated in the price of median gross rent. This is also evident in rental listings queried in 2019 (see Table 5-6). However, it should be noted that Table 5-5 accounts for all rents asked in the Study Area, including non-market rate housing, such as rentals that are subject to rent control or other subsidized programs.

A widening gap between household incomes and gross rent is not unique to the study area; households throughout the City are struggling to keep pace with rising rents. Mayor de Blasio's Housing New York plan identified the trend of a growing gap between incomes and the cost of rent as a key issue in New York City's housing affordability crisis.

Table 5-5: Median Gross Rent in the Study Area (2006-2010 and 2014-2018)

	Median Gross Rent	
	2006-2010	**2014-2018**
Study Area	$1,380	$1,503

Source: Bureau of the Census, 2006-2010 and 2013-2017 Five-Year ACS Estimates
Notes: Income values reflect inflation adjusted 2017 dollars.

Census and ACS data do not provide specific rent information according to regulation status or unit size, but instead can paint a general picture about how the rental rates in the Study Area have changed in recent years. Supplemental data from current market rate real estate listings for the surrounding area are therefore used to provide additional indicators of where the market is today. Table 5-6 summarizes online listings in 2019 for market rate apartments in Woodside. The average asking rents presented in the table were calculated based on 166 listings of available market rate rental units in 2019, and in general are considerably higher than median gross rent data from the 2014-2018 Five-Year ACS estimates. However, it should again be noted that ACS estimates include non-market rate rentals, which are lower than market rate units.

Table 5-6: Median Asking Rents in Woodside

	Studios	**One-Bedrooms**	**Two-Bedrooms**	**Three-Bedrooms**
Woodside	$1,500	$ 1,725	$2,075	$2,775

Source: Streeteasy (http://streeteasy.com, accessed April 2019) and Zillow (http://zillow.com, accessed April 2019)

In absence of the Proposed Actions, current land use and market trends are anticipated to continue, and the area will continue to support a mix of residential, commercial, community facility, automotive, and industrial uses with modest increased residential development occurring as-of-right.

The No-Action condition would likely add a new population with higher average incomes than the average incomes of the existing population. In absence of the Proposed Actions, the Mandatory Inclusionary Housing (MIH) program would not be mapped,

and there would be potential for a net increase of 242 market-rate housing units above the existing condition in the Study Area (see Tables 5-10 and 5-11). As shown in Table 5-5 there is an upward trend of increasing median gross rents. Based on market trends of increased rents, residents are expected to continue to experience displacement pressures. In absence of the Proposed Actions, it is expected that some existing residents could be displaced due to increasing rents.

In the future with the Proposed Actions, the proposed zoning change to the Project Area along Roosevelt Avenue would permit an increase in residential density, as well as make the area to be rezoned applicable to the Mandatory Inclusionary Housing (MIH) program. The Proposed Actions are intended to create opportunities for new housing in close proximity to a transit hub by creating a new mixed-use district and to help meet current and future demand for the neighborhood including mixed-income housing and support services.

As described in the Project Description, the proposed zoning change to C4-4 is expected to facilitate the construction of 225 new dwelling units, 68 of which would be applicable to MIH under Option 2. The development of affordable housing would be a condition of residential development in this proposed C4-4 zoning district and is expected to help preserve affordable housing in the area. There also would be no expiration to the affordability requirement of housing units created through MIH, making them a long-term stable reservoir of affordable housing in the area, a key policy to meet the Housing New York goal of fostering diverse livable communities.

In the future with the Proposed Actions, it is expected that MIH would result in more affordable housing for a wider range of income levels as compared to the No-Action condition. The MIH program sets forth two primary options (Option 1 and Option 2) that are characterized by different affordability levels, which promote a range of affordable development:

- Option 1 requires that 25 percent of residential floor area of a development be set aside for households earning up to 60 percent of the area median income (AMI) on average, with 10 percent of that number set aside for households earning up to 40 percent of AMI.

- Option 2 requires that 30 percent of residential floor area of a development be set aside for households earning up to 80 percent of the AMI on average, with 10 percent of that number set aside for households earning up to 40 percent of AMI.

At this time, the Applicant would seek to comply with MIH through Option 2. For either MIH option, none of the affordable units could be targeted to residents with incomes exceeding 130 percent AMI. Additionally, the City Council and City Planning Commission (CPC) could decide to apply a Deep Affordability Option in conjunction with either Option 1 or 2. The Deep Affordability Option would require that 20 percent of the residential floor area be targeted to households earning up to 40 percent of AMI instead of ten percent. The incomes of households who are expected to reside in the market-rate and affordable DUs generated by the Proposed Actions cannot be estimated at this time, because the amount of affordable DUs produced and resulting range of affordability presented would ultimately depend on the extent to which each MIH Option is utilized. Additionally, the levels of affordability are based on percentages of the HUD-defined Area Median Income (AMI) for the region; the 2020 income limits by family size for the New York City region are presented in Table 5-7, while Table 5-8 shows the monthly rents by unit size for each. These levels will change over time - but their future levels cannot conclusively be established at this time.

Table 5-7: 2019 New York City Area Median Income (AMI)

Size	30%	40%	50%	60%	80%	100%	120%	130%
1	$23,880	$31,840	$39,800	$47,760	63,680	79,600	95,520	103,480
2	27,300	$36,400	$45,500	$54,600	$72,800	91,000	$109,200	$118,300
3	$30,720	$40,960	$51,200	$61,440	$81,920	$102,400	$122,880	$133,120
4	$34,110	$45,480	$56,850	$68,220	$90,960	$113,700	$136,440	$147,810

Source: U.S. Department of Housing and Urban Development (HUD) and New York City Housing Development Corporation (HDC)

Table 5-8: 2019 New York City Affordable Monthly Rents by Rental Tier

Unit Size	30%	40%	50%	60%	80%	100%	120%	130%
Studio	$397	$567	$738	$909	$1,250	$1,643	$1,985	$2,155
One-bedroom	$503	$717	$930	$1,143	$1,570	$2,060	$2,487	$2,700
Two-bedroom	$598	$854	$1,110	$1,366	$1,878	$2,467	$2,979	$3,235
Three-bedroom	$683	$978	$1,274	$1,570	$2,161	$2,841	$3,432	$3,728

Notes: Assumes tenant pays electricity, no electric stove. Rents have been calculated at 30 percent of annual gross income of the target AMI. For low-income bands, rents are based on 30 percent of 27 percent, 37 percent, 47 percent, and 57 percent AMI. Studio rents are based on a household factor of 0.6.
Source: New York City Housing Preservation and Development (HPD)

The affordable housing units created by the Proposed Actions are expected to help stabilize the neighborhood for years to come and help to alleviate the upward pressure on housing prices as compared to the No-Action condition, since in the absence of MIH, the development of affordable housing would not be required. The new affordable units created by MIH would help to address needs of residents at lower income levels even if local housing market conditions change and are expected to increase the universe of rent stabilized housing. Through the land use review process, the CPC and City Council will work together to select which MIH Option would apply within the proposed rezoning area's MIH Area.

While it is expected that the population moving into new affordable housing would generally have income characteristics comparable to existing residents in the study area, the number of affordable DUs and corresponding AMI bands for residential development resulting from the Proposed Actions have not yet been determined. Irrespective of the levels of affordability that would occur as a result of MIH, the Proposed Actions would result in mostly market-rate housing development, and given existing trends toward higher rents and incomes, are expected to command higher rents and have the potential to bring in a higher income population.

Per *CEQR Technical Manual* guidance, if the expected average incomes of the new population would exceed the average incomes of the study area populations, *Step 2* of the

preliminary assessment should be conducted. Accordingly, *Step 2* is warranted and is provided below.

Table 5-9: Estimated Population 2014-2018

	Estimated Population
	2014-2018
Study Area	48,632

Source: Bureau of the Census, 2014-2018 Five-Year ACS Estimates

Currently, the Study Area contains 48,632 residents (See Table 5-9), according to 2014-2018 U.S Census estimates. In order to account for major development that would occur prior to the Analysis Year, a query of DOB building permits was conducted for the Study Area (See Figure 5-1 and Table 5-10), which found 12 planned developments that include permitted developments and enlargements in the Study Area. Combined, these developments total 242 anticipated new dwelling units to include as part of the No-Action population.

Based on estimates from 2014-2018 ACS, the average household size for the study area is 2.68 persons per dwelling unit (DU), which is the average between owner-occupied and renter-occupied units in Queens Community District 2. Therefore, these 242 new dwelling units would be expected to generate 649 new residents in the Study Area prior to the Analysis Year of 2023. Table 5-11 shows the total projections in the future without the Proposed Actions by adding the population from the No-Action projects to the 2014-2018 population estimates for the Study Area.

Table 5-10: No-Action Developments in Study Area

Number	Street	Dwelling Units	BIN No.
41-59	71st Street	5	4030615
64-06	Queens Boulevard	42	4053651
41-10	69th Street	3	4618108
41-30	66th Street	14	4030239
34-44	59th Street	3	4027371
34-46	59th Street	3	4027371
37-31	58th Street	2	4027701
70-38	Broadway	2	4029734
37-32	58th Street	2	4027667
41-12	69th Street	3	4607263
37-46	72nd Street	154	4618758
67-11	Roosevelt Avenue	9	4028080
Total		**242**	

Source: Department of Buildings, Active Major Construction: (https://www1.nyc.gov/assets/buildings/html/nyc-active-major-construction.html, Accessed April 2019

Table 5-11: Projected Incremental Population in The Future without the Proposed Actions

	Projected Increase in DUs in the Future Without the Proposed Actions	**Projected Increase in the Future Without the Proposed Actions**	**2023 Population Projection in the Future Without the Proposed Actions**
Study Area	242	649	49,281

Notes: The estimated number of residents assumes 2.65 persons per DU for residential units.

The Proposed Actions and associated RWCDS could introduce 225 incremental DUs by 2023 on the Projected Development Sites. Assuming an average household size of 2.68 persons per DU, as well as 100 percent occupancy rates, these incremental DUs could add an estimated 603 new residents. Table 5-12 shows this new population and its size relative to the population in the future without the Proposed Actions.

Table 5-12: Projected Incremental Population in The Future with the Proposed Actions

	2023 Population Projections in the Future Without the Proposed Actions	**Number of Incremental DUs**	**Projected Population Increase from Proposed Actions RWCDS**	**2023 Population Projections in the Future with the Proposed Actions**	**Percent Change from 2023 Future Without the Proposed Actions**
Study Area	49,281	225	603	49,884	1.22%

By adding an estimated 603 residents, the Proposed Actions and associated RWCDS could increase population of the half-mile study area by approximately 1.22 percent. According to *CEQR Technical Manual* analysis thresholds, if the population increase is less than five percent in a study area or identified analysis area, the incremental population may not be large enough to affect real estate market conditions, and therefore, a detailed assessment is not warranted for the study area.

Indirect Business Displacement

The CEQR Technical Manual considers that adverse socioeconomic impacts resulting from indirect business displacement are likely if the new development differs greatly from existing uses and land use patterns. As noted in Chapter 2: *Land Use, Zoning and, Public Policy,* the Proposed Actions would not introduce development that differs from existing land use patterns. To further assess the potential for significant adverse impacts

to socioeconomic conditions resulting from indirect business displacement, the *CEQR Technical Manual* identifies four additional criteria. These criteria are discussed below.

1. Would the proposed projects introduce enough of a new economic activity to alter existing economic patterns?

As summarized below in Table 5-13 (Workers in the Study Area by Industry), there are currently 24,983 employed persons in the census tracts that constitute the Study Area (per data available from Population Fact Finder produced by DCP using data from the 2014-2019 ACS).

The introduction of an increment of 623 new workers (which represents an increase in workers of 2.4% compared to existing conditions, see Table 5-13) is not anticipated to alter existing economic patterns. Further, as summarized in Table 5-13 (Workers in the Study Area by Industry), the top two largest employment sectors in the Study Area are "Educational services, and health care and social assistance" and "Arts, entertainment, and recreation, and accommodation, and food services" (31.7% of workers are employed in these sectors). The addition of new medical offices, retail and commercial offices facilitated by the Proposed Actions would therefore be compatible with existing economic activity in the Study Area and would not alter existing economic patterns.

2. Would the proposed projects add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend or to alter existing patterns?

As discussed above, the Proposed Actions would introduce an increment of 623 workers. These workers would be employed in a mix of retail, medical office and traditional office created through the Proposed Actions (See Table 5-14). As summarized in Table 5-13 (Workers in the Study Area by Industry), the four industries that are represented in the uses introduced by the Proposed Actions (Arts, entertainment, and recreation, and accommodation, and food services; Educational services, and health care and social assistance) employ a total of 7,924 workers in the Study Area or 31.7% of total employment. The addition of 623 workers in these industries is not anticipated to add to the concentration of a particular sector of the local economy at a scale large enough to alter or accelerate ongoing trends nor existing economic patters.

In addition, the Proposed Action would result in the direct displacement of two industrial/manufacturing firms that include an estimated total of 35 workers. As noted in Table 5-13, this sector encompasses 4% of the workers in the Study Area and the loss of these two firms is not anticipated to significantly alter existing employment patterns in the area. Moreover, the existing zoning district (R6/C1-2) does not currently permit heavier commercial, industrial or manufacturing uses and absent the Proposed Actions, it is not assumed this sector would continue to operate in this area. However, the proposed C4-4 district permits an expanded range of commercial uses (Use Groups 5-6, 8-10 & 12) that would not result in the concentration of any particular sector of the local economy and could potentially diversify commercial uses in the surrounding area to reflect more regional commercial areas. As such, the Proposed Actions would not be anticipated to result in the concentration of a particular sector of the local economy in this area.

Table 5-13: Workers in the Study Area by Industry

Civilian employed population (16 years and over)	24,983	100.00%
Agriculture, forestry, fishing and hunting, and mining	133	0.50%
Construction	1,410	5.60%
Manufacturing	1,180	4.70%
Wholesale trade	423	1.70%
Retail trade	2,744	11.00%
Transportation and warehousing, and utilities	3,791	15.20%
Information	636	2.50%
Finance and insurance, and real estate and rental and leasing	1,509	6.00%
Professional, scientific, and management, and administrative and waste management services	2,864	11.50%
Educational services, and health care and social assistance	3,905	15.60%
Arts, entertainment, and recreation, and accommodation, and food services	4,019	16.10%
Other services, except public administration	1,680	6.70%
Public administration	689	2.80%

Source: Bureau of the Census, 2014-2018 Five-Year ACS Estimates

Table 5-14 – Future With-Action (Scenario 2) Worker Calculations[8]

Site 1	***Use***	***Workers***
27,630	Retail (GSF)	83
31,995	Retail (GSF)	96
27,964	Office (GSF)	112
169,687	Med-Office (GSF)	377
279	Parking (Spaces)	6
	Sub-total	**674**
Site 2	***Use***	***Workers***
4,381	Retail (GSF)	13
11,751	Med-Office (GSF)	26
-	Parking (Spaces)	0
	Sub-total	**39**
Total		**713**

3. Would the proposed projects directly displace uses of any type that directly support businesses in the study area or bring people to the area that form a customer base for local businesses?

As discussed in *Land Use, Zoning and, Public Policy*, and noted in Table 5-3, the Proposed Actions would result in the demolition of ten retail units and two industrial businesses, totaling 90 employees. As these businesses would be replaced by new retail spaces, it is not anticipated that the Proposed Actions would remove specific uses that bring people to the Study Area that serve as a customer base for existing local businesses. However, the Proposed Actions would introduce new workers in the Study Area that would form an increased larger customer base for local businesses.

[8] Worker assumptions include the following: Retail 1/333 sf; Office 1/250sf; General CF 1/333sf; Medical Office 1/450 sf; and 1 employee per 50 accessory parking spaces.

4. Would the proposed projects directly or indirectly displace residents, workers, or visitors who form the customer base of existing businesses in the study area?

As discussed above, the Proposed Actions will facilitate the redevelopment two properties with a new higher-density mixed use development. This would consist of commercial retail and residential uses (Scenario 1) or an alternative scenario (Scenario 2) with medical office, commercial office and retail space. As concluded in the indirect residential displacement analysis conducted above, the Proposed Actions would not significantly indirectly displace residents. In addition, as noted in Table 5-3, less than 100 workers would be directly displaced by the Proposed Actions, with 713 new workers added to the Study Area under Scenario 2.

As such, the Proposed Actions would not introduce new market trends or accelerate existing trends within the Study Area. No indirect or direct residential displacement is expected to occur as a result of development facilitated by the approval of the Proposed Actions. Workers and visitors who form a customer base for existing business are not expected to be directly or indirectly displaced as a result of approval of the Proposed Actions, as there would be an overall increase in the amount of retail space created as a result of the Proposed Actions. While 35 employees are estimated to work at two industrial businesses that are anticipated for removal (FL Metal Glass and Baldwin Metal Stamping), these industrial businesses represent a small share of employment in the Study Area, with only 1,180 workers or 4.7% of workers in Study Area employed in the manufacturing sector (see Table 5-3 and 5-13). Further, the existing retail businesses that would be displaced would be replaced by similar retail businesses under the Proposed Actions and would not result in any incremental loss of this industry.

CONCLUSION

In the future with the Proposed Actions new residential units would be introduced that mirror current market conditions and new units would be introduced with rents higher than current market conditions. The trend of rising rents in the Study Area would continue unaffected. As the Proposed Actions are not anticipated to introduce new

market trends or accelerate existing trends, the Proposed Actions do not have the potential to cause significant adverse impacts on socioeconomic conditions due to indirect residential displacement.

Further, the Proposed Actions are not anticipated to result in Indirect or Direct Business displacement as none of the conditions described in the *CEQR Technical Manual* as creating the potential for adverse socioeconomic impacts due to indirect business displacement would be created as a result of approval of the Proposed Actions. Therefore, no significant adverse impacts to socioeconomic conditions are anticipated as a result of development facilitated by the approval of the Proposed Actions.

6. COMMUNITY FACILITIES AND SERVICES

Introduction

The community facilities and services considered under CEQR are public schools, public or publicly subsidized day care centers, public libraries, hospitals and other health care facilities, and police and fire protection services. Under the guidelines set forth in the *CEQR Technical Manual,* a detailed analysis is required only if a proposed action would displace or otherwise directly affect an existing community facility or if it would place significant new demands on facilities or services. Most of the demand for community facility services is generated by the introduction of new residents in an area.

Direct Effects

The Proposed Actions would not physically displace or affect any existing community facilities and would have no direct impact on any community facilities or services. Therefore, further assessment of direct impacts is not warranted.

Indirect Effects

The *CEQR Technical Manual* provides a set of thresholds to use in determining whether detailed studies of potentially significant adverse indirect impacts related to community facilities and services are warranted. The With-Action RWCDS includes the development of 225 dwelling units of housing. The No-Action RWCDS does not include any dwelling units. Therefore, the Proposed Actions would result in the development of a net increase of 225 dwelling units in the Rezoning Area.

The required zoning text amendment to Appendix F of the ZR (Option 2) would establish a Mandatory Inclusionary Housing (MIH) designated area over the Rezoning Area For CEQR purposes, dwelling units are considered "affordable" if they are available exclusively to low- and moderate-income households with income not exceeding 80 percent of the Area Median Income (AMI). Because the income-restricted Inclusionary Housing units may include ones available to middle-income households within specified income bands, not all of the income-restricted units would be considered affordable

housing. It is conservatively assumed that 20 percent of the anticipated 225 dwelling units would be affordable - or 45 dwelling units. This would consist of the proposed 213 units (the Applicant's Proposed Development), in addition to the 12 dwelling units that are anticipated for development as a result of the Proposed Actions.

Public Schools

The *CEQR Technical Manual* states that, in general, if a project would introduce more than 50 school-age children (elementary and intermediate grades), significant impacts on public schools may occur and further analysis of schools may be appropriate.

Based on the factors contained in *Table 6-1A* of the *CEQR Technical Manual* (Chapter 6) and updated school multipliers from March of 2020[9], the 225 new dwelling units resulting from the Proposed Actions would be anticipated to generate a total of 135 public school students, including 86 elementary school and 29 middle school pupils. The 225 dwelling units would be anticipated to generate a total of 23 public high school students, which would fall below the threshold of concern of 150 high school level pupils. Accordingly, a detailed public elementary and intermediate schools analysis is provided below.

Publicly Funded Child Care Centers

Analyses of impacts to day care facilities are generally conducted for projects that produce substantial numbers of subsidized, low- to moderate-income family housing units which may generate a significant number of children who would be eligible for subsidized child care at publicly financed day care centers. The threshold number requiring further analysis would be the generation of 20 eligible children. Based on the Queens multipliers in *Table 6-1B* of the *CEQR Technical Manual*, 45 dwelling units at or below 80% of AMI would be expected to generate 7 children under the age of 6 who would be eligible for public child care, which is less than the threshold of 20 eligible children to warrant a detailed analysis. Therefore, no further analysis is warranted for publicly funded child care centers.

Other Community Facilities

The development of 225 dwelling units of housing on the Development Site would not be anticipated to exceed the thresholds of concern for any other community facilities and

[9] Available via the CEQR App, NYC Department of City Planning, Accessed March 2021

Figure 6-1: Public Elementary and Intermediate Schools Within CSD 24, Sub-district 1



services. Based on the *CEQR Technical Manual*, the Proposed Actions would have no adverse impacts to libraries, health care facilities, or fire and police protection.

Public Schools

Existing Conditions

Primary Study Area (Sub-district Analysis)

The Rezoning Area is located in Queens Community School District (CSD) 24, Sub-district 1. CSD 24, Sub-district 1 is considered to be the primary study area for the analysis of elementary and intermediate schools. Within CSD 24, Sub-district 1, there are 20 elementary and intermediate schools. Figure 6-1, Public Elementary and Intermediate Schools Within CSD 24, Sub-district 1, illustrates the locations of these schools.

Table 6-1 provides a listing of the elementary and intermediate schools within CSD 24, Sub-district 1. The table identifies the schools by school number/name, address, and grades served, and includes the latest available enrollment and school capacity numbers from the Department of Education. Elementary school capacity numbers are less than actual building capacities as they assume a class size reduction for Kindergarten through the third grades of 20 children per class, 28 children for grades 4-8; and 30 children for grades 9-12 ("target capacity").

Table 6-1 indicates that the elementary schools within CSD 24, Sub-district 1 are generally above capacity with a collective utilization rate of 118% with enrollments ranging from 87% to 157% of target capacity at individual school buildings. The elementary schools within CSD 24, Sub-district 1 have a total enrollment of 15,169 students relative to a target capacity of 12,491 seats resulting in a deficit of 2,259 school seats.

Table 6-1: CSD 24, Sub-district 1 – Existing Enrollment, Capacity and Utilization (Elementary)

Org. ID	Bldg. ID	School Name	Address	Enrollment	Target Capacity	Available Seats	Utilization (%)
Q007	Q007	P.S. 007 Louis F. Simeone *P.S. 7 - QUEENS*	80-55 CORNISH AVENUE	943	956	13	99%
Q007	Q877	P.S. 007 Louis F. Simeone *51ST AVENUE ACADEMY - QUEENS*	76-05 51 AVENUE	432	486	54	89%
Q012	Q012	P.S. 012 James B. Colgate *P.S. 12 - QUEENS*	42-00 72 STREET	1157	846	-311	137%
Q013	Q013	P.S. 013 Clement C. Moore *P.S. 13 - QUEENS*	55-01 94 STREET	1515	1303	-212	116%
Q014	Q014	P.S. 014 Fairview *P.S. 14 - QUEENS*	107-01 OTIS AVENUE	1374	1193	-181	115%
Q014	Q322	P.S. 014 Fairview *PS 14 Annex*	89-11 43RD AVENUE	200	177	-23	113%
Q016	Q721	P.S. Q016 The Nancy DeBenedittis School *P.S. 16 (OLD Q721 SPED) - QUEENS*	41-15 104 STREET	1509	1127	-382	134%
Q019	Q019	P.S. 019 Marino Jeantet *P.S. 19 - QUEENS*	98-02 ROOSEVELT AVENUE	1889	1653	-236	114%
Q028	Q028	P.S. 28 - The Thomas Emanuel Early Childhood Center *P.S. 28 - QUEENS*	109-10 47 AVENUE	473	302	-171	157%

Q089	Q089	P.S. 089 Elmhurst *P.S. 89 - QUEENS*	85-28 BRITTON AVENUE	1810	1299	-511	139%
Q110	Q315	P.S. 110 *P.S. 315 - Queens*	43-18 97TH PLACE	894	1027	133	87%
Q143	Q143	P.S. 143 Louis Armstrong *P.S. 143 - QUEENS*	34-74 113 STREET	792	745	-47	106%
Q143	Q908	P.S. 143 Louis Armstrong *P.S. 908 - QUEENS*	98-07 38TH AVENUE	204	168	-36	121%
Q211	Q298	Elm Tree Elementary School *P.S./I.S. 298 - QUEENS*	50-51 98TH STREET	517	545	28	95%
Q307	Q260	Pioneer Academy *P.S. 307- QUEENS*	40-20 100TH STREET	899	654	-245	138%
Q330	Q287	Helen M. Marshall School *P.S. 330 - QUEENS*	110-08 NORTHERN BOULEVARD	561	429	-132	131%
Totals (District 24 - Subdistrict 1)				15,169	12,910	-2,259	118%

Source: NYCDOE, Enrollment, Capacity, and Utilization Report (Blue Book), 2017-2018 School Year

Table 6-1 indicates that the intermediate level schools in CSD 24, Sub-district 1 are generally at capacity with a collective utilization rate of 105% with rates ranging from 94% to 105% of target capacity for the intermediate level schools in this district. The intermediate level schools in CSD 24, Sub-district 1 have a total enrollment of 3,012 students relative to a target capacity of 2,897 seats resulting in a deficit of 133 available seats.

Table 6-2: CSD 24, Sub-district 1 – Existing Enrollment, Capacity and Utilization (Intermediate)

Map No.	Bldg. ID	School Name	Address	Org Level	Enrollment	Target Capacity	Available Seats	Utilization (%)
1	Q061	I.S. 61 - Q	98-50 50 AVENUE	IS	2251	2065	-186	109%
2	Q311	CORONA ARTS AND SCIENCES ACADEMY *GABRIELA MISTRAL CAMPUS - Q*	98-11 44TH AVENUE	IS	761	814	53	94%
Totals (District 24 - Subdistrict 1)					3,012	2,879	-133	105%

Source: NYCDOE, Enrollment, Capacity, and Utilization Report (Blue Book), 2017-2018 School Year

Since the NYC Department of Education (DOE) is actively engaged in an ongoing process of repurposing underutilized school space, either for its own programs or for Charter Schools, a school building that is significantly underutilized in the existing condition may be programmed to include a new school organization in the near future. In this case, the available capacity may be radically altered within a few months of when the assessment is made. In the August 10, 2018 Under-Utilized Space Memorandum, the CSD 24, Sub-district 1 area, no schools were identified as underutilized. Therefore, no adjustment has been made to available capacity within the sub-district study area.

CEQR Technical Manual guidelines, charter school enrollments are not included in DOE enrollment projections. However, there are no elementary or intermediate level charter schools in the sub-district.

Future No-Action Scenario

This section presents an analysis of public school enrollments (including Pre-Kindergarten enrollments) and capacities for the Project Analysis year of 2023 without the Proposed Actions. The analysis includes the primary study area of CSD 24, Sub-

district 1 and is derived from NYC Department of Education (DOE) enrollment projections.

In the future and absent the actions, it is assumed that no new residential development would occur in the Rezoning Area by the Analysis Year of 2023. However, based on the NYC School Construction Authority's (SCA) "Projected New Housing Starts" (aka Housing Pipeline) projections, additional student enrollments would occur in CSD 24, Sub-district 1 under the No-Build condition by the Analysis Year of 2023 as presented in Table 6-3 below.

As outlined in the *CEQR Technical Manual*, No-Action school capacity changes considered in a community facilities analysis include information on proposed and adopted "Significant Changes in School Utilization" and the DOE's Five-Year Capital Plan. DOE's Proposed FY 2020-2024 Five Year Capital Plan released in November 2020 proposes two capacity increasing projects schools for CSD 24, Sub-District 1. It identified 980 elementary seats and 646 intermediate seats in scope/design. According to SCA construction data, these projects are funded at 90 percent and are anticipated for completion prior to the 2023 Analysis Year (See Table 6-2). As such, these projects meet the criteria for inclusion in the analysis as they are funded and sited in the district, construction has commenced and would be anticipated to be completed prior to the analysis year of 2023.

In addition, the DOE's Panel for Educational Policy (PEP) identifies fives schools (Q877, Q298, Q315, Q287 and Q260) in the study area that could be re-purposed for underutilized space that could radically alter available capacity in the future by the 2023 Analysis Year. However, according to the proposals affecting these schools, no known capacity changes have been identified at this time and capacity has not been modified.

Table 6-3: Capacity Increasing Projects

School	Address	PS Seats	MS Seats	Est. Completion
I.S. 419	111-10 ASTORIA BOULEVARD	0	646	12/10/2020
P.S. 143 ADDITION	34-74 113TH STREET	980	0	12/10/2020
		980	646	

Source: SCA, Capacity Projects by Schools & Active Projects Under Construction (http://www.nycsca.org/Community/Capital-Plan-Reports-Data#Local-Law-167-Reports-352; Accessed March 2021)

Table 6-4 indicates that elementary schools in the sub-district would be above capacity, while middle schools in the sub-district would be below capacity in 2023 without the Proposed Actions. This is based on growth in projected enrollment for elementary schools in the area. The increase in capacity for middle schools is primarily due to the construction of a new facility (I.S. 419), as noted above.

Table 6-4: Estimated Public School Enrollment, Capacity and Utilization in Year 2023 Future without the Proposed Actions

Study Area	Projected 2023 Enrollment	Students Introduced by No Action Residential Development	Total No Action Enrollment	Capacity	Available Seats	Utilization (%)
Primary Schools						
District 24 - Subdistrict 1	14,538	871	15,409	13,890	-1,519	111%
Intermediate Schools						
District 24 - Subdistrict 1	2,722	293	3,015	3,525	510	86%

Sources: Enrollment Projections 2018-2028 New York City Public Schools by Statistical Forecasting. School Construction Authority, Projected New Housing Starts for the 2018-2027 Capital Year.

Future With-Action Scenario

As stated above, applying the household multipliers for Brooklyn from *Table 6-1A* of the *CEQR Technical Manual* to the RWCDS of 225 dwelling units, would result in the anticipated generation of approximately 86 public elementary and 29 middle school children. The Proposed Actions are not anticipated to result in the addition of any new schools or additional capacity in the sub-district. Table 6-5 presents the anticipated student enrollments that would be generated by the Proposed Actions and the effect of these enrollments on the available capacity of the schools within Sub-district 1. The projected increase in elementary and middle school students resulting from the Proposed Actions in 2023 would have a minimal impact upon the utilization rates of the schools in Sub-district 1. With the addition of these new enrollments, utilization rates for both elementary and middle school seats would be increased by less than one percent, where elementary schools would continue to be above capacity and middle schools would continue to be below capacity. Based on *CEQR Technical Manual* criteria and as further explained below, it is not anticipated that the elementary school and middle school students that would be generated by the Proposed Actions would result in a significant impact on the elementary and intermediate schools in the area.

Table 6-5: Estimated Public School Enrollment, Capacity and Utilization in Year 2023 Future with the Proposed Actions

School Level	Projected Enrollment Without Project in 2023	Students Generated by Project	Projected Enrollment with Project	Projected Capacity	Available Seats	Utilization (%) with Project	Change in Utilization (%) from No Action
Primary Schools	15,409	86	15,495	13,890	-1,605	112%	0.62%
Intermediate Schools	3,015	29	3,044	3,525	481	86%	0.82%

According to the *CEQR Technical Manual*, a significant impact on schools may occur if the following two conditions are met: (1) a significant impact may occur if the project results in a collective utilization rate of the elementary and/or intermediate schools in the Sub-

district study area that is equal to or greater than 100 percent in the With-Action Condition, and (2) if the project results in an increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions. With the Proposed Actions, the elementary schools in Sub-district 1 would be above capacity at approximately 112% utilization and the intermediate schools would be below capacity at approximately 86% utilization. The difference between the No-Action and With-Action utilization rate within Sub-district 1 of the elementary schools would be an increase of less than one percent, while that of the middle schools would also be less than a percent. Therefore, the Proposed Actions would not be expected to result in a significant adverse impact on elementary or intermediate schools. No further analysis of the Proposed Actions on public schools is therefore required.

Conclusion

The proposed project would not physically displace or alter a community facility or cause a change that could affect the service delivery of a community facility. In addition, the development would not create a demand that would not overtax services or facilities. Development under the Proposed Actions would not adversely affect public schools, hospitals and other health care facilities, public libraries, publicly subsidized child care centers, and police and fire protection services. Therefore, the project would have no potentially significant adverse impacts related to community facilities and services and further assessment is not warranted.

7. OPEN SPACE

Introduction

For the purpose of *CEQR*, open space is defined as publicly or privately-owned land that is publicly accessible and has been designated for leisure, play, or sport; or land that is set aside for the protection and/or enhancement of the natural environment. Under *CEQR*, an open space analysis is conducted to determine whether or not a proposed action would have either a direct impact resulting from the elimination or alteration of open space or an indirect impact resulting from overtaxing the use of open space. The analyses focus only on officially designated existing or planned public open space. Open space may be public or private and may include active and/or passive areas. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation with benches, walkways, and picnicking areas. Certain spaces such as lawns, can be used for both active and passive recreation.

Open space analyses may be necessary when an action would potentially have a direct or indirect effect on open space. A direct impact would physically change, diminish or eliminate an open space or reduce its utilization or aesthetic value. An indirect impact could result from an action introducing a substantial new user population that would create or exacerbate an overutilization of open space resources.

Direct Effects

The Proposed Actions would not result in any direct impacts to open space resources. The project would not eliminate or reduce the size of any existing open space facilities, would not limit access to any open spaces, and would not alter any open space areas so that they no longer serve the same user population. In addition, the projected developments in the Rezoning Area would not directly affect any open space resources by casting them in shadow for a substantial portion of the day, or by causing substantial noise, odors, air pollutant emissions, or other nuisances that would interfere with the public's ability to enjoy the open space. As further discussed in the Shadows section below, there are no open space resources that would be affected by shadows cast by the RWCDS in the Rezoning Area

Indirect Effects

Introduction

On the basis of *CEQR Technical Manual* criteria, the Proposed Actions could potentially result in indirect impacts to open space resources within the project study area and must be further assessed to determine whether significant indirect impacts would be expected to occur. The Rezoning is located in the Woodside neighborhood of Queens, which is considered neither under- or well-served area relative to open space resources. If a project is located in an area that is neither under-served nor well-served, the *CEQR Technical Manual* requires that an open space assessment be conducted if that project would generate more than 200 residents or 500 workers.

In the future with the Proposed Actions, the Rezoning Area is anticipated for redevelopment with two new buildings. Based on the two scenarios described in the analysis framework, the Proposed Actions would result in a net increase of 225 dwelling units, 68 of which would be affordable under Scenario 1, which represents the most conservative scenario for residential use. In terms of nonresidential uses, Scenario 2 consists of an incremental increase of 69,523 gsf of commercial use (local retail/office space) and 181,438 gsf of community facility use (medical office) which represents the most conservative scenario for nonresidential uses. Both scenarios would also result in a net loss and the displacement of 16,860 square feet of manufacturing/industrial space and 22,447 square feet of local retail space, as further discussed below. In terms of additional residents and workers, Scenario 1 would generate a net increment of 603 new residents[10], while Scenario 2 would result in an increment of 623 new employees. The increment for employees in the area is based on 90 existing employees (see Table 5-1 in the Socioeconomics chapter) and the creation of 713 new employees under Scenario 2, which is the more conservative scenario compared to the creation of 293 workers under Scenario 1 (see Table 7-1).

New residents would therefore exceed the threshold number of 200 new residents, and a quantitative analysis of indirect open space impacts for residents would be required. New employees would also exceed the threshold number of 500 new workers, and a

[10] Residents are calculated based on 225 dwelling units with an average household size of 2.68 persons, based on the U.S. Census ACS 2014-2018 estimates for the Study Area.

quantitative analysis of indirect open space impacts for employees would be required as well.

Table 7-1: Worker Calculations

Scenario 1				**Scenario 2**		
Site 1	*Use**	*Workers*		*Site 1*	*Use**	*Workers*
24,287	Retail	73		27,630	Retail	83
27,558	Retail	83		31,995	Retail	96
25,749	Office	103		27,964	Office	112
8,013	Med-Office	18		169,687	Med-Office	377
213	Residential Units	9		-	Residential Units	0
161	Parking	3		279	Parking	6
	Sub-total	**288**			Sub-total	**674**
Site 2	*Use**	*Workers*		*Site 2*	*Use**	*Workers*
1,189	Retail	4		4,381	Retail	13
500	Misc-CF	2		11,751	Med-Office	26
17	Res Units	1		-	Res Units	0
-	Parking	0		-	Parking	0
	Sub-total	**5**			Sub-total	**39**
Total		**293**		**Total**		**713**

Assumptions:
Retail = 1/333 sf
Office = 1/250 sf
General CF = 1/333 sf
Medical Office = 1/450 sf
1 employee / 25 dwelling units
1 employee / 50 parking spaces

Preliminary Assessment

Based on the methodologies presented in the *CEQR Technical Manual*, an initial quantitative open space assessment involves a determination of an area's open space ratios based on the residential and worker populations of the study areas and the acreage of all publicly accessible open space resources within these study areas. If an area's open space ratio decreases significantly as a result of a proposed action or if an area has a very low open space ratio, a more detailed assessment may be required.

Based on the calculation of the ratio of publicly accessible open space acres to the study area population, a determination of the adequacy of open space resources in the study area was quantified. The resultant computation for the study area was then compared with the median ratio for New York City, which is 1.5 acres per 1,000 residents, and with the planning benchmarks of 2.5 acres per 1,000 population established by the DCP. The optimal ratio for worker populations is 0.15 acres of passive open space per 1,000 nonresidents.

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would decrease the open space ratio substantially, thereby reducing the availability of open spaces for an area's population. A decrease in the open space ratio of 5 percent or more is generally considered to be a significant adverse impact on open space resources. However, if the existing open space ratio is low, even an open space ratio change of less than 1 percent may result in potential significant open space impacts.

The residential project study area exhibits a low open space ratio of 0.186 acres per 1,000 residents, (based on 9.05 acres of existing open space within a ½-mile radius divided by the study area population of 48,632). The worker project study area also exhibits a high open space ratio of 0.27 acres per 1,000 workers (based on 0.72 acres of existing passive open space within a ¼-mile radius divided by the worker population of 2,640 workers), compared to the optimal ratio for worker populations of 0.15 acres of passive open space per 1,000 nonresidents, according to the *CEQR Technical Manual.*

Existing Conditions

Study Area Populations

Residential

According to the U.S. Census American Community Survey (ACS), the half-mile area surrounding the Rezoning Area contains 48,632 residents (See Table 7-2) based on estimates from 2014-2018 (See Figure 5-1). Therefore, the open space study area would have an existing residential population of 48,632 persons.

Table 7-2: ½-Mile Study Area Residential Population

	TOTAL POPULATION* (2014-2018)
Study Area	48,632

Source: U.S. Census Bureau, 2014-2018American Community Survey 5-Year Estimates

Table 7-3: ¼-Mile Study Area Worker Population

	TOTAL NONRESIDENTIAL POPULATION (2012-2016)
Worker Study Area	2,640

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, Special Tabulation: Census Transportation Planning. CTPP Part 2 – Total Workers, 16 Years and Over at Workplace

Worker

The worker study area population was calculated using the Census Bureau's American Community Survey (ACS) data, from the Special Tabulation data, the most recently of which is available for 2012-2016. This data tabulates workers within the census tracts located fully or at least 50 percent within the quarter-mile study area. As shown in Table 7-3, the quarter-mile study area ("Worker Study Area") contained a total of 2,640 employees, which will be assumed as the nonresidential population.

Study Areas Open Space

Residential

The one-half mile residential open space study area is generally bounded by an area between Northern Boulevard to the north, The Brooklyn-Queens Expressway to the south, 52nd Street to the west and 74th Street to the east. Within the census tracts that are fully or at least 50 percent within this area, there are 12 publicly owned and accessible facilities providing a total of 9.05 acres of open space resources. See Figure 7-1, Open Space Facilities and Census Tracts and Table 7-4, Inventory of Open Space Resources.

Worker

The one-quarter mile worker open space study area is generally bounded by an area with 37th Avenue to the north, 57th Street to the west, Queens Boulevard to the south and 68th Street to the east. Within the census tracts that are fully or at least 50 percent within this area, there are 8 publicly owned and accessible facility providing a total of 1.62 acres of open space resources. See Figure 7-1, Open Space Facilities and Census Tracts and Table 7-4, Inventory of Open Space Resources.

Figure 7-1: Open Space Facilities and Census Tracts



Table 7-4: Inventory of Open Space Resources

Map Key	Open Space Name and Location	Total Size (acres)	Area Within ½ Mile	Area Within ¼ Mile
1	Sergeant Collins Triangle – Broadway & 34th Avenue	0.12	0.12	0.12
2	Hart Playground – 37t Avenue & 65th Street	0.9	0.9	0.9
3	Crosson Park/Winfield Plaza – 69th Street & Woodside Avenue	0.09	0.09	0.09
4	Sherry Park – Queens Boulevard & 65th Place	0.35	0.35	0.35
5	Big Bush Park – Queens Boulevard & 61st Street	2.50	2.50	n/a
6	Woodside Plaza – 60th & Woodside Avenue	0.02	0.02	0.02
7	Carl L. Sohncke Square – 58th Street & Woodside Avenue	0.04	0.04	0.04
8	Steinmann Triangle – 55th Street & Skillman Avenue	0.21	0.21	n/a
9	Doughboy Plaza – Woodside Avenue & 56th Street	1.71	1.71	n/a
10	Lawrence Virgilio Playground – 52nd Street & 39th Road	3.01	3.01	n/a
11	Pigeon Paradise – 69th Street & 37th Avenue	0.07	0.07	0.07
12	Latham Park – 67th Street & 43rd Avenue	0.03	0.03	0.03
TOTAL		**9.05**	**9.05**	**1.62**

Assessment of Open Space Adequacy

Residential

The residential open space ratio was calculated based on the residential study area population shown in Table 7-2 and the total open space acreage within ½-mile shown in Table 7-4. The resulting ratio is 0.18 acres per 1,000 residents based on 9.05 acres of existing open space divided by the Study Area population of 48,632 residents.. This ratio is substantially less than the citywide average of 1.5 acres and the DCP benchmark of 2.5 acres per 1,000 population, indicating that the area is underserved by public open space resources.

Worker

The worker open space ratio was calculated based on the worker study area population shown in Table 7-3 and the total open space acreage within ¼-mile shown in Table 7-4. The resultant ratio is 0.61 acres per 1,000 workers based on 1.62 acres of existing open space divided by the Worker Study Area population of 2,640 workers. However, workers are not anticipated to utilize all open spaces in the Worker Study Area, as workers typically engage in passive activities compared to active activities. As such, the more appropriate ratio of workers to open space resources assume a worker to passive open space ratio, which is calculated in the detailed analysis conducted below (see Table 7-9). This number is 0.72 acres of passive open space for 2,640 workers or a ratio of 0.27. This ratio is higher than the optimal ratio for worker populations of 0.15 acres of passive open space per 1,000 nonresidents, indicating that the area is well-served by public open space resources for the worker population.

For the remainder of the preliminary analysis however, the ratio will assume all open space resources in the Work Study Area, and in the detailed analysis conducted below, open spaces are divided between passive and active open space for the nonresidential population.

Future No-Action Condition

Study Area Populations

Residential

Currently, the Study Area contains 48,632 residents (See Table 7-2), according to 2014-2018 U.S Census estimates. In order to account for major development that would occur prior to the Analysis Year, a query of DOB building permits was conducted for the Study Area, which found 12 planned developments, which include permitted developments and enlargements in the Study Area. Combined, these developments total 242 anticipated new dwelling units to include as part of the No-Action population.

Based on estimates from 2014-2018 ACS, the average household size for the study area is 2.68 persons per dwelling unit (DU), which is the average between owner-occupied and renter-occupied units in Queens Community District #2. Therefore, these 242 new

dwelling units would be expected to generate 649 new residents in the Study Area prior to the Analysis Year of 2023. Therefore, the open space study area would have a No-Action residential population of 49,281 persons in 2023.

Table 7-5: No-Action Developments in Study Area

Number	Street	Dwelling Units	BIN No.
41-59	71st Street	5	4030615
64-06	Queens Boulevard	42	4053651
41-10	69th Street	3	4618108
41-30	66th Street	14	4030239
34-44	59th Street	3	4027371
34-46	59th Street	3	4027371
37-31	58th Street	2	4027701
70-38	Broadway	2	4029734
37-32	58th Street	2	4027667
41-12	69th Street	3	4607263
37-46	72nd Street	154	4618758
67-11	Roosevelt Avenue	9	4028080
Total		**242**	

Source: Department of Buildings, Active Major Construction: (https://www1.nyc.gov/assets/buildings/html/nyc-active-major-construction.html, Accessed April 2019

Worker

As stated above, the latest census worker population of the quarter-mile open space study area is 2,640 persons. No major commercial projects were identified based on available DOB data. Therefore, for a conservative analysis, a background growth rate of 0.5 percent was applied per year. Therefore, the open space study area would have a No-Action worker population of 2,734 workers in 2023.

Study Areas Open Space

Residential

There would be no increase or decrease in the 9.05 acres of existing open space area within the Study Area by the project build year of 2023.

Worker

There would be no increase or decrease in the 1.62 acres of existing open space area within the Worker Study Area by the project build year of 2023.

Assessment of Open Space Adequacy

Residential

The Future No-Action residential open space ratio within Study Area would be approximately 0.183 based on the area residential population of 49,281 persons in 2023 and the 9.05 acres of open space area.

Worker

The Future No-Action worker open space ratio within the Worker Study Area would be approximately 0.59 based on the area worker population of 2,733 persons in 2023 and the 1.62 acres of open space area.

Future With-Action Scenario

Study Area Populations

Residential

As discussed above, the Proposed Actions are expected to generate approximately 603 new residents to the Study Area. Adding this population to the Future No-Action residential population of 49,281 would result in a total Study Area population of approximately 49,884 residents.

Worker

The Proposed Actions would generate an increment of approximately 623 new workers in the Study Area. Adding this population to the Future No-Action worker population 2,733 would result in a total study area population of approximately 3,356 workers.

Study Areas Open Space

Residential

No new publicly accessible open space and recreational resources are planned to be added to the residential study area by 2023 with the Proposed Actions. Therefore, in 2023 with the Proposed Actions, the residential project study area would contain approximately 9.05 acres of open space resources, the same as under currently existing and Future No-Action conditions.

Worker

No new publicly accessible open space and recreational resources are planned to be added to the worker study area by 2023 with the Proposed Actions. Therefore, in 2023 with the Proposed Actions, the worker project study area would contain approximately 1.62 acres of open space resources, the same as under currently existing and Future No-Action conditions.

Assessment of Open Space Adequacy

Residential

The Future With-Action residential open space ratio within the Study Area would be approximately 0.181 based on the area residential population of 49,884 persons in 2023 and the 9.05 acres of open space area.

The projected residential open space ratio in 2023 with the Proposed Actions would be 0.181 acres per 1,000 residents compared with the projected ratio of 0.183 acres in the Study Area in the future without the project. This represents a decrease of approximately 0.002 acres or 1.1% in the residential open space ratio. Therefore, the residential community would continue to be underserved compared to the City as a whole and would not meet DCP's open space planning goal or its deficiency threshold.

Table 7-6 shows the calculation of residential open space ratios for the existing, Future No-Action, and Future With-Action Scenarios.

Table 7-6: Existing, Future No-Action, and Future With-Action Residential Open Space Ratios

	Existing Conditions	Future No-Action	Future With-Action
Publicly Accessible Open Space (Acreage)	9.05	9.05	9.05
Study Area Population	48,632	49,281	49,884
Open Space Ratio (Acres/1,000 Residents)	0.186	0.183	0.181 (-1.1%)

Worker

The Future With-Action worker open space ratio within Worker Study Area would be approximately 0.48 based on the area worker population of 3,356 persons in 2023 and the 1.62 acres of open space area.

The projected worker open space ratio in 2023 with the Proposed Actions would be 0.48 acres per 1,000 workers compared with the projected ratio of 0.61 acres in Work Study Area in the future without the project. This represents a decrease of approximately 0.11 acres per 1,000 workers or approximately 18% in the worker open space ratio. Table 7-7 shows the calculation of worker open space ratios for the existing, Future No-Action, and Future With-Action Scenarios.

Table 7-7: Existing, Future No-Action, and Future With-Action Worker Open Space Ratios

	Existing Conditions	Future No-Action	Future With-Action
Publicly Accessible Open Space (Acreage)	1.62	1.62	1.62
Study Area Population	2,640	2,733	3,356
Open Space Ratio (Acres/1,000 Workers)	0.61	0.59	0.48 (-18.5%)

Conclusion

The open space ratio for the Study Area is less than 0.25 acres, which is considered to be low and the Proposed Actions would result in a decrease in the ratio of approximately one percent. While the open space ratio for the Worker Study Area is higher, the resulting decrease of approximately 19 percent is higher than five percent. According to the *CEQR Technical Manual* a decrease of more than five percent warrants further analysis. In addition, where low ratios of open space are present, reductions in approximately one percent can be considered significant. Therefore, a detailed open space analysis is provided below for both categories.

Detailed Analysis

Study Area Populations by Age Group

Residential

The Study Area population and age breakdown was estimated using data from 2018 U. S. Census estimates for the accessible census tracts located fully or at least 50 percent within the one-half mile study area. As shown in Table 7-8, in 2014-2018 the Study Area contained a total of 48,632 residents. 18.8% of the area population was younger than 20 years of age while 15.3% was 65 years of age or older. 65.8% of the area population was between the ages of 20 and 64, indicating a heavier reliance on active open space and passive open space that does not revolve around playground areas.

Table 7-8: Residential Study Area Population by Age Group (2014-2018)

Age Category	Persons	Percent of Population
Under 5	2,454	5.00%
5-9	2,317	4.80%
10-14	2,504	5.10%
15-19	1,876	3.90%
20-64	32,017	65.80%
65 and older	7,464	15.30%
Total	48,632	100%

Source: U.S. Census Bureau, 2014-2018American Community Survey 5-Year Estimates

Worker

The worker study area population was estimated using 2012-2016 Census Transportation Planning Package (CTTP) data collected through the Census Bureau's American Community Survey (ACS) surveys for the accessible census tracts located fully or at least 50 percent within the one-quarter mile study area (also known here as the Worker Study Area). As shown in Table 7-3 above, in 2010 the study area contained a total of 2,640 workers within the five relevant census tracts for the most recently available data.

Study Areas Open Space

The Study Area contains 12 publicly accessible open spaces, which total approximately 9.05 acres. This includes approximately 6.62 acres of active and 2.43 acres of passive open space (see Table 7-9 and Figure 7-1). In terms of publicly accessible open space, the study area includes primarily active open space within children's playgrounds and other multi-purpose park areas containing basketball courts, handball courts, baseball fields and fitness equipment. The passive open space primarily consists of bench seating and landscaped areas. All facilities in the study area are managed by the Department of Parks and Recreation (DPR).

Table 7-9 Inventory of Open Space Resources

Map Key	Open Space Resource Name & Location	Total Size (Acres)	Agency	Features	Passive Acres (total/ within ¼-mile)	Active Acres	Condition	Utilization
1	Sergeant Collins Triangle – Broadway & 34th Avenue	0.12	DPR	Benches	0.12	0	Very Good	Low to Moderate
2	Hart Playground – 37t Avenue & 65th Street	0.9	DPR	Bathrooms, Playgrounds	0.0	0.9	Good	Low to Moderate
3	Crosson Park/Winfield Plaza – 69th Street & Woodside Avenue	0.09	DPR	Benches	0.09	0	Good	Low to Moderate
4	Sherry Park – Queens Boulevard & 65th Place	0.35	DPR	Benches	0.35	0	Good	Low to Moderate
5	Big Bush Park – Queens Boulevard & 61st Street	2.5	DPR	Baseball Fields, Basketball Courts, Bathrooms, Fitness Equipment, Handball Courts, Playgrounds, Soccer Fields, Spray Showers	0	2.5	Fair	Low to Moderate
6	Woodside Plaza – 60th & Woodside Avenue	0.02	DPR	Benches	0.02	0	Good	Low to Moderate
7	Carl L. Sohncke Square – 58th Street & Woodside Avenue	0.04	DPR	Benches	0.04	0	Good	Low to Moderate
8	Steinmann Triangle – 55th Street & Skillman Avenue	0.21	DPR	Benches	0	0.21	Good	Low to Moderate

9	Doughboy Plaza – Woodside Avenue & 56th Street	1.71	DPR	Benches	1.71/0.00		Fair	Low to Moderate
10	Lawrence Virgilio Playground – 52nd Street & 39th Road	3.01	DPR	Basketball Courts, Eateries, Handball Courts, Playgrounds, Spray Showers, Bathrooms, Fitness Equipment, Outdoor Pools, Running Tracks	0	3.01	Fair	Low to Moderate
11	Pigeon Paradise – 69th Street & 37th Avenue	0.07	DPR	Benches	0.07	0	Very Good	Low to Moderate
12	Latham Park – 67th Street & 43rd Avenue	0.03	DPR	Benches	0.03	0	Very Good	Low to Moderate
Total		**9.05**			**2.43/0.72**	**6.62**		

Source: New York City Department of Parks and Recreation (DPR)
Notes: Field survey conducted August 17th, 2018 and September 10, 2019 during clear days with highs between 77-82F.

A field survey of Resource numbers 1 through 10 was conducted on Friday August 17th between 11 A.M and 3 P.M during clear weather. Based on the field survey, all resources were low to moderately utilized (25-50%) with no facility utilized over 50%. This level of usage implies sufficient capacity is available for the facilities during the mid-day period. In addition, Pigeon Paradise and Latham Park (Resources 11 and 12) were observed to be in very good condition on a field visit conducted on September 20, 2019 at 10am on a clear day, with low (approximately 25%) utilization.

Table 7-9 indicates the latest DPR condition report, which indicate all resources as acceptable. Sergeant Collins Triangle and Woodside Plaza had no known condition reports with DPR but field visits confirmed a recent rehabilitation of Sergeant Collins Triangle and the benches at Woodside Plaza in good working condition. Pigeon Paradise

and Latham Park were observed to be in very good condition on a field visit conducted on September 20, 2019 at 10am.

Table 7-10: DPR Condition Reports

Map Key	Open Space Name - Location	DPR Condition	Inspection Date
1	Sergeant Collins Triangle – Broadway & 34th Avenue	N/A	N/A
2	Hart Playground – 37th Avenue & 65th Street	Acceptable	16-Apr-19
3	Crosson Park/Winfield Plaza – 69th Street & Woodside Avenue	Acceptable	4-Feb-19
4	Sherry Park – Queens Boulevard & 65th Place	Acceptable	11-Oct-18
5	Big Bush Park – Queens Boulevard & 61st Street	Acceptable	9-Apr-19
6	Woodside Plaza – 60th & Woodside Avenue	N/A	N/A
7	Carl L. Sohncke Square – 58th Street & Woodside Avenue	Acceptable	30-Jan-19
8	Steinmann Triangle – 55th Street & Skillman Avenue	Acceptable	15-Nov-18
9	Doughboy Plaza – Woodside Avenye & 56th Street	Acceptable	19-Jun-19
10	Lawrence Virgilio Playground – 52nd Street & 39th Road	Acceptable	6-Jun-19
11	Pigeon Paradise – 69th Street & 37th Avenue	Acceptable	30-Jan-19
12	Latham Park – 67th Street & 43rd Avenue	Acceptable	27-Feb-19

Source: New York City Department of Parks and Recreation (DPR) website, accessed September 2019

Additional Open Space Resources

Several public parks are located just outside the open space radius area and have and have not been included in the quantitative analysis as they are located outside the census tract boundaries included in the study areas. However, these public parks and open space resources serve the area's residential and worker populations. A description of these facilities follows below:

- Spargo Park consists of 0.38 acres of passive open space, a 0.6 mile walk from the Rezoning Area;
- Nathan Widenbaum Playground consists of 0.73 acres of active open space, located a 0.8 mile walk from the Rezoning Area;
- John Vincent Daniels Jr. Square consists of 0.25 acres of passive open space, located a 0.6 mile walk from the Rezoning Area;
- Joe Sabba Park/Sunnyside Veterans Triangle consists of 0.47 acres of passive open space, located a 0.8 mile walk from the Rezoning Area
- Travers Park consists of 1.92 acres of active open space, located a 1 mile walk from the Rezoning Area; and
- Frank D. O'Conner Playground consists of 1.54 acres of active open space, located a 0.9 mile walk from the Rezoning Area;

These resources provide a total of 5.29-acres of publicly accessible open space just beyond the Study Area. Approximately 79% of this acreage or 4.19 acres is active open space and approximately 21% or 1.1 acres is passive open space.

Assessment of Open Space Adequacy

Residential

The existing residential open space ratio was calculated based on the residential study area population (the "Study Area") discussed above and shown in Table 7-2 and the passive, active, and total open space acreage within ½-mile also shown in Table 7-11.

With a total of 9.05 acres of publicly accessible open space (of which 2.43 are for passive use and 6.62 are for active use) and a total residential population of 48,632 persons, the study area has a total open space ratio of 0.186 acres per 1,000 residents (see Table 7-11). This ratio is substantially less than the citywide average of 1.5 acres and the DCP benchmark of 2.5 acres per 1,000 population, indicating that the area is underserved by public open space resources.

The area's residential active open space ratio is 0.136 acres per 1,000 residents, which is well below DCP's planning guideline of 2.0 acres per 1,000 residents. The study area's

current residential passive open space ratio is 0.049 acres of passive open space per 1,000 residents, which is also much less than DCP's goal of 0.5 acres per 1,000 residents.

Table 7-11: Residential Open Space Ratios (Existing Condition)

	Existing Conditions	DCP Guideline
Publicly Accessible Open Space (Acreage)	9.05	-
Study Area Residential Population	48,632	-
Open Space Ratio (Acres/1,000 Residents)	0.86	2.5
Active Open Space Ratio (Acres/1,000 Residents)	0.136	2.0
Passive Open Space Ratio (Acres/1,000 Residents)	0.049	0.5

Worker

The existing worker open space ratio was calculated based on the worker study area population discussed above and shown in Table 7-3 and the passive open space acreage within ¼-mile shown in Table 7-9.

With a total of 0.72 acres of passive publicly accessible open space and a total population of 2,650 workers, the Worker Study Area has a passive open space ratio of 0.27 acres per 1,000 workers (see Table 7-12). This ratio is higher than the optimal ratio for worker populations of 0.15 acres of passive open space per 1,000 nonresidents, indicating that the area is well served by passive open space resources for the nonresidential population.

Table 7-12: Worker Open Space Ratios (Existing Condition)

	Existing Conditions	DCP Guideline
Publicly Accessible Passive Open Space (Acreage)	0.72	-
Study Area Worker Population	2,640	-
Passive Open Space Ratio (Acres/1,000 Workers)	0.27	0.15

Future No-Action Condition

Residential

The Future No-Action residential open space ratio was calculated based on the Future No-Action residential study area population discussed above and shown in Table 7-6 and the passive, active, and total open space acreage within ½-mile shown in Table 7-9.

With a total of 9.05 acres of publicly accessible open space (of which 2.43 are for passive use and 6.62 acres for active use) and a total Future No-Action residential population of 49,281 persons, the study area would have a total open space ratio of 0.183 acres per 1,000 residents (see Table 7-13). This ratio is substantially less than the citywide average of 1.5 acres and the DCP benchmark of 2.5 acres per 1,000 population, indicating that the area would continue to be underserved by public open space resources.

The area's Future No-Action residential active open space ratio would be 0.134 acres per 1,000 residents, which is well below DCP's planning guideline of 2.0 acres per 1,000 residents. The study area's Future No-Action residential passive open space ratio would be 0.0493 acres of passive open space per 1,000 residents, which is also much less than DCP's goal of 0.5 acres per 1,000 residents.

Table 7-13: Residential Open Space Ratios (No-Action Condition)

	No-Action Conditions	**DCP Guideline**
Publicly Accessible Open Space (Acreage)	9.05	-
Study Area Residential Population	49,281	-
Open Space Ratio (Acres/1,000 Residents)	0.183	2.5
Active Open Space Ratio (Acres/1,000 Residents)	0.134	2.0
Passive Open Space Ratio (Acres/1,000 Residents)	0.0493	0.5

Worker

The Future No-Action worker open space ratio was calculated based on the No-Action worker study area population discussed above and shown in Table 7-7 and the passive open space acreage within ¼-mile shown in Table 7-9.

With a total of 0.72 acres of passive publicly accessible open space and a total population of 2,733 workers, the Worker Study Area would have a passive open space ratio of 0.26 acres per 1,000 workers under Future No-Action conditions (see Table 7-17). This ratio is still higher than the optimal ratio for worker populations of 0.15 acres of passive open space per 1,000 nonresidents, indicating that the area would continue to be well-served by passive open space resources.

Table 7-14: Worker Open Space Ratios (No-Action Condition)

	No-Action Conditions	DCP Guideline
Publicly Accessible Passive Open Space (Acreage)	0.72	-
Study Area Worker Population	2,733	-
Passive Open Space Ratio (Acres/1,000 Workers)	0.26	0.15

Future With-Action Condition

Residential

The residential open space ratio was calculated based on the Future With-Action residential study area population discussed above and shown in Table 7-5 and the passive, active, and total open space acreage within ½-mile shown in Table 7-9.

With a total of 9.05 acres of publicly accessible open space (of which 2.43 are for passive use and 6.62 are for active use) and a total Future With-Action residential population of 51,999 persons, the Study Area would have a total open space ratio of 0.174 acres per 1,000 residents (see Table 7-15). The Future With-Action open space ratio would decrease by 1.1% relative to the Future No-Action open space ratio of 0.176. The Future With-Action open space ratio would remain substantially less than the citywide average of 1.5 acres

and the DCP benchmark of 2.5 acres per 1,000 population, indicating that the area would continue to be underserved by public open space resources.

The area's Future With-Action residential active open space ratio would be 0.132 acres per 1,000 residents. The Future With-Action active open space ratio would decrease by 1.49% relative to the no-action active open space ratio of 0.0134. The active open space ratio would remain well below DCP's planning guideline of 2.0 acres per 1,000 residents. The area's future with-action residential passive open space ratio would be 0.0487 acres of passive open space per 1,000 residents. The future with-action passive open space ratio would decrease by 1.2% relative to the no-action passive open space ratio of 0.0493. The passive open space ratio would remain well below DCP's goal of 0.5 acres per 1,000 residents.

It should be noted that 5,552 square feet (0.12 acres) of recreation would be provided on the Applicant's Projected Development Site 1 which would serve to meet at least a portion of the active space needs of the project's residents.

Table 7-15: Residential Open Space Ratios (With-Action Condition and Incremental Change)

	Future No-Action	Future With-Action	DCP Guideline	Change
Publicly Accessible Open Space (Acreage)	9.05	9.05	-	
Study Area Residential Population	49,281	49,884	-	+603
Open Space Ratio (Acres/1,000 Residents)	0.183	0.181	2.5	-1.11%
Active Open Space Ratio (Acres/1,000) Residents	0.134	0.132	2	-1.49%
Passive Open Space Ratio (Acres/1,000 Residents)	0.0493	0.0487	0.5	-1.21%

Worker

The Future With-Action worker open space ratio was calculated based on the Worker Study Area population discussed above and shown in Table 7-7 and the passive open space acreage within ¼-mile shown in Table 7-9.

With a total of 0.72 acres of passive publicly accessible open space and a total population of 3,365 workers, the Worker Study Area would have a passive open space ratio of 0.21 acres per 1,000 workers (see Table 7-16). The Future With-Action passive open space ratio would decrease by approximately 18.5% relative to the No-Action passive open space ratio of 0.26. This ratio is still greater than the optimal ratio for nonresidential populations of 0.15 acres of passive open space per 1,000 nonresidents, indicating that the area would continue to be well served by passive open space resources.

Table 7-16: Worker Open Space Ratios (With-Action Condition and Incremental Change)

	Future No-Action	Future With-Action	DCP Guideline	Change
Publicly Accessible Open Space	0.72	0.72	-	
Study Area Worker Population	2,733	3,356	-	
Passive Open Space Ratio (Acres/1,000 Workers)	0.26	0.21	0.15	-18.5%

Impact Significance

Quantitative Impact

Direct

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would directly displace or alter an existing resource to the detriment of its users. The Proposed Development associated with the Proposed Actions would not

result in the direct displacement of any parklands or recreational facilities. The Proposed Actions would, however, reduce the open space ratio as further discussed below.

Indirect

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would generate a substantial enough population to noticeably diminish the capacity of available open spaces to serve the affected neighborhood. A decrease in the open space ratio of 5 percent or more is generally considered to be a significant adverse impact on open space resources if the area has a median open space ratio of 1.5 acres or less per 1,000 population. However, if the existing open space ratio is low, even an open space ratio change of less than 1 percent may result in potential significant open space impacts.

Residential

At 0.181 acres per 1,000 residential population, the amount of publicly accessible open space with the Proposed Actions would be significantly less than the median of 1.5 acres per 1,000 residents in community districts in the City and well below the planning benchmark of 2.5 acres per 1,000 residents, and would be considered to be a low ratio. Relative to indirect impacts on open space resources, the proposed development would result in a decrease of only 1.1% in the residential open space ratio in the Study Area. Based on *CEQR Technical Manual* criteria, the proposed project could potentially result in a significant adverse impact on open space resources.

The Future With-Action active open space ratio of 0.132 acres per 1,000 residents would represent a decrease of 1.1% relative to the No-Action active open space ratio of 0.134. The active open space ratio would remain well below DCP's planning guideline of 2.0 acres per 1,000 residents. However, as noted below in the qualitative analysis, the development resulting from the Proposed Actions is required to provide 3.3% of the total residential floor area as required recreation space. This would consist of at least 5,552 square feet in Projected Development Site 1 under Scenario 1 or 0.12 acres.

In terms of passive open space, the Future With-Action passive open space ratio of 0.0487 acres of passive open space per 1,000 residents would decrease by 1.21% relative to the

No-Action passive open space ratio of 0.0493. The passive open space ratio would remain well below DCP's goal of 0.5 acres per 1,000 residents.

Worker

At 0.21 acres per 1,000 worker population, the amount of publicly accessible passive open space with the Proposed Actions would be consistent with the optimal ratio for worker populations of 0.15 acres of passive open space per 1,000 nonresidents, and would be considered to be a high ratio. Relative to indirect impacts on open space resources, the proposed development would result in a decrease of 18.5% in the worker passive open space ratio in the Worker Study Area. However, as the overall ratio would continue of 0.21 would continue to be above the optimal ratio of 0.15, the Proposed Actions would not result in a significant adverse impact on open space resources for the nonresidential population.

Qualitative Impact

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would significantly increase shadows, noise, air pollutant emissions, or odors on existing public open spaces resources compared to the future without the action condition. The projected development associated with the Proposed Actions would not significantly increase such impacts on existing public open spaces resources as further explained below.

Based on *CEQR Technical Manual* criteria and as explained further in the Shadows section below, buildings on Projected Development Sites 1 and 2 would not cast new shadows on any open space resources. There is only one open space resource within the maximum shadows radius of the Project Development Sites, that being Woodside Plaza on Woodside Avenue between 59th and 60tt Street. The analysis shows that any incremental shadows from the RWCDS development would not reach this resource.

Quality and Capacity

The Rezoning Area is neither located in a "well-served" or "underserved" area for public open space, according to the *CEQR Technical Manual*. This is evident based on the amount

of public open space resources located immediately outside the Study Area, which are further discussed below. Furthermore, as noted above in Table 7-10, all of the public open space resources in the Study Area with DPR inspection reports were rated as "acceptable" by the agency with low to moderate utilization observed during field visits occurring during the warmer months of the year, on clear days. This indicates that additional capacity is available for existing public open space resources to serve current and future residents and the quality of these resources is acceptable.

New Recreational Space for Building Residents

The Proposed Actions would not result in the creation of any new publicly accessible open space. However, as noted above, under the Proposed Actions, at least 5,552 square feet (0.12 acres) of required recreational space would be created for residents of the Proposed Development. This recreational space would be provided for use by project residents, and as it would not be publicly accessible, the area has not been included in any calculations of publicly accessible open space. However, it would help satisfy some of the open space recreational needs of the 603 residents added to the Study Area and would serve to off-set the 1% reduction in active open space noted above in the quantitative analysis. As currently proposed, this active recreation space would consist of gym space for use by residents as a required amenity. In addition, Projected Development Site 2 would be required to provide at least 350 square feet of recreation space.

Demographics of the Study Area

As noted above, the Study Area population and age breakdown was estimated with approximately 18% of the area population being younger than 20 years of age, while 15% of the population is 65 years of age or older. The remaining 66%, or a majority of the Study Area population, is aged between 20 and 64, indicating a heavier reliance on active open space and passive open space that does not revolve around playground areas.

The City seeks to attain a planning goal of a balance of 80 percent active open space and 20 percent passive open space. Despite the relatively low amount of open space in the Study Area, the balance of open space in the Study Area is consistent with that planning

goal. The 6.62 acres of active open space would represent approximately 73% of the total open space acreage of 9.05 acres while the 2.43 acres of passive open space would represent approximately 27% of the total acreage. Only one of the 12 facilities present (Hart Playground) primarily serves as a playground without other amenities and features. This breakdown is consistent with planning goals as well as the Study Area population.

Additional Resources Located Outside the Study Area

The quantitative open space analysis did not include six public parks located just outside the open space radius area (Spargo Park, Nathan Widenbaum Playground, Joe Sabba Park, Travers Park & Frank O'Conner Playground). These resources provide a total of 5.29-acres of publicly accessible open space just beyond ½-mile of the proposed Rezoning Area and all within a 1-mile or 18-minute walk from this area. Approximately 79% of this acreage or 4.19 acres is active open space and approximately 21% or 1.1 acres is passive open space. While it is unlikely that residents of the Proposed Development would travel to these resources and these facilities are not further assessed for quality and usage, it is evident the some of the Study Area population that live further from the Rezoning Area have overall access to additional resources.

Conclusion

The Proposed Actions would not result in any significant direct impacts on any open space resources. While a decrease in the active open space ratio of approximately 1.4% for the Study Area population would occur in an area with a relatively low ratio of active open space, the Proposed Actions would result in new recreational space for the increased population, which would consist of residents for the Proposed Development. For passive open space, the ratio for residents would decrease by less than one percent and pursuant to the *CEQR Technical Manual*, would not be considered a significant adverse impact.

The largest quantitative reduction in public open space would occur through the additional of a new nonresidential population to the Worker Study Area. However, as noted above, the overall ratio of 0.21 would continue to be higher than the planning goal

of 0.15. As such, the Proposed Actions would not result in a significant adverse impact on open space resources for the nonresidential population,

The *CEQR Technical Manual* indicates that the ratios alone do constitute an absolute impact threshold and that the balance of passive and active open space resources should be considered. A larger percent of active space is preferred, due to the fact that physical space requirements for active open space uses are significantly greater, while a greater number of passive open space users, such as those sitting on a park bench to enjoy fresh air, may be accommodated within smaller spaces. The City seeks a balance of 80 percent active open space and 20 percent passive open space, with the ratio at 73 percent and 27 percent, respectively, in the Future With-Action condition. This, in addition to the overall "acceptable" quality of facilities and available capacity observed, indicates that the Proposed Actions would not result in significant adverse impacts on public open spaces for residents and nonresidents.

Lastly, as the Rezoning Area is neither located in a "well-served" or "underserved" area for public open space, additional public open spaces are available immediately outside the Study Area. These resources are available for the existing Study Area population that resides further away from the Rezoning Area. It is therefore concluded that the project would not have any potentially significant adverse open space impacts and further assessment is not warranted.

8. SHADOWS

Introduction

Under CEQR, a shadow is defined as the circumstance in which a building or other built structure blocks the sun from the land. An adverse shadow impact is considered to occur when the shadow from a proposed project falls upon a publicly accessible open space, a historic landscape, or other historic resource if the features that make the resource significant depend on sunlight, or if the shadow falls on an important natural feature and adversely affects its uses or threatens the survival of important vegetation. An adverse impact would occur only if the shadow would fall on a location that would otherwise be in sunlight; the assessment therefore distinguishes between existing shadows and new shadows resulting from a proposed project. Finally, the determination of whether the impact of new shadows on an open space or a natural or historic resource would be significant is dependent on their extent and duration. In general, shadows on City streets and sidewalks or on other buildings are not considered significant under CEQR. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under CEQR.

According to the *2020 CEQR Technical Manual*, a shadows assessment is not required unless the project would include a structure at least 50 feet tall or if it would contain shorter structures that might cast substantial new shadows on an adjacent park, historic resource, or an important natural resource. A shadow analysis is required for this project since the RWCDS would result in buildings over 50 feet in height and the Project Area is located a short distance from several open space resources.

The RWCDS assumed the Rezoning Area would be redeveloped with two buildings (Projected Development Site 1 & 2) each of which would result in an incremental height over 50 feet. Under the proposed C4-4 district with MIH, a maximum height of 135 feet could be achieved for each building.

Based on *CEQR Technical Manual* criteria, the longest shadow that any building would cast during the year (except within an hour and a half of sunrise or sunset which is not deemed to be of concern) is 4.3 times its height. Under the RWCDS projected development, the sites would have a top floor height of 138 feet under a proposed maximum height of 135 feet and a bulkhead height of approximately 158 feet, which

Figure 8-1: Tier 1 Screening Assessment

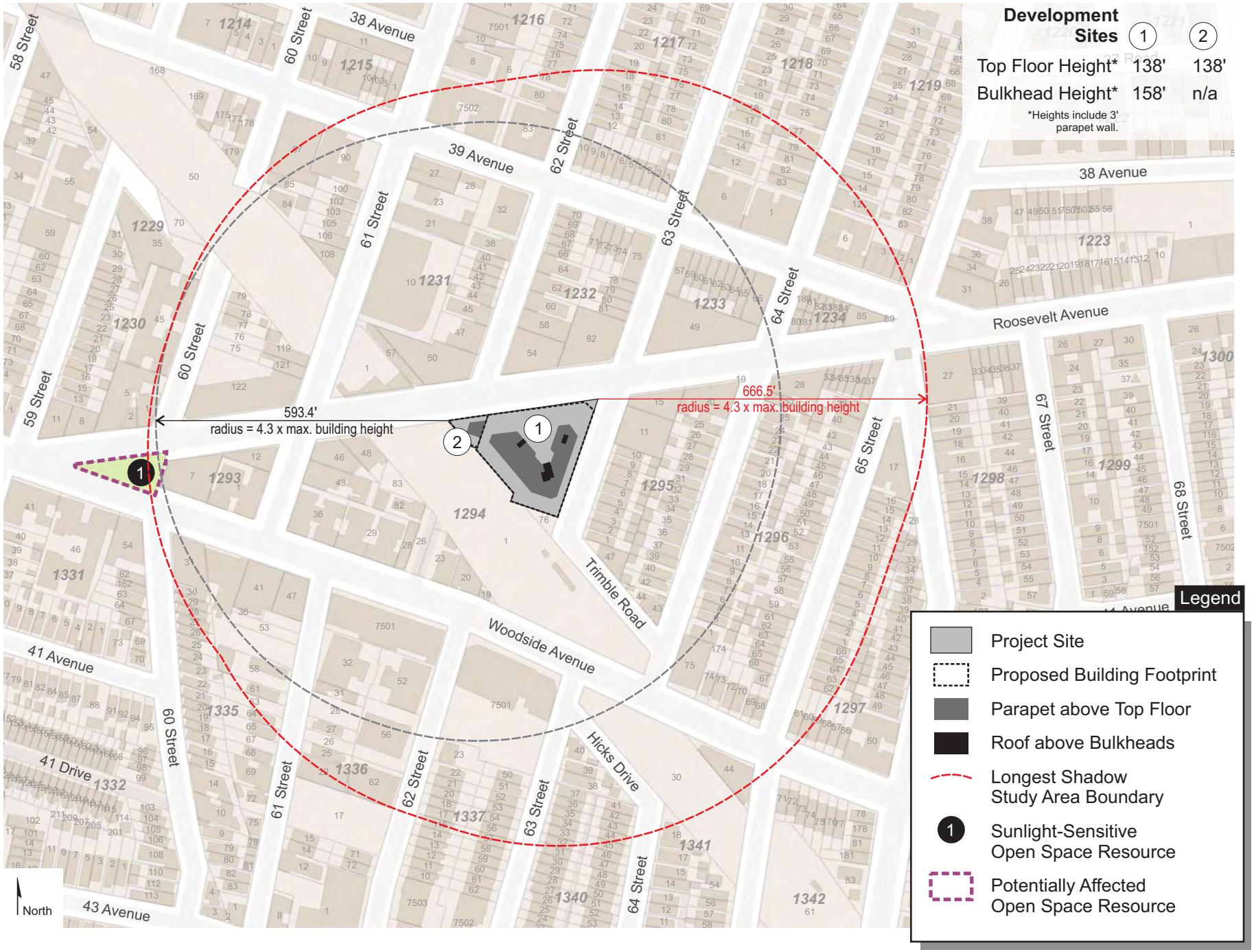


Figure 8-2: Tier 2 Screening Assessment

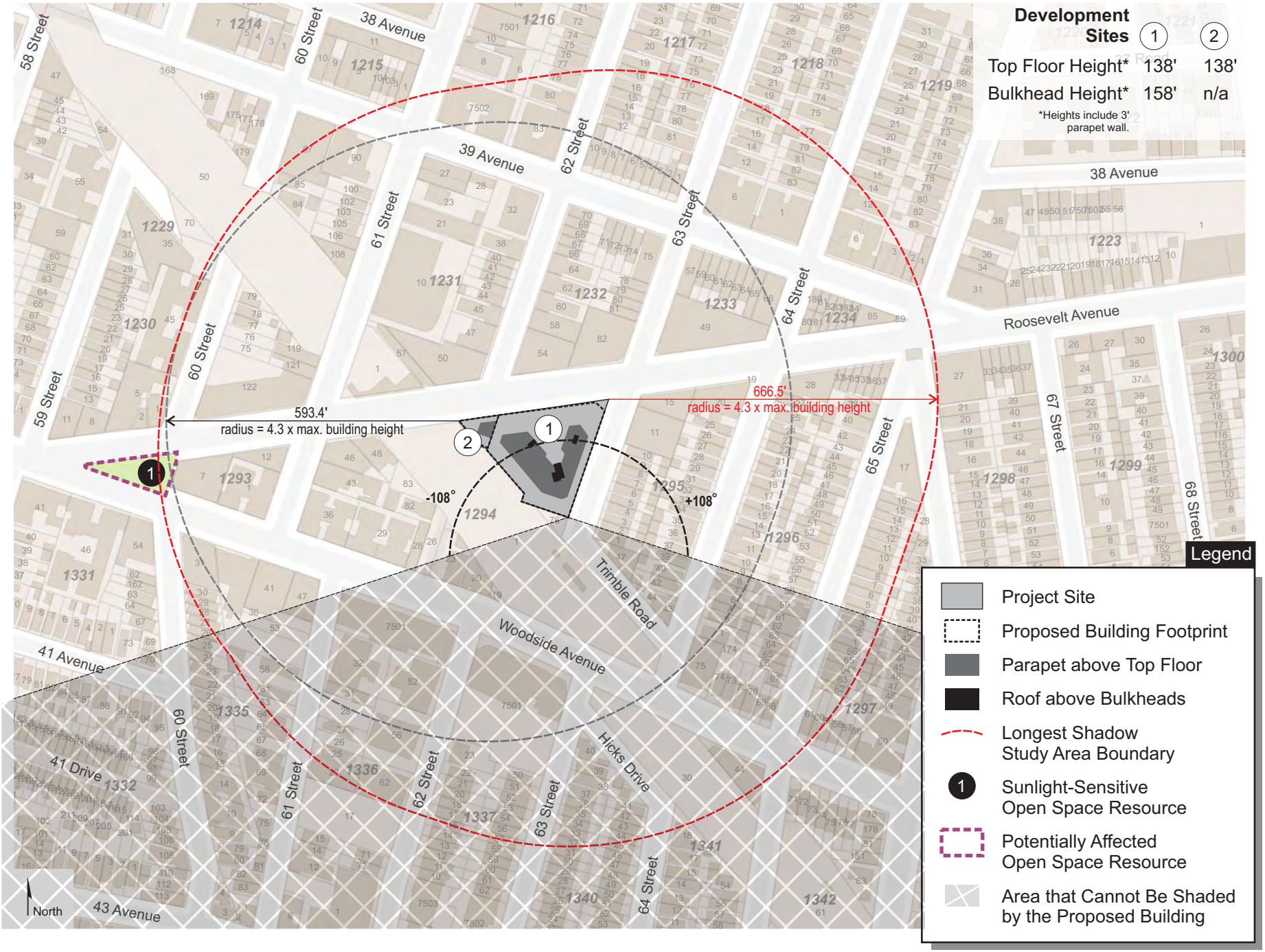


Figure 8-3: Tier 3 Screening Assessment for the December 21 Analysis Day

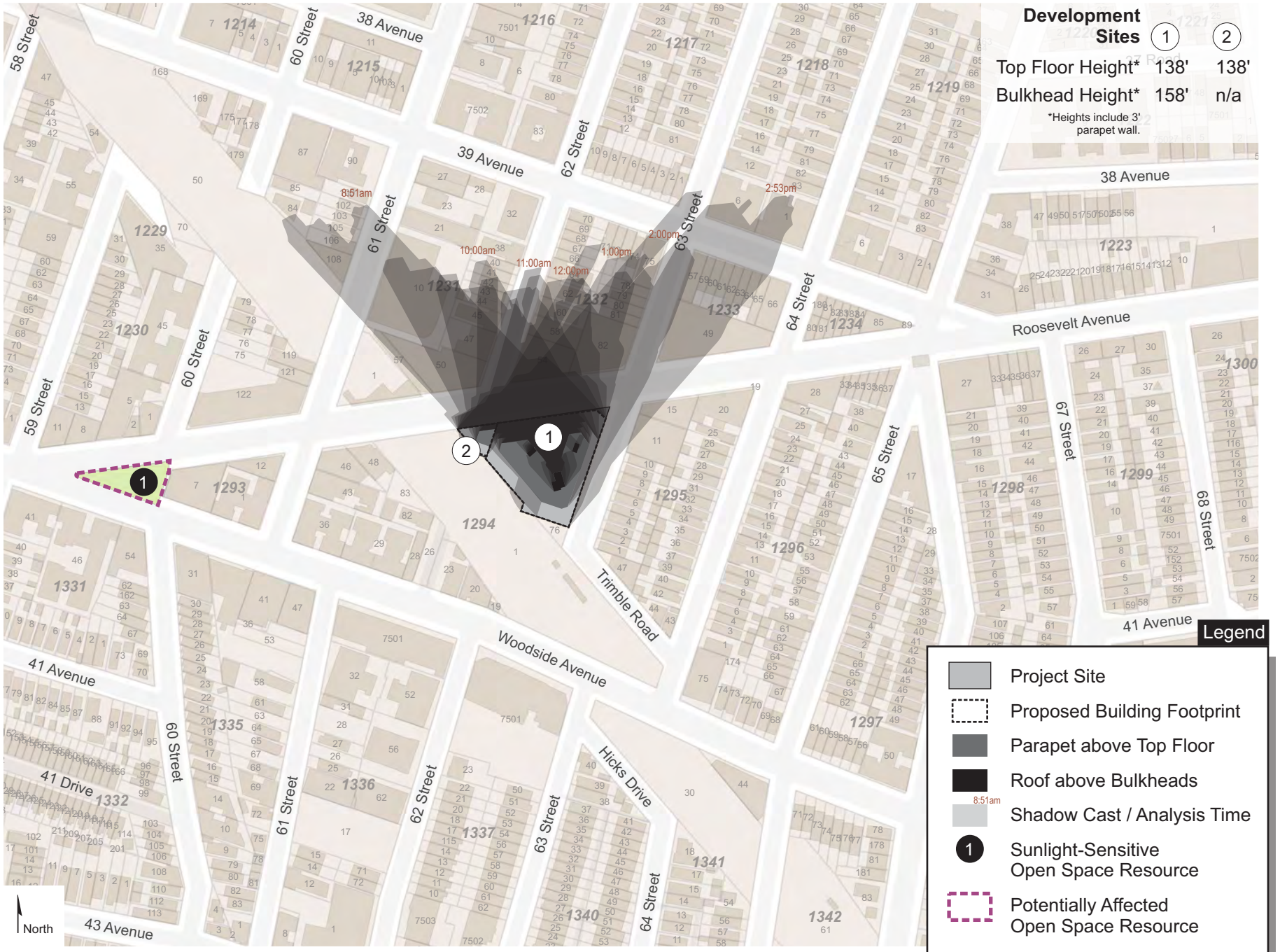


Figure 8-4: Tier 3 Screening Assessment for the March 21 Analysis Day

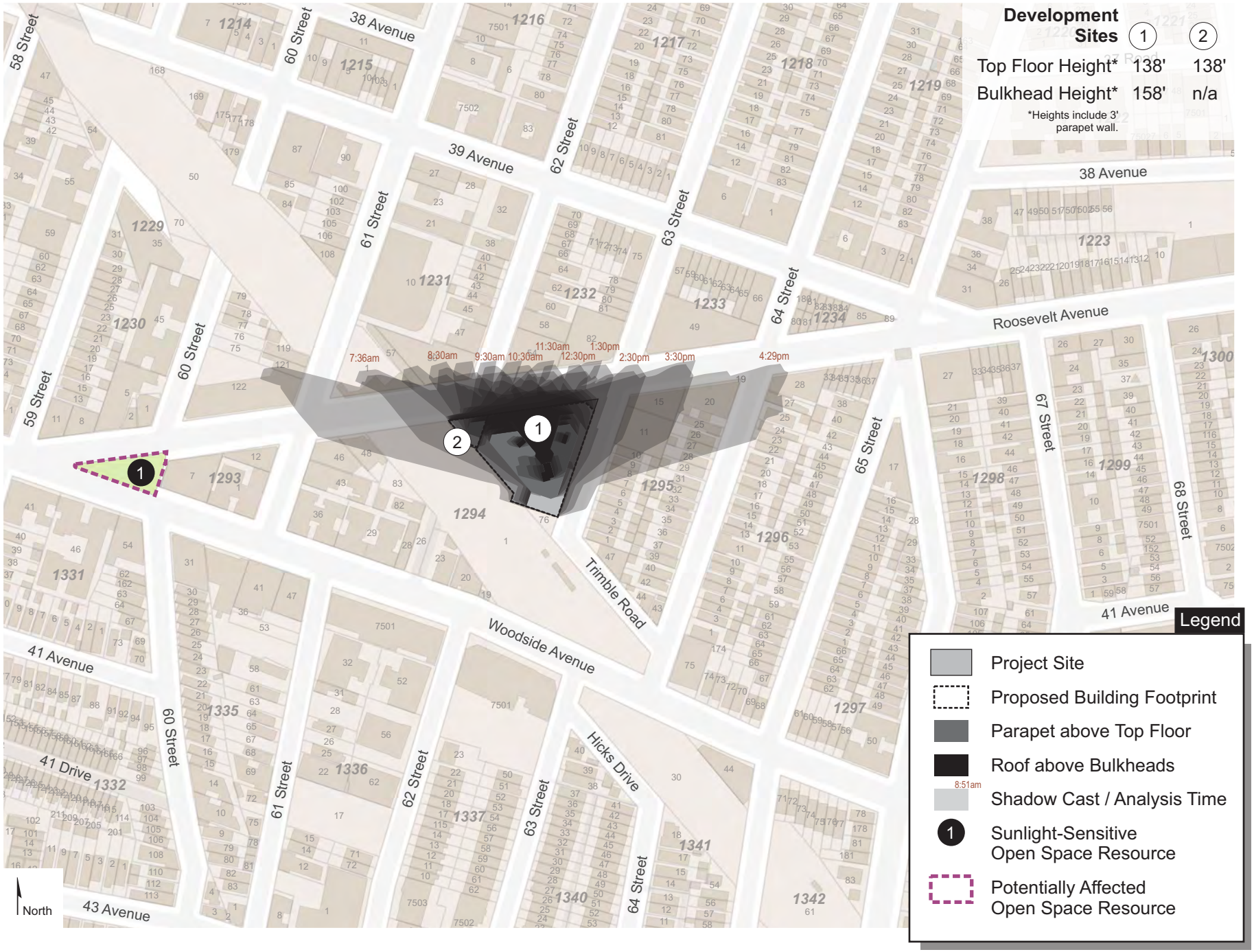


Figure 8-5: Tier 3 Screening Assessment for the May 6 Analysis Day



Figure 8-6: Tier 3 Screening Assessment for the June 21 Analysis Day



includes a three-foot parapet wall. Applying the 4.3 factor to the heights outlined above would result in a maximum shadow distance of 593.4 feet and 666.5 feet from the Rezoning Area.

PRELIMINARY SCREENING ASSESSMENT

Tier 1 Screening Assessment

A tier 1 assessment was performed assuming a maximum study area boundary of approximately 666.5 feet around the Rezoning Area. The closest sunlight-sensitive open space resource is Woodside Plaza, which is located at the intersection of Roosevelt Avenue, Woodside Avenue and 60th Street (see *Chapter 7, Figure 7-1: Open Space Facilities*) between 56th and 57th Street. Furthermore, there are no sunlight sensitive historic resources located within the maximum shadow radius (see *Chapter 9, Historic and Cultural Resources*).

When the maximum shadows distance is modeled in relation to the single sunlight sensitive open space resource (Figures 8-1 through 8-6), any incremental shadows created as a result of the proposed new buildings would not reach the resource under any of the analysis days (December 21st, March 21st, May 6th and June 21st).

Conclusion

Based on *CEQR Technical Manual* criteria, any shadows created as a result of the Proposed Actions would not result in significant adverse shadow impacts, as the Projected Development Sites will not result in any buildings tall enough or located close enough to cast incremental shadows on any sunlight sensitive resources within the surrounding area.

Therefore, the Proposed Actions would not result in significant adverse shadows impacts on any open space resources, historic resources, or important natural resources and further assessment is not required.

9. HISTORIC AND CULTURAL RESOURCES

Introduction

Historic and cultural resources include both architectural and archaeological resources. Architectural resources generally include historically important buildings, structures, objects, sites, and districts. They may include bridges, canals, piers, wharves, and railroad transfer bridges that may be wholly or partially visible above ground. Archaeological resources are physical remains, usually subsurface, of the prehistoric, Native American, and historic periods—such as burials, foundations, artifacts, wells, and privies. As a general rule, archaeological resources do not include 20th and 21st Century artifacts.

According to the *CEQR Technical Manual*, a historic and cultural resources assessment is required if a project has the potential to affect either archaeological or architectural resources. Since the Proposed Development would result in increased subsurface disturbance in the Rezoning, it is necessary to analyze the potential impacts of the Proposed Development on archaeological resources. In addition, the Proposed Actions would result in the demolition of buildings in the Rezoning Area, so further assessment of architectural resources is warranted and both areas are discussed below.

Architecture

The Proposed Rezoning Area (Block 1294, Lots 55, p/o 56, 58, 60, 68, p/o 73 and 76) predominantly contain commercial and manufacturing uses, such as retail spaces and some manufacturing uses ranging in height from one- to two-stories constructed between 1931 and as recently as the last decade. The NYC Landmarks Preservation Commission (LPC) was contacted and on June 28, 2018 (See Attachment B) they indicated no known architectural resources in the Rezoning Area.

Archaeology

All of the properties in the Rezoning Area are developed and based on site history from the Phase I Environmental Site Assessment (as noted in *Chapter 12 - Hazardous Materials)* are likely improved with cellar space dating from the time of construction and are not anticipated to contain the potential for archaeological resources. In addition, the NYC

LPC was contacted and on June 28, 2018 (see Attachment B) and they indicated no known archaeological resources in the Rezoning Area.

Conclusion

Based on the above and correspondence with the NYC LPC, no potential for impacts related to architectural or archaeological resources are anticipated and further analysis is not required for Historic and Cultural Resources.

10. URBAN DESIGN AND VISUAL RESOURCES

A preliminary urban design screening assessment for the Proposed Actions is required because the Proposed Development and development assumed in the RWCDS would introduce new buildings that would not be allowed under the existing zoning of the property. As noted in the *CEQR Technical Manual*:

A preliminary assessment is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including the following:

1. Projects that permit the modification of yard, height, and setback requirements;

2. Projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the proposed project.

Currently, the affected area is zoned R6 and R6/C1-4. The R6 district only permits residential and community facility uses (Use Groups 1-4 and 6c) at a maximum of 2.43 (residential only) and 4.8 FAR with the inclusion of community facility space under height factor regulations. Quality housing regulations permit a maximum FAR of 3.0 on a wide street, such as Roosevelt Avenue. Under the R6/C1-4 district, commercial uses are permitted at a maximum of 2.0 FAR on the ground floor only. Under both districts with Quality Housing regulations, a maximum height 70 or 75-feet (with a qualifying ground floor) is permitted after a street wall height of 40-65 feet on a wide street

The proposed C4-4 zoning map amendment would permit a maximum residential FAR of 4.6 FAR with MIH and would permit a greater range of commercial uses (Use Groups 5-6, 8-10 & 12) at a higher-density that would be consistent with the increasingly vibrant and dense character of Roosevelt Avenue, while still permitting residential and community facility uses (Use Groups 1-4). MIH would increase the maximum permitted residential FAR to 4.6 FAR and permit a maximum height of 135 feet or 13-stories with the mandatory inclusion of affordable units.

Since development assumed in the RWCDS is anticipated to result in a different built-form at the street level, an assessment of urban design and visual resources is warranted. Table 10-1: Zoning Comparison Table displays a side-by-side comparison of the varying bulk, use and height regulations between the existing and proposed zoning districts.

Table 10-1: Zoning Comparison Table

	Existing Zoning (R6)		Existing Zoning (R6/C1-4)		Proposed Zoning C4-4 (Under MIH Zoning)	
	ZR Section #	R6	ZR Section #	R6/C1-4	ZR Section #	C4-4
USE GROUPS	22-10	1, 2, 3, 4	22-10/32-10	1-6	22-10/32-10	1-10
MAXIMUM FAR						
Residential	23-153/23-151	3.0[1] (QH), 2.2[2] (QH), 2.36 (HF)	23-153/23-151	3.0[1] (QH), 2.2[2] (QH), 2.36 (HF)	35-20/23-154*	4.6
Affordable Independent Residences for Seniors	23-155	3.9	23-155	3.9	35-012/23-155	5.01
Community Facility	24-11	4.8	33-121	4.8	35-31/33-123	6.5
Commercial	n/a	n/a	33-121	2	35-31/33-122	3.4
Commercial and Community Facility	n/a	n/a	33-121	4.8	35-31/33-123	6.5
Manufacturing	n/a	n/a	n/a	n/a	n/a	n/a
YARDS						
Minimum Front Yard	n/a	n/a	n/a	n/a	n/a	n/a
Minimum Side Yard	23-462	None or 8'	34-232/23-462	None or 8'	34-232/23-462	None or 8'
Minimum Rear Yard	23-47	30'	33-26/23-47	30', 20' (Commercial)	33-26/23-47	30' / 20' (Commecial)
HEIGHT AND SETBACKS						
Minimum Base Height	23-662	40' (QH)[1], 30' (QH)[2]	35-22/35-65/35-652/23-662	40' (QH)[1], 30' (QH)[2]	35-65/35-652/23-662	40'
Maximum Base Height	23-662	65' (QH)[1], 45' (QH)[2]	35-22/35-65/35-652/23-662	65' (QH)[1], 45' (QH)[2]	35-65/35-652/23-664*	75'
Maximum Building Height	23-662	70' (QH)[1], 55' (QH)[2]	35-22/35-65/35-652/23-662	70' (QH)[1], 55' (QH)[2]	35-65/35-652/23-664*	135'/13-Stories
Maximum Height of Front Wall	23-662	65' (QH)[1], 45' (QH)[2]	35-22/35-65/35-652/23-662	65' (QH)[1], 45' (QH)[2]	35-65/35-652/23-664*	75'
Sky Exposure Plane	23-641	2.7:1 narrow / 5.6:1 wide (HF)	35-22/23-641	2.7:1 narrow / 5.6:1 wide (HF)	n/a	n/a
Setbacks from Narrow Streets	23-641/23-662	15' (QH), 20' (HF)	35-22/23-641/23-662	15' (QH), 20' (HF)	35-65/35-652/23-662	15'
Setbacks from Wide Streets	23-641/23-662	10' (QH), 15' (HF)	35-22/23-641/23-662	10' (QH), 15' (HF)	35-65/35-652/23-662	10'
OPEN SPACE						
Minimum Open Space Ratio	23-151	Varies	35-22/23-151	Varies	n/a	n/a
LOT COVERAGE						
Interior/Through Lot	23-153	65% (QH)	35-23/23-153	65% (QH)	35-23/23-153	65% (QH)
Corner Lot	23-153	100% (QH)	35-23/23-153	100% (QH)	35-23/23-153	100% (QH)
DENSITY						
Maximum Number of Dwelling Units	23-22	680 sf/DU max	35-40/23-22	680 sf/DU max	35-40/23-22	680 sf/DU
Affordable Independent Residences for Seniors	23-23	325 sf/DU max	35-40/23-23	325 sf/DU max	35-40/23-23	325 sf/DU max
PARKING						
Residential	25-23	50% (QH), 70% (HF)	25-23	50% (QH), 70% (HF)	25-23	50%
Commercial	n/a	n/a	36-21	By Use	36-21	By Use
Income-Restricted Housing Units	12-10/25-251	None (Transit Zone)	12-10/25-251	None (Transit Zone)	12-10/25-251	None (Transit Zone)
Affordable Independent Residences for Seniors	12-10/25-252	None (Transit Zone)	12-10/25-252	None (Transit Zone)	12-10/25-252	None (Transit Zone)
Government Assisted Dwelling Units	12-10/25-253	35% (QH) / 55% (HF)	12-10/25-253	35% (QH) / 55% (HF)	12-10/25-253	25%
LOADING						
Commercial	n/a	n/a	36-62	By Use	36-62	By Use
Bicycle Parking (Residential)	25-80	1 per 2 dwelling units (UG-2)	25-80	1 per 2 dwelling units (UG-2)	25-80	1 per 2 dwelling units (UG-2)
Bicycle Parking (AIRS)	25-80	1 per 10,000 sf	25-80	1 per 10,000 sf	25-80	1 per 10,000 sf
Bicycle Parking (Commercial/Manufacturing)	n/a	n/a	36-70	By Use	36-70	By Use

* When providing affordable housing pursuant to the Inclusionary Housing Program as set forth in ZR Section 23-90

[1] Within 100' of a wide street

[2] Beyond 100' of a wide street

Urban Design

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

Building Bulk, Use, Type, and Arrangement

Proposed C4-4 district would increase the range of uses for the entire Project Area from residential, community facility and limited neighborhood retail uses (Use Groups 1-6) to include those uses as well as a wider range of commercial uses, including uses classified under Use Groups 8, 9, 10 and 12, which are intended for commercial and transit hubs. Under Scenario 1, the following development would occur:

Projected Development Site 1 (Block 1294, Lots 58, 60, 68 and 73): The scenario would consist of a 13-story mixed-use building that would rise to a height of 135 feet. Under both scenarios, the first three floors would consist of commercial space (two floors of retail and then office space on the third), with the remaining floors as residential (Scenario 1) or medical office (Scenario 2). The building would contain frontage along Roosevelt Avenue and 63rd Street.

Projected Development Site 2 (Block 1294, Lots 55 & 56): The scenario would consist of a 13-story mixed-used building that would rise to a height of 135 feet with the first floor as commercial retail space, and the remaining floors as residential (Scenario 1) or medical office (Scenario 2). The building would primarily contain frontage along Roosevelt Avenue.

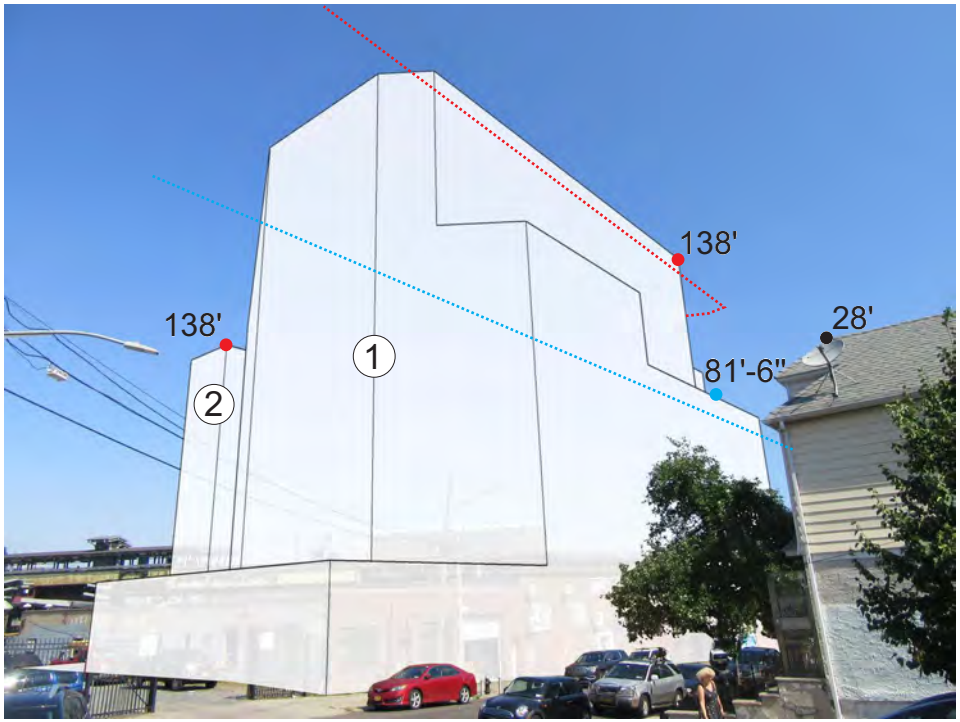
Figures 10-1 and 10-2 illustrate how these buildings would appear from the street level. Roosevelt Avenue is a heavily trafficked two-way street measuring 80' wide and is classified as a 'wide street, while 63rd Street is a one-way side street measuring 60' wide and is classified as 'narrow' street. (see Figure 10-3 and Figure 10-4). The elevated No. 7 subway train runs above Roosevelt Avenue and has a station at Woodside – 61st Street. The LIRR Woodside station is also located nearby at Roosevelt Avenue and 61st Street. Roosevelt Avenue is a diagonal corridor that travels east-west across Northern Queens from Sunnyside to Flushing.

Trimble Road facing northwest (Projected Sites ahead)



No-Action Scenario

Trimble Road facing northwest (Projected Sites ahead)



With-Action Scenario

Maximum Permitted Base Height (75')
Proposed Base Height (including parapet)
Maximum Permitted Building Height (135'/13-Stories)
Proposed Building Height (including parapet)

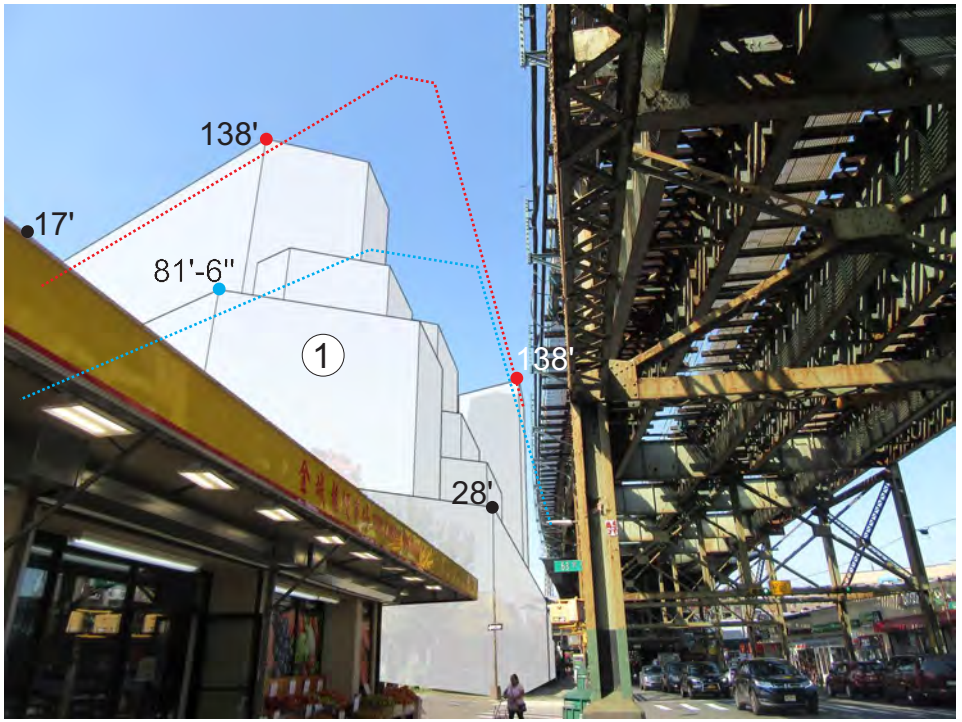
Figure 10-2: Urban Design Diagram

Roosevelt Avenue facing west (Projected Site 1 at left)



No-Action Scenario

Roosevelt Avenue facing west (Projected Site 1 at left)



With-Action Scenario

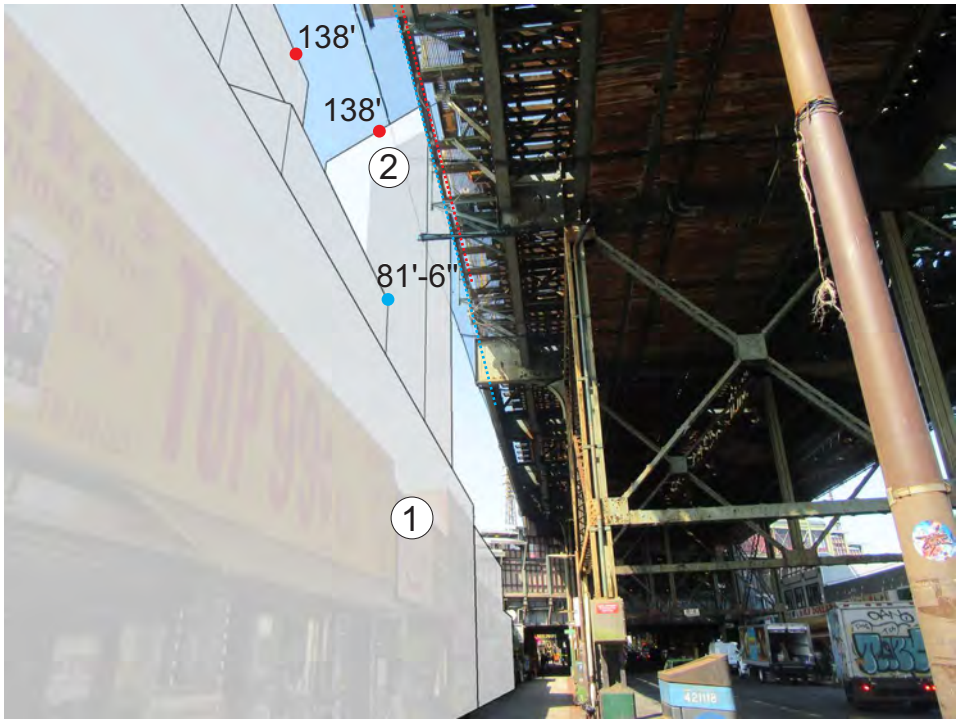
- Maximum Permitted Base Height (75')
- Proposed Base Height (including parapet)
- Maximum Permitted Building Height (135'/13-Stories)
- Proposed Building Height (including parapet)

62nd Street facing south (Projected Sites ahead)



No-Action Scenario

62nd Street facing south (Projected Sites ahead)



With-Action Scenario

- Maximum Permitted Base Height (75')
- Proposed Base Height (including parapet)
- Maximum Permitted Building Height (135'/13-Stories)
- Proposed Building Height (including parapet)

The Rezoning Area's block is comprised of mixed residential and commercial uses radiating from Roosevelt Avenue (see Figures 10-3 through 10-9). The larger surrounding area includes a mix of uses including commercial and transportation-related uses, multiple dwellings, one- and two-family residences and public facilities and institutions. Properties to the west along both sides of Roosevelt Avenue consist of one-story convenience retail and service establishments located in an existing R6/C1-4 district, including a bakery, beauty salons, eating and drinking establishments, a hardware store and office buildings. Several six-story buildings exist one block west of the Rezoning Area in R6, R6/C1-4 and R5B districts. Along or near Woodside Avenue are four six-story multiple dwellings in an R6/C1-4 district. Two blocks west of the Rezoning Area, in an R5B district, is another six-story multiple dwelling containing 105 dwelling units.

Two blocks south of the Project Area, in an R6B district, are two additional six-story multiple dwellings each containing 56 units, fronting on 61st and 62nd Streets. Also, to the south in an R6A/C1-3 district, are four- and five-story multiple dwellings and a four-story office building fronting on Woodside Avenue in the area between 61st and 63rd Streets. Properties to the east along both sides of Roosevelt Avenue consist of one- and two-story convenience retail and service establishments in an R6/C1-4 district, including grocery stores, a supermarket, a liquor store and drug stores. The two blocks to the west of the Project Area consist mainly of two-family semi-detached residential buildings in an R4-1 district.

North of the Project Area beyond Roosevelt Avenue are multiple dwellings ranging in height between three and five-stories and some one- and two-family residences, along with some three-story attached residences in an R5D district. Along 39th Avenue are three multiple dwellings ranging in height between four and six-stories containing 42 dwelling units, 41 dwelling units and 85 dwelling units, respectively, in an R5D and R5D/C1-4 district. A single-story branch of the U.S. Postal Service and house of worship are located on 61st Street in an R5D/C1-4 district.

Block Form, Street Pattern, and Street Hierarchy

Roosevelt Avenue serves as the principal corridor of the surrounding area with smaller numbered streets typically radiating north-south from the roadway. Woodside Avenue runs parallel to the south of Roosevelt Avenue but intersects with Roosevelt Avenue around 59th Street. Another principal corridor of the Borough of Queens, Broadway,



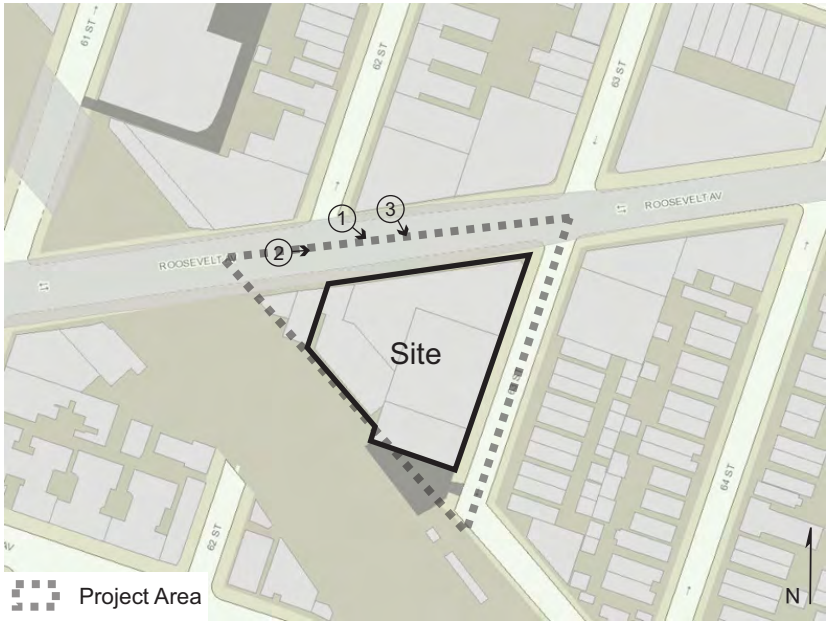
1. View of the Site facing southeast from Roosevelt Avenue.



2. View of Roosevelt Avenue facing east from 62nd Street (Site at right).



3. View of the Site facing southeast from Roosevelt Avenue.





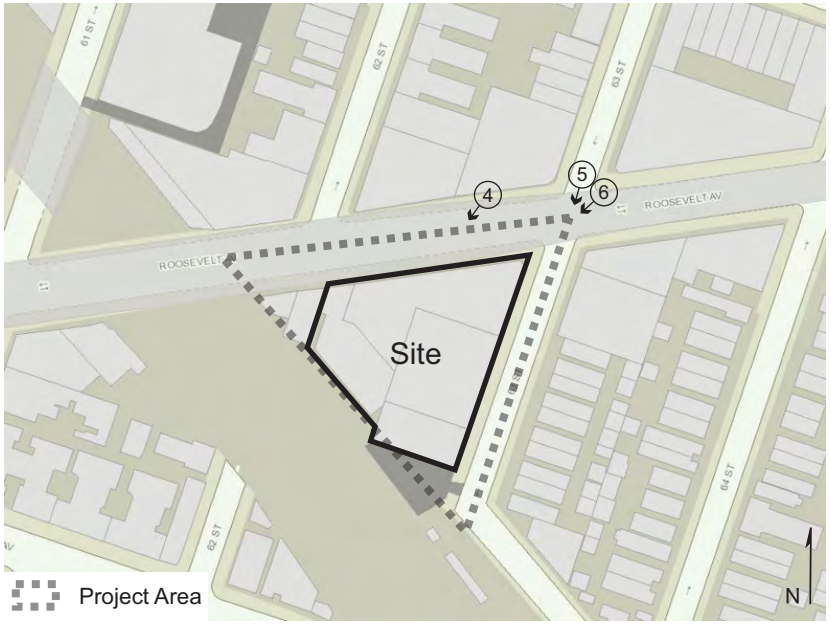
4. View of the Site facing southwest from Roosevelt Avenue.



5. View of 63rd Street facing south from Roosevelt Avenue (Site at right).



6. View of the Site facing southwest from the intersection of Roosevelt Avenue and 63rd Street.





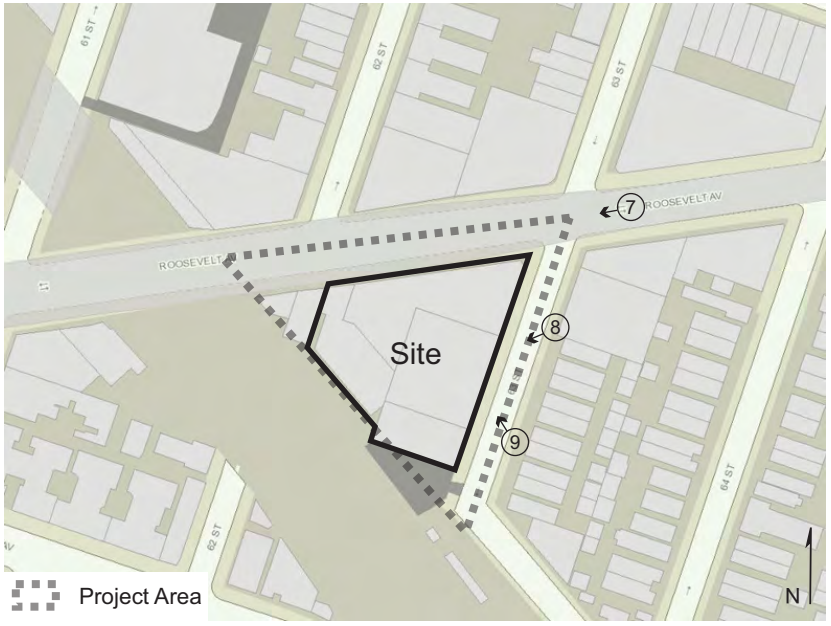
7. View of Roosevelt Avenue facing southwest from 63rd Street.



8. View of the Site facing southwest from 63rd Street.



9. View of the Site facing northwest from 63rd Street.



travels diagonally (north to south) from the Astoria area to Queens Boulevard in the south. Broadway bisects Roosevelt Avenue to the east of the Rezoning Area nearby at 74th Street, with the presence of another transit hub in the adjacent neighborhood of Jackson Heights. Notable numbered north-south streets consist of 58th Street, 61st Street and 69th Street. The Brooklyn-Queens Expressway (BQE) travels north-south through the immediate area below-grade around 70th Street with the intersection of Roosevelt Avenue. The nearest exit/entrance to this roadway is at Broadway several blocks to the north of the Rezoning Area.

As noted above, the elevated No. 7 subway train runs above Roosevelt Avenue and has a station at Woodside – 61st Street. The LIRR Woodside station is also located nearby at Roosevelt Avenue and 61st Street.

It should be noted that the angles of these roadways are irregular in this area of Queens, leading to irregular shaped blocks and lot sizes. Additionally, the presence of the LIRR right-of-way diagonally travels through the subject block, resulting in two triangular areas (and tax lots) on either side, the northern end of which is comprised of the Rezoning Area. The southern end, which is not affected by the Proposed Actions, primarily fronts Woodside Avenue, another principal arterial roadway for the surrounding area.

In terms of elevation, the surrounding area is irregular with Roosevelt Avenue traveling downward in elevation from the Sunnyside area to the west. Furthermore, the areas to the north and south of Roosevelt Avenue are at a higher elevation, serving to create the appearance of Roosevelt Avenue running down a small valley traveling east towards Jackson Heights.

Streetscape Elements

The frontage of the Rezoning Area does not contain any street trees, owing to the elevated right-of-way present over Roosevelt Avenue. However, the 63rd Street frontage contains street trees. The area otherwise does not contain an abundance of street trees compared older more established neighborhoods of the city. A NYCT bus shelter is located nearby the Rezoning Area along the south side of Roosevelt Avenue at 63rd Street for the Q32 line. There are cross walks at the intersection of Roosevelt Avenue and 63rd Street (See Figures 10-4 and 10-5).



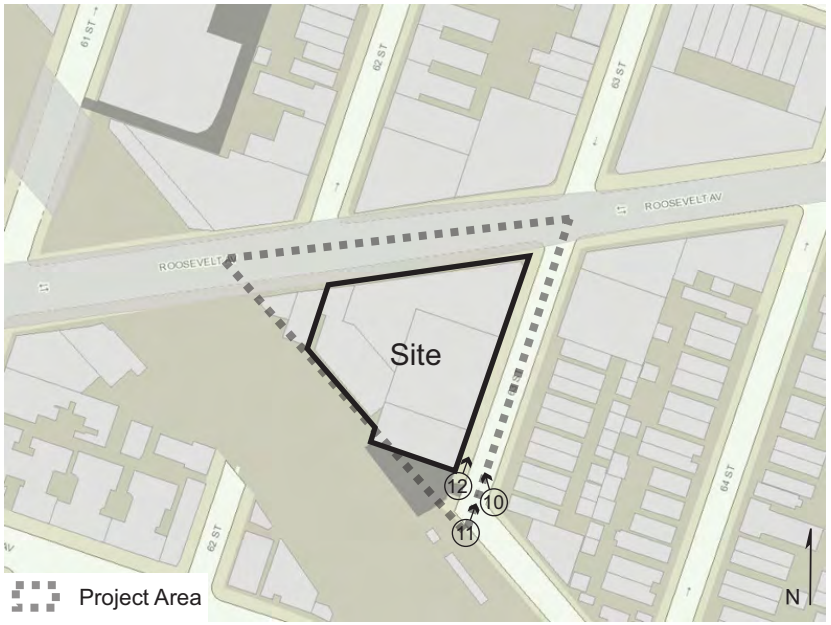
10. View of the Site facing northwest from the intersection of 63rd Street and Trimble Road.



11. View of 63rd Street facing northeast from Trimble Road (Site at left).



12. View of the sidewalk along the west side of 63rd Street facing north (Site at left).





13. View of Trimble Road facing southeast from the Site.



14. View of the east side of 63rd Street facing east from the Site.



15. View of the sidewalk along the west side of 63rd Street facing south from Roosevelt Avenue (Site at right).





16. View of the intersection of Roosevelt Avenue and 63rd Street facing northeast from the Site.



17. View of the sidewalk along the south side of Roosevelt Avenue facing west from 63rd Street (Site at left).



18. View of the north side of Roosevelt Avenue facing northwest from the Site.



Natural Features

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

Assessment

The Proposed Actions would produce two higher-density mixed-use buildings that would be complement the mix of uses and densities found in the surrounding area, which contain several six-story buildings. While the Proposed Actions would permit a new increased level of density that is higher than other multi-family residential buildings in the surrounding area, this newly permitted density would be located immediately adjacent a vibrant transit corridor along Roosevelt Avenue with an elevated right-of-way present adjacent the Rezoning Area.

Currently, the Development Sites are within R6 and R6/C1-4 districts. The R6 district permits residential and community facility uses (Use Groups 1-4 and 6c) at a maximum of 2.43 (residential only) but also at 4.8 FAR with the inclusion of community facility space under height factor regulations. Quality housing regulations permit a maximum FAR of 3.0 on a wide street, such as Roosevelt Avenue. The R6/C1-4 district permits commercial uses at a maximum of 2.0 FAR on the ground floor only. For both districts under Quality Housing regulations, a maximum height 70 or 75-feet (with a qualifying ground floor) is permitted after a street wall height of 40-65 feet on a wide street.

A key difference between the existing R6 and R6/C1-4 districts and proposed C4-4 district is the level of commercial floor area, which can rise beyond the first story, where Roosevelt Avenue is almost uniformly developed with commercial uses. Therefore, permitting commercial uses on additional floors in this area would be appropriate, as the use is predominant along Roosevelt Avenue.

In addition, with the inclusion of affordable units, buildings under the proposed C4-4 district can rise to 13-stories under quality housing regulations. This would be consistent with the medium-density and multi-family character of the surrounding area, where numerous apartment buildings are developed to the north and south of Roosevelt Avenue at higher elevations.



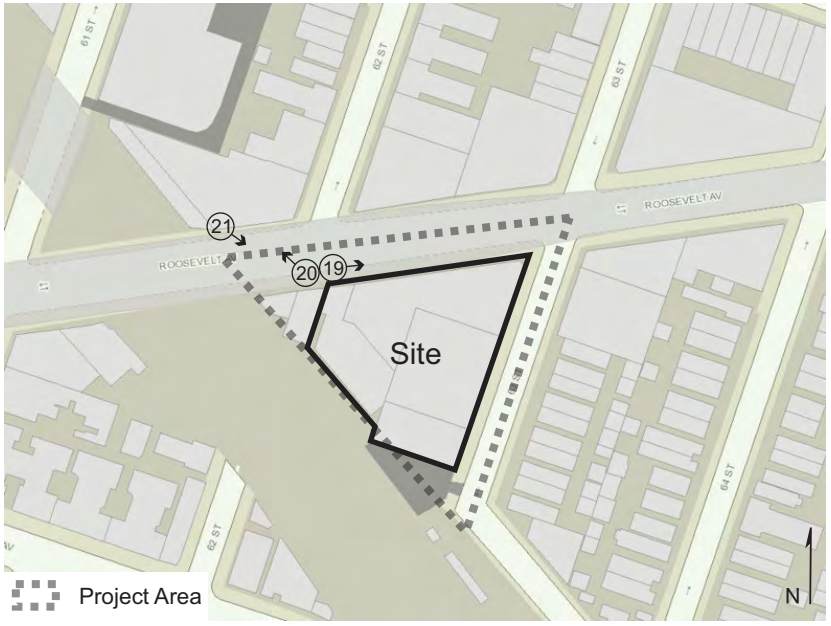
19. View of the north side of Roosevelt Avenue facing northwest from the Site.



20. View of the sidewalk along the south side of Roosevelt Avenue facing east (Site at left).



21. View of the Project Area facing southeast from Roosevelt Avenue.





22. View of the Project Area facing south from Roosevelt Avenue.



23. View of the Project Area facing southwest from Roosevelt Avenue.



The RWCDS projected developments would rise to 13-stories or a maximum permitted height of 135 feet after 10 or 15-foot setbacks under the proposed C4-4 zoning districts with MIH. While these new buildings would be taller than adjacent properties, numerous apartment buildings are constructed at higher elevations in the surrounding area to the north and south of Roosevelt Avenue, enveloping the Rezoning Area and serving to reduce the taller appearance of projected developments assumed under the RWCDS.

For an illustrative display of the RWCDS projected developments as well as the maximum permitted building envelopes under the Proposed Actions, see Figure 10-1 and Figure 10-2 (Urban Design Diagrams**)**. Based on these diagrams, the newly permitted bulk would visually consist of a departure from building envelopes in the surrounding area. The Proposed Actions would affect two frontages which are pre-existing mixed-use corridors and can visually accommodate additional density, with elevated railroad rights-of-way bisecting the nearby intersections to west.

Accordingly, the Proposed Development would not result in buildings with dramatically different bulk, size and scale than existing buildings in the area, as multi-family buildings are present at higher elevations in the surrounding area. In addition, the proposed commercial retail, office and medical office are consistent with the pre-existing uses in the surrounding neighborhood. In addition, the Proposed Development would improve the area's visual quality by developing underutilized parcels along a vibrant corridor with elevated railroad rights-of-ways and would provide continuous commercial retail at the ground level, in continuing with existing development patterns at the pedestrian level. Therefore, no significant adverse impacts to the urban design character of the study area are anticipated as a result of the Proposed Action.

Visual Resources

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

Conclusion

The Proposed Actions would create additional density and allow a greater maximum height for an area along a heavily trafficked mixed-use thoroughfare that also serves as a transit hub. The Applicant feels the location and size of the affected area is appropriate, given the presence of a nearby transit hub and predominantly mixed-use nature of the immediate area, as well as the mix of densities and irregular elevations present. Furthermore, the Proposed Actions would not affect any natural resources or public view corridors to notable features or buildings in the immediate vicinity of the Rezoning Area. Accordingly, no impacts to the urban design and/or visual resources of the area are expected.

12. HAZARDOUS MATERIALS

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

In accordance with the *CEQR Technical Manual* guidelines, an assessment was conducted to determine whether the proposed action could lead to increased exposure of people or the environment to hazardous materials and whether the increased exposure would result in significant adverse public health impacts or environmental damage.

The Project Area (Block 1294, Lots 55, p/o 56, 58, 60, 68, p/o 73 and 76) predominantly contains commercial and manufacturing uses, ranging in height from one-to two-stories. Since the Proposed Actions are anticipated to result in increased ground disturbance in an area with a history of manufacturing use, an assessment of Hazardous Materials is required.

EPDSCO, Inc. performed a Phase I Environmental Site Assessments (ESA) in June of 2018 for the area that reflects the Proposed Development (Block 1294, Lots 58, 60, 68 and 73), which consists of a majority of the tax blocks within the Rezoning Area. This ESA was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-13).

The Phase I ESAs revealed the following recognized environmental conditions (RECS) based on the site history and history of adjacent uses that could affect sub-surface conditions:

- The potential for soil impacts, including the potential for a vapor encroachment condition to existing and any future buildings at the Development Site, from past on-site operations involving the use of hazardous substances and/or petroleum products.
- The possible presence of asbestos-containing building materials and lead-based paints in the subject buildings in the Development Site.
- The potential for groundwater contamination in the immediate vicinity of the Rezoning Area from potential off-site sources of contamination in the surrounding area.

Based on the RECs noted above and due to the close proximity and similar uses contained on the remaining projected site (Projected Development Site 2), it is assumed that the remaining lots within the Rezoning Area contain will contain similar RECs and the potential for contamination and potentially hazardous building materials. Therefore, prior to any soil disturbance on these properties, an (E) designation related to hazardous materials will be assigned to Project Area as described below.

To avoid any potential impacts associated with hazardous materials, the Proposed Actions would map an (E) designation (E-603) for hazardous materials for each Development Site within the Rezoning Area as follows:

Block 1294, Lots 55, 56, 58, 60, 68, 73 and 76

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

Task 1

The fee owners of the lot restricted by this (E) designation will be required to prepare a scope of work for any soil, gas, or groundwater sampling and testing needed to determine if contamination exists, the extent of the contamination, and to what extent remediation may be required. The scope of work will include all relevant supporting

documentation, including site plans and sampling locations. This scope of work will be submitted to the OER for review and approval prior to implementation. It will be reviewed to ensure that an adequate number of samples will be collected and that appropriate parameters are selected for laboratory analysis.

No sampling program may begin until written approval of a work plan and sampling protocol is received from the OER. The number and location of sample sites should be selected to adequately characterize the type and extent of the contamination, and the condition of the remainder of the site. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for choosing sampling sites and performing sampling will be provided by OER upon request.

Task 2

A written report with findings and a summary of the data must be presented to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such test results, a determination will be provided by OER if the results indicate that remediation is necessary.

If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is necessary according to test results, a proposed remediation plan must be submitted to OER for review and approval. The fee owners of the lot restricted by this (E) designation must perform such remediation as determined necessary by OER. After completing the remediation, the fee owners of the lot restricted by this (E) designation should provide proof that the work has been satisfactorily completed.

An OER-approved construction-related health and safety plan would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This Plan would be submitted to OER for review and approval prior to implementation.

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

16. TRANSPORTATION

INTRODUCTION

Pursuant to the guidance of the *2014 City Environmental Quality Review (CEQR) Technical Manual*, this chapter examines the potential effects of the proposed rezoning on the study area's transportation systems. Specifically, it compares conditions in the future with the proposed project (the With Action condition) against conditions in the future without the proposed project (the No Action/Existing condition) in order to determine the potential for significant adverse impacts to transportation systems. The analyses consider the 2023 analysis year to identify potential impacts, and if warranted, identify improvement measures that would be appropriate to address those impacts.

DEVELOPMENT SITE

The Development Site is located, at 62-04 Roosevelt Avenue in Woodside section of Queens, Community District 2, within a block, bounded by Roosevelt Avenue, a two-way eastbound/westbound roadway, on the north, 63rd Street, a one-way southbound roadway, on the east, 62nd Street, a one-way northbound roadway and tracks for LIRR and number 7 train on the west, and Trimble Road a one-way southbound roadway and tracks for LIRR and number 7 train on the south, as shown in **Figure 1 (Transportation Attachment).**

EXISTING CONDITIONS

The existing site currently includes 17,125 gsf of local retail, 3,834 gsf of commercial office, 16,860 gsf of light industrial and 1,488 gsf of fast food restaurant.

NO-BUILD SCENARIO

Absent of the proposed action, it is likely that the existing buildings and uses in the Project Area would remain unchanged.

PROJECT DEVELOPMENT SCENARIOS

The applicant is proposing two mixed-use development scenarios, Residential/Commercial development and Community Facility/Commercial development along Roosevelt Avenue in Woodside section of Queens, as detailed below:

- Residential/Commercial Development, Scenario One (1), would result in a development composed of 225 residential units, 53,034 gsf of commercial retail (local) space, 25,749 gsf of commercial office space, 8,513 gsf of community facility (professional medical office) space and 161-space accessory parking garage for a total of 283,651 gsf of mixed-use development.
- Community Facility/Commercial Development, Scenario Two (2), would result in a development composed of 64,006 gsf of commercial retail (local) space, 27,964 gsf of commercial office space, 181,438 gsf of community facility (professional medical office) space and 279-space accessory parking garage for a total of 273,408 gsf of mixed-use development.

Tables 1 and 2 provide program assumptions under the Existing/No-Action as well as the Reasonable Worst-Case Development Scenario (RWCDS) With-Action conditions for both scenarios.

Table 1 - Scenario One: Residential/Commercial Mixed-Use Development

Land Use	No-Action/Existing	With-Action	Increment
Residential D.U. (gsf)	0	225 d.u.	225 d.u.
Local Retail (gsf)	17,125 gsf	53,034 gsf	35,909 gsf
Office (gsf)	3,834 gsf	25,749 gsf	21,915 gsf
Fast Food Restaurant (gsf)	1,488 gsf	0	-1,488 gsf
Light Industrial (gsf)	16,860 gsf	0	-16,860 gsf
Medical Office (gsf)	0	8,513 gsf	8,513 gsf
Accessory parking space	0	161 parking spaces	161 parking spaces

Table 2 - Scenario Two: Community Facility/Commercial Mixed-Use Development

Land Use	No-Action/Existing	With-Action	Increment
Residential D.U. (gsf)	0	0	0
Local Retail (gsf)	17,125 gsf	64,006 gsf	46,881 gsf
Office (gsf)	3,834 gsf	27,964 gsf	24,130 gsf
Fast Food Restaurant (gsf)	1,488 gsf	0	-1,488 gsf
Light Industrial (gsf)	16,860 gsf	0	-16,860 gsf
Medical Office (gsf)	0	181,438 gsf	181,438 gsf
Accessory parking space	0	279 parking spaces	279 parking spaces

The increment between the No-Action and With-Action development scenarios are summarized in **Table 1** for Scenario One **and Table 2** for Scenario Two**.** Based on the proposed project generated trips, as detailed in **Tables 3 through 8 (Attachment C)** for Scenario One and **Tables 9 through 14** for Scenario Two, it was determined that scenario two (2), community facility/ commercial mixed-use development, would generate greater person and vehicular trips and therefore, it was analyzed for transportation-related elements.

PRINCIPAL CONCLUSIONS

TRAFFIC

The proposed rezoning would generate a net total of 268 (151 inbound and 117 outbound), 386 (178 inbound and 208 outbound), 242 (86 inbound and 156 outbound), and 254 (122 inbound and 132 outbound)vehicle trip ends during AM, Midday, PM and Saturday Midday Peak hour periods, respectively. The result of trip assignment (Tier 2)

screening analysis **(Figures 11 through 14; Attachment C)** identifies ten (10) intersections to be analyzed, as described in detail below. Analyzed intersections, as shown in **Figure 2 (Attachment C)**, are listed below:

- Roosevelt Avenue and 69th Street,
- Roosevelt Avenue and 68th Street,
- Roosevelt Avenue and 67th Street,
- Roosevelt Avenue and 65th Street,
- Roosevelt Avenue and 64th Street,
- Roosevelt Avenue and 63rd Street,
- Roosevelt Avenue 60th Street,
- Roosevelt Avenue and 59th Street,
- Woodside Avenue and 64th Street,
- Woodside Avenue and 63rd Street, and
- Trimble Road and 64th Street.

The detailed analysis concluded that in the future with the proposed project, Scenario 2, all ten (10) intersections would operate in an acceptable Level of Service (LOS), below Mid LOS D, during all peak hours and there would be no significant adverse traffic impacts, as described below and shown in the LOS summary **Tables 16 through 18 (Attachment C)**.

PARKING

Based on the build program for Scenario 2, parking accumulation was prepared to determine the proposed parking adequacy for the proposed project (Total built-out condition).

As shown in Table 19, parking demand generated by the commercial office, commercial local retail, and community facility (professional medical office) uses that would be developed under the Proposed Actions would typically peak during the midday hour.

Overall, development associated with the Proposed Actions would generate a total demand of approximately 204 parking spaces in the weekday midday (1:00-2:00 PM) and (3:00-4:00 PM) peak hour periods. The proposed project would provide an on-site parking garage facility with 279 parking spaces. The proposed parking would be more than adequate to accommodate the proposed project parking demand of 204.

To estimate parking demand, ESC has utilized trip generation rates and modal split information, summarized in **Table 9 (Attachment C)** for the proposed uses. NYCDOT has provided hourly temporal distribution for medical office, and the *approved East New York FEIS, Table 13-6* was utilized to estimate parking demand for office and local retail uses, as shown in **Table 19 (Attachment C).**

TRANSIT
Subway

The proposed rezoning would generate a total of 175 and 147 net subway trip ends during the AM, and PM peak hour time periods, respectively, as summarized in **Tables 10 (Attachment C)** Currently, there is one (1) subway station for number 7 train and one (1) commuter train station for LIRR (Complex Train Station) at Roosevelt Avenue and 61st Street intersection in the study area.

The 61st Street/Woodside Ave Subway station for number 7 train and LIRR Commuter train station (complex train station) is within a ¼ mile radius from the proposed project (Transit Zone). The subway/commuter train complex station includes two entrances and two exits for subway and commuter riders, one at 61st Street and Roosevelt Avenue intersection(entrance at the southern side includes one escalator, operating upward only), and another one at the southern end of the Development Site where 63rd Street meets Trimble Road.

The Proposed Actions would generate less than the *CEQR 200-subway trip end threshold* during the AM and PM peak hour time periods, and in accordance with the *CEQR Technical Manual criteria*, would not result in any conditions that would typically trigger the need for a detailed assessment of subway impacts.

Bus

The proposed rezoning would generate a total of 332, and 268 net incremental bus trip ends during the AM, and PM peak hour time periods, respectively, as summarized in **Table 10**. Currently, there are seven (7) bus lines within the ¼ mile radius from the proposed site, three bus lines (Q32, Q53/52 SBS and Q70 SBS) are operating along Roosevelt Avenue, one (Q18) is operating along Woodside Avenue, one (Q47) is

operating along 69th Street/Roosevelt Avenue and one (Q60) is operating along Queens Blvd.. A preliminary screening assessment concluded that new demand from the proposed rezoning would not exceed the *CEQR 50-bus trip end threshold per bus line per direction* during any peak hour, and in accordance with *the CEQR Technical Manual criteria*, would not result in any conditions that would typically trigger the need for a detailed assessment of bus impacts.

PEDESTRIANS

The proposed rezoning would generate a total of 1,027, 2,167, 1,240 and 1,484 net pedestrian (bus, subway, walk, and other) trip ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Table 10 and 13**.

The proposed action would generate more than the *CEQR 200- pedestrian trip ends* during Weekday AM, Midday, PM and Saturday Midday peak hour time periods, respectively. A review of a combined trip assignment (Tire 2) and existing pedestrian volumes identified (back-up data- existing pedestrian counts) Saturday Midday peak hour as the highest peak hour, therefore Saturday Midday peak hour was selected for detailed analysis. Based on Saturday Midday peak hour generated pedestrian trips, there are ten (10) pedestrian elements exceeding the *CEQR 200- pedestrian trip ends*, as described in detail below.

Analyzed pedestrian elements, as shown in **Figures 20, 21, 22, and 23 (Attachment C)** are also listed below:

AM Peak Hour

Sidewalks

- Roosevelt Avenue between 61st and 62nd Streets (south sidewalk),
- Roosevelt Avenue between 62nd and 63rd Streets (south sidewalk)
- Roosevelt Avenue between 63rd and 64th Streets (south sidewalk), and
- 63rd Street between Roosevelt Avenue and Trimble Road (west sidewalk)

Corner Reservoirs

Roosevelt Avenue and 63rd Street Intersection
- Northwest Corner
- Southwest Corner
- Northeast Corner, and
- Southeast Corner

Roosevelt Avenue and 61st Street Intersection
- Southeast Corner

Crosswalks

Roosevelt Avenue and 63rd Street Intersection
- North Crosswalk
- East Crosswalk
- South Crosswalk
- West Crosswalk

Midday Peak Hour

Sidewalks

Roosevelt Avenue between 61st and 62nd Streets (south sidewalk),
Roosevelt Avenue between 62nd and 63rd Streets (south sidewalk)
Roosevelt Avenue between 63rd and 64th Streets (south sidewalk), and
63rd Street between Roosevelt Avenue and Trimble Road (west sidewalk)

Corner Reservoirs

Roosevelt Avenue and 63rd Street Intersection
- Northwest Corner
- Southwest Corner
- Northeast Corner, and
- Southeast Corner

Roosevelt Avenue and 61st Street Intersection
- Northeast Corner
- Southeast Corner

Crosswalks

Roosevelt Avenue and 63rd Street Intersection
- North Crosswalk
- East Crosswalk
- South Crosswalk
- West Crosswalk

PM Peak Hour

Sidewalks

Roosevelt Avenue between 61st and 62nd Streets (south sidewalk),
Roosevelt Avenue between 62nd and 63rd Streets (south sidewalk)
Roosevelt Avenue between 63rd and 64th Streets (south sidewalk), and
63rd Street between Roosevelt Avenue and Trimble Road (west sidewalk)

Corner Reservoirs

Roosevelt Avenue and 63rd Street Intersection
- Northwest Corner
- Southwest Corner
- Northeast Corner, and
- Southeast Corner

Roosevelt Avenue and 61st Street Intersection
- Southeast Corner

Crosswalks

Roosevelt Avenue and 63rd Street Intersection

- North Crosswalk
- East Crosswalk
- South Crosswalk
- West Crosswalk

Saturday Peak Hour

Sidewalks

Roosevelt Avenue between 61st and 62nd Streets (south sidewalk),
Roosevelt Avenue between 62nd and 63rd Streets (south sidewalk)
Roosevelt Avenue between 63rd and 64th Streets (south sidewalk), and
63rd Street between Roosevelt Avenue and Trimble Road (west sidewalk)

Corner Reservoirs

Roosevelt Avenue and 63rd Street Intersection

- Northwest Corner
- Southwest Corner
- Northeast Corner, and
- Southeast Corner

Roosevelt Avenue and 61st Street Intersection

- Southeast Corner

Crosswalks

Roosevelt Avenue and 63rd Street Intersection

- North Crosswalk
- East Crosswalk
- South Crosswalk
- West Crosswalk

The detailed analysis concluded that in the future with the proposed project, Scenario 2, all pedestrian elements would operate in level of service (LOS) B or better, during all peak hours and there would be no significant adverse pedestrian impacts, as described below and shown in LOS summary in Attachment C: **Tables 23 (A, B, C, D, E, F, G, H, I, J, K, L) through 25 (A, B, C, D, E, F, G, H, I, J, K, L).**

VEHICULAR AND PEDESTRIAN SAFETY

Crash data for traffic and pedestrian study area intersections were obtained from the New York City Department of Transportation (NYCDOT) for the three-year reporting period between January 1, 2015, and December 31, 2017 (the most recent period for which data were available for all locations). A high crash location is defined as those with 48 or more total reportable and non-reportable crashes or five or more pedestrian/bicyclist injury crashes occurring in any consecutive 12 months of the most recent three-year period for which data are available.

ANALYSIS FRAMEWORK

BUILD YEAR

Based on an estimated 12-month approval process and an 18-month construction period, it is anticipated that construction and occupancy on the Proposed Development Site would be completed by 2023.

PRELIMINARY ANALYSIS METHODOLOGY AND SCREENING ASSESSMENT

The CEQR Technical Manual recommends a two-tier screening procedure for the preparation of a "preliminary analysis" to determine if quantified analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation analysis (Level 1) to estimate the volume of person and vehicle trips attributable to the Proposed Project. If the Proposed Project is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Level 2) are performed to estimate the

incremental trips at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the Proposed Project would result in 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a pedestrian element, then further quantified analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, and parking.

LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the numbers of person and vehicle trips by mode expected to be generated by the Proposed Project (Scenario 2) during the weekday AM, midday, PM, and Saturday peak hours. These estimates were then compared to the *CEQR Technical Manual thresholds* to determine if a Level 2 screening and/or quantified operational analyses would be warranted.

The transportation screening below has been prepared based on the difference between the No-Action and With-Action Scenarios, which would result in the development under the With-Action Scenario of an increase of 46,881 gross square feet (gsf) of local retail space, 24,130 gsf of office space, 181,438 gsf of medical office space, 279-space parking garage and the decrease of 1,488 gsf of fast food restaurant and 16,860 gsf of light industrial space as summarized in **Table 2**.

TRANSPORTATION PLANNING ASSUMPTIONS

Trip generation factors for the Proposed Project were determined based on information from the 2014 City Environmental Quality Review (CEQR) Technical Manual, U.S. Census Data, recent NYCDOT data, and other approved EASs and EISs. The travel demand assumptions and trip generation sources are summarized below as well as in **Tables 9 and 12** for Scenario 2 (see Attachment C).

Residential

The *2020 CEQR Technical Manual (table 16-2)* was utilized for trip generation rates, including truck trips, and daily temporal distribution. The 2013-2017 American Community Survey (ACS) Journey-to-Work (JTW) data for Census Tract #'s 247, 249, 259, 261, 263, and 293 in Queens, NY was used for modal split information and vehicle occupancy rates, as is summarized in **Exhibits 1 and 2** and **Tables 3, 6 for Scenario 1 and Tables 9 and 12 for Scenario 2 (see Attachment C and back-up data).**

The estimated modal split data for residential use found that approximately 24.4% would travel by car, 0.9% would travel by taxi, 3.8% would travel by bus, 63.7% would travel by subway, and 7.2% would travel by foot and other mode of travel, such as bicycle, as shown in **Exhibits 1 and 2 and Tables 3, 6, 9 and 12 (see Attachment C and back-up data)**.

Office

The 2020 CEQR Technical Manual (table 16-2) was utilized for trip generation rates, including daily temporal distribution and truck trip rates. The 2012-2016 American Community Survey (ACS) Reverse-Journey-to-Work (RJTW) data for Census Tract #'s 247, 249, 259, 261, 263, and 293 in Queens, NY was used for modal split information and vehicle occupancy rates, as is summarized in **Exhibits 3 and 4** and **Tables 3, 6 for Scenario 1 and Tables 9 and 12 for Scenario 2 (Transportation Attachment, and Support Data).**

The estimated modal split data for office use found that approximately 45.0% would travel by car, 0.01% would travel by taxi, 12.3% would travel by bus, 28.8% would travel by subway, and 13.8% would travel by foot and other mode of travel, such as bicycle, as shown in **Exhibits 3 and 4 and Tables 3, 6, 9 and 12 (Transportation Attachment, and Support Data)**.

Local Retail

The 2020 CEQR Technical Manual (table 16-2) was utilized for trip generation rates, including daily temporal distribution and truck trip rates. Modal split information is based on the NYCDOT survey result for a similar local retail space, located within a ¼ -

mile radius of a subway station (Queens Transit Zone, 61st Street and Roosevelt Avenue Subway Station # 7 train), as is summarized in **Tables 3, 6, 9 and 12 (Attachment C).** Vehicle Occupancy rates are based on the *East New York Rezoning FEIS, Table 13-8* **(Attachment C)**.

The estimated modal split results for local commercial retail use found that approximately 11% would travel by car, 0% would travel by taxi, 3% would travel by bus, 4% would travel by subway and 82% would travel by foot. The above information is summarized in **Tables 3, 6, 9 and 12 (Attachment C)**.

Medical Office

Future With-Action Scenario generated person and vehicular trips are all based upon the rates, percent temporal distribution, modal split information and vehicle occupancy rate as provided by *NYCDOT for medical office development, in transit zone in Queens NY*, as summarized in **Tables 3, 6, 9 and 12 (Attachment C).** Truck trip rates are based on rates provided in the East New York FEIS, Table 13-8 for medical office use.

The estimated modal split results for medical office use found that approximately 23% would travel by car, 7% would travel by taxi, 26% would travel by bus, 14% would travel by subway and 30% would travel by foot. The above information is summarized in **Tables 3, 6, 9 and 12 (Attachment C)**.

Fast Food Restaurant

The 2020 CEQR Technical Manual (table 16-2) was utilized for trip generation rates, including daily temporal distribution. Modal split information and truck trip rates are based on the *East New York Rezoning FEIS, Table 13-8,* as is summarized in **Tables 3, 6, 9 and 12 (Attachment C)**.

The estimated modal split results for fast food restaurant use found that approximately 30% would travel by car, 5% would travel by taxi, 15% would travel by bus, 15% would travel by subway and 35% would travel by foot. The above information is summarized in **Tables 3, 6, 9 and 12 (Attachment C)**.

Light Industrial

The East New York Rezoning FEIS (table 13-8) was utilized for trip generation rates, including daily temporal distribution, and truck trip rates. The 2012-2016 American Community Survey (ACS) Reverse-Journey-to-Work (RJTW) data for Census Tract #'s 247, 249, 259, 261, 263, and 293 in Queens, NY was used for modal split information and vehicle occupancy rates, as is summarized in **Exhibits 3 and 4** and **Tables 3, 6 for Scenario 1, and Tables 9 and 12 for Scenario 2 (Attachment C and Support Data).**

The estimated modal split data for office use found that approximately 45.0% would travel by car, 0.01% would travel by taxi, 12.3% would travel by bus, 28.8% would travel by subway, and 13.8% would travel by foot and other mode of travel, such as bicycle, as shown in **Exhibits 3 and 4 and Tables 3, 6, 9 and 12 (Transportation Attachment)**.

The above information is summarized in **Tables 3, 6, 9 and 12 (Attachment C and Support Data)**.

Based on the above standard and approved trip generation rates and modal split and temporal distribution as is detailed below and summarized in **Tables 9 and 12 (Attachment C)**, the proposed incremental development would generate a net total of 268 (151 inbound and 117 outbound), 386 (178 inbound and 208 outbound), 242 (86 inbound and 156 outbound), and 254 (122 inbound and 132 outbound)vehicle trip ends during AM, Midday, PM and Saturday Midday Peak hour periods, respectively, as summarized **Tables 11 and 14 (Attachment C)**.

All peak hour net vehicle trip ends would exceed the *CEQR 50-vehicle peak hour trip end threshold* and, therefore in accordance with the *CEQR Technical Manual criteria* and it would trigger the need for a detailed assessment (level two screening) of traffic or parking impacts.

LEVEL 2 SCREENING ASSESSMENT

A Level 2 screening assessment involves the distribution and assignment of projected trips to the transportation network and the determination of whether specific locations are expected to experience incremental trips exceeding CEQR Technical Manual thresholds. Typically, if the results of this analysis show that the Proposed Project would

result in 50 or more peak hour vehicle trips through an intersection, 50 or more peak hour bus riders on a bus route in a single direction, 200 or more peak hour subway passengers per station, or 200 or more peak hour pedestrian trips per pedestrian element, further quantified analyses may be warranted to evaluate the potential for significant adverse traffic, transit, pedestrian, and parking impacts.

SITE ACCESS AND EGRESS

Access to the Development Site would be provided at one location along 63rd Street between Roosevelt Avenue and Trimble Road.

TRAFFIC

As summarized in **Tables 11 and 14 (Attachment C)**, incremental vehicle trips resulting from the Proposed Project would exceed the CEQR Level-1 screening threshold during the weekday AM, midday, and PM, and Saturday peak hours. These vehicle trips were assigned to area intersections based on the most likely travel routes to and from the Development Site, prevailing travel patterns, commuter origin destination (O-D) summaries from the census data, the configuration of the roadway network, and the anticipated locations of site access and egress. Auto trips were assigned to the proposed parking garage on 63rd Street. Taxi trips were assigned to Roosevelt Avenue, Woodside Avenue, 64th Street/Trimble Road to access the Development Site. All delivery trips were assigned to the Development Site loading bays (Access/egress to loading bays is from the proposed parking garage along 63rd Street) via NYCDOT-designated truck routes.

Proposed Project Traffic Assignments

The mixed -use development uses are anticipated to draw mostly local customers. The trip distribution patterns for vehicle trips were based on U.S. Census (population density for retail and community facility uses and reverse-journey to work O&D Census for office use). For retail and community facility uses trips are assumed originating within a 1 ½ -mile radius. Trips originating within the 1 1/2-mile radius and beyond (office) were assumed to utilize mostly Roosevelt Avenue, 63rd Street, 69th Street, 58th Street and Woodside Avenues to access the Development Site. Overall, vehicle trips generated by the Proposed Project were distributed to the study area streets/roadways in the following

manner: approximately 24.5 percent of project-generated trips were assumed to approach the site from the north and northeast, 42 percent from the east and southeast, 11 percent from the west and southwest and 23.5 percent from south. Departing trips were assigned along the same routes as arrivals.

Figures 11 through 14 (Attachment C) show the proposed project-generated vehicle trips for the weekday AM, midday, PM, and Saturday peak hours. According to the C*EQR Technical Manual,* intersections expected to incur 50 or more incremental peak hour vehicle trips as a result of a proposed action should be considered for inclusion in a quantified traffic analysis to assess the potential for significant adverse traffic impacts. Based on a detailed assignment of project-generated vehicle trips, ten (10) intersections were identified as warranting detailed analysis for the weekday AM, midday, PM, and Saturday peak hours, as shown in **Figure 2 (Attachment C).**

TRANSPORTATION ANALYSIS METHODOLOGIES TRAFFIC OPERATIONS

The operation of all the signalized intersections and unsignalized intersection in the study area were assessed using methodologies presented in the 2000 Highway Capacity Manual (HCM). The intersections have been analyzed based on the methodologies of the Highway Capacity Software (HCS), Version HCS+5.5. Information derived from the manual relative to the level of service criteria is provided below.

SIGNALIZED INTERSECTIONS

The average control delay per vehicle is the basis for LOS determination for individual lane groups (grouping of movements in one or more travel lanes), the approaches, and the overall intersection. The LOS criteria for signalized intersections are summarized in **Table 15**.

Table 15

Signalized and Un-Signalized Level of Service Criteria		
Level of Service (LOS)	**Average Delay (Seconds per Vehicle)**	
	Signalized	**Un-Signalized**
A	<=10	0-10
B	>10-20	>10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	>80	>50

Source: 2000 Highway capacity Manual.

Although the HCM methodology calculates a volume-to-capacity (v/c) ratio, there is no strict relationship between v/c ratios and LOS as defined in the HCM. A high v/c ratio indicates substantial traffic passing through an intersection, but a high v/c ratio combined with low average delay actually represents the most efficient condition in terms of traffic engineering standards, where an approach or the whole intersection processes traffic close to its theoretical maximum capacity with minimal delay. However, very high v/c ratios—especially those approaching or greater than 1.0—are often correlated with a deteriorated LOS. Other important variables affecting delay include cycle length, progression, and green time. LOS A and B indicate good operating conditions with minimal delay. At LOS C, the number of vehicles stopping is higher, but congestion is still light. LOS D describes a condition where congestion levels are more noticeable and individual cycle failures (a condition where motorists may have to wait for more than one green phase to clear the intersection) can occur. Conditions at LOS E and F reflect poor service levels, and cycle breakdowns are frequent. The HCM methodology also provides for a summary of the total intersection operating conditions.

The analysis chooses the two critical movements (the worst case from each roadway) and calculates a summary critical v/c ratio. The overall intersection delay, which determines the intersection's LOS, is based on a weighted average of control delays of the individual lane groups. Per the CEQR Technical Manual, the midpoint of LOS D (45 seconds of delay) is generally considered as the threshold between acceptable and unacceptable operations.

UNSIGNALIZED INTERSECTIONS

For unsignalized intersections, the average control delay is defined as the total elapsed time from which a vehicle stops at the end of the queue until the vehicle departs from the stop line. This includes the time required for the vehicle to travel from the last-in-queue to the first-in-queue position. As per the HCM, the average control delay for any minor movement is a function of the service rate or capacity of the approach and the degree of saturation. The LOS criteria for unsignalized intersections are also summarized in Table 15.

The LOS thresholds for unsignalized intersections are different from those for signalized intersections. The primary reason is that drivers expect different levels of performance from different types of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection; hence, the corresponding control delays are higher at a signalized intersection than at an unsignalized intersection for the same LOS. In addition, certain driver behavioral considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections can relax during the red interval, whereas drivers on minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized intersections. For these reasons, the corresponding delay thresholds for unsignalized intersections are lower than those of signalized intersections. Per the CEQR Technical Manual, as with signalized intersections, the midpoint of LOS D (30 seconds of delay) is generally perceived as the threshold between acceptable and unacceptable operations.

TRAFFIC

2018 Existing Conditions

Traffic data were collected in November 10 through 20, 2018 for the weekday AM, midday, PM, and Saturday peak periods via a combination of video data intersection counts and 24-hour Automatic Traffic Recorder (ATR) counts. These traffic counts were used to develop balanced traffic networks for the weekday AM, midday, and PM peak hours, as well as the Saturday peak hour, which are generally 7:15 to 8:15AM, 12:15 to 1:15PM, 4:30 to 5:30PM and 3:15 to 4:15 PM, respectively.

Inventories of roadway geometry, traffic controls, bus stops, and parking regulations/activities were recorded to provide appropriate inputs for the operational analyses. Official signal timings were measured in the field and obtained from NYCDOT for use in the analysis of the study area signalized intersections**. Figures 3 through 6** show the 2018 existing traffic volumes for the weekday AM, midday, PM, and Saturday peak hours, respectively.

LEVELS OF SERVICE

A summary of the 2018 existing conditions traffic analysis results with details on level-of-service, v/c ratios, and average delays are presented in **Table 16**. Overall, the capacity analysis indicates that all of the study area's intersection approaches/lane groups operate acceptably—at mid-LOS D or better (i.e., with delays of 45 seconds or less per vehicle for signalized intersections and 30 seconds or less per vehicle for un-signalized intersections) for the analysis peak hours.

2023 No-Build Conditions

The 2023 no-build traffic volumes are constructed by increasing the existing traffic

volumes by 2.5 percent (½ percent per year per CEQR TM guidelines). There is no major development planned in the study area, according to the NYC active major constructions. **Figures 7 through 10** show the 2023 no-build traffic volumes for the weekday AM, midday, PM, and Saturday peak hours, respectively

The 2023 no-build conditions traffic analysis results with details on level-of-service, v/c ratios, and average delays are presented in **Table 17**.

All of the study area's intersection approaches/lane groups would operate acceptably—at mid-LOS D or better (i.e., with delays of 45 seconds or less per vehicle for signalized intersections and 30 seconds or less per vehicle for un-signalized intersections) for the analysis peak hours.

2023 Build Conditions

The 2023 build traffic volumes are prepared by adding the project generated incremental vehicle trips (**Figures 11 through 14)** to the no-build traffic volumes (**Figures 7 through 10**) as shown in **Figures 15 through 18 (see Attachment C).**

The 2023 build conditions traffic analysis results with details on level-of-service, v/c ratios, and average delays are presented in **Table 18 (see Attachment C).**

Overall, the capacity analysis indicates that all of the study area's intersection approaches/lane groups would operate acceptably—at mid-LOS D or better (i.e., with delays of 45 seconds or less per vehicle for signalized intersections and 30 seconds or less per vehicle for un-signalized intersections) for the analysis peak hour.

The detailed analysis concluded that in the future with the proposed project, Scenario 2, all ten (10) intersections would operate in an acceptable LOS, below Mid LOS D, during all peak hours and there would be no significant adverse traffic impacts, as described below and shown in Levels of Service summary **Tables 16 through 18 (see Attachment C)**.

PARKING

On-Site Parking Garage

The proposed project would include an on-site accessory parking garage with 279 parking spaces. The proposed vehicular egress/ingress for both auto and trucks is located along 63rd Street between Roosevelt Avenue and Trimble Road. The parking demand would peak at 204 parking spaces during the 1:00-2:00PM and 3:00-4:00PM peak hours, as shown in **Table 19 (see Attachment C).** The proposed on-site parking garage would accommodate parking demand, generated by the proposed project and there is no-need for detailed parking analysis.

On-Street Parking Regulations

On-Street parking regulations are collected by ESC during April 2019 for the study area. On-Street parking regulations are summarized in **Table 20** and shown in **Figure 19 (see Attachment C).**

TRANSIT

Subway

The proposed rezoning would generate a total of 174 and 146 net incremental subway trip ends during the AM, and PM peak hour time periods, respectively, as summarized in **Tables 10 and 13 (see Attachment C)**. Currently, there is one (1) subway station for number 7 train and one (1) commuter train station for LIRR (Complex Train Station) at Roosevelt Avenue and 61st Street intersection in the study area.

The 61st Street/Woodside Ave Subway station for number 7 train and LIRR Commuter train station (complex train station) is within a ¼ mile radius from the proposed project (Transit Zone). The subway/commuter train complex station includes two entrances and two exits for subway and commuter riders, one at 61st Street and Roosevelt Avenue intersection (entrance at the southern side includes one escalator, operating upward only), and another one at the southern end of the Development Site where 63rd Street meets Trimble Road.

The Proposed Rezoning would generate less than the *CEQR 200-subway trip end threshold* during the AM and PM peak hour time periods, and in accordance with the *CEQR Technical Manual criteria*, would not result in any conditions that would typically trigger the need for a detailed assessment of subway impacts.

Bus

The proposed rezoning would generate a total of 333, and 268 net incremental bus trip ends during the AM, and PM peak hour time periods, respectively, as summarized in **Tables 10 and 13 (see Attachment C)**. Currently, there are seven (7) bus lines within the ¼ mile radius from the proposed project, three bus lines (Q32, Q53/52 SBS and Q70 SBS) are operating along Roosevelt Avenue, one (Q18) is operating along Woodside Avenue, one (Q47) is operating along 69th Street/Roosevelt Avenue and one (Q60) is operating along Queens Blvd.

The proposed incremental bus trips were assigned to each route based on proximity to the Project Area and current ridership patterns (MTA 2019 bus ridership data). **Table 21** shows the anticipated numbers of new riders expected on each bus route in the AM and PM peak hours.

According to the general thresholds used by the MTA and specified in the CEQR Technical Manual, a detailed analysis of bus conditions is generally not required if a proposed action is projected to result in fewer than 50 peak hour trips being assigned to a single bus route (in one direction), as this level of new demand is considered unlikely to result in significant adverse impacts.

As shown in **Table 21 (see Attachment C)**, new trips for each bus route are not expected to exceed *the 50-trip CEQR Technical Manual analysis threshold.*

Therefore, no bus line would experience the *CEQR 50-bus trip end threshold per bus line per direction during any peak hour*. The Proposed Actions would generate less than 50 bus trip ends per bus per direction during each peak hour time period, and in accordance with the CEQR Technical Manual criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of bus impacts.

PEDESTRIANS

Analysis Methodology Peak 15-minute pedestrian flow conditions during the weekday AM, midday, PM, and Saturday Midday peak hours are analyzed using the Highway Capacity Manual 2010 methodology and procedures outlined in the CEQR Technical Manual. Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volume, measuring the sidewalk or crosswalk width, determining the available pedestrian capacity, and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared with LOS standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street crosswalks and corners is more complicated as these spaces cannot be treated as corridors due to the time incurred waiting for traffic lights. To effectively evaluate these facilities a "time-space" analysis methodology is employed, which takes into consideration the traffic light cycle at intersections. LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. **Table 22** summarizes the LOS criteria for pedestrian crosswalk/corner area and sidewalk conditions, as based on the *Highway Capacity Manual methodology*. The analysis of sidewalk conditions includes a "platoon" factor in the calculation of pedestrian flow to more accurately estimate the dynamics of walking. "Platooning" is the tendency of pedestrians to move in bunched groups or "platoons" once they cross a street where cross traffic required them to wait. Platooning generally results in an LOS one level poorer than that determined for average flow rates.

Table 22-Level of Service Criteria for Pedestrian Elements

LOS	Sidewalks			Corners Reservoirs and Crosswalks
		Non-Platoon Flow	Platoon Flow	
A	(Unrestricted)	> 60	> 530	> 60
B	(Slightly Restricted)	> 40 to 60	> 90 to 530	> 40 to 60
C	(Restricted but fluid)	> 24 to 40	> 40 to 90	> 24 to 40
D	(Restricted, necessary to continuously alter walking stride and direction)	> 15 to 24	> 23 to 40	> 15 to 24
E	(Severely restricted)	> 8 to 15	> 11 to 23	> 8 to 15
F	(Forward progress only by shuffling; no reverse movement possible)	<8	< 11	<8

Notes:

SEP: square feet per pedestrian.

Source: *CEQR Technical Manual*

2018 EXISTING CONDITIONS

Pedestrian counts were collected in November 10 and 14, 2018 for the Saturday Midday, and Weekday AM, midday, PM peak periods, respectively. These pedestrian counts were used to develop balanced pedestrian networks for the weekday AM, midday, and PM peak hours, as well as the Saturday Midday peak hour, which are *7:30 to 8:30AM, 12:45 to 1:45PM, 4:00 to 5:00PM and 12:45 to 1:45 PM,* respectively.

Inventories of roadway geometry, traffic controls, bus stops, and subway location were recorded to provide appropriate inputs for the operational analyses. Official signal timings were measured in the field and obtained from NYCDOT for use in the analysis

of the study area signalized intersections**. Figures 24 through 27 (see Attachment C)** show the 2018 existing traffic volumes for the Weekday AM, Midday, PM, and Saturday peak hours, respectively.

LEVELS OF SERVICE (LOS)

AM Peak Hour

A summary of the 2018 existing conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 23A, 23B and 23C (see Attachment C)**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS A for the AM analysis peak hour.

Midday Peak Hour

A summary of the 2018 existing conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 23D, 23E and 23F (see Attachment C).** Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS A for the Midday analysis peak hour.

PM Peak Hour

A summary of the 2018 existing conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 23G, 23H and 23I (see Attachment C)**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS A for the PM analysis peak hour.

Saturday Midday Peak Hour

A summary of the 2018 existing conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 23J, 23K and 23L (see Attachment C)**. Overall, the LOS analysis

indicates that all of the study area's pedestrian elements operate at LOS A for the Saturday Midday analysis peak hour.

2023 NO-BUILD CONDITIONS

The 2023 no-build pedestrian volumes are constructed by increasing the existing pedestrian volumes by 2.5 percent (½ percent per year per CEQR TM guidelines). There is no major development planned in the study area, according to the NYC active major constructions.

Figures 28 through 31 (see Attachment C) show the 2023 no-build pedestrian volumes for the Weekday AM, midday, PM, and Saturday peak hours, respectively.

AM Peak Hour

A summary of the 2023 no-build conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 24A, 24B and 24C (see Attachment C)**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS B or better for the AM analysis peak hour.

Midday Peak Hour

A summary of the 2023 no-build conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 24D, 24E and 24F (see Attachment C)**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS B or better for the Midday analysis peak hour.

PM Peak Hour

A summary of the 2023 no-build conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 24G, 24H and 24I (see Attachment C)**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS B or better for the PM analysis peak hour.

Saturday Midday Peak Hour

A summary of the 2023 no-build conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 24J, 24K and 24L (see Attachment C**). Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS B or better for the Saturday Midday analysis peak hour.

2023 BUILD CONDITIONS

The 2023 build pedestrian volumes are prepared by adding the project generated incremental pedestrian trips (**Figures 20 through 23)** to the no-build pedestrian volumes (**Figures 28 through 31**) as shown in **Figures 32 through 35 (see Attachment C).** The 2023 build pedestrian volumes are, respectively, shown for the Weekday AM, midday, PM, and Saturday peak hours in **Figures 32 through 35 (see Attachment C)**.

AM Peak Hour

A summary of the 2023 build conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 25A, 25B and 25C (see Attachment C).** Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS B or better for the AM analysis peak hour.

Midday Peak Hour

A summary of the 2023 build conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 25D, 25E and 25F (see Attachment C)**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS B or better for the Midday analysis peak hour.

PM Peak Hour

A summary of the 2023 build conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 25G, 25H and 25I (see Attachment C)**. Overall, the LOS analysis

indicates that all of the study area's pedestrian elements operate at LOS B or better for the PM analysis peak hour.

Saturday Midday Peak Hour

A summary of the 2023 build conditions pedestrian analysis results with details on average pedestrian space (sf/ped), level-of-service (LOS), and LOS adjusted for platoon are presented in **Tables 25J, 25K and 25L (see Attachment C).** Overall, the LOS analysis indicates that all of the study area's pedestrian elements operate at LOS B or better for the Saturday Midday analysis peak hour.

VEHICULAR AND PEDESTRIAN SAFETY

Crash data for traffic and pedestrian study area intersections were obtained from the New York City Department of Transportation (NYCDOT) for the three-year reporting period between January 1, 2015, and December 31, 2017 (the most recent period for which data were available for all locations). During this period, a total of 24 reportable and non-reportable crashes, no fatalities, and 11 pedestrian/bicyclist-related injury crashes occurred at study area intersections. A review of the crash data identified no intersection as a high crash location (defined as those with 48 or more total reportable and non-reportable crashes or five or more pedestrian/bicyclist injury crashes occurring in any consecutive 12 months of the most recent three-year period for which data are available), as shown in **Table 26 (see Attachment C).**

CONCLUSION

In accordance with the threshold guidelines as detailed in the *2020 CEQR Technical Manual*, the proposed rezoning is not expected to result in significant adverse impacts related to transportation. Specifically, the proposed rezoning is unlikely to have a significant effect on traffic flow, parking and operating conditions, safety, transit provision, and pedestrian safety.

17. AIR QUALITY

INTRODUCTION

Analysis Framework
Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. Under CEQR, an air quality assessment determines both a proposed project's effects on ambient air quality as well as the effects of ambient air quality on the project. The analysis framework, as mandated by the State Environmental Review Act, followed the *New York City Environmental Quality Review 2014 Technical Manual*.

Project Description

The Project Area
The Project Area is located on the southwest corner of Roosevelt Avenue and 63rd Street (Block 1294, Lots 55, p/o 56, 58, 60, 68, p/o 73 and 76) in the Woodside neighborhood of Queens, Community District 2. The Project Area is bounded by Roosevelt Avenue to the north, the Long Island Railroad tracks to the southwest, and 63rd Street to the east.

The Applicant-controlled Development Site (Projected Development Site 1) consists of Block 1294, Lots 58, 60, 68, and p/o Lot 73. One soft site (Projected Development Site 2, Block 1294, Lots 55 and 56) is also included in the Reasonable Worst Case Development Scenario (RWCDS). Block 1294, Lot 76, would also be affected by the Proposed Actions. This property is owned by the Long Island Railroad and is used as a parking lot. Because Lot 76 is controlled by the LIRR, it is not anticipated to be redeveloped as a result of the proposed actions.

Existing Conditions
Projected Development Site 1 is improved with 4 commercial buildings containing retail, service, eating and drinking, and warehousing uses. Projected Development Site 2 is improved with two commercial buildings containing retail and service uses. Block 1294,

Lot 76, also affected by the Proposed Actions, is owned by the LIRR and is used as a parking lot.

Future No-Action and With-Action Conditions

Per the *CEQR Technical Manual*, a project's effects on air quality are determined by comparing predictions made for the future no-action and the future with-action conditions. The existing condition does not serve as a baseline for determining if a proposed project would have a significant impact but is typically included in the analysis for informational purposes.

Absent the Proposed Action, the Project Area would remain in its current condition: A one-story retail building exists on Lot 55; Lot 56 is improved with a one-story building operating as a beauty salon; the building on Lot 58 contains an eating and drinking establishment on the first floor and offices on the second floor; eight convenience retail and service establishments occupy the one-story building on Lot 60, Lot 68 is improved with a one-story building that contains a factory and offices; Lot 73 is improved with a one-story building that contains a factory, storage, and office; and, Lot 76 is owned by the LIRR and is used as a parking lot.

The With-Action Scenario includes the Applicant's proposed building on Development Site 1 and a projected mixed-use development on Projected Development Site 2. While the primary intent of the Proposed Action is mixed-use primarily residential buildings ("Scenario 1: Mixed-Use"), a mixed use commercial and community facility buildings ("Scenario 2: Commercial-Community Facility") were considered too. The developments for the two possible scenarios are described here:

Scenario 1 (Mixed-Use: Residential-Commercial-Community Facility)

Projected Development Site 1: The scenario would consist of a 13-story mixed-use building (307,388 gsf) to contain 214 residential units (181,912 gsf), 77,584 gsf of commercial space, and 8,013 gsf of community facility space. 161 accessory parking spaces would be provided in the building cellar level. The building's RWCDS is a height of 135 feet. The building's HVAC system would operate on natural gas.

Projected Development Site 2: The scenario would consist of a 13-story mixed-used building (16,132 gsf) to contain 17 residential units (14,443 gsf), 1,189 gsf of commercial

space, and 500 gsf of community facility space. The building would rise to a maximum height of 135 feet.

Scenario 2 (Commercial-Community Facility)

Projected Development Site 1: The scenario would consist of a 12-story mixed-use building (297,745 gsf) to contain 87,589 gsf of commercial space (assume as retail) and 169,687 gsf of community facility space (assumed as ambulatory medical). 279 accessory parking spaces would be provided in the cellar level (109 for commercial and 170 for ambulatory medical). The building's RWCDS is a height of 135 feet. The building's HVAC system would operate on natural gas.

Projected Development Site 2: The scenario would consist of a 13-story mixed-used building (16,132 gsf) to contain 4,381 gsf of commercial space (assumed as retail), and 11,751 gsf of community facility space (assumed as ambulatory medical). The building would rise to a maximum height of 135 feet. Off-street accessory parking requirements would be waived for this site.

Considering the two scenarios, the worst-case predicted difference (for the air quality analysis) between the future with-action and the future no-action conditions is the development of an additional 284,213 gsf of floor area of Scenario 1: Mixed-Use and 279 new accessory parking spaces of Scenario 2: Commercial-Community Facility.

Air Pollutants and Applicable Standards and Guidelines

Criteria Pollutants - National Air Quality Standards

The U.S. Environmental Protection Agency (EPA) has identified six pollutants, known as criteria pollutants, which are of concern nationwide. As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. The pollutants for which detailed analyses were conducted, together with their averaging time periods, are presented in Table 17-1.

NYC Guidelines

In addition to the NAAQS, project subjected to the CEQR require $PM_{2.5}$ and CO significant impact criteria (based on concentration increments). These criteria, *de minimis*, are more

stringent than the NAAQS and the state standards, as the criteria set a maximum increase of pollutant concentration that is below the national standard. If the estimated impacts of a proposed project are less than the *de minimis* criteria, the impacts are not considered to be significant. $PM_{2.5}$ significant impact concentration was evaluated as follows:

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

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

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

Per the *CEQR Technical Manual*, CO significant impact concentration is:

- An increase of 0.5 parts per million (ppm) or more in the maximum 8-hour average CO concentration at a location where the predicted No-Action 8-hour concentration is equal to 8 ppm or between 8 ppm and 9 ppm; or

- An increase of more than half the difference between baseline (i.e., No-Action) concentrations and the 8-hour standard, when No-Action concentrations are below 8 ppm.

Background Concentrations

Background concentrations, at the nearest New York State Department of Environmental Conservation (NYSDEC) monitoring station(s), of the criteria pollutants for which detailed analyses were conducted, were obtained from the NYSDEC's annual report for 2018. Table 17-1 shows the background concentrations and the NAAQS.

Table 17-1: Background Concentration at the NYSDEC Nearest Monitoring Station

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO_2	1-Hour	188 µg/m^3	105.7 µg/m^3	Queens College
	Annual	100 µg/m^3	27.2 µg/m^3	
$PM_{2.5}$	24-Hour	35 µg/m^3	17.2 µg/m^3	JHS 126
	Average	12 µg/m^3	7.7 µg/m^3	
CO	1-Hour	35 ppm	1.95 ppm	Queens College
	8-Hour	9 ppm	1.30 ppm	
SO_2	1-Hour	196 µg/m^3	14.8 µg/m^3	
	Annual [(1)]	80 µg/m^3	1.1 µg/m^3	

1. 6 CRR-NY 257-2.3 for annual SO2 standard: "During any 12 consecutive months, the annual average of the 24-hour average concentrations shall not exceed 0.03 ppm.

The *de minimis* impact criterions of CO and $PM_{2.5,}$ evaluated per the NYC Guidelines are:

- 24-hour $PM_{2.5}$ 8.90 µg/m^3
- Annual $PM_{2.5}$ 0.3 µg/m^3 (for stationary source)
- Annual $PM_{2.5}$ 0.1 µg/m^3 (for mobile source on a neighborhood scale)
- CO 8-hour 3.85 ppm

<u>NO2 NAAQS</u>

Nitrogen oxide (NOx) emissions from combustion consist predominantly of nitric oxide (NO) at the source. The NOx in these emissions are then gradually converted to NO_2, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source). For determining compliance with the 1-hour standard, the EPA has developed a three-tiered modeling approach: Tier 1, the most conservative approach, assumes a full (100%) conversion of NOx to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80% to the NOx estimated

concentrations; and Tier 3, which is the most precise approach, employs AERMOD's 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. Per the *CEQR Technical Manual*, a Tier 1 approach is initially applied, followed by a Tier 2 application. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO_2 NAAQS were estimated.

Non-Criteria Pollutants

In addition, the NYSDEC has established guidelines for maximum allowable concentration of "noncriteria pollutants," which are potentially toxic or carcinogenic pollutants. The maximum allowable guidelines set a maximum 1-hour and annual averaging time concentrations and are published in the DAR-1 AGC/SGC Table, where AGC/SGC refers to Annual and Short-term Guideline Concentrations. The most recent DAR-1 guidelines were created on August 10, 2016. NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic, or duration.

MOBILE SOURCE

Introduction

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

Per the transportation analysis for this project, Scenario 2: Commercial-Community Facility would result in greater on-street vehicular traffic and greater off-street parking demand. Therefore, Scenario 2: Commercial-Community Facility was analyzed.

Per the Transportation section, the Proposed Action would generate a total of 276 (155 inbound and 121 outbound), 413 (210 inbound and 203 outbound), 260 (95 inbound and 165 outbound), and 272 (131 inbound and 141 outbound) during the AM, Midday, PM and Saturday peak hour periods, respectively. The total project generated traffic would include 8, 6, 2 and 0 truck trip end during the AM, Midday, PM and Saturday peak hour periods, respectively. In addition, the With-Action scenario would result in 279 spaces parking garage in the cellar level (109 for commercial and 170 for ambulatory medical).

Mobile Source Screen

Existing Sources

According to the *CEQR Technical Manual*, projects that would result in new sensitive uses within 200 feet of an atypical roadway or near other significant mobile sources of pollutants may result in significant adverse mobile source air quality impacts. As the Project Area is not located within 200 feet of an atypical roadway or any other significant mobile sources of pollutants, no analysis was required.

Parking Garage

Based on CEQR guidelines, the maximum capacity of a parking garage is evaluated against a threshold criterion to predict whether the potential impacts associated with mobile source emissions are significant. The threshold criteria level, per CEQR guidelines, is 85 new off-street parking spaces. If the threshold is met or exceeded, a detailed analysis is warranted. The proposed project would result in 279 new off-street parking spaces. Therefore, a detailed air quality analysis was required.

Project-Generated Traffic

Per the *CEQR Technical Manual*, localized increases in CO and $PM_{2.5}$ levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed project. For this area of the City, the threshold volume for a detailed analysis of CO concentration, using MOVES2014 and CAL3QHC/R or AERMOD, is an increment of 170 vehicles; $PM_{2.5}$ threshold criterion is an increment of 12 to 23 heavy-duty diesel vehicles (HDDVs) or its equivalence depending on the road types.

For this area of the City, the threshold volume for a detailed analysis of CO concentration is an increment of 170 peak hour automobile vehicle trips. $PM_{2.5}$ threshold criterion applies a heavy-duty diesel vehicles (HDDVs) screen.

Per the trip assignment analysis for this project, the maximum peak hour trip generation increment between the Future No-Action and the Future With-Action would exceed the threshold of 170 vehicular trips (condition outlined in Sections 210 of Chapter 17 of *the CEQR Technical Manual*) at three intersections. The 170 incremental vehicles threshold would be exceeded at the intersection of 63rd Street and Roosevelt Avenue (196 vehicles) and 64th Street and Roosevelt Avenue (245 vehicles) during the Midday peak hour period. The 170 incremental vehicles threshold would be exceeded at the intersection of 64th Street and Trimble Road during the Midday (228 vehicles) and Saturday (172 vehicles) peak-hour periods. Therefore, CO detailed analyses were conducted for these intersections.

According to *CEQR Technical Manual*, $PM_{2.5}$ detailed analysis is required if a threshold criterion, determined by project-generated peak hour HDDVs traffic or its equivalent in vehicular emission, is exceeded. The threshold criterion depends on the type of road and the incremental vehicular traffic as follows:

- 12 or more HDDV for paved roads with 5,000 vehicles;
- 19 or more HDDV for collector roads;
- 23 or more HDDV for principal and minor arterials; or
- 23 or more HDDV for expressways and limited access roads.

The trip assignment analysis was used to calculate the project-generated traffic on each road segment at the three intersections, and on Woodside Avenue. Roosevelt Avenue is a principal arterial (functional class 14) roadway, Woodside Avenue is a minor arterial (functional class 16) roadway, and the other roadways are paved road (functional class 19) with less than 5,000 vehicles per day.

The $PM_{2.5}$ screen does not apply to passenger cars. As such, the NYSDEC vehicle population by source type database (part of MOVES database for the county of Queens) was consulted. The database shows that the passenger car/truck distribution (LDGV / LDGT1) in Queens is 60.5% and 39.5%, respectively. The project-generated trucks (HDDV7) was obtained from the transportation analysis for this project.

The result of the $PM_{2.5}$ screening analyses shows that 63rd Street south of Roosevelt Avenue, Trimble Road, and 64th Street between Woodside Avenue and Roosevelt Avenue

failed the $PM_{2.5}$ screen. The other roadways passed the HDDVs screen. Therefore, $PM_{2.5}$ detailed analyses were conducted for these intersections.

Detailed Analysis Methodology

Introduction

Mobile source impacts are a function of vehicular related emissions and the pollutants' dispersion. The emission rates of vehicular engines and mechanical components were generated with the latest EPA's Mobile Vehicle Emission Simulator (version MOVES2014b), and emission of dust generated by vehicles travelling on paved roadways were added to estimate total particulate matter emission rates. The impact concentrations of the pollutants associated with the on-street traffic were modeled with the EPA's AERMOD Gaussian dispersion model. The dispersion analysis of parking garage was modeled with the spreadsheet referenced in the *CEQR Technical Manual Appendices*. As previously mentioned, the intersections of 63rd Street and Roosevelt Avenue, 64th Street and Roosevelt Avenue, 64th Street and Trimble Road were analyzed.

Emission Rates

The EPA's MOVES2014b emission factor algorithm was used to estimate CO and $PM_{2.5}$ emission rates. MOVES can be used to calculate emission rates of criteria air pollutants, greenhouse gas emissions, and some hazardous air pollutants for both onroad motor vehicles and nonroad equipment. MOVES models calculate emissions at the national, county, and project level by use of databases and by specifying the characteristics (Run Specification) of the scenario that is modeled.

Modeling inputs for inspection/maintenance, fuel supply, fuel formulation, fuel usage, average vehicle fuel technology, age distribution, and meteorology (the parking garage temperature was modeled at 45-deg F per the *CEQR Technical Manual*) were all provided by the NYSDEC for the borough of Queens, year 2020. The EPA Age Distribution Projection Tool for MOVES2014 was used to project the vehicles age distribution to 2023 from 2020.

The MOVES models were run in inventory mode, producing pollutants' emission rates in grams per hour (g/hr). The MOVES model specified the actual lengths of the links. The parking garage specified 100 vehicles per link, which were adjusted to the actual number of vehicles. The on-street traffic specified the actual number of vehicles traversing each link. Post-processing was conducted using the MOVES MySQL

Workbench data management software application to extract the emission rates from MOVES output.

In addition to exhaust running $PM_{2.5}$ emissions, vehicle related $PM_{2.5}$ emissions of dust generated by vehicles traveling on paved roadways were added to estimate total particulate matter emission factors for the short-term analysis (per DEP, annual fugitive dust emission is negligible). Per *CEQR Technical Manual*, slit loading factors of 0.4 g/m^2 for paved roadways and 0.1 g/m^2 for arterial roadways were specified. An average vehicle weight of 6,000 pounds was applied. These factors with the equation from Section 13.2.1-3 of EPA's AP-42 were used to calculate the on-street emission of each link. In addition, based on DEP guidance, the conservative assumptions of "dry" road condition was used for the short-term calculation (precipitation reduced silt loading).

AERMOD Dispersion Analysis

The EPA's AERMOD modeling system version 19191 was used to predict pollutants' concentrations. In accordance with CEQR guidance, these analyses were conducted assuming elimination of calms. Models specified flat terrain and urban group with population of 2,000,000.

All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Surface data was obtained from LGA Airport and upper air data was obtained from Brookhaven station, New York. The meteorology data, processed by Lakes Environmental Software, was processed using AERMET version 18081, AERMINUTE version 15272, and AERSURFACE version 13016. No data filling was conducted as the raw data quality was more than sufficient for the modeling purposes (99.47 percent of raw data). 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 to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs and Anemometer height of 9.4 meters was specified per Lakes Environmental Software.

For the parking garage analysis, 63rd Street and Trimble Road impact concentrations were modeled. Receptors were located on the sidewalks (the parking garage vent is considered a stationary source) at the east side of 63rd Street and the north-east side of Trimble Road. All receptors were placed at a height of 6 feet above grade, and in 10-foot increment.

For the intersection analysis, receptors were located per the guidelines specified in the *CEQR Technical Manual*. Annual $PM_{2.5}$ on neighborhood scale receptors were placed 15-meters from the curb side; short-term modeling specified receptors in the middle of the sidewalks. All receptors were placed at a height of 6 feet above grade, and in 10-foot increment from the modeled intersection to approximately 200 feet distance (in each direction). Roadway segments were modeled for 1,000 feet length from each side of the modeled intersection, except shorter roadways which used the actual lengths of the links. Roadways' widths were obtained from satellite imagery. The widths of traveling lanes did not include the parking lanes widths.

On-street traveling vehicles were modeled as line area sources. Private cars' heights of 1.53-meter and heavy-duty vehicle height of 4.0-meter were obtained from the Transportation Conformity Guidance for Quantative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas – Appendix J. The methodology outlined in the manual was used to calculate the dispersion parameters.

Parking Garage Dispersion Analysis

The following conditions, as outlined in the *CEQR Technical Manual*, were applied in the analysis to predict the potential for significant adverse air quality impacts:

- Pollutants within the garage are exhausted through a single vent situated above the parking garage entrance at 12 feet above grade;
- A receptor is placed at 6 feet high and 6 feet from the parking garage entrance, directly downwind from the garage's exhaust vent, to simulate a pedestrian on the adjacent sidewalk of the parking garage;
- A receptor is placed at 6 feet high and at the opposite sidewalk, directly downwind from the garage's exhaust vent;
- A receptor is placed 5 feet above the garage's exhaust vent to simulate a receptor placed in a window above the exhaust vent;
- Wind speed is assumed to be 1 meter per second;
- The garage ventilation rate is assumed to be the minimum rate as required by the New York City Building Code and outlined in the *CEQR Technical Manual;* and,

- The impact of the pollutants generated by on-street traffic are added to the receptor placed on the opposite sidewalk from the parking garage. These include both emissions from vehicular mechanical components and dust generated by vehicles travelling on paved roads.

Pollutants impact concentrations from the garage's exhaust vent were calculated using the spreadsheet referenced in the *CEQR Technical Manual Appendices.* Per *CEQR Technical Manual*, persistence factors of 0.7, 0.4, and 0.08 were applied to the 1-hour concentrations to evaluate the 8-hour CO concentration, 24-hour $PM_{2.5}$, and annual $PM_{2.5}$ concentrations, respectively.

Parking Garage Detailed Analysis

Methodology

The proposed project would contain 279 off-street parking spaces. The parking garage would occupy 35,330 gsf in the sub-cellar level. per the Site Plans, provided by the building's architect for this project, the sub-cellar is 24 feet below grade, similar to the building design of Scenario 1: Mixed-Use; The garage entrance/exit is located on 63rd Street and at the building's south-east corner. The garage entrance/exit ramp was assumed to have a slope of 1:7, the maximum allowable gradient[11], and typical slope of parking garages. The 1:7 gradient was used to calculate the ramp's length (168 feet).

Per the transportation analysis for this project, the Midday peak hour traffic would result in 401 (200 incoming and 201 outgoing) vehicular trips; the daily average (hourly average) would result in 113 (57 incoming and 56 outgoing) vehicular trips per hour. The CO analysis used the worst-case peak hour ins and outs; the $PM_{2.5}$ analysis used the average daily ins and outs traffic.

Per *CEQR Technical Manual*, vehicles exiting the parking garage idle for 1 minute before starting to travel to the parking facility exit, and all parking garage vehicles are assumed to drive at a speed of 5 miles per hour. Entering and exiting vehicles were assumed to travel a mean travel distance of two-thirds of the width and the length of the parking garage plus the ramp's length. With the parking garage length of 226'-9" (building wall façade facing 63rd Street), the mean travel distance is 255 feet, plus the 168 feet long ramp.

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11 https://www1.nyc.gov/assets/buildings/apps/pdf_viewer/viewer.html?file=2014CC_BC_Chapter_4_Special_Detailed_Requirements.pdf&section=conscode_2014

Table 17-2 shows the parking garage dimensions, the peak hour worst-case ins and outs (Midday peak hour), and the average hourly ins and outs.

Table 17-2: Parking Garage Dimensions and Peak Hour Traffic

Area (sq. ft)	Length (ft)	Width (ft)	Ramp's Length (ft)	Peak Hour Traffic (Ins / Out)	24- Hour Average (Ins / Out)
35,330	227	156	168	200 / 201	57/56

Per the transportation analysis for this project, the worst-case on-street traffic increment traversing 63rd Street would be of 183 vehicles (180 private cars and 3 trucks) during the Midday peak hour traffic. Receptors for both the short-term and annual averaging times were located 6 feet above the middle of the sidewalks located across the street from the development.

Parking Garage Results

Table 17-3 shows the results of the parking garage analysis, where the concentrations of 1-hour CO were evaluated with the NAAQS (modeled concentration added to the background concentration). The modeled concentrations of 8-hour CO and 24-hour and annual $PM_{2.5}$ were evaluated with the NYC Guidelines.

Table 17-3: Parking Garage Air Quality Impact

Pollutant		Near Sidewalk		Far Sidewalk		Window Above Vent	
CO (ppm)	**Averaging Period**	**1-hour**	**8-hour**	**1-hour**	**8-hour**	**1-hour**	**8-hour**
	Garage	0.854	0.598	0.752	0.592	0.878	0.614
	Line Source	N.A.	N.A.			N.A.	N.A.
	Background concentration	1.95	N.A.	1.95	N.A.	1.95	N.A.
	Total concentration	**2.80**	**0.60**	**2.83**	**0.59**	**2.83**	**0.61**
	NAAQS	35	9	35	9	35	9
	de minimis	N.A.	3.85	N.A.	3.85	N.A.	3.85
	Impact	**No**		**No**		**No**	
		Near Sidewalk		**Far Sidewalk**		**Window Above Vent**	
$PM_{2.5}$ ($\mu g/m^3$)		**24-hour**	**Annual**	**24-hour**	**Annual**	**24-hour**	**Annual**
	Garage	0.91	0.18	3.93	0.21	0.93	0.19
	Line Source	N.A.	N.A.			N.A.	N.A.
	de minimis	8.90	0.3	8.90	0.3	8.90	0.3
	Impact	**No**		**No**		**No**	

As seen in Table 17-3, the 1-hour CO concentrations do not exceed the NAAQS, and the 8-hour CO and 24-hour and annual $PM_{2.5}$ concentrations do not exceed the *de minims*. As all the pollutants are within the NAAQS and the NYC Guideline threshold criterions, no impact was predicted.

Intersection Detailed Analysis

Methodology

CO and $PM_{2.5}$ detailed analyses were performed for the intersections of 64th Street and Roosevelt Avenue, 64th Street and Trimble Road, and 63rd Street and Roosevelt Avenue. The No-Action and With-Action traffic were provided by the transportation analysis for this project. The Midday peak hour traffics at each intersection, which was the worst-case

increment at all intersections, were analyzed. Existing vehicle classification detailing private cars, light-good vehicles, buses, single-unit trucks, and articulate trucks on each link was obtained from the traffic analysis. The NYSDEC vehicle population for the county of Queens was used to detail these types of vehicle types into more types. The No-Action number of vehicles by source type was derived from the existing source type distribution. The With-Action number of vehicles by source type accounted for the incremental trucks and cars. Each intersection was modeled independently. Table 17-4 shows the traffic on these intersections.

Table 17-4: Peak Hour and Daily Average Incremental Traffic on the Most Affected Intersections

Intersection	Peak Hour Traffic (Veh/hr)	Roadways
63rd Street & Roosevelt Avenue	196	63rd Street, Roosevelt Avenue
64th Street & Roosevelt Avenue	245	64th Street, Roosevelt Avenue
64th Street & Trimble Street	228	63rd Street, 64th Street, Trimble Street, Woodside Avenue

The 1-hour CO With-Action impact concentration was evaluated with the NAAQS. The annual $PM_{2.5}$ increment concentration between the With-Action and No-Action was evaluated with the *de minimis*. The 8-hour CO and 24-hour $PM_{2.5}$ With-Action impact concentrations were evaluated with the *de minimis*, where the No-Action concentrations were assumed to be the background concentrations (this approach is conservative as the No-Action impact concentrations would be greater than the background concentration, and therefore, the increments between the With-Action and No-Action smaller).

Intersection Analyses Results

1-hour CO modeled concentrations were added to the background concentration and the results evaluated with the NAAQS. The $PM_{2.5}$ predicted concentrations and 8-hour CO concentrations were evaluated with the NYC Guideline, *de minimis*. Tables 17-5 through Table 17-7 show the dispersion analyses results.

Table 17-5: 63rd Street and Roosevelt Avenue - Dispersion Analysis Results

Pollutant and Averaging Time	No-Action Modeled Concentration	With-Action Modeled Concentration	Background Concentration	Evaluated Concentration	Threshold Concentration	Threshold Standard
$PM_{2.5}$ 24-hour	0 (1)	8.19 µg/m³	N.A.	**8.19 µg/m³**	**8.90 µg/m³**	*de minimis*
$PM_{2.5}$ Annual	0.297 µg/m³	0.368 µg/m³	N.A.	**0.07 µg/m³**	**0.1 µg/m³**	*de minimis*
CO 1-hour	N.A.	0.42 ppm	1.95	**2.37 ppm**	**35 ppm**	NAAQS
CO 8-hour	0 (1)	0.26 ppm	N.A.	**0.26 ppm**	**3.85 ppm**	*de minimis*

1. The No-Action modeled concentration was not modeled (assumed to be 0). Therefore, the increment between the With-Action and No-Action impact concentrations is the With-Action modeled concentration.

Table 17-6: 64th Street and Roosevelt Avenue - Dispersion Analysis Results

Pollutant and Averaging Time	No-Action Modeled Concentration	With-Action Modeled Concentration	Background Concentration	Evaluated Concentration	Threshold Concentration	Threshold Standard
$PM_{2.5}$ 24-hour	0 (1)	7.50 µg/m³	N.A.	**7.50 µg/m³**	**8.90 µg/m³**	*de minimis*
$PM_{2.5}$ Annual	0.290 µg/m³	0.383 µg/m³	N.A.	**0.09 µg/m³**	**0.1 µg/m³**	*de minimis*
CO 1-hour	N.A.	0.45 ppm	1.95	**2.40 ppm**	**35 ppm**	NAAQS
CO 8-hour	0 (1)	0.27 ppm	N.A.	**0.27 ppm**	**3.85 ppm**	*de minimis*

1. The No-Action modeled concentration was not modeled (assumed to be 0). Therefore, the increment between the With-Action and No-Action impact concentrations is the With-Action modeled concentration.

Table 17-7: 64th Street and Trimble Road - Dispersion Analysis Results

Pollutant and Averaging Time	No-Action Modeled Concentration	With-Action Modeled Concentration	Background Concentration	Evaluated Concentration	Threshold Concentration	Threshold Standard
$PM_{2.5}$ 24-hour	0 (1)	8.36 µg/m³	N.A.	**8.36 µg/m³**	**8.90 µg/m³**	*de minimis*
$PM_{2.5}$ Annual	0.160 µg/m³	0.206 µg/m³	N.A.	**0.05 µg/m³**	**0.1 µg/m³**	*de minimis*
CO 1-hour	N.A.	0.33 ppm	1.95	**2.28 ppm**	**35 ppm**	NAAQS
CO 8-hour	0 (1)	0.23 ppm	N.A.	**0.23 ppm**	**3.85 ppm**	*de minimis*

1. The No-Action modeled concentration was not modeled (assumed to be 0). Therefore, the increment between the With-Action and No-Action impact concentrations is the With-Action modeled concentration.

As seen in Table 17-5 through Table 17-7, the $PM_{2.5}$ and 8-hour CO concentrations do not exceed the *de minimis* (therefore not exceeding the NAAQS), and the 1-hour CO predicted concentrations do not exceed the NAAQS. Therefore, no significant adverse air quality impacts are expected at intersections effected by the project-generated traffic or in the neighborhood.

HVAC SYSTEMS ANALYSIS

Introduction

Per the *CEQR Technical Manual*, the HVAC analysis considers the potential for emissions from the HVAC system of the proposed project to significantly impact existing land uses (project-on-existing), and the potential of the proposed project to significantly impact each other (project-on-project). Based on CEQR guidelines, a preliminary screening analysis is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system boiler emissions can be significant. The screening analysis determines the threshold of development size below which the action would not have a significant impact. This CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

As previously mentioned, the Proposed Actions comprises of two scenarios: Scenario 1: Mixed-Use, and Scenario 2: Commercial-Community Facility. Both of these scenarios were considered in the HVAC system analysis.

Screening Analysis

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

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

The projected for development buildings within the Project Area, Projected Development Site 1 and Projected Development Site 2, would consist of two mixed-use buildings. Each building would rise to a height of 135 feet in both Scenarios 1: Mixed-Use, and Scenario 2: Commercial-Community Facility.

Projected Development Site 1 Scenario 1: Mixed-Use features greater floor area (total floor area, and floor area for residential use) than Scenario 2: Commercial-Community Facility. Therefore, the analysis assumed that the HVAC equipment would serve the Scenario 1: Mixed-Use building design. In addition, both scenario feature building heights of 135 feet, which was considered for the screening analysis.

The scenarios of Projected Development Site 2 feature similar building designs. The only differences are the floor areas designated to each category of land use (residential, commercial, community facility). The analysis assumed that the HVAC equipment would serve residential use as this would result in greater emissions.

Screening analysis is only applicable to a single smokestack. However, for purposes of a cumulative analysis, emissions from multiple stacks could be combined in a single stack situated as close as possible to the receiving building. This methodology was used to for the project-on-existing analysis. The following screening analyses were conducted:

1. Project-on-project: The impact of Projected Development Site 1 on Projected Development Site 2 and vice versa.

2. Project-on-existing: The cumulative impact of the Projected Development Sites 1 and 2 on existing land uses that are at least 135 feet high. Fuel oil #2 would be the type of fuel used in the HVAC system.

Project-on-Project

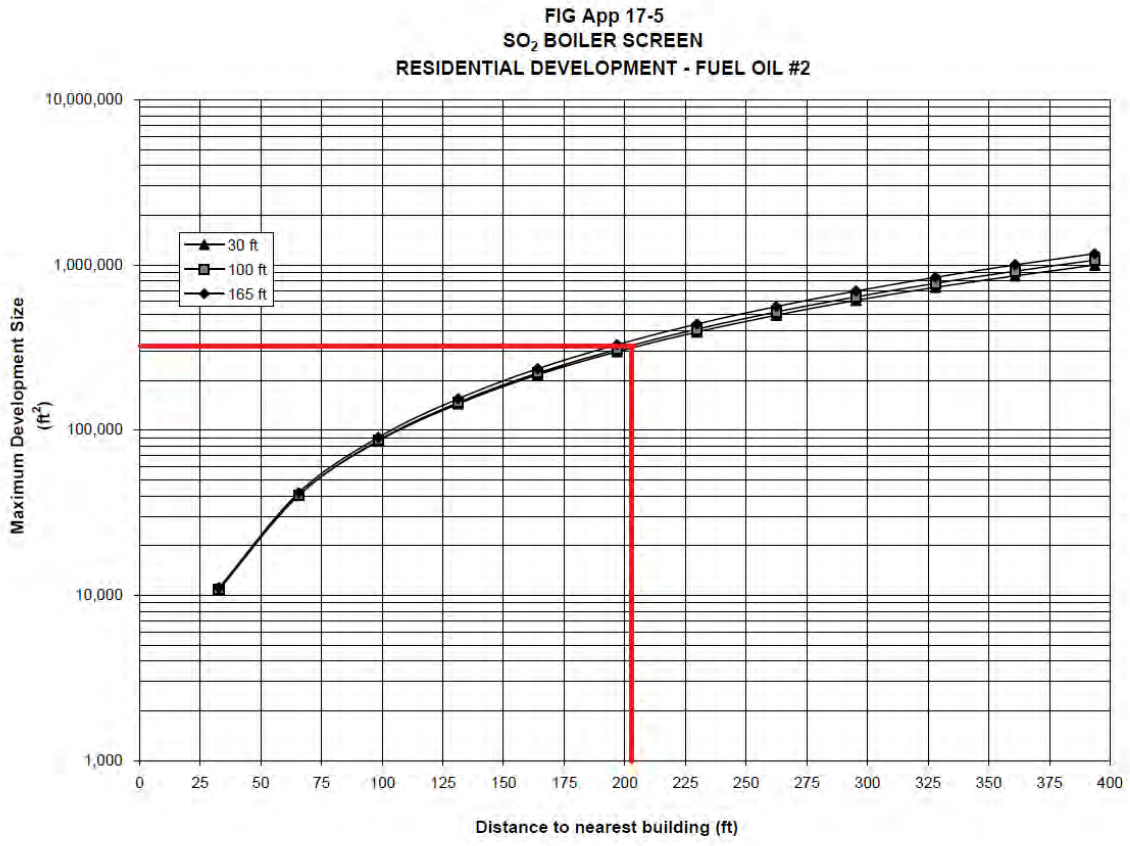
As previously mentioned, screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. The Projected Development Site 1 RWCDS abuts the Projected Development Site 2. Therefore, the

proposed project-on-project screening analysis is not applicable, and a detailed analysis was required.

Project-on-Existing

Per the *CEQR Technical Manual*, the CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendices* for 100-foot stack height was applied (as the 100 feet curve height is closest to but not higher than the proposed stack height, as the CEQR screening procedure requires). According to 15 RCNY 2-15, no new boiler or burner installations may use No. 6 or No. 4 fuel oils. Therefore, the highest-emitting fuel that could be used is a No. 2 fuel oil. This nomograph depicts the size of the development versus distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. Figure 17-1 (using Figure 17-5 of the *CEQR Technical Manual Appendices)* shows the screening analysis.

Figure 17-1: Proposed Project Minimum Distance - HVAC Screen



The screening analysis nomograph shows that a detailed analysis would be required for any existing land uses that is 135 feet or higher and at a distance of less than 205 feet from the Project Area. Building footprint geo metadata, obtained from the NYC Open Data Building Footprints shapefile[12], and satellite imagery shows that there is no building 135 feet or taller within 140 feet from the Project Area. The nearest building of similar or greater height is the 18-story building located at 59-10 Queens Boulevard (Block 2314, lot 1), and 1,750 feet from the Project Area. Therefore, the proposed project passes the CEQR

[12] https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh/data.

screening analysis on existing land uses. Table 17-8 shows the heights and floor area of the proposed developments and the results of the screening analyses.

Table 17-8: Screening Analysis Results

Projected Development Site ID	Lot	Building Height (ft.)	Heated Area (sq. ft.)	Screen Distance (ft.)	Receptor Building (Site ID or Block/Lot)	Receiving Building Distance (ft.)	Pass/ Fail
Project-on-Project							
Site 1	58, 60, 68, 73	135	307,388	N.A.	Site 2	< 30	Fail
Site 2	55, 56	135	16,132	N.A.	Site 1	< 30	Fail
Project-on-Existing							
Site 1, Site 2	58, 60, 68, 73, 55, 56	135	323,520	205	2134/1	1,750	Pass

As seen in Table 17-8, the proposed project passes the CEQR screening analysis on existing land uses. However, the potential for an adverse significant impact of the project-on-project scenario required a detailed analysis.

Detailed AERMOD Analysis

Methodology

Two dispersion modeling analyses were conducted to estimate the impacts from the buildings' stacks emissions: The Projected Development Site 1 impact on Projected Development Site 2 and vice versa. In accordance with CEQR guidance, this analysis was conducted assuming stack tip downwash, urban dispersion surface roughness, and elimination of calms. The models specified population of 2,000,000 and flat terrain. The Building Profile Input Program (BPIP) was run with the downwash effect enabled.

The HVAC equipment of Projected Development Site 1 would be fueled by natural gas. The HVAC equipment of Projected Development Site 2 would be fueled by fuel oil #2. Per the *CEQR Technical Manual*, the pollutants of concern for natural gas fueled boilers are NO_2 and $PM_{2.5}$; the pollutants of concern for fuel oil #2 fueled boilers are NO_2, $PM_{2.5}$, and SO_2. The boilers heat capacities were calculated from the annual fuel usage, the developments gross floor area, and the developments fuel usage corresponding to residential buildings. Pertinent values were obtained from the *CEQR Technical Manual Appendices* for residential buildings, and the assumption that all fuel would be consumed

during the 100-day (or 2,400 hour) heating season. Table 17-9 shows the developments HVAC equipment short-term and annual emission rates.

Table 17-9: Estimated Emission Rates of the Developments' HVAC Systems

Site ID	Fuel Type	Pollutant	Short term emission factor (g/sec)	Annual emission factor (g/sec)
Projected Development Site 1	Natural Gas	$PM_{2.5}$	7.25E-03	1.99E-03
		NO_2	9.54E-02	2.61E-02
Projected Development Site 2	Oil #2	$PM_{2.5}$	7.84E-04	2.15E-04
		NO_2	7.36E-03	2.02E-03
		SO_2	7.84E-05	2.15E-05

The Projected Development Site 1's diameter of the stack and exhaust's exit velocity were estimated based on values obtained from the New York City Department of Environmental Protection (DEP) "CA Permit" database for the corresponding boiler size (i.e., rated heat input or million Btu per hour). The Projected Development Site 2's diameter of the stack and exhaust's exit velocity were assumed to be 0.0 feet and 0.001 meter per second, respectively, based on values obtained from the *CEQR Technical Manual*. The stacks exit temperatures were assumed to be 300°F (423°K), which is appropriate for boilers.

The New York City Building Code (Building Code) requires that a rooftop stack should be at least 10 feet away from the edge of the roof and at least 3 feet higher than the roofline, so the HVAC stacks of the proposed buildings were located on the buildings' highest levels, 10 feet from the edge of the roof, and as close as possible to the receiving building. If impact was predicted, a stack set back distance was specified until no impact was predicted.

The Projected Development Sites were both modeled as buildings that cover the whole footprint of their lots and rise to their maximum heights. Receptors on the receiving building were placed all around the receiving building envelope, generally in 10-foot increment (receptors on Projected Development Site 1 wall façade facing 63rd Street were placed every 20-foot increment). Ground floor receptors were placed 6 feet above grade; 2nd floor receptors were placed at a height of 21 feet above grade; and, consecutive floor levels were placed at heights of 31-131 feet height every 10 feet.

All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. 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 to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs and Anemometer height of 9.4 meters was specified per Lakes Environmental Software Inc.

The Projected Development Site 1 impact on the Projected Development Site 2 was modeled with generic emission rate of 1 gram per second for the $PM_{2.5}$ and annual NO_2. The predicted concentrations of the 1 gram per second emission rates were multiplied by the boiler's calculated emission rates to predict the impact concentrations. The 1-hour NO_2 with the downwash effect enabled utilized a Tier 1 approach; the no downwash effect on plum dispersion utilized a Tier 3 approach. In addition, a stack set back of 30 feet from the Projected Development Site 2 was specified in all models. For the 1-hour NO_2 Tier 3 approach, 2014-2018 ozone hourly background concentrations were obtained from the NYSDEC Queens College monitoring station[13]. The maximum ozone hourly concentration was filled for missing values. 2016-2018 NO_2 hourly background concentrations were obtained from the NYSDEC for Queens College monitoring station. The 3-year of data was compiled, and a 5-year of hourly background concentrations file created following the EPA March 2011 Memorandum (Page 17)[14].

The Projected Development Site 2 impact on the Projected Development Site 1 was modeled with generic emission rate of 1 gram per second for the SO_2, $PM_{2.5}$, annual NO_2, and the 1-hour NO_2 with the downwash effect enabled. The predicted concentrations of the 1 gram per second emission rates were multiplied by the boiler's calculated emission rates to predict the impact concentrations. The 1-hour NO_2 with no downwash effect on plum dispersion was run with the calculated emission rate and a Tier 1 approach.

Results of the Dispersion Analysis

As stated above under Methodology, each model was run twice—with building wake effect enabled/disabled. The predicted concentrations (1-hour, 24-hour, and annual averaging times) are the highest concentrations of these two building wake effect options.

[13] http://www.nyaqinow.net/

[14] https://www.epa.gov/sites/production/files/2015-07/documents/appwno2_2.pdf

The results are compared with the 24-hour/annual $PM_{2.5}$ significant impact criteria, and the 1-hour/annual NO_2 and SO_2 NAAQS. Results of the HVAC dispersion analysis are shown in Table 17-10.

Table 17-10: Detailed HVAC Analysis Results

Pollutant a Averaging Time	Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
Projected Development Site 1 – on - Projected Development Site 2					
1-hour	152(1)		**152**	**188**	NAAQS
Annual	0.9	27.2	**28.1**	**100**	NAAQS
24-hour	2.39	N.A.	**2.39**	**8.90**	*de minimis*
Annual	0.06	N.A.	**0.1**	**0.3**	*de minimis*
Projected Development Sites 2 – on - Projected Development Site 2					
1-hour	67.9	105.7	**174**	**188**	NAAQS
Annual	0.27	27.2	**27.5**	**100**	NAAQS
24-hour	1.39	N.A.	**1.39**	**8.90**	*de minimis*
Annual	0.03	N.A.	**0.03**	**0.3**	*de minimis*
1-hour	1.4	14.8	**16**	**196**	NAAQS
Annual	0.003	1.1	**1.1**	**80**	NAAQS

As seen in Table 17-10, the $PM_{2.5}$ 24-hour and annual averaging times impacts do not exceed the significant impacts criteria, and the NO_2 and SO_2 predicted concentrations do not exceed the NAAQS.

Therefore, with (E) Designations in place, the emissions of the proposed project HVAC systems would not significantly impact any of the other proposed project's buildings.

(E) Designation (E-603)

The (E) Designation language is as follows:

<u>Block 1294, Lots: 58, 60, 68, and 73 (Projected Development Site 1)</u>: Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) and hot water equipment, ensure that the stack is located at the building's highest level

and at least 138 feet above the grade, and at least 30 feet from the western lot line facing 61st Street to avoid any potential significant adverse air quality impacts.

Block 1294, Lot 55 and 56 (Projected Development Site 2): Any new residential or commercial development on the above-referenced property must ensure that the stack is located at the building's highest level and at least 138 feet above the grade to avoid any potential significant adverse air quality impacts.

INDUSTRIAL and MAJOR SOURCES

Industrial Source

Per the *CEQR Technical Manual*, projects that would introduce new uses near industrial sources may result in potentially significant adverse air quality impacts. The study area considers industrial sources within 400 feet of the Project Area. Industrial sources are identified as commercial, industrial, or processing facilities that are likely to have New York City Department of Environmental Protection (DEP) processing permits. Typical types of industrial sources are: auto body facilities, woodworking shops, offset printing facilities, metal processing facilities, and generators or cogeneration equipment (emergency generators are exempt).

The result of the study identified 59 nonresidential lots in the 400 feet study area. These lots were searched in the DEP online CATS database for processing permits that either have an expired or current status, and the land uses on these lots identified in the land survey study. The current uses on the lots and the DEP CATS database results are included in the backup file for this project. The result of the land survey study identified no industrial source, nor manufacturing facility that is likely to emit toxic air, in the 400-foot study area. As such, no analysis was warranted, and no significant adverse air quality impacts are predicted from these types of facilities.

Major and Large Sources

Per the *CEQR Technical Manual*, projects that would introduce new uses near major sources, large sources, or odor producing facilities may result in potentially significant adverse air quality impacts. The study area considers major sources, large sources, and odor producing facilities within 1,000 feet of the Project Area. Major emission sources are identified as those sources located at Title V facilities that require Prevention of

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

No existing large combustion sources, such as power plants, cogeneration facilities, etc., located within 1,000 feet of the Project Area were identified[15]. In addition, no odor producing facility was identified within 1,000 feet of the Project Area. The nearest Title V facility is the Big Six Tower Inc, located at 59-55 47th Avenue, and 1,800 feet from the Project Area. As such, no analysis was warranted, and no significant adverse air quality impacts are predicted from these types of facilities.

Conclusion

Conditions associated with the project development would not result in any violations of the ambient air quality standards. Therefore, the action would not result in any potentially significant adverse stationary or mobile source air quality impacts, and further assessment is not warranted.

[15] https://gisservices.dec.ny.gov/gis/dil/

19. NOISE

Introduction

Noise monitoring was conducted on May 23rd and May 24th 2018 and Tuesday, October 27th, 2019 to assess the potential noise impacts associated with the Proposed Actions. The Proposed Action would effectuate the development of a 13-story mixed-use building within an C1-4 zoning district. The Development Site, known as Block 1294, Lots 55, 56, 58, 60, 68, 73, and 76 on the New York City Tax Map, is situated between 63rd Street, 62nd Street and Roosevelt Avenue within Queens Community District 2. 63rd Street a one-way single lane road with its intersections controlled by traffic lights and stop signs. 62nd Street is a one-way single lane road with its intersections controlled by traffic lights and stop signs. Roosevelt Avenue is a two-way single lane road with its intersections controlled by traffic lights.

Accordingly, an assessment of the potential for adverse effects on project occupants from ambient noise is warranted. The proposed development would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. Therefore, this noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development.

Framework of Noise Analysis

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

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

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz) and are most sensitive to frequencies in the 1,000- to

5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common frequency weightings used are the A- and C-weightings. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighting is the most commonly used for environmental measurements, and sound levels measured using this weighting are denoted as dBA. The letter "A" indicates that the sound has been filtered to reduce the strength of very low and very high frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high frequency bands are significantly affected by C-weighting.

Table 1: Noise Levels of Common Sources

Sound Source	SPL (dB(A))
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Notes: A change in 3dB(A) is a just noticeable change in SPL. A change in 10 dB(A)Is perceived as a doubling or halving in SPL.	
Source: 2020 CEQR Technical Manual	

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

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

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

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

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

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

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

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEPO-CEQR) noise standards at the exterior façade to achieve interior noise levels of 45 dB(A) or below. CEPOCEQR Noise Standards classify noise exposure into four categories: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable. As noted in the *CEQR Technical Manual*, these standards are the basis for classifying noise exposure into the following categories based on the L10 measured directly outside the projected development site.

Table 2: Attenuation Values to Achieve Acceptable Interior Noise Levels (19-2 CEQR TM)

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

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

Initial Impact Screening

The *CEQR Technical Manual* recommends an analysis of two principal types of noise sources: mobile sources; and stationary sources. As the Project will not be a stationary generator of noise, mobile noise sources will be examined in the following sections. The initial impact screening considers whether the project would:

(1) Generate any mobile sources of noise and/or
(2) Be located in an area with existing high ambient noise levels.

As discussed above, the noise analysis presented in this chapter focuses on the operational noise effects of the Proposed Action and the impacts of the ambient noise levels on the Proposed Action.

- An analysis to determine the level of building attenuation necessary to ensure that interior noise levels satisfy City Environmental Quality Review (CEQR) requirements; and
- A Noise Passenger Car Equivalent Screening to determine if the Proposed Action would result in an increase to existing Noise PCE values by 100 percent or more. The Noise PCE screening analyzes the potential for significant adverse impacts on adjacent receptors, and to determine, if any, the level of additional mitigation required to attenuate project-generated mobile noise sources.

Mobile Sources

Vehicular Traffic Sources

The study area for potential noise impacts from vehicular sources includes the locations of receptors along traffic routes to and from the site along which project vehicular trips are assigned, and the proposed site itself if a receptor would be located there. Mobile noise sources are those which move in relation to receptors. Per the *CEQR Technical Manual*, if existing noise passenger car equivalent (PCE) values are increased by 100 percent or more due to a Proposed Action, a detailed analysis is generally performed.

As the main source of noise for the Development Site is generated from the elevated subway line and the raised LIRR tracks and not vehicular movements, a PCE analysis would improperly calculate the addition of noise PCEs and add the improper dB(A)'s to the current readings. Therefore, at the requested of New York City Department of City Planning (DCP), the Federal Highway Administration Traffic Noise Model (TNM) software was utilized to determine impacts from the additional project vehicular trips, if any.

Aircraft Sources

Three types of projects require study areas for aircraft-related noise sources: (i) a proposed project that would include a new or expanded aircraft facility, (ii) renewal of a lease for an existing facility, or (iii) a receptor that would be affected by a proposed project that is near a flight path of an existing aircraft facility and that is typically within the annual 65 dB(A) Ldn contour of the existing aircraft facility.

Rail Sources

Two types of projects generally require study areas for rail-related noise sources: (i) a proposed project that introduces a receptor within approximately 1,500 feet of an existing rail facility and generally having a direct line of sight to the rail facility; or (ii) a proposed project that would include a new rail facility or that would add trains to an existing facility.

The Development Site is located directly adjacent to Long Island Rail Road (LIRR). Pursuant to 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} 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 a 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 measure and model-predicted values. The FTA analysis begins with predicting the source of noise levels, expressed in

terms of Sound Exposure Level (SEL) at a reference distance and a reference speed. These are shown in Table 5-1 of the FTA guidance manual and listed as Table 3 below.

Table 3: Reference SEL's at 50 feet from Track at 50 mph

Source/Type		Reference Conditions	Reference SEL (SEL_{ref}), dBA
Commuter Rail	Locomotives	Diesel-electric, 3000 hp, throttle 5	92
		Electric	90
	Diesel Multiple Unit (DMU)	Diesel-powered, 1200 hp	85
	Horns	Within 1/4 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

There reference SEL's are used in the equations in Table 5-2 of the FTA guidance manual and reference below as Table 4, to predict the noise exposure at 50-feet. Also shown in Table 4 are rough estimates of the noise reduction available from wayside noise barriers, the most common noise mitigation measure.

Table 4: Computation of Noise Exposure at 50 feet for Fixed Guideway General Assessment

LOCOMOTIVES[I] 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[II] Hourly L_{eq} at 50 ft:	$L_{eq(h)}(h) = SEL_{ref} + 10\log(V) - 35.6$
RAIL VEHICLES[II] 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[III] Hourly L_{eq} at 50 ft:	$L_{eq(h)}(h) = SEL_{ref} - 10\log\left(\frac{S}{50}\right) + 10\log(V) - 35.6$
COMBINED Hourly L_{eq} at 50 ft:	L_{eq} (h) = 10 log $\left[10^{\left(L_{eq}/10\right)} + 10^{\left(L_{eq}/10\right)}\right]$
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:	$L_{dn} = 10\log\left[(15)\times10^{\left(L_{eq}(day)/10\right)} + (9)\times10^{\left(L_{eq}(night)+10\right)/10}\right] - 13.8$
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 = $\frac{number\ of\ trains\ 7\ am\ to\ 10\ pm}{15}$ V_n = average hourly nighttime volumes of train traffic, in trains per hour = $\frac{number\ of\ trains\ 10\ pm\ to\ 7\ am}{9}$	
I Assumes a passenger diesel locomotive power rating at approximately 3000 hp II Includes all commuter rail cars, transit cars, AGT and monorail III Based on FRA's horn noise model (www.fra.dot.gov/downloads/RRDev/hornmodel.xls)	

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 includes: number of train pass-bys 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. This data is used in the equations in Table 4 to obtain factors to calculate $L_{eq}(h)$ and L_{dn} at 50 feet.

Stationary Sources

The *CEQR Technical Manual* states that, based upon previous studies, unless existing ambient noise levels are very low and/or stationary source levels are very high (and there

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

A review of the surrounding area was conducted and it was determined that there are residential uses within 1,500 feet of the Proposed Action. These uses are considered sensitive noise receptors. As the Proposed Action is a commercial and residential use, it would not be a stationary noise source.

It is assumed that the building mechanical systems (i.e., HVAC systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building mechanical equipment.

Measurement Location and Equipment

Twenty-four-hour noise monitoring was conducted on the rooftop at the eastern portion of the site (block 1294, lot 68) adjacent to 63rd Street (Location 1). Simultaneous with the 24-hour monitoring, 1- hour noise monitoring was conducted at a street level location - the eastern 63rd Street frontage of the site (Location 1a). 1-hour noise monitoring was conducted on the train platform of the #7 elevated subway line (Location 2). 1-hour noise monitoring was conducted on the Roosevelt Avenue street frontage (Location 3). Monitoring Locations are shown in Figure 1 followed by photographs of each location.

For the 24-hour monitoring, measurements ran continuously for a period of 24 hours and were logged once on the hour, every hour. For the 1-hour noise monitoring, measurements ran continuously for an hour and were recorded cumulatively for the entire session. Statistics were recorded in 1/3 octave bands from 6.35 Hz to 20k Hz. Noise monitoring was conducted using a Type 1 Casella CEL-633C sound meter with wind screen. The monitors were placed on a tripod at a height of approximately three feet above the ground, away from any other noise-reflective surfaces. The meter was calibrated prior to and following our measurement using a CEL120/1 sound calibrator conforming to ANSI S1.4. The time response of the sound level was set to "slow." We

recorded the L_{10} noise level, as well as the L_{max}, L_{eq}, L_{50}, L_{90} and L_{min} noise levels, for each monitoring location in the tables below.

Periods of peak public transit and vehicular traffic around the subject site constitute a worst-case condition for noise at the Development Site. Vehicular traffic counts are shown in the tables below. Noise meter calibration certification and back up data are provided in Attachment E.

Figure 1: Noise Monitoring Locations



Photo 1: *Noise Monitoring Location One (1a) at the Street Frontage of Block 1249, Lot 68*

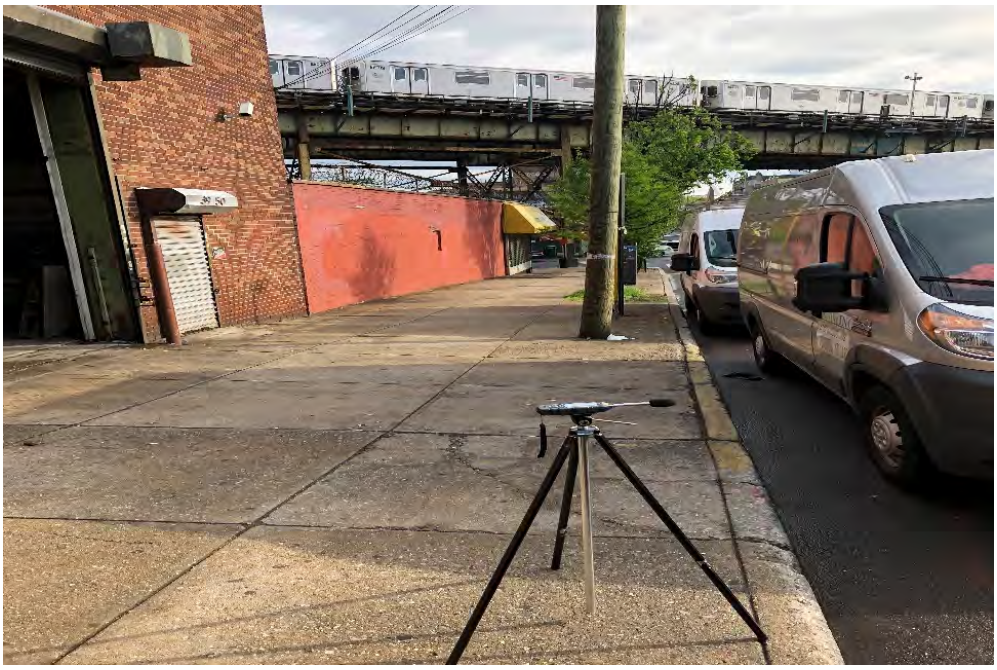


Photo 2: *Noise Monitoring Location One (1) on the Roof of Block 1249, Lot 68*



Photo 3: ***Noise Monitoring Location Two (2)***



Photo 4: *Noise Monitoring Location Three (3)*



Measurement Conditions

The weather conditions during the monitoring sessions were dry with moderate winds. The temperature ranged from approximately 60-70 ^{O}F.

Existing Conditions

Based on the noise measurements taken at the Development Site, the predominant source of noise is the elevated #7 subway line, the LIRR, and vehicular traffic.

Tables 5 and 6 below *contains the 1-hour results for the measurements taken at the Development Site:*

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

Table Noise-5: Noise Levels (dB)

Location 1a: *1-hour Noise Monitoring at the Street Frontage of Block 1294, Lot 68*

Wednesday, May 23rd, 2018			
Time	7:55 am – 8:55 am	12:02 pm – 1:02 pm	4:30 pm – 5:30 pm
L_{max}	91.6	89.8	94.4
L_{10}	**73.5**	**74**	**74.5**
L_{eq}	69.6	70.2	71.8
L_{50}	66.5	63.5	69.5
L_{90}	60.5	58.5	61.5
L_{min}	52.1	53.8	56.8

Table Noise-6: Noise Levels (dB)

Location 2: *1-hour Noise Monitoring on the platform of the elevated #7 subway line*

Tuesday, October 29th, 2019			
Time	7:30 am – 8:30 am	12:00 pm – 1:00 pm	4:30 pm – 5:30 pm
L_{max}	89.8	84.1	85.2
L_{10}	**81.5**	**77.0**	**77.5**
L_{eq}	77.2	72.5	72.6
L_{50}	72.0	65.0	65.5
L_{90}	63.0	59.0	58.0
L_{min}	57.2	56.4	55.7

Table Noise-7 *below contains the 24-hour results for the measurements taken at the Development Site:*
Note: **Bold** denotes L_{10} noise level exceedances, according to Table 19-2 of the CEQR Technical Manual

Table Noise-7: Noise Levels (dB)

Location 1: *24-hour Noise Monitoring on roof of Block 1294, Lot 68*

Start Date & Time	LAeq	LAS 10%	LAS 50%	LAS 90%	LASmin	LASmax
5/23/2018 10:53	66.1 dB	67.5 dB	59.0 dB	56.0 dB	54.6 dB	91.3 dB
5/23/2018 11:53	65.9 dB	69.5 dB	59.0 dB	56.5 dB	54.3 dB	80.7 dB
5/23/2018 12:53	68.3 dB	**73.0 dB**	60.5 dB	57.0 dB	54.9 dB	83.3 dB
5/23/2018 13:53	66.5 dB	**70.5 dB**	60.0 dB	56.5 dB	54.0 dB	82.2 dB
5/23/2018 14:53	63.9 dB	66.0 dB	59.0 dB	56.0 dB	54.2 dB	78.7 dB
5/23/2018 15:53	65.3 dB	68.5 dB	60.0 dB	56.5 dB	54.2 dB	81.6 dB
5/23/2018 16:53	65.8 dB	69.5 dB	61.0 dB	57.0 dB	54.9 dB	78.6 dB
5/23/2018 17:53	65.7 dB	69.0 dB	60.5 dB	58.0 dB	56.0 dB	79.1 dB
5/23/2018 18:53	64.8 dB	67.5 dB	60.0 dB	57.5 dB	55.3 dB	78.1 dB
5/23/2018 19:53	64.7 dB	68.0 dB	59.0 dB	56.0 dB	54.3 dB	78.5 dB
5/23/2018 20:53	63.5 dB	66.0 dB	58.5 dB	55.5 dB	54.0 dB	78.1 dB
5/23/2018 21:53	65.4 dB	69.5 dB	58.5 dB	55.5 dB	53.6 dB	79.9 dB
5/23/2018 22:53	63.9 dB	67.5 dB	57.0 dB	55.0 dB	53.6 dB	77.4 dB
5/23/2018 23:53	63.3 dB	65.0 dB	56.5 dB	55.0 dB	54.2 dB	78.4 dB
5/24/2018 0:53	60.1 dB	60.0 dB	54.0 dB	52.5 dB	51.4 dB	77.1 dB
5/24/2018 1:53	62.3 dB	64.0 dB	61.5 dB	53.0 dB	52.3 dB	76.7 dB
5/24/2018 2:53	64.6 dB	66.5 dB	63.0 dB	60.0 dB	53.7 dB	81.6 dB
5/24/2018 3:53	59.7 dB	60.0 dB	54.0 dB	53.0 dB	50.8 dB	76.6 dB
5/24/2018 4:53	61.6 dB	63.0 dB	56.5 dB	54.0 dB	52.5 dB	78.5 dB
5/24/2018 5:53	64.7 dB	68.5 dB	59.0 dB	55.5 dB	52.9 dB	79.0 dB
5/24/2018 6:53	67.9 dB	**71.5 dB**	61.5 dB	56.5 dB	53.8 dB	85.9 dB
5/24/2018 7:53	66.5 dB	**71.0 dB**	62.0 dB	58.0 dB	55.1 dB	77.8 dB
5/24/2018 8:53	66.1 dB	**70.0 dB**	61.5 dB	57.0 dB	55.4 dB	79.7 dB
5/24/2018 9:53	66.5 dB	68.0 dB	59.5 dB	56.5 dB	53.9 dB	89.4 dB

Table Noise-8: Noise Levels (dB)

Location 3: *1-hour Noise Monitoring on the Roosevelt Avenue Street Frontage*

Tuesday, October 29th, 2019			
Time	7:54 am – 8:56 am	12:03 pm – 1:03 pm	4:34 pm – 5:34 pm
L_{max}	93.3	107.0	95.9
L_{10}	**84.0**	**82.0**	**83.5**
L_{eq}	**79.5**	**79.6**	**78.8**
L_{50}	74.0	72.0	71.0
L_{90}	69.5	64.5	67.0
L_{min}	61.2	60.6	61.4

Table 9 through 11 *below contains the traffic counts taken at the Project Site:*

Table Vehicular-9: Traffic Counts and Vehicle Classifications
Location 1a: *Traffic Counts at the Street Frontage of Block 1294, Lot 68*

	Morning	Midday	Afternoon
Cars	8	12	30
Van/SUV	34	19	19
Heavy Trucks	0	0	1
Bus	0	0	0
Train	14	4	8

Table Vehicular-10: Traffic Counts and Vehicle Classifications
Location 2: *Train Counts on the elevated #7 subway line*

	Morning	Midday	Afternoon
Train	56	45	47

Table Vehicular-11: Traffic Counts and Vehicle Classifications
Location3: *Traffic Counts at the Street Frontage of Block 1294, Lot 60*

	Morning	Midday	Afternoon
Cars	83	84	107
Van/SUV	95	80	117
Heavy Trucks	15	15	4
Bus	12	8	10
Train	14	5	8

*field notes have incorrect # for Afternoon Van/SUV, correct # is in this table

Determination of Impacts – Rail Sources – LIRR
At the direction of New York City Department of City Planning (DCP), the FTA analysis from the Vax Road Demapping EAS (CEQR#14DCP154Q) was used. The Demapping is located one block to the northwest of the Development Site.

The noise monitoring that was conducted for the Demapping was conducted at the north edge of Vaux Road, adjacent to the LIRR. The results of the monitoring are provided as Table 10 below.

Table 10- Vaux Road Demapping Noise Monitoring Results

#	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

Using the methodology previously described, the Vax Road demapping calculated noise levels for the weekday AM, Midday, and PM peak periods. By using the most conservative readings at the receptor location for the L_{eq} AM peak hour, (65.5 dBA), the L_{10} value was generated as 75.9 dBA.

Mobile Source Analysis – Federal Highway Administration Traffic Noise Model (TNM)
The evaluation of the sound pressure levels due to the traffic on 63rd Avenue was based on the traffic count data collected during noise monitoring. At the direction of New York City Department of City Planning (DCP), to calculate the sound pressure levels along 63rd Avenue, the Federal Highway Administration Traffic Noise Model (TNM) software was used. The evaluation considered the propagation of sound over a distance, the shieling and reflection of sound due to buildings, and the effect or air absorption.

Table 11, below, shows the existing projected traffic count data and vehicle speeds used in the TNM sound level calculations. As a conservative assumption, the highest peak hour of incremental traffic (Scenario 1 – weekday MD peak; Scenario 2 – weekday MD peak) was modeled with the lowest existing peak hour of traffic counts (weekday MD), so as to yield the greatest potential increase in sound levels. Additionally, as a conservative assumption, all traffic generated by the Proposed Project (both Roosevelt Avenue and 63 Street) were assumed to pass all receptor locations.

Table 11 – Traffic Counts and vehicle Speeds Used for TNM Calculations

Scenario	Cars	Heavy Trucks	Speed (mph)
Existing	31	0	25
Scenario 1	67	4	25
Scenario 2	411	6	25

Figure 2, below, shows the location of the acoustical evaluation points used along 63rd Avenue.

Figure 2 – TNM Acoustical Evaluation Points



Table 12, below, shows the TNM A-weighted 1-hour L_{eq} sound level results along 63rd Street for the existing traffic conditions, traffic scenario 1, and traffic scenario 2.

Table 12 – TNM Results

Location	TNM Sound Level Results, dB(A)		
	Existing	Scenario 1	Scenario 2
Location 1	45.0	53.5	58.1
Location 2	46.0	54.4	59.1

Baseline sound level measurements show an existing sound level of 70.2 dB(A) (midday L_{eq} that corresponds with the wort-case traffic conditions). The TNM sound level results for the existing traffic conditions were subtracted on an energy basis from the measured baseline sound levels to result in "Adjusted Total" sound levels at the noise sensitive receptors. Then, the TNM sound level results for both proposed traffic scenarios were added on an energy bases for the Adjusted Total sound levels to result in the total sound levels for each proposed scenario. Table 13, below, shows the total expected A-weighted sound levels along 63rd Street compared to 1-hour L_{eq} baseline sound levels. The calculations for this evaluation and the backup model files for the TNM software are attached in Appendix A.

Table 13 – Expected Sound Levels Along 63rd Street

Location	1 Hour L_{eq} Sound Level Results, dB(A)		
	Existing	Scenario 1	Scenario 2
Location 1	70.2	70.3	70.5
Location 2	70.2	70.3	70.5

The highest expected L_{eq} is 70.5 dB(A). Using the difference between the measured L_{eq} and L_{10} for that hour, the highest expected L_{10} is projected to be 74.3 dB(A) for the MD peak hour.

Conclusions

The *2020 CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the proposed action, an L_{10} of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An L_{10} of between 70 and 80 dB(A) is identified as marginally unacceptable general external exposure.

The *2020 CEQR Technical Manual* Chapter 19 Section 421.1 outlines impacts on existing receptors:

- If the No Action noise level is less the 60 dB(A) $L_{eq(1)}$, a 5 dB(A) $L_{eq(1)}$ or greater increase would require further action;
- If the No Action noise level is between 60 dB(A) $L_{eq(1)}$ and 62 dB(A) $L_{eq(1)}$, a resultant $L_{eq(1)}$ of 65 dB(A) or greater would require further action;
- If the No Action noise level is equal to or greater than 62 dB(A) $L_{eq(1)}$, or if the analysis period is a nighttime period (between 10PM and 7AM), the incremental significant impact threshold would be 3 dB(A).

Conclusion

63rd Street Frontage Above Track Level - Location 1
The highest recorded L_{10} at the 63rd Street frontage above/at track level (Location 1) was 73.0 dB(A) during the 12:53 PM monitoring hour.

63rd Street Frontage Below Track Level - Location 1a
The highest recorded L_{10} at the 63rd Street frontage below track level (Location 1a) was 74.5 dB(A) during the PM peak hour. The TNM modelled a worst-case midday reading of 74.3 dB(A). This is lower than the existing monitored $L_{10,}$ this difference when imputed to the highest recorded L_{10} would not result in a projected worst-case L_{10} at Location 1a of more than 75 dB(A) and therefore would require no additional attenuation.

Roosevelt Ave Frontage - Location 2
The highest recorded L_{10} at the Roosevelt Avenue frontage at the elevated track level (Location 2) was 81.5 dB(A) during the AM peak hour.

Roosevelt Ave Frontage - Location 3
The highest recorded L_{10} at the Roosevelt Avenue frontage below the elevated track level (Location 3) was 84.0 dB(A) during the MD peak hour.

LIRR Western Frontage
According to the FTA Analysis, the highest calculated L_{10} along the façade facing the LIRR (western) is 75.9 dB(A).

Based on these results as diagramed in Figure 3 (see below);

- A window-wall attenuation of 38 dB(A) would be required for the northern façade (Roosevelt Frontage) above the elevate rail line and the northwestern corner of the project site facing the intersection of LIRR track and MTA elevated rail above the elevated rail line.

- A window-wall attenuation of 40 dB(A) would be required for the northern façade (Roosevelt Frontage) below the elevated rail line and the northwestern corner of the project site facing the intersection of LIRR track and MTA elevated rail above the elevated rail line.

- A window-wall attenuation of 38 dB(A) would be required for the eastern façade (63rd St) 50 feet from the intersection with Roosevelt Avenue above the elevated rail line. A window-wall attenuation of 31 dB(A) would be required for the remaining eastern façade facing 63rd St above the elevated rail line.

- A window-wall attenuation of 40 dB(A) would be required for the eastern façade (63rd St) 50 feet from the intersection with Roosevelt Avenue below the elevated rail line. A

window-wall attenuation of 31 dB(A) would be required for the remaining eastern façade facing 63rd St below the elevated rail line.

- A window-wall attenuation of 33 dB(A) would be required for the western and southern façades facing the LIRR elevated track.

With this level of noise attenuation, there would be no potential for adverse impacts related to noise, and an acceptable interior noise exposure level of 45 dB(A) would be achieved. The noise attenuation requirements are shown in Figure 3 below.

Figure 3 – Attenuation Requirements



E-Designations (E-603)

Projected Development Site 1 (Block 1294 / Lots 58, 60, 68, 73): To ensure an acceptable interior noise environment, future residential/commercial office/community facility uses must provide a closed-window condition with a minimum of 38 dB(A) window/wall attenuation on the northern façades facing Roosevelt Avenue above the elevated rail and the western facades parallel to 62nd Street above the elevated rail and the eastern facades facing 63rd Street within 50 feet of Roosevelt Avenue above the elevated rail and 40 dB(A) of attenuation on the northern façades facing Roosevelt Avenue below the elevated rail and the western facades parallel to 62nd Street below the elevated rail and the eastern facades facing 63rd Street within 50 feet of Roosevelt Avenue below the elevated rail and 33 dBA of attenuation on all southern facades facing the LIRR track and 31 dBA of attenuation on all eastern facades facing 63rd Street beyond 50 feet of Roosevelt Avenue to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Projected Development Site 2 (Block 1294 / Lots 55, 65): To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 38 dB(A) window/wall attenuation on all facades above the elevated rail and 40 dB(A) of attenuation on all facades below the elevated rail to maintain an interior noise level not greater than 45 dBA for residential and community facility uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

20. PUBLIC HEALTH

Public health involves the activities that society undertakes to create and maintain conditions in which people can be healthy. Many public health concerns are closely related to air quality, hazardous materials, construction, and natural resources.

A public health assessment may be warranted if a project results in a) increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect ground water to be used as a source of drinking water; c) solid waste management practices that could attract vermin and result in an increase in pest populations; d) potentially significant adverse impacts to sensitive receptors from noise and odors; or e) vapor infiltration from contaminants within a building or underlying soil that may result in significant adverse hazardous materials or air quality impacts.

As assessed in the applicable sections of this EAS, the Proposed Actions are not anticipated to result in any significant adverse impacts related to air quality, noise, or hazardous materials. Solid waste would not be expected to attract vermin or pest populations during construction or upon completion of the action-generated developments. During construction, solid waste would be carted by a private solid waste management company and would consist predominantly of construction materials. Upon completion of construction, the building's superintendent would be responsible for maintaining the trash and recycling collection area. Regular solid waste collection by the New York Department of Sanitation would ensure that vermin problems do not arise. Therefore, the proposed action is not anticipated to result in a significant adverse impact to public health, and no further analysis is provided.

21. NEIGHBORHOOD CHARACTER

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

Land Use, Zoning, and Public Policy
As stated in this section, the proposed action would not result in significant adverse impacts related to land use, zoning, or public policy. Although the Land Use, Zoning, and Public Policy technical area of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the project does not have the potential to result in any significant adverse Land Use, Zoning, or Public Policy impacts.

Regarding land use, the Rezoning Area already contains a mix of residential, commercial, and light industrial properties. No significant adverse impacts related to land-use would occur as a result of the proposed rezoning. Regarding zoning, the proposed zoning map amendment to C4-4 under MIH is appropriate given the context of the Rezoning Area. The Rezoning Area is located on a heavily-trafficked street in an area that is developed with both residential and commercial uses, in an already medium-density mixed-use district (R6 with a commercial overlay) and is located in a transit hub with subway and commuter rail access immediately adjacent the affected area. Thus, the increase in height and FAR permitted by this proposal is consistent with what is already permitted in the area. In accordance with the stated public policies within the study area, the proposed action would be suitable for the Rezoning Area and the study area as a whole.

Open Space
As stated in the Open Space chapter, the Proposed Actions would result in an incremental increase in the resident and worker population of the study area. The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would directly displace or alter an existing resource to the detriment of its users. The Proposed Development associated with the Proposed Actions would not result in the direct displacement of any parklands or recreational facilities. The Proposed Actions would, however, reduce the open space ratio as further discussed below.

The Proposed Actions would not result in any significant direct impacts on any open space resources, and would result in a negligible decrease in the Future With-Action open space ratio for residents within the project study area. While the passive open space ratio decrease in the Future With-Action would be higher than the decrease for residents, the *CEQR Technical Manual* indicates that the ratios alone do constitute an absolute impact threshold and that the balance of passive and active open space resources should be considered. A

larger percent of active space is preferred, due to the fact that physical space requirements for active open space uses are significantly greater, while a greater number of passive open space users, such as those sitting on a park bench to enjoy fresh air, may be accommodated within smaller spaces. The City seeks a balance of 80 percent active open space and 20 percent passive open space, with the ratio at 74 percent and 26 percent, respectively, in the Future With-Action condition.

In addition, there are five public parks adjacent to the ½-mile project study area, and within a mile of the Rezoning Area, which were included in the quantitative assessment, which include 4.19 acres of active open space and 1.1 acres of passive open space. These spaces are within an 18-minute walk of the Rezoning Area or within one mile. Finally, a 0.34-acre private residential open space will be provided between Projected Development Sites 1 and 2 under the Proposed Actions which would help satisfy some of the open space recreational needs of project residents. It is therefore concluded that the project would not have any potentially significant adverse open space impacts and further assessment is not warranted.

Shadows

As stated in the Shadows section, there are no sunlight-sensitive resources within the area that can be shaded by buildings resulting from the Proposed Actions.

Historic and Cultural Resources

As stated in the Historic and Cultural Resources chapter, appended to this document is a letter from the Landmarks Preservation Commission (LPC) stating that the Rezoning Area does not contain any architectural or archeological resources. No historic or cultural resources in the Rezoning Area or the surrounding area would be affected by the proposed actions.

Urban Design and Visual Resources

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

The proposed building, as well as any development occurring within the Rezoning Area as a result of the Proposed Actions would adhere to the underlying floor area, yard, height, and setback regulations of the proposed zoning district. The proposed zoning map amendment to C4-4 is appropriate given the context of the area. The Rezoning Area is located along a vibrant and heavily trafficked commercial corridor (Roosevelt Avenue), a major thoroughfare that spans Queens from east to west. Commercial zoning districts are present along this corridor with near uniform commercial uses present along surrounding segment.

Many of the blocks surrounding the Rezoning Area and study area are zoned with medium density districts with the Rezoning Area situated adjacent several transit options, with subway, bus and commuter rail service available within one block of the Rezoning Area. In addition, the medium-density apartment buildings present to the north and south of the Rezoning Area sit at a higher elevation, minimizing the increased density of the Proposed Development and any other development occurring in the Rezoning Area as a result of the Proposed Actions. Thus, the increase in height and FAR plus the allowance of commercial use beyond the second floor permitted by the Proposed Actions is consistent with existing development in the area. The proposed zoning is consistent in scale and use with the surrounding area, and there will be no significant adverse effects relating to urban design or visual character.

Transportation

As noted in the transportation section, the Proposed Actions are expected to exceed thresholds for traffic, subway and pedestrian analyses. However, the projected trips are associated with the RWCDS buildings are not anticipated to significantly impact traffic in the surrounding area nor significantly impact the pedestrian experience or transit operations.

Noise

The proposed action required a detailed noise analysis due to ambient noise levels in the vicinity of the affected area that could have a potentially adverse impact on future residents of the Projected Development Sites. As discussed in the noise section above, window-wall noise attenuation will be incorporated into the project design and therefore there would be no adverse impacts related to noise for project occupants. In order to avoid a significant adverse impact related to noise, E designations will be placed on the Development Site and Projected Development Sites. In addition, no potential significant adverse noise impacts would be generated by the proposed project on the surrounding area.

Conclusion

While a combination of moderate changes in several of these technical areas may potentially have a significant effect on neighborhood character, the proposed action would be compatible with the mixed-use character of the neighborhood and, as discussed in the relevant sections of this EAS, is not anticipated to result in any significant adverse impacts on land use, zoning and public policy; open space; shadows; historic and cultural resources; urban design and visual resources; transportation or noise within the neighborhood.

The Proposed Actions will not alter the character of the neighborhood, impair the appropriate use or development of adjacent property, nor be detrimental to the public welfare. The proposed actions would not negatively affect the pedestrian experience along Roosevelt Avenue and would have no adverse effects on the vitality, walkability, or visual character of the area. The neighborhood is a mix of commercial, residential, and community facility uses, and the proposed uses (residential, commercial and community facility) would not be inconsistent with the surrounding area.

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

22. CONSTRUCTION

Based on *CEQR Technical Manual* guidelines, where the duration of construction is expected to be short-term (less than two years), any impacts resulting from construction generally do not require detailed assessment. Construction of the Proposed Development is expected to be completed within 18 months. Nevertheless, a preliminary screening of construction impacts resulting from the project is recommended as construction activities on the site may require the closing, narrowing, or otherwise impeding of traffic, transit or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.) along streets bordering the Development Site.

The proposed development would affect Roosevelt Avenue and 63nd Streets and during construction the sidewalks along these streets adjacent to the site may need to be closed at times in order to accommodate construction vehicles, equipment, and supplies. If sidewalk closure is necessary, jersey barriers would be erected, and a covered pedestrian walkway would be created to accommodate pedestrian traffic around the property. This closure would be considered to be a routine closure that would be addressed by a permit (and pedestrian access plan) to be issued by the NYC Department of Transportation (DOT) Office of Construction Mitigation and Coordination (OCMC) at the time of closure so that impacts are not expected to occur.

Although during construction on-street parking may be affected adjacent to the construction area which will occur along Roosevelt Avenue and 63rd Street, it is not anticipated that vehicle moving lanes adjacent to the site along any of these streets would need to be closed during construction. An analysis of transportation impacts from construction of the project is not required as most construction traffic would take place outside of the AM and PM traffic peak hours in the vicinity of the sites. In addition, the construction peak would generate fewer vehicle trips than the operational project peak and, as discussed above, the project has been determined not to produce the potential for significant adverse traffic impacts.

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

Attachment A

Illustrative Site Plans

The Proposed Development (Scenario 1)

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

EXISTING
1 STORY

EXISTING 1 STORY

62ND STREET

COMMERCIAL ENTRANCE

TERRACE OVER 11TH FLOOR

TERRACE OVER 9TH FLOOR

20'-0"

ROOF OVER
1ST FLOOR

BULKHEAD ROOF

RETAIL ENTRANCE

ROOSEVELT AVENUE

EXISTING
1 STORY

ROOF OVER
13TH FLOOR

ROOF OVER
2ND FLOOR

20'-0"

BULKHEAD ROOF

ROOF OVER
2ND FLOOR

BULKHEAD ROOF

TERRACE OVER 9TH FLOOR

TERRACE OVER 9TH FLOOR

TERRACE OVER 7TH FLOOR

92'-0"

EXISTING
1 STORY

PARKING ENTRANCE

COM. FAC ENTRANCE

RESIDENTIAL ENTRANCE

LINE OF TRAIN RAIL ABOVE

63RD STREET

SCHEMATIC PLOT PLAN
SCALE 1/32 " = 1'-0"

SCHEMATIC
PLOT PLAN

Z-100.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294

12.14.17
LOTS: 58,60,68,&73

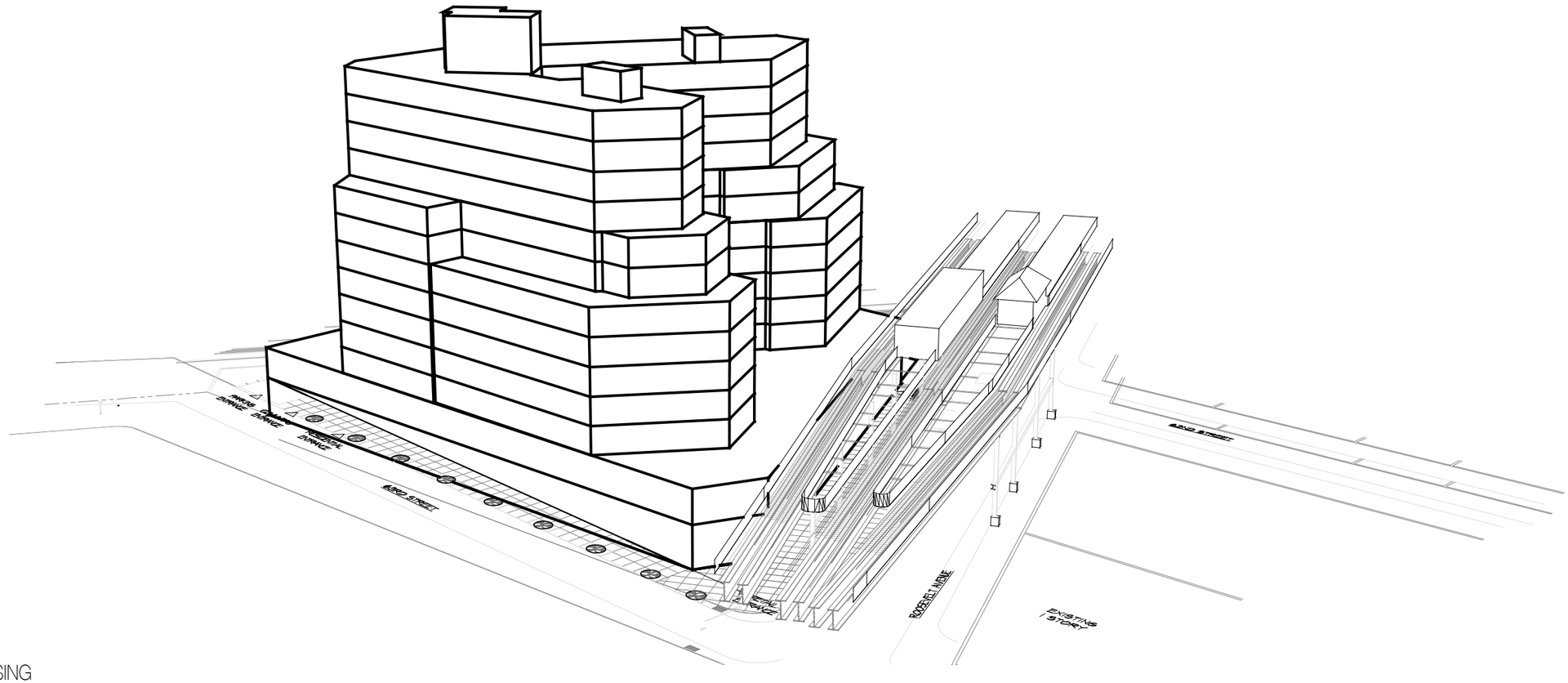


62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET



SCHEMATIC MASSING



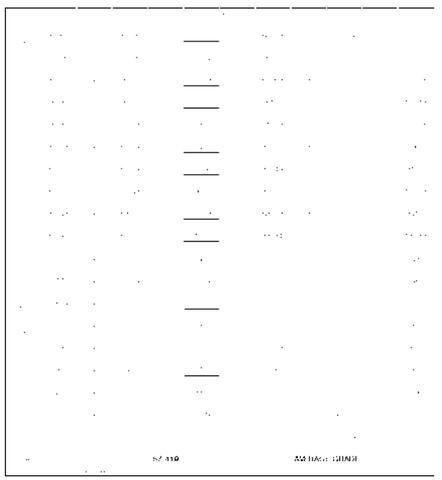
TAX MAP

PROPERTY LOCATION



ZONING MAP

PROPERTY LOCATION
REZONE TO C4-4



AVERAGE GRADE CALCULATION

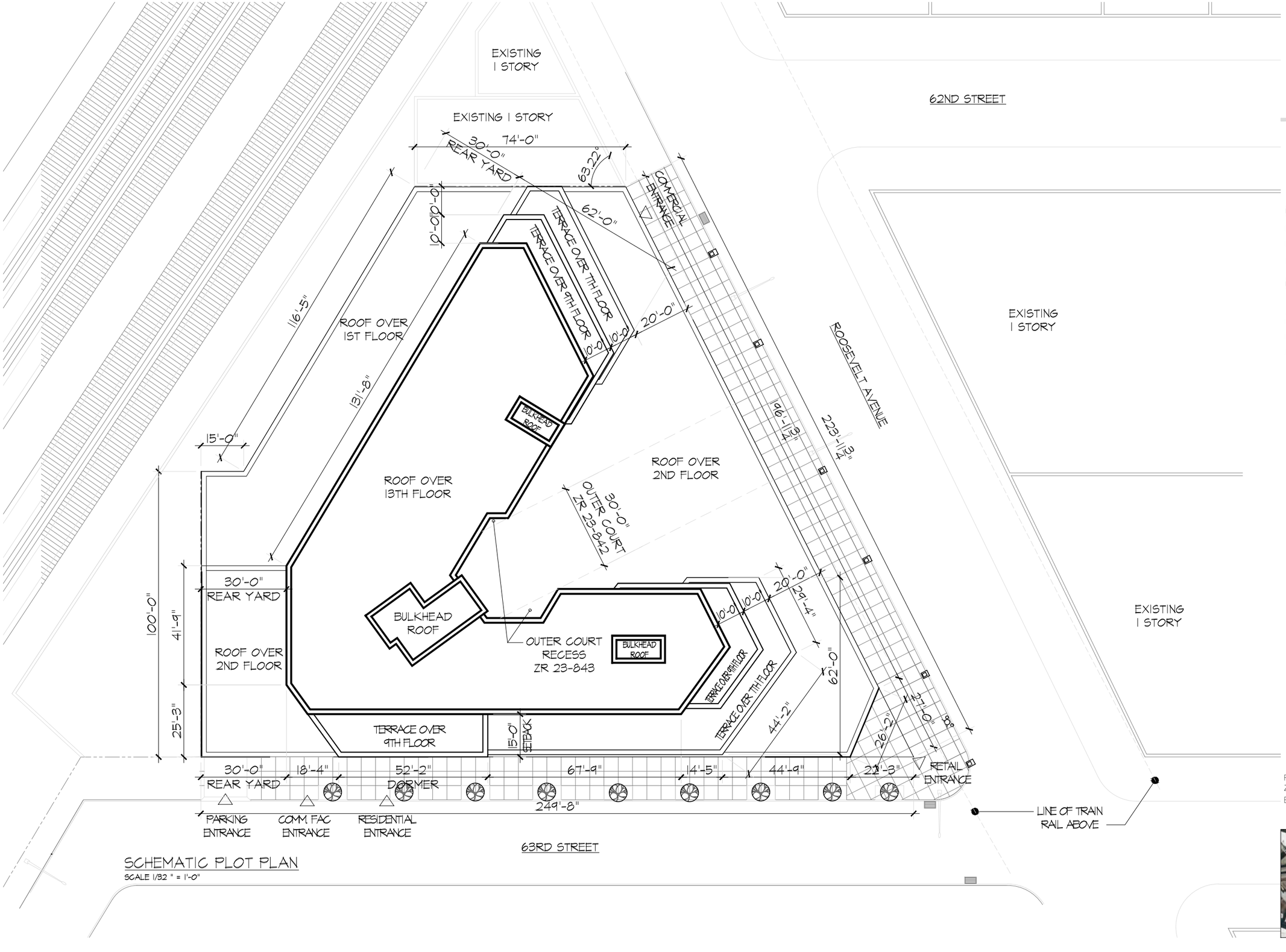
MASSING
& MAPS

Z-101.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294

12.14.17
LOTS: 58,60,68,&73





SCHEMATIC PLOT PLAN

SCALE 1/32 " = 1'-0"

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

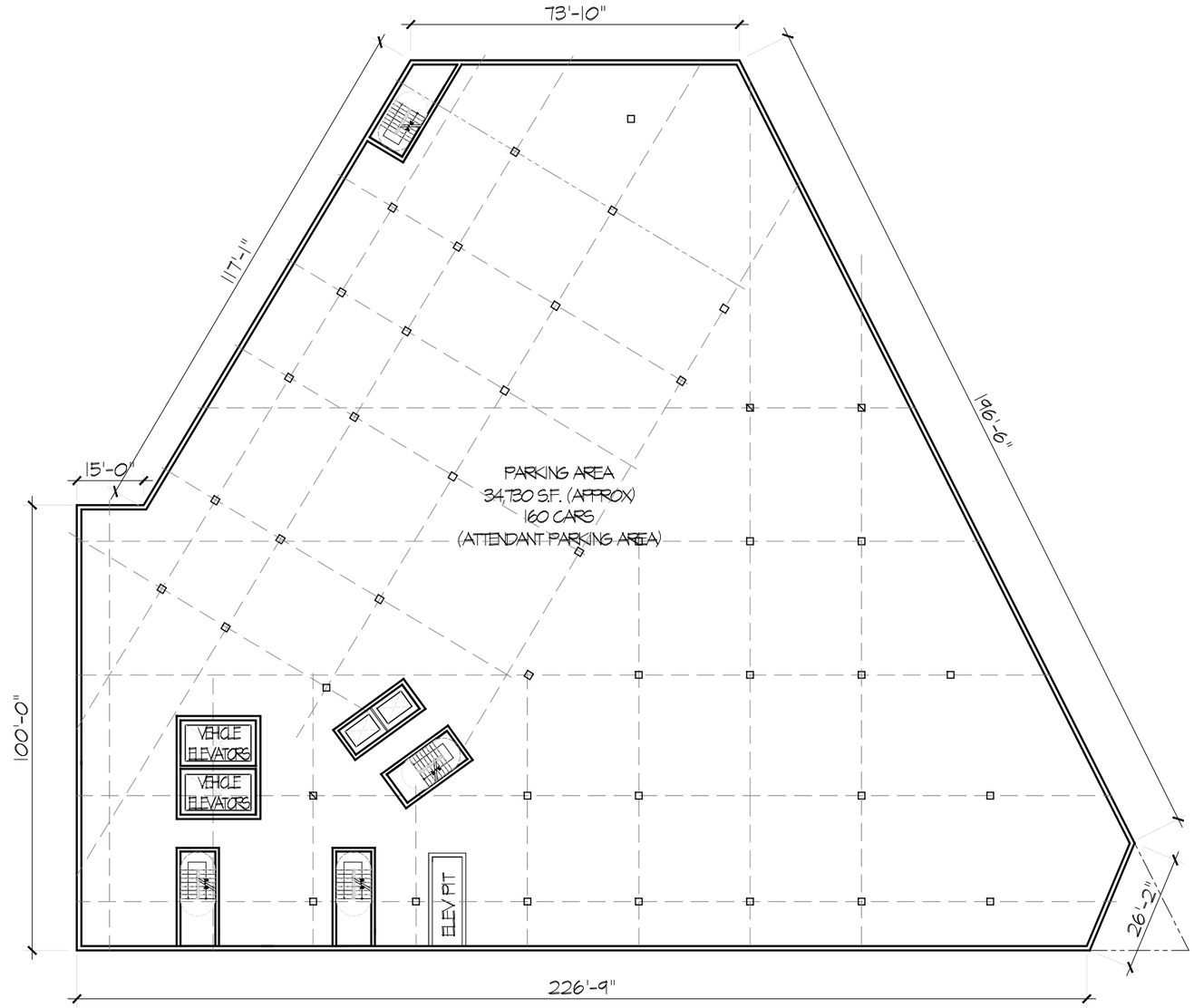
SCHEMATIC PLOT PLAN

Z-102.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294

12.14.17
LOTS: 58,60,68,&73





SCHEMATIC SUB-CELLAR PLAN

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

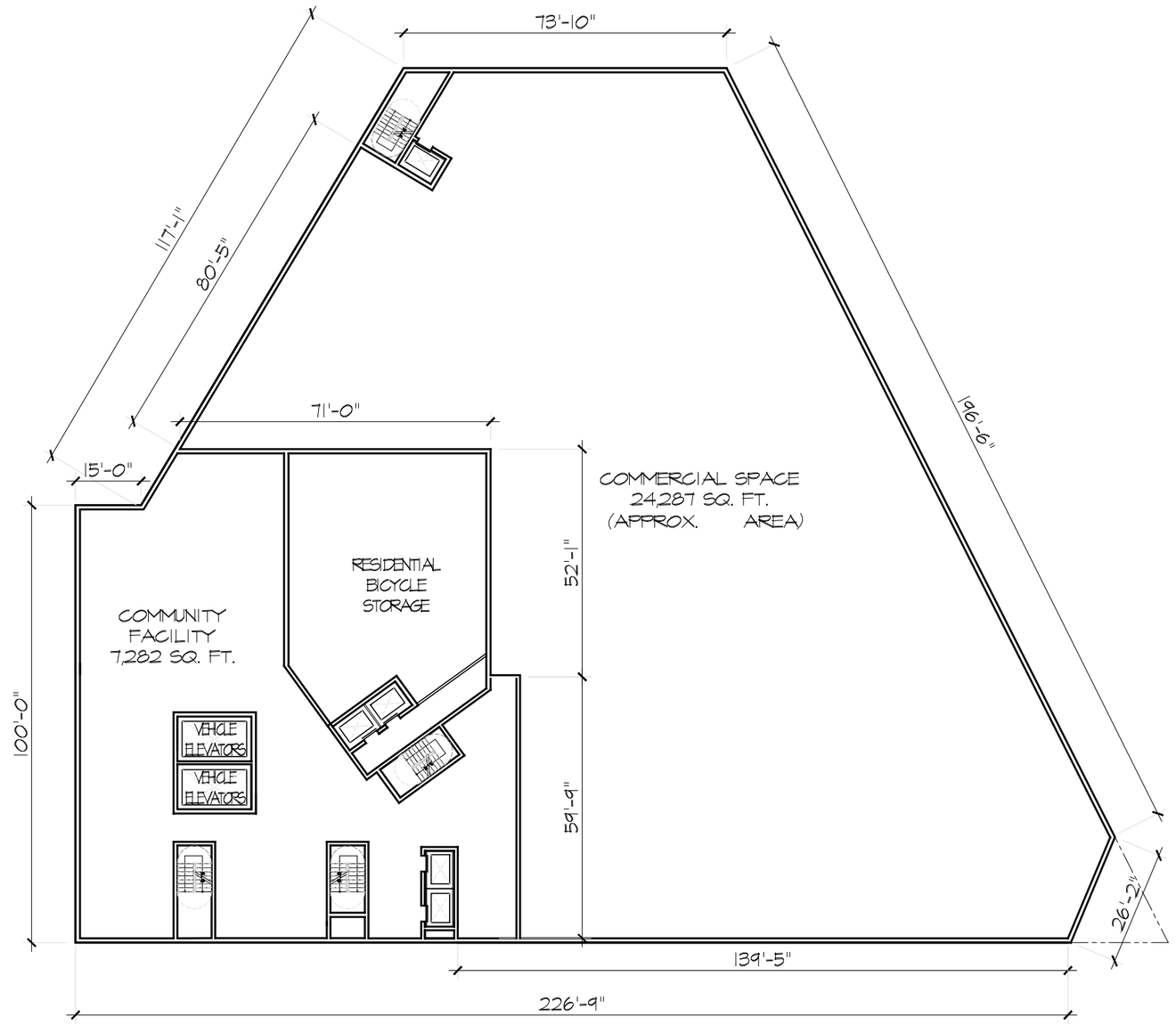
SCHEMATIC
SUB CELLAR
PLAN

Z-103.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294

12.14.17
LOTS: 58,60,68,&73





SCHEMATIC CELLAR PLAN

SCALE 1/32 " = 1'-0"

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

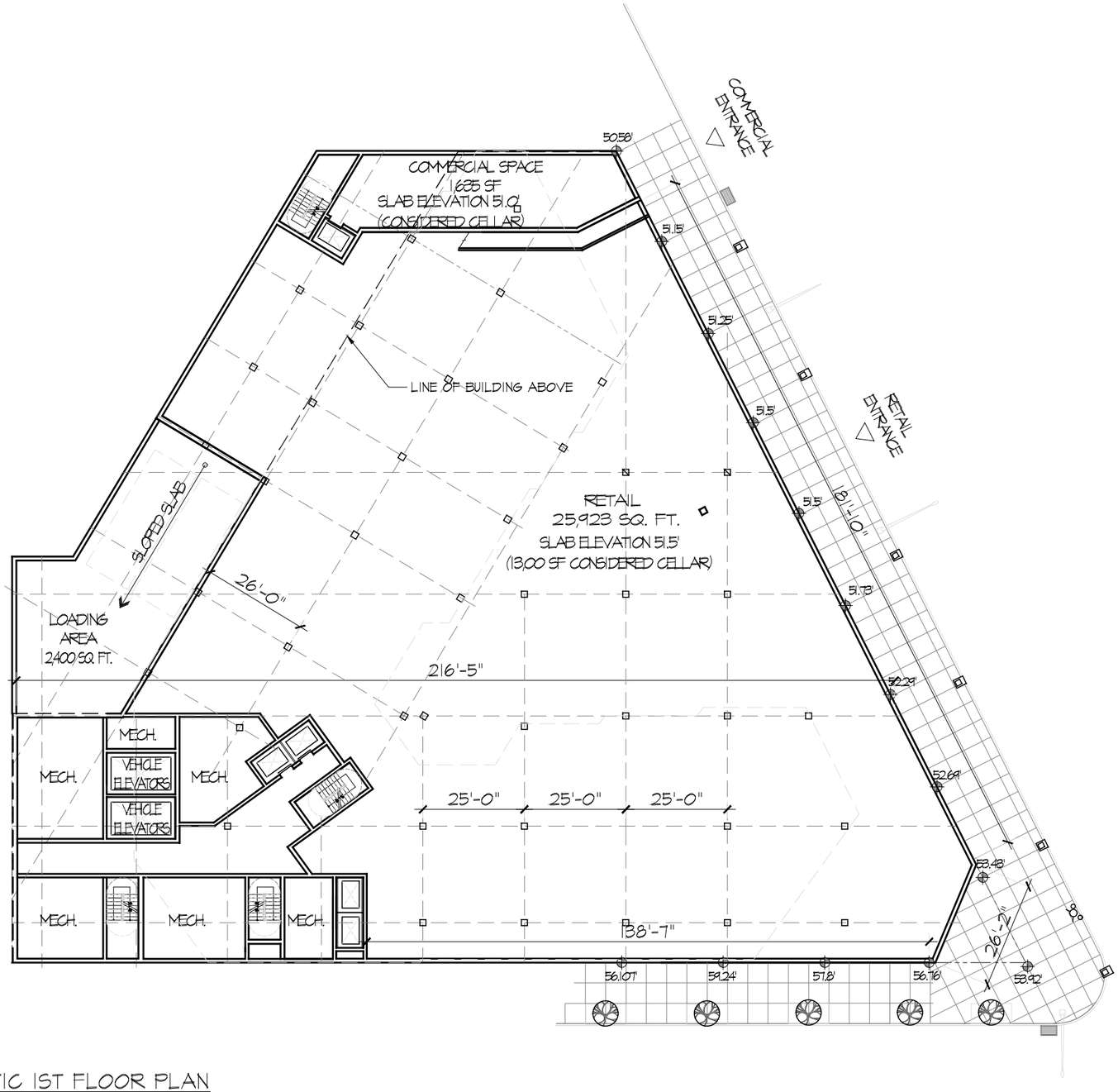
11.20.19
PROGRESS SET

SCHEMATIC
CELLAR
PLAN

Z-104.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294
12.14.17
LOTS: 58,60,68,& 73





SCHEMATIC 1ST FLOOR PLAN

SCALE 1/32 " = 1'-0"

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

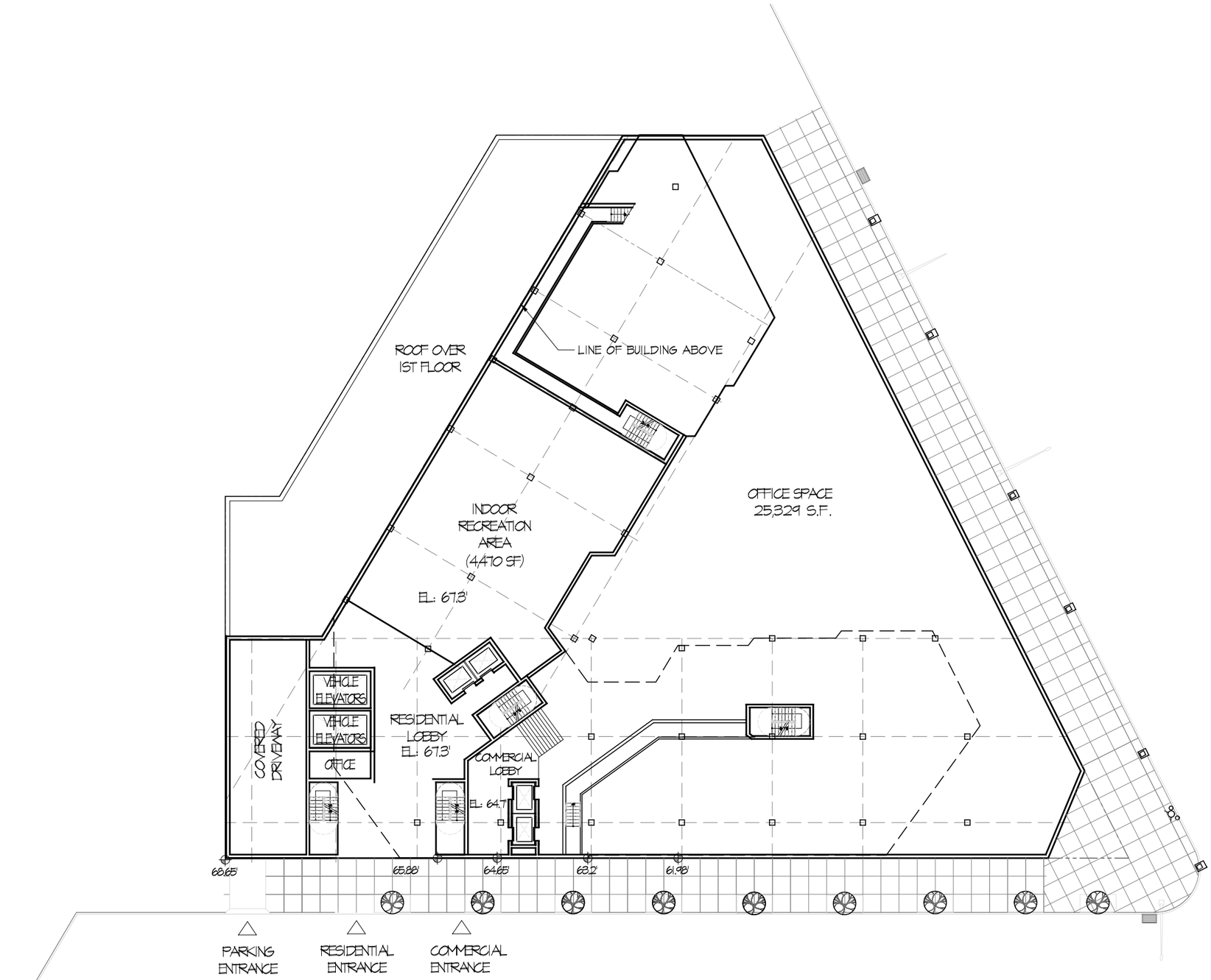
SCHEMATIC
1st FLOOR
PLAN

Z-105.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294

12.14.17
LOTS: 58,60,68,&73





SCHEMATIC 2ND FLOOR PLAN

SCALE 1/32 " = 1'-0"

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

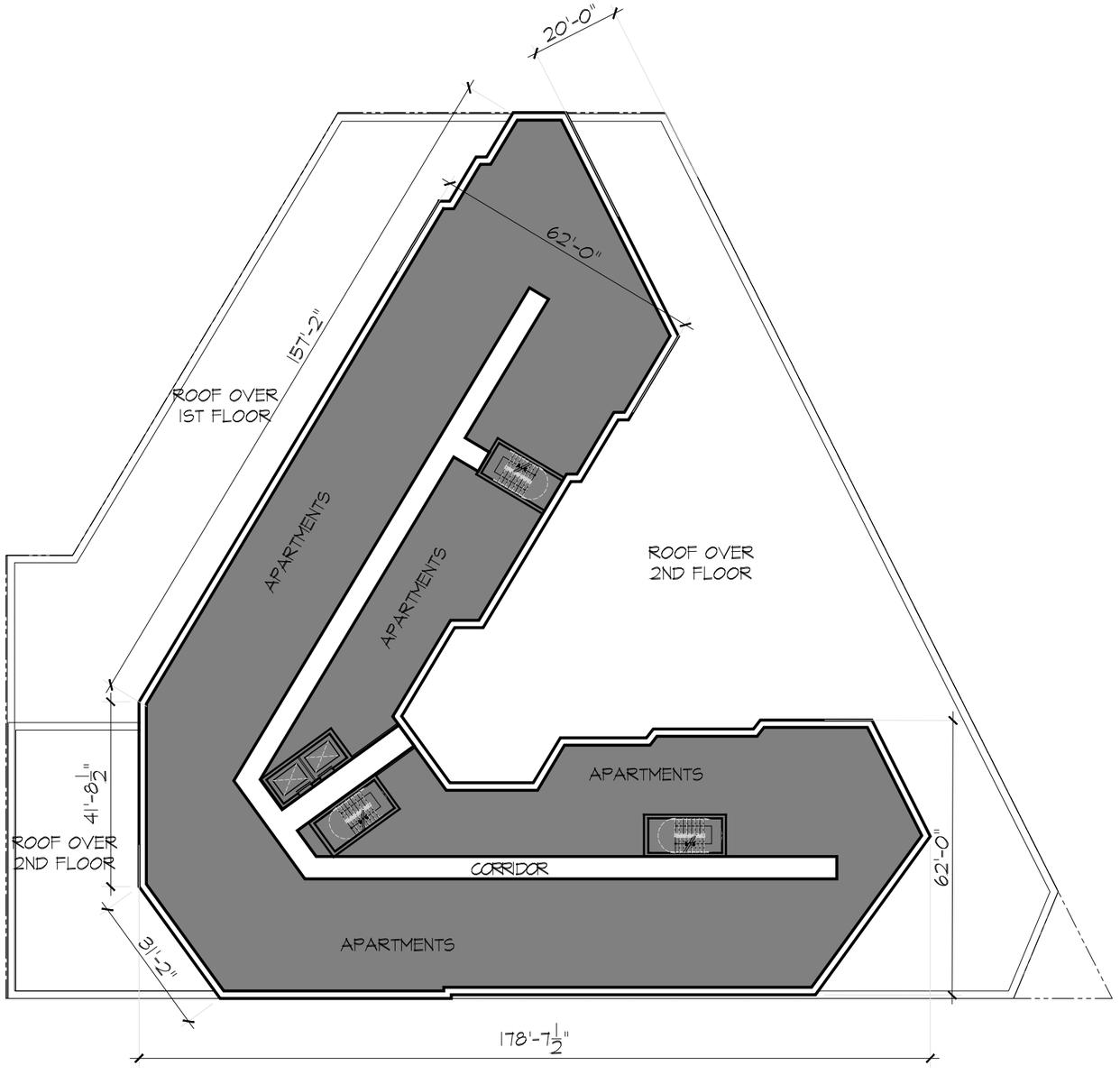
11.20.19
PROGRESS SET

SCHEMATIC
2nd FLOOR
PLAN

Z-106.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294
12.14.17
LOTS: 58,60,68,&73





SCHEMATIC 3RD THRU 7TH FLOOR PLAN

SCALE 1/32 " = 1'-0"

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

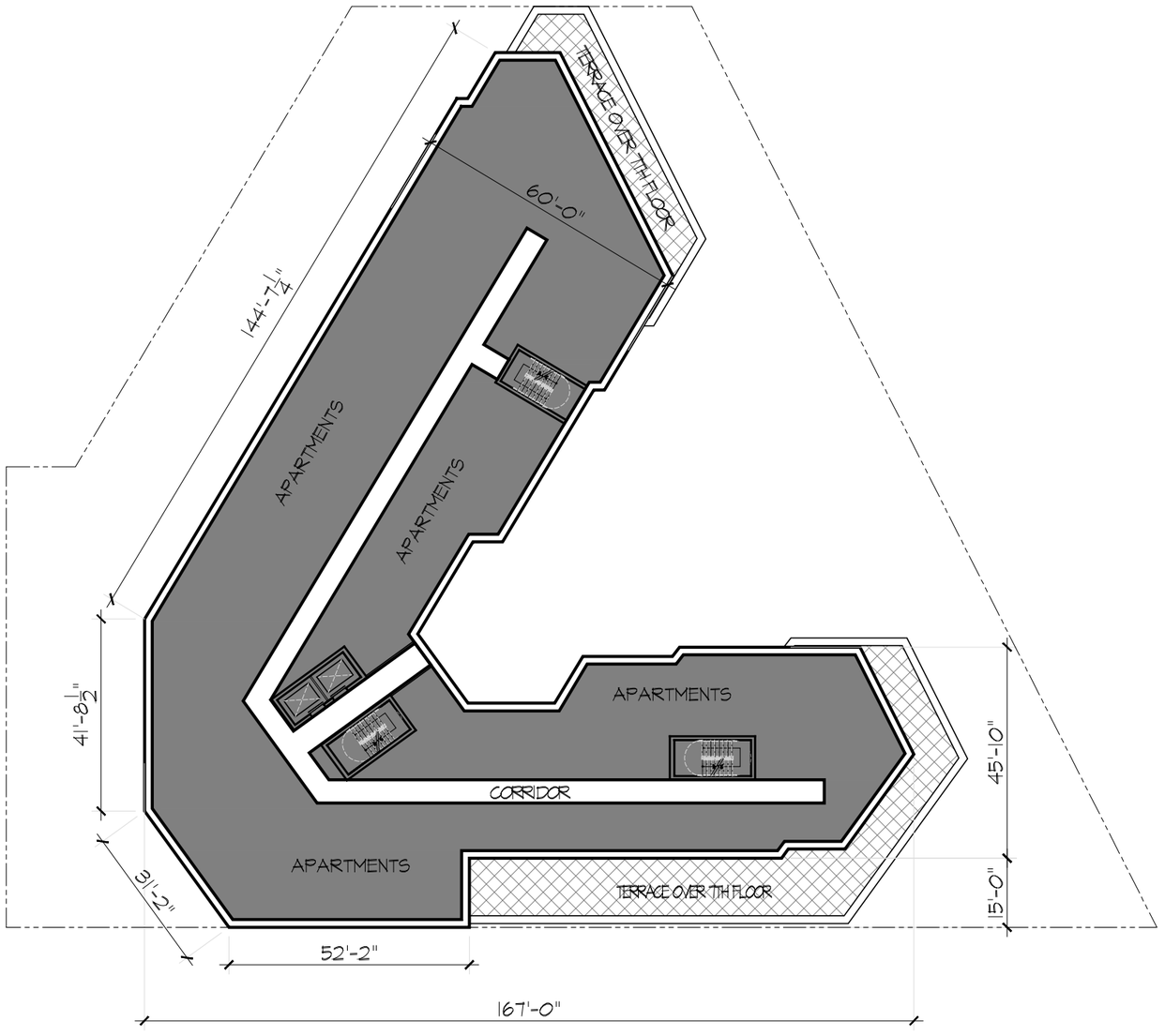
SCHEMATIC
2rd THRU 6th
FLOOR PLAN

Z-107.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294

12.14.17
LOTS: 58,60,68,&73





SCHEMATIC 8TH & 9TH FLOOR PLAN

SCALE 1/32 " = 1'-0"

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

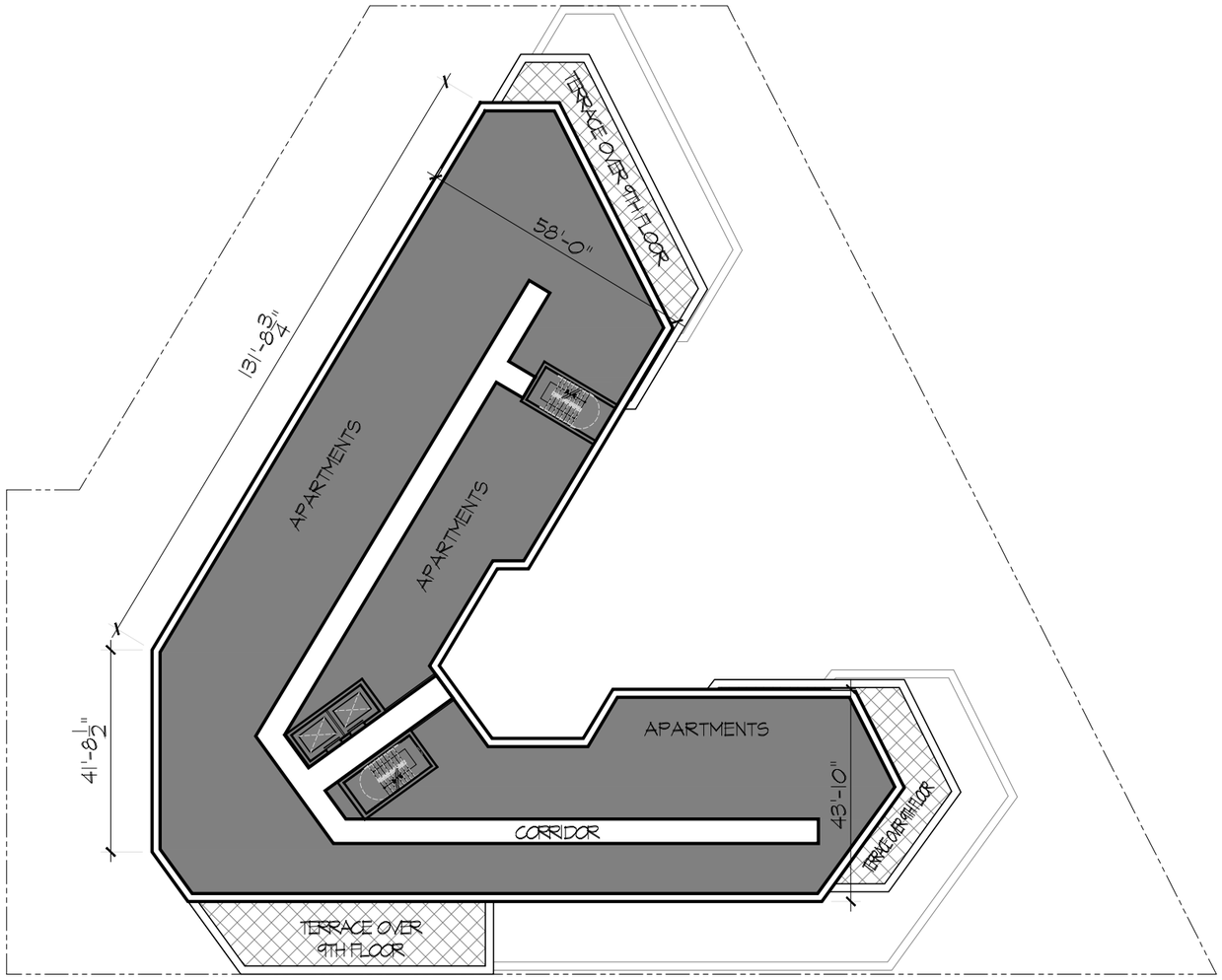
SCHEMATIC
7th THRU 10th
FLOOR PLAN

Z-108.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1291

12.14.17
LOTS: 58,60,68,&73





SCHEMATIC 10TH THRU 13TH FLOOR PLAN

SCALE 1/32 " = 1'-0"

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

SCHEMATIC
11th THRU 14th
FLOOR PLAN

Z-109.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294

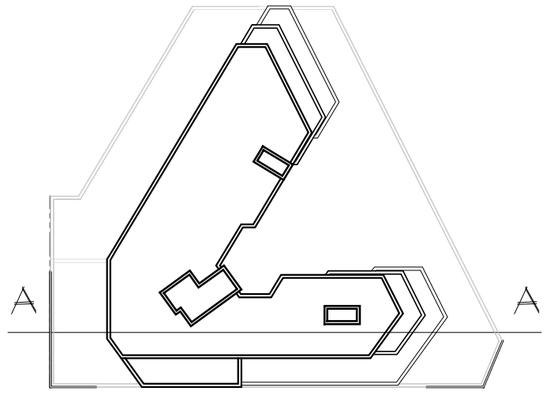
12.14.17
LOTS: 58,60,68,&73



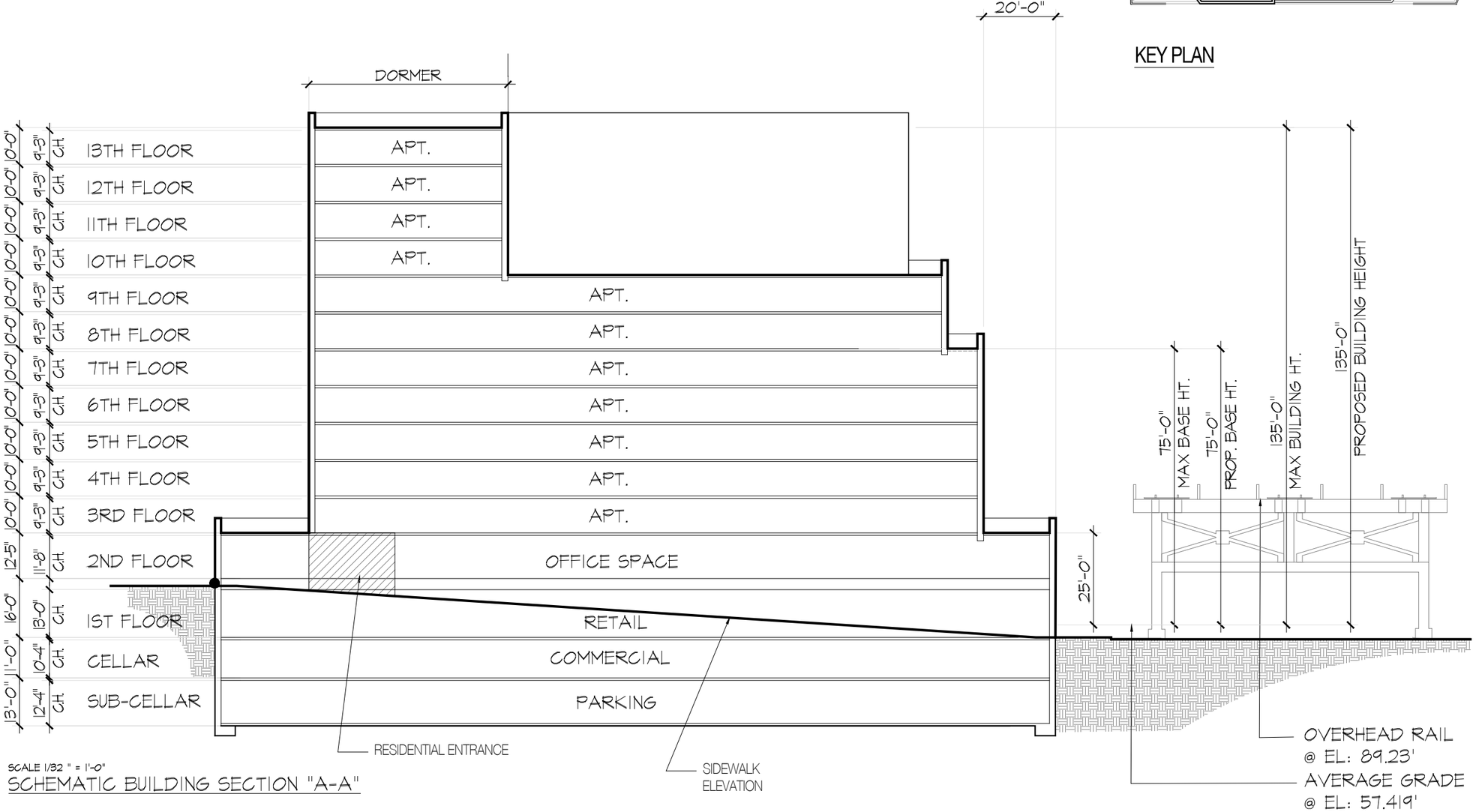
62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS



KEY PLAN



SCALE 1/32 " = 1'-0"
SCHEMATIC BUILDING SECTION "A-A"

11.20.19
PROGRESS SET

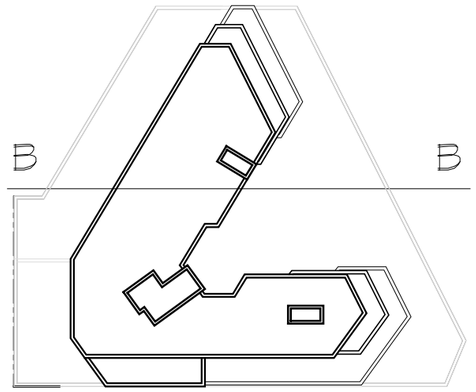
SCHEMATIC HEIGHT DIAGRAM

Z-110.00

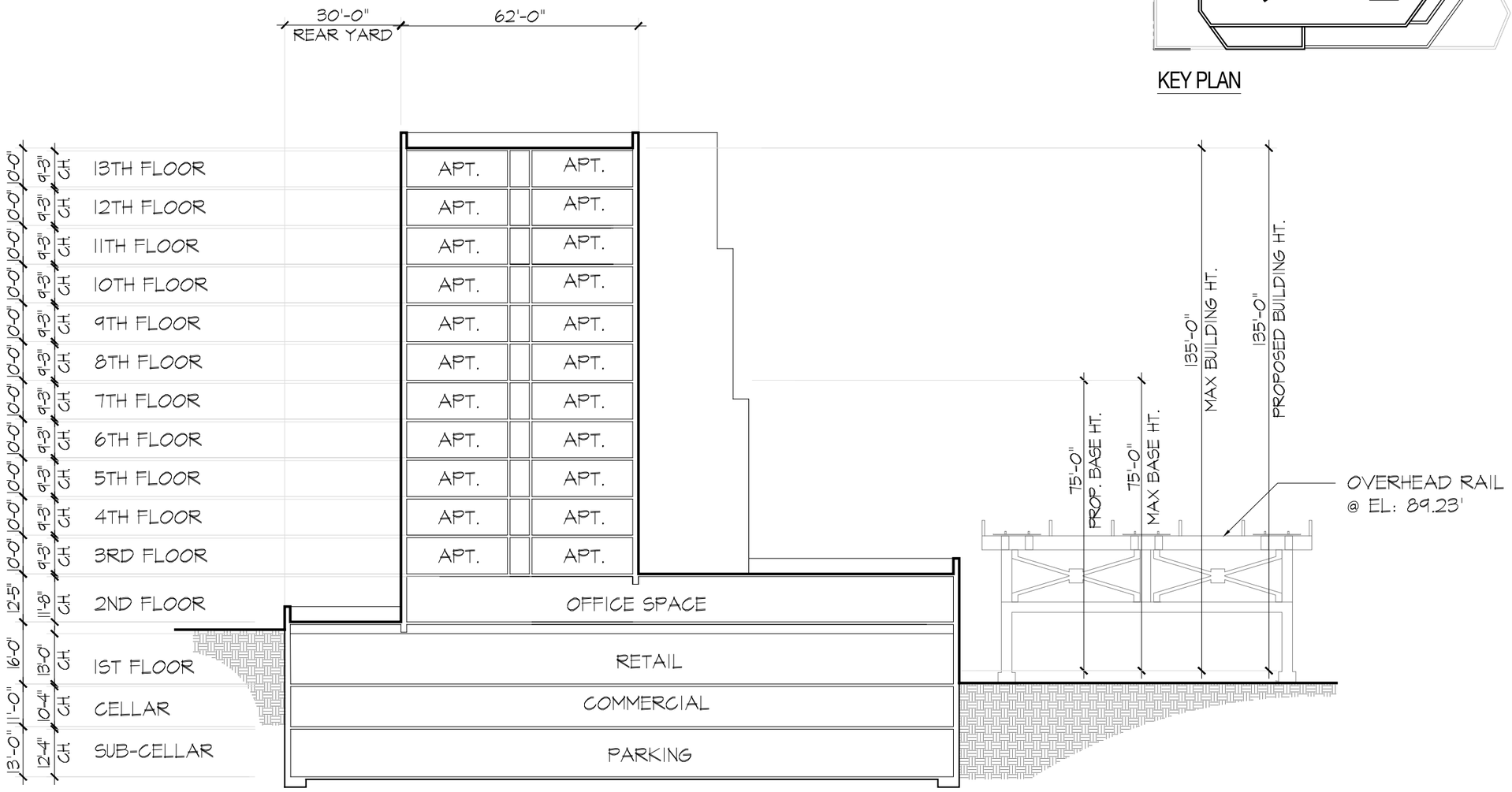
REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294
LOTS: 58,60,68,&73

12.14.17





KEY PLAN



SCHEMATIC BUILDING SECTION "B-B"
SCALE 1/32 " = 1'-0"

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

SCHEMATIC
HEIGHT
DIAGRAM

Z-111.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294
12.14.17
LOTS: 58,60,68,&73



ALL FIGURES ARE PRELIMINARY AND APPROXIMATE. LOT AREAS AND EXISTING FLOOR AREAS ARE SUBJECT TO SURVEY CONFIRMATION. FINAL AREAS AND LOT ANGLES TO BE VERIFIED BY COMPLETE SURVEY

SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	1294	1.REZONE TO C4-4 (MIH)	CONST. C. ASS 1-B 2HR RATED	
Lots:	58, 60, 68, 73		BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	39-30 63RD STREET		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	R6		BUILDING TO BE DESIGNED	
Proposed Zoning:	C4-4		PER 2014 NYC BUILDING CODE	
Community District	2, QUEENS		PER NYC ENERGY CODE	
Zoning Section Map:	9d			
Zoning Lot Area	35,330.13			

ZR - Section	Title	Description	Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
32-00	USES	USE GROUP 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10			2, 4 & 6		OK
35-23	QUALITY HOUSING PROGRAM	R7-2			YES		OK
23-32	MIN LOT AREA	1,700 INTERIOR LOT 25,330 SQ. FT. CORNER LOT 10,000 SQ. FT.			22,553 9,819		OK
35-20 / 23-154 35-31 / 33-122 35-31 / 33-121	FAR	C4-4 RESIDENTIAL COMMERCIAL COMMUNITY FACILITY	4.6 3.4 6.5		4.60 1.39 0.01	5.99	OK OK OK
35-20 / 23-154 35-31 / 33-122 35-31 / 33-121	FLOOR AREA	C4-4X RESIDENTIAL 35,330.13 X 4.6 = COMMERCIAL 35,330.13 X 3.4 = COMMUNITY FACILITY 35,330.13 X 6.5 =	162,519 120,122 229,646		162,516 49,937 188		OK OK OK
		TOTAL DEVELOPMENT 35,330.13 X 6.5 =	229,646		211,641		OK
23-153	LOT COVERAGE	INTERIOR LOT 65% – CORNER LOT 100% =	16,466 10,000		13,014 8,746		OK OK
N/A 23-45 23-53	YARD REGULATION	FRONT YARD SIDE YARD REAR YARD	NONE NONE 30'-0"		NONE NONE 30'-0"		OK OK OK
33-27	SHALLOW INTERIOR LOTS	REAR YARD	N/A		N/A		OK
23-533 23-531		REQUIRED REAR YARD EQUIVALENT EXCEPTED TROUGH LOTS			N/A		OK OK
23-664 / TABLE 2 23-664 / TABLE 2 23-664 / TABLE 2 23-692, 35-23	HEIGHT & SETBACKS HEIGHT LIMITATION FOR NARROW BLDGS.	MIN BASE MAX BASE MAX BUILDING STREET WALL IS LESS THAN 45' IN WIDTH	NONE 65'-0" 135' 0" / 13		25'-0" 65'-0" 135' 0" / 13 N/A		OK OK OK R7-2, R7D, R7X, R8, R9 & R10
23-661	STREET WALL LOCATION	ENTIRE STREET FRONTAGE TO MATCH EX. ADJACENT	0'-0"		0'-0"		OK
23-664 23-664	SETBACKS	SETBACK @ WIDE STREETS SETBACK @ NARROW STREETS	10'-0" 15'-0"		0'-0" 0'-0"		OK OK

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

ZONING CALCULATION

Z-112.00

REZONE: C4-4
ZONE: R6 / C1-4 12.14.17
BLOCK: 1294 LOTS: 58,60,68,&73



23-62	PERMITTED OBS	PERMITTED OBSTRUCTIONS	DORMERS		YES		OK
23-22	DENSITY	R7-2 (GC)	239		213		OK
23-84	OUTER COURT REG.	NARROW / WIDE OUTER COURT	YES		YES		OK
23-851	INNER COURT REG.	1,200 SQ. FT. (MIN. AND 30' MIN. DIMENSION	N/A		N/A		OK
23-87	PERMITTED OBS IN COURTS	FENCE, OPEN TERRACES, SOLAR ENERGY SYSTEMS, ETC.	YES		YES		OK
23-633	SPECIAL PROVISIONS	ADJACENT TO R1 THROUGH R5B	N/A		N/A		OK
23-52		SHALLOW INTERIOR LOTS - LESS THAN 70' DEEP	N/A		N/A		OK
25-251	ACCESSORY OFF-STREET PARKING						
25-23	30% OF DU	RESIDENTIAL 64 TRANSIT ZONE	0		0		OK
36-21	70% OF DU	RESIDENTIAL 149 50%	75		75	166	OK
36-21		COMMERCIAL 1 x 1000	73		73		OK
		COMM. FAC. 1 x 1000	8		8		OK
25-57, 23-97	PARKING LOCATION	IN COURTS		NO	NO		OK
		ON SITE		YES	YES		OK
36-711	BICYCLE PARKING	RESIDENTIAL 50% 166	166		166		OK
		COMMERCIAL 1/2 0%	8		8	115	OK
		COMM. FAC. 1/2 0%	1		1		OK
36-62	REQ. OFF-STREET LOADING BERTH						
		RESIDENTIAL REQUIRED 0	N/A		N/A		OK
		COMMERCIAL LESS THAN 25,000 2	N/A		2		OK
		COMM. FAC. 0	N/A		N/A		OK
36-683	LOADING BERTH REQ.	LOCATION - 60' FROM RESIDENTIAL DISTRICT BOUNDARY	N/A		YES		OK
36-684		SURFACING - ASPHALT	N/A		YES		OK
36-685		SCREENING - PLANTING STRIP OR WALL BARRIER	N/A		YES		OK

166 PARKING SPACES REQUIRED	32,160 NET PARKING AREA PROPOSED (SUB CELLAR)

QUALITY HOUSING DEDUCTIONS

FLOOR	GROSS SQ. FT.	PARKING / LOADING SQ. FT.	COMMERCIAL SQ.FT	COMM. FACILITY SQ. FT	RESIDENTIAL GROSS SQ. FT.	CORRIDOR SQ. FT.	REF SQ. FT.	REC. SQ. FT	LAUNDRY SQ. FT.	ZONE GREEN SQ. FT	STAIRS SQ. FT	MECHANICAL SQ. FT.	TOTAL RESIDENTIAL ZONING
CC	25,330	24,330			800								
C	25,330	178	21,287	2,292	3,843								
1	25,330	2,792	21,287	516	4,137								
2	20,883	1,929	21,279	188	2,227			3,170					2227
3	17,755				17,755	0	12	1,332	0	190	341	93	16,361
4	17,755				17,755	0	12			190	341	89	17,133
5	17,755				17,755	789	12			190	341	89	16,361
6	17,755				17,755	789	12			190	341	89	16,361
7	17,755				17,755	789	12			190	341	89	16,361
8	11,195				11,195	733	12			174	341	76	11,151
9	11,195				11,195	733	12			174	341	76	11,151
10	13,083				13,083	693	12			196	341	65	12,970
11	13,083				13,083	693	12			196	341	65	12,970
12	13,083				13,083	693	12			196	341	65	12,970
13	13,083				13,083	693	12			196	341	65	12,970
TOTAL	307,393	29,829	21,124	9,613	181,972	6,933	132	4,502	0	1,972	4,841	851	162,316

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.20.19
PROGRESS SET

ZONING CALCULATION

Z-113.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294
LOTS: 58,60,65,&73

12.14.17

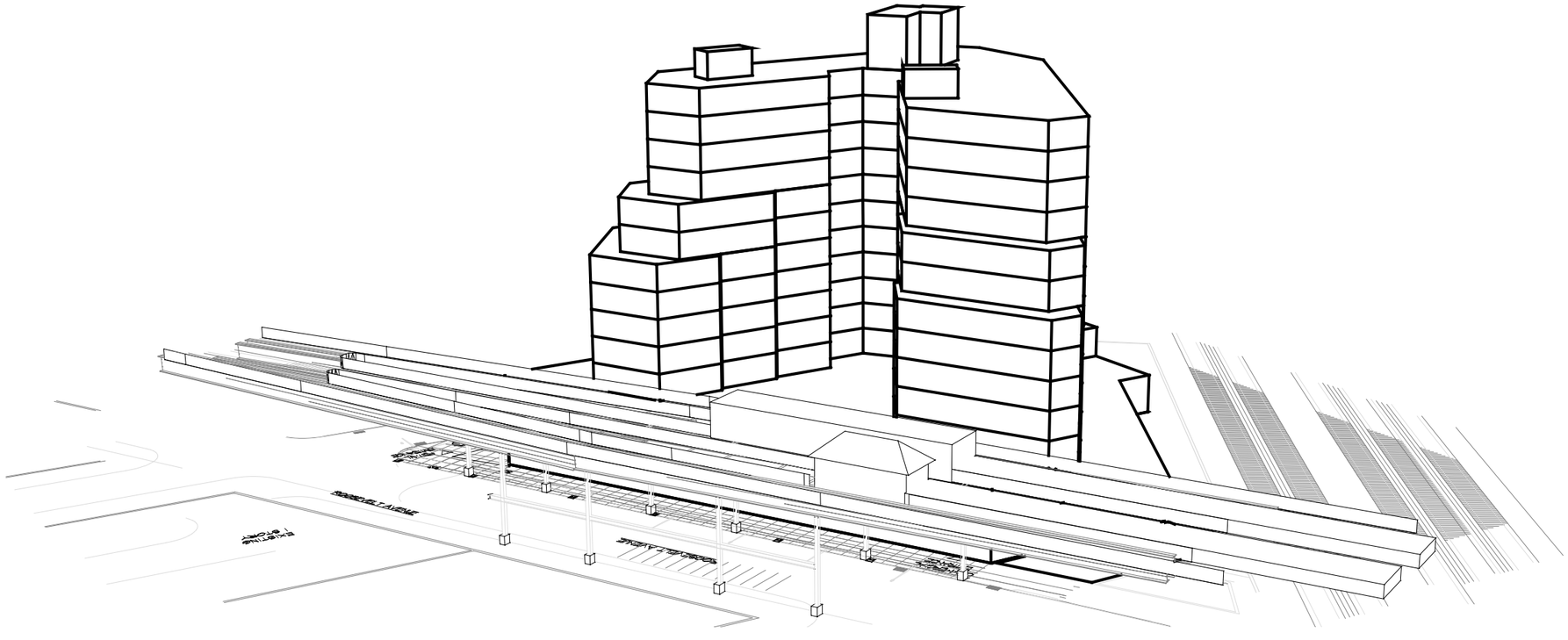


62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

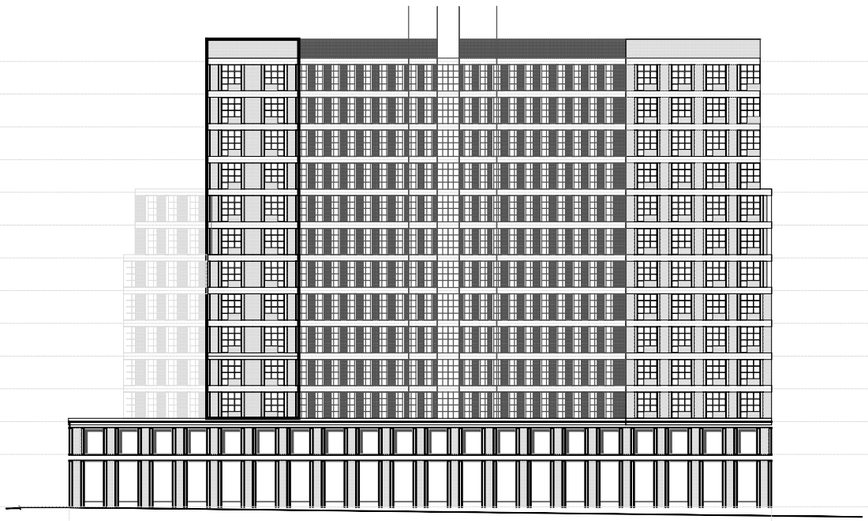
11.20.19
PROGRESS SET



SCHEMATIC 3D MASSING



SCHEMATIC 63RD STREET ELEVATION
(NOT TO SCALE)



SCHEMATIC ROOSEVELT AVENUE ELEVATION
(NOT TO SCALE)

SCHEMATIC
ELEVATIONS

Z-114.00

REZONE: C4-4
ZONE: R6 / C1-4
BLOCK: 1294

12.14.17
LOTS: 58, 60, 65, & 73



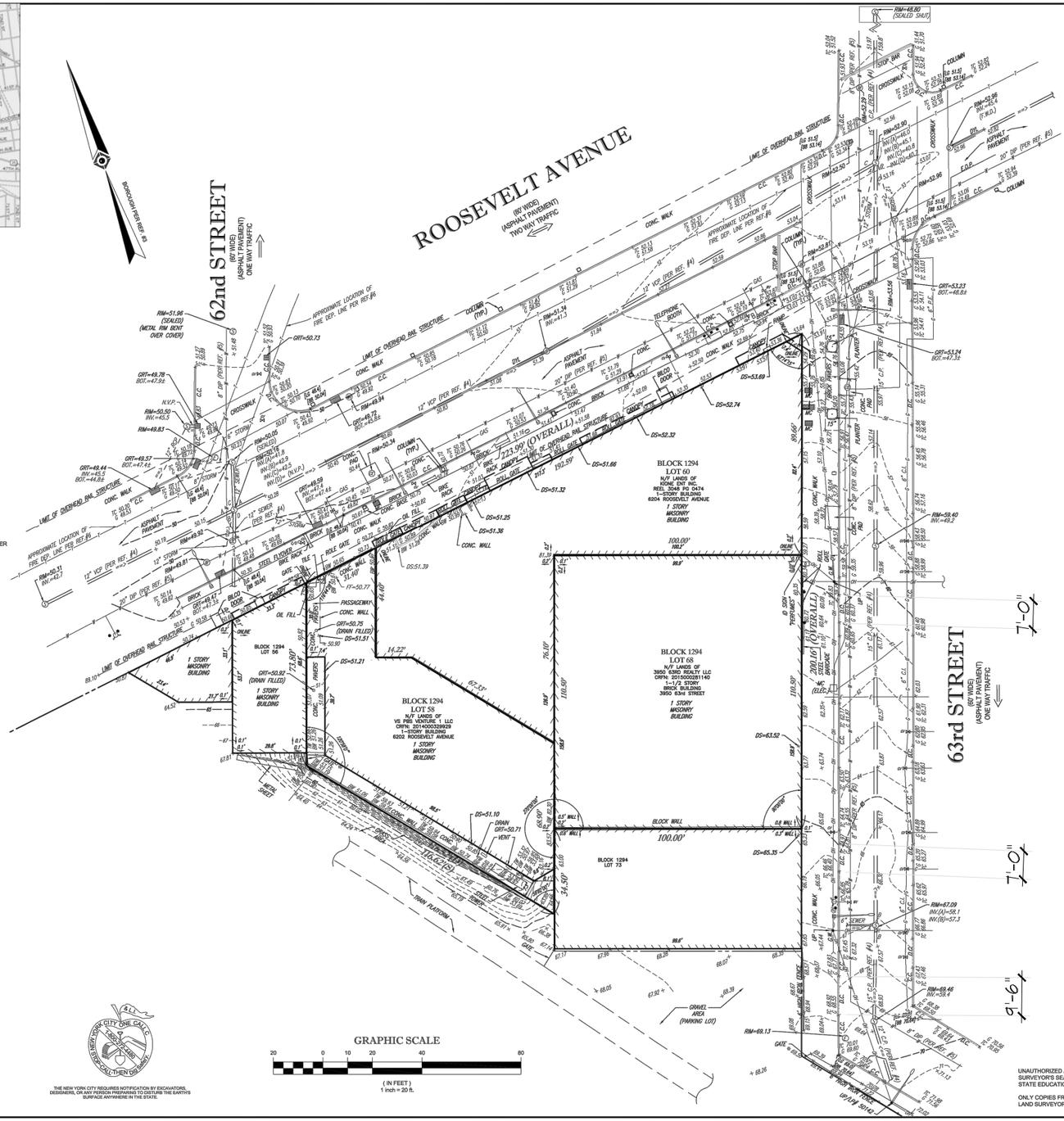


VICINITY MAP
©2004 DeLorme. Street Atlas USA

LEGEND

124 / 125	EXISTING CONTOUR
× 123.45	EXISTING SPOT ELEVATION
× TC 123.45	EXIST. TOP OF CURB ELEVATION
× G 122.95	EXIST. GUTTER ELEVATION
× TW 123.45	EXIST. TOP OF WALL ELEVATION
× BW 122.95	EXIST. BOTTOM OF WALL ELEVATION
× FF 123.45	EXIST. FINISHED FLOOR ELEVATION
× DS 123.45	EXIST. DOOR SILL ELEVATION
× [LG 125.45]	EXIST. LEGAL GRADE ELEVATION
× [88=125.45]	LEGAL GRADE ELEVATION (PER REF. 4) CONVERTED TO NAVD 88 DATUM
OH	OVERHEAD WIRES
G	APPROX. LOC. UNDERGROUND GAS LINE
E	APPROX. LOC. UNDERGROUND ELEC. LINE
T	APPROX. LOC. UNDERGROUND TEL. LINE
W	APPROX. LOC. UNDERGROUND WATER LINE
	DEPRESSED CURB
	APPROX. LOC. UNDERGROUND SANITARY SEWER
HYD.	HYDRANT
WV	WATER VALVE
GV	GAS VALVE
	ELECTRIC METER
SMH	SANITARY/SEWER MANHOLE
EMH	ELECTRIC MANHOLE
MH	UNKNOWN MANHOLE
WMH	WATER MANHOLE
	CON-ED ELECTRIC MANHOLE
C/O	CLEAN OUT
VENT & NUMBER OF VENTS	
RD	ROOF DRAIN
UP	UTILITY POLE
UP/LP	UTILITY POLE/LIGHT POLE
	GUY WIRE
	SIGN
MB	MAIL BOX
	BOLLARD
PM	PARKING METER
	AREA LIGHT
	CATCH BASIN OR INLET
MC	METAL COVER
FLOW ==>	FLOW DIRECTION
	DECIDUOUS TREE & TRUNK SIZE
	AIR CONDITIONING
E.O.P.	EDGE OF PAVEMENT
C.C.	CONCRETE CURB
D.C.	DEPRESSED CURB
L.S.A.	LANDSCAPED AREA
MC	METAL COVER
(TYP.)	TYPICAL
D.Y.L.	DOUBLE YELLOW LINE
Ht.	HEIGHT
F.F.	FINISHED FLOOR ELEVATION
D.S.	DOOR SILL ELEVATION
N.V.P.	NO VISIBLE PIPE
F.W.D.	FILLED WITH DEBRIS
GRT.	GRATE
INV.	INVERT
BOT.	BOTTOM ELEVATION
R.C.P.	REINFORCED CONCRETE PIPE
V.C.P.	VITRIFIED CLAY PIPE
C.P.	CLAY PIPE
D.I.P.	DUCTILE IRON PIPE
R.C.P.	REINFORCED CONCRETE PIPE
C.I.	CAST IRON PIPE
BLDG.	BUILDING
CONC.	CONCRETE
(TYP.)	TYPICAL
REF.	REFERENCE
S.F.	SQUARE FEET
AC.	ACRES
P.O.B.	POINT OF BEGINNING
(D)	DESCRIBED
(S)	SURVEYED

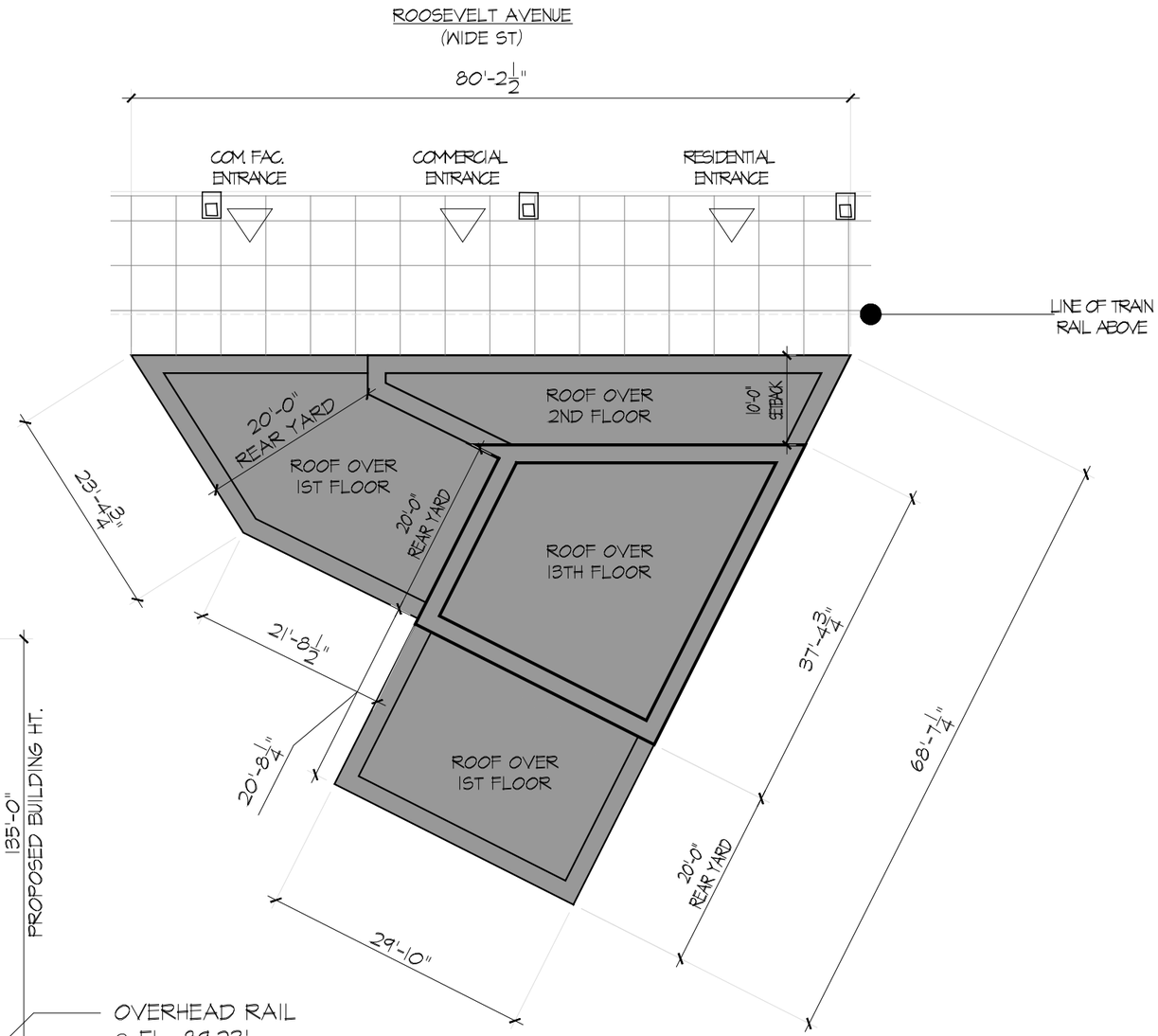
1 THIS PURPOSE ORIGINALLY INTENDED, WITHOUT THE WRITTEN PERMISSION OF CONTROL POINT ASSOCIATES, INC. IS PROHIBITED

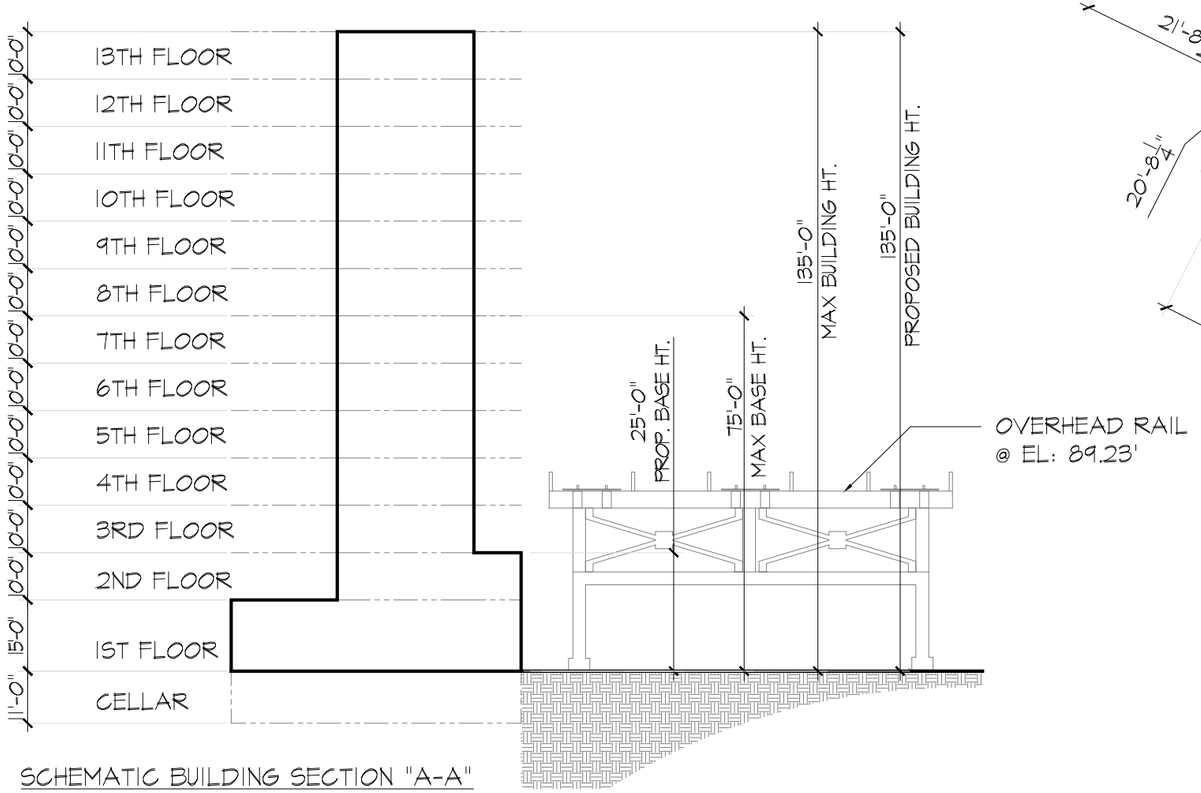

ROOSEVELT AVENUE
(80' WIDE)
(ASPHALT PAVEMENT)
TWO WAY TRAFFIC
62nd STREET
(80' WIDE)
(ASPHALT PAVEMENT)
ONE WAY TRAFFIC
63rd STREET
(80' WIDE)
(ASPHALT PAVEMENT)
ONE WAY TRAFFIC
BOROUGH PER REF. #3
BLOCK 1294
LOT 60
N/F LANDS OF
KONE ENT INC
REEL 3048 PG 00474
1-STORY BUILDING
6204 ROOSEVELT AVENUE
1 STORY MASONRY BUILDING
BLOCK 1294
LOT 58
N/F LANDS OF
VS PBS VENTURE 1 LLC
CRFN: 2014000329929
1-STORY BUILDING
6202 ROOSEVELT AVENUE
1 STORY MASONRY BUILDING
BLOCK 1294
LOT 65
N/F LANDS OF
3950 63RD REALTY LLC
CRFN: 2015000281140
1-1/2 STORY BRICK BUILDING
3950 63rd STREET
1 STORY MASONRY BUILDING
BLOCK 1294
LOT 56
1 STORY MASONRY BUILDING
BLOCK 1294
LOT 73
223.99' (OVERALL)
100.00'
LIMIT OF OVERHEAD RAIL STRUCTURE
APPROXIMATE LOCATION OF FIRE DEP. LINE PER REF.#6
IRON PLATFORM
GRAVEL AREA (PARKING LOT)
METAL SHED
STEEL FLOWER RACK
OIL FILL
PASSAGEWAY
CONC. WALL
BLOCK WALL
TELEPHONE BOOTH
CROSSWALK
CONC. WALK
ASPHALT PAVEMENT
STOP BAR
STRIP BAR
E.O.P.
C.C.
F.C.C.
CURB
GAS
TEL
OHW
CONCRETE PAD
PLANTER
FENCE
GATE
SEWER
DRAIN
VENT
ONLINE
ONLINE
ONLINE

SCEANRIO 1 - Projected Development Site 2

SCHEMATIC PLOT PLAN

SCALE 1/16 " = 1'-0"





SCHEMATIC BUILDING SECTION "A-A"

SCALE 1/32 " = 1'-0"

61-32 ROOSEVELT AVE.

61-32 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.18.19
PROGRESS SET

SCHEMATIC PLOT PLAN

Z-100.00

REZONE: R7X / C2-4
ZONE: C1-4 02.12.18
BLOCK: 1294 LOTS: 55 & 56



ALL FIGURES ARE PRELIMINARY AND APPROXIMATE. LOT AREAS AND EXISTING FLOOR AREAS ARE SUBJECT TO SURVEY CONFIRMATION. FINAL AREAS AND LOT ANGLES TO BE VERIFIED BY COMPLETE SURVEY

SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	1294	1.REZONE TO C4-4 (MIH)	CONST. CLASS 1-B 2HR RATED	
Lots:	55 & 56		BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	39-50 63RD STREET		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	R6		BUILDING TO BE DESIGNED	
Proposed Zoning:	C4-4		PER 2014 NYC BUILDING CODE	
Community District:	2 QUEENS		PER NYC ENERGY CODE	
Zoning Section Map:	9c			
Zoning Lot Area:	2,461.79			

ZR - Section	Title	Description	Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
32-00	USES	USE GROUP 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10			2, 4 & 6		OK
35-23	QUALITY HOUSING PROGRAM	R7-2			YES		OK
23-32	MIN. LOT AREA	1,700 INTERIOR LOT 2,461.79 SQ. FT.			22,533		
	FAR	C4-4					
35-20 / 23-154		RESIDENTIAL	4.6		4.39		OK
35-31 / 33-122		COMMERCIAL	2.0		0.48	4.99	OK
35-31 / 33-121		COMMUNITY FACILITY	6.5		0.20		OK
	FLOOR AREA	C4-5X					
35-20 / 23-154		RESIDENTIAL 2,461.79 X 4.6 =	11,324		10,809		OK
35-31 / 33-122		COMMERCIAL 2,461.79 X 2.0 =	4,924		1189		OK
35-31 / 33-121		COMMUNITY FACILITY 2,461.79 X 6.5 =	16,002		500		OK
		TOTAL DEVELOPMENT 2,461.79 X 6.5 =	16,002		12,284		OK
23-153	LOT COVERAGE	INTERIOR LOT 65% =	1,600		1,374		OK
	YARD REGULATION						
N/A		FRONT YARD	NONE		NONE		OK
23-46		SIDE YARD	NONE		NONE		OK
23-53		REAR YARD	30'-0		20'-0"		OK
33-27	SHALLOW INTERIOR LOTS	REAR YARD	20'-0		20'-0"		OK
23-533 23-537		REQUIRED REAR YARD EQUIVALENT EXCEPTED THROUGH LOTS			N/A		OK OK
	HEIGHT & SETBACKS						
23-664 / TABLE 2		MIN. BASE	NONE		25'-0"		OK
23-664 / TABLE 2		MAX BASE	75'-0		25'-0"		OK
23-664 / TABLE 2		MAX BUILDING	135'-0" / 13		135'-0" / 13		OK
23-692, 35-23	HEIGHT LIMITATION FOR NARROW BLDGS	STREET WALL IS LESS THAN 45' IN WIDTH			N/A		R7-2, R7D, R7X, R8, R9 & R10
	STREET WALL LOCATION						
23-661		ENTIRE STREET FRONTAGE TO MATCH EX. ADJACENT	0'-0"		0'-0"		OK
	SETBACKS						
23-664		SETBACK @ WIDE STREETS	10'-0"		10'-0"		OK
	PERMITTED OBS						
23-62		PERMITTED OBSTRUCTIONS	DORMERS		NO		OK

61-32
ROOSEVELT AVE.

61-32 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.18.19
PROGRESS SET

ZONING ANALYSIS

Z-101.00

REZONE: R7X / C2-4
ZONE: C1-4 02.12.18
BLOCK: 1294 LOTS: 55 & 56



23-22	DENSITY	R7-2 QPO	14		12		OK
23-64	OUTER COURT REQ	NARROW / WIDE OUTER COURT	YES		NO		OK
23-65	INNER COURT REQ.	1,200 SQ. FT. (MIN) AND 30' MIN. DIMENSION	N/A		N/A		OK
23-67	PERMITTED OBS IN COURTS	FENCE, OPEN TERRACES, SOLAR ENERGY SYSTEMS, ETC	YES		YES		OK
23-663 23-32	SPECIAL PROVISIONS	ADJACENT TO R1 THROUGH R5B SHALLOW INTERIOR LOTS - LESS THAN 70' DEEP	N/A N/A		N/A N/A		OK OK
25-23 36-21 36-21	ACCESSORY OFF-STREET PARKING	RESIDENTIAL 50% COMMERCIAL 1 x NOT REQ. COMM. FAC. 1 x NOT REQ	WAIVED		WAIVED WAIVED 0	0	OK OK OK
25-51, 23-87	PARKING LOCATION	IN COURTS ON SITE		NO YES	NO YES		OK OK
36-711	BICYCLE PARKING	RESIDENTIAL 50% 6 COMMERCIAL 1E-01 COMM. FAC. 1E-01	6 8 1		6 8 1	15	OK OK OK
36-62	REQ. OFF-STREET LOADING BERTH	RESIDENTIAL REQUIRED 0	N/A		N/A		OK
36-683 36-684 36-685	LOADING BERTH REQ.	LOCATION 60' FROM RESIDENTIAL DISTRICT BOUNDARY SURFACING - ASPAHLT SCREENING - PLANTING STRIP OR WALL BARRIER	N/A N/A N/A		YES YES YES		OK OK OK

QUALITY HOUSING DEDUCTIONS

FLOOR	GROSS SQ. FT	COMMERCIAL SQ.FT.	COMM. FACILITY SQ. FT.	RESIDENTIAL GROSS SQ. FT.	REF SQ. FT.	REC. SQ. FT.	LAUNDRY SQ. FT	ZONE GREEN SQ. FT.	STAIRS SQ. FT.	MECHANICAL SQ. FT.	TOTAL RESIDENTIAL ZONING
C	2462			2462							
1	2462	1189	500	773							773
2	1374			1374	12	360	400	29	15	3	856
3	894			894	12			21	15	4	842
4	894			894	12			21	15	4	842
5	894			894	12			21	15	4	842
6	894			894	12			21	15	4	842
7	894			894	12			21	15	4	842
8	894			894	12			21	15	4	842
9	894			894	12			21	15	4	842
10	894			894	12			21	15	4	842
11	894			894	12			21	15	4	842
12	894			894	12			21	15	4	842
13	894			894	12			21	15	4	842
TOTAL	16102	1189	500	14413	144	360	400	260	180	52	10369

61-32
ROOSEVELT AVE.

61-32 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.18.19
PROGRESS SET

ZONING ANALYSIS

Z-102.00

REZONE: R7X / C2-4
ZONE: C1-4
BLOCK: 1294
02.12.18
LOTS: 55 & 56

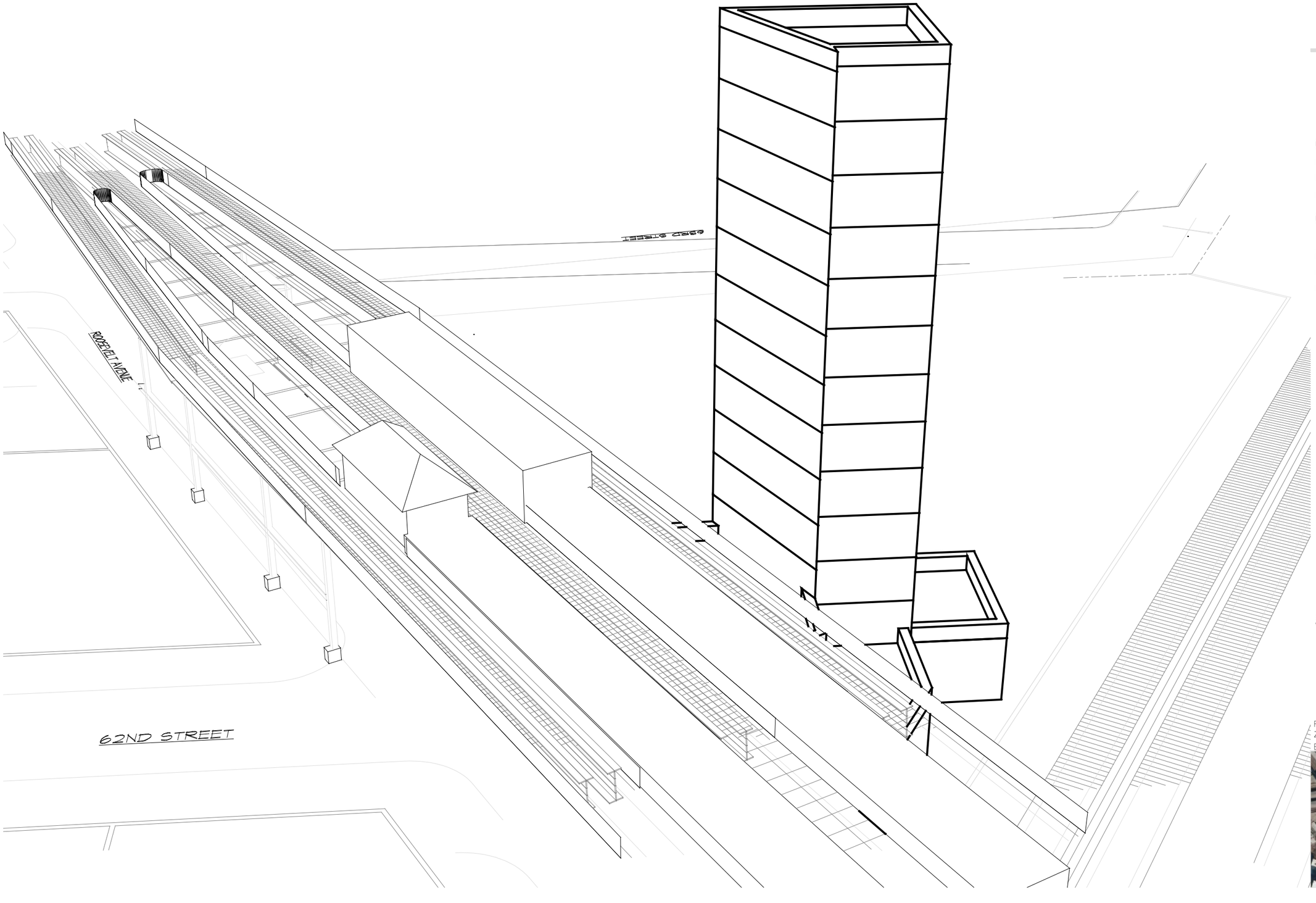


61-32
ROOSEVELT AVE.

61-32 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.18.19
PROGRESS SET



SCHEMATIC 3D
MASSING

Z-103.00

REZONE: R7X / C2-4
ZONE: C1-4 02.12.18
BLOCK: 1291 LOTS: 55 & 56



SCEANRIO 2 (Projected Development Site 1 & Site 2)

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

06.07.18
PROGRESS SET

EXISTING
1 STORY

EXISTING 1 STORY
73'-9 1/2"

62ND STREET

COMMERCIAL ENTRANCE

62'-0 1/4"

30'-0"
REAR YARD

4'-0 1/4"

13'-11 1/2"

20'-0"

116'-5 1/4"

ROOF OVER 7TH FLOOR

ROOF OVER 9TH FLOOR

40'-1 3/4"

ROOF OVER
12TH FLOOR

RETAIL ENTRANCE

ROOSEVELT AVENUE

223'-11 1/4"

4'-2 1/2"

4'-2 1/4"

80'-10 1/2"

52'-6"

EXISTING
1 STORY

15'-0"

43'-5 3/4"

62'-2 3/4"

21'-0"

20'-1/4"

48'-11 3/4"

29'-4 1/4"

12'-0"

12'-0"

ROOF OVER
11TH FLOOR

ROOF OVER 9TH FLOOR

ROOF OVER 7TH FLOOR

45'-2 3/4"

26'-1 1/2"

82°

100'-0"

31'-5 1/4"

29'-10 3/4"

ROOF OVER 9TH
FLOOR

15'-0"
SETBACK

EXISTING
1 STORY

PARKING ENTRANCE

21'-6"

COM. FAC ENTRANCE

52'-2"

66'-0 1/4"

13'-2 1/4"

47'-8 3/4"

22'-3"

249'-8"

LINE OF TRAIN
RAIL ABOVE

63RD STREET

SCHEMATIC PLOT PLAN
SCALE 1/32 " = 1'-0"

SCHEMATIC PLOT PLAN

Z-100.00

REZONE: C4-4
ZONE: R6 / C1-4 06.07.18
BLOCK: 1294 LOTS: 58, 60, 68, & 73



ALL FIGURES ARE PRELIMINARY AND APPROXIMATE. LOT AREAS AND EXISTING FLOOR AREAS ARE SUBJECT TO SURVEY CONFIRMATION. FINAL AREAS AND LOT ANGLES TO BE VERIFIED BY COMPLETE SURVEY

SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	1294	1. REZONE TO C4-4 (MIH)	CONST. CLASS 1-B 2HR RATED	
Lots:	58, 60, 68, 73		BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	62-04 ROOSEVELT AVE		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	R6 / C1-4		BUILDING TO BE DESIGNED	
Proposed Zoning:	C4-4		PER 2014 NYC BUILDING CODE	
Community District:	2, QUEENS		PER NYC ENERGY CODE	
Zoning Section Year:	91			
Zoning Lot Area:	36,330.13			

ZR - Section	Title	Description	Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
32-00	USES	USE GROUP 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10			2, 4 & 6		OK
35-23	QUALITY HOUSING PROGRAM	R7-2			YES		OK
23-32	MIN. LOT AREA	1,700 INTERIOR LOT 25,330 SQ. FT. CORNER LOT 10,000 SQ. FT.					OK
35-31 / 33-122 35-31 / 33-123	FAR	C4-4 COMMERCIAL COMMUNITY FACILITY	3.4 6.5		1.70 4.30		OK OK
35-31 / 33-122 35-31 / 33-123	FLOOR AREA	C4-4 COMMERCIAL 36,330.13 X 3.4 = COMMUNITY FACILITY 36,330.13 X 6.5 =	120,122 229,646		59959 169627		OK * OK
		TOTAL DEVELOPMENT 36,330.13 X 6.5 =	229,646		229,646		OK

QUALITY HOUSING DEDUCTIONS

FLOOR	GROSS SQ. FT	PARKING / LOADING SQ. FT.	COMMERCIAL SQ.FT	COMM. FACILITY SQ. FT.
SC	36330	36330		
C	36330	418	27630	7282
1	36330	2792	31998	843
2	30861	1929	27965	1881
3	19136			19136
4	19136			19136
5	19136			19136
6	19136			19136
7	19136			19136
8	16350			16350
9	16350			16350
10	14007			14007
11	14007			14007
12	5283			5283
TOTAL	297745	43689	87593	166067

* 27,630 SF. ARE EXCLUDED FROM DEFINITION OF FLOOR AREA

62-04
ROOSEVELT AVE.

62-04 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

06.07.18
PROGRESS SET

ZONING CALCULATION

Z-101.00

REZONE: C4-4
ZONE: R6 / C1-4 06.07.18
BLOCK: 1294 LOTS: 58, 60, 68, & 73



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SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	1294	1.REZONE TO C4-4 (MIH)	CONST. CLASS 1-B 2HR RATED	
Lots:	55 & 56		BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	61-32 ROOSEVELT AVENUE		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	R6 / C1-4		BUILDING TO BE DESIGNED	
Proposed Zoning:	C4-4		PER 2014 NYC BUILDING CODE	
Community District:	2 QUEENS		PER NYC ENERGY CODE	
Zoning Section Map:	9a			
Zoning Lot Area:	2,461.79			

ZR - Section	Title	Description	Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
32-00	USES	USE GROUP 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10			2, 4 & 6		OK
35-23	QUALITY HOUSING PROGRAM	R7-2			YES		OK
23-32	MIN. LOT AREA	1,700 INTERIOR LOT 2,462 SQ. FT.					
35-31 / 33-122 35-31 / 33-123	FAR	C4-4 COMMERCIAL COMMUNITY FACILITY	3.4 6.5		0.78 4.77		OK OK
35-31 / 33-122 35-31 / 33-123	FLOOR AREA	C4-4 COMMERCIAL 2,461.79 X 3.4 = COMMUNITY FACILITY 2,461.79 X 6.5 =	8,370 16,002		1919 11754		OK OK
		TOTAL DEVELOPMENT 2,461.79 X 6.5 =	16,002		13,670		OK
36-21 / 36-231 36-21 / 36-231	ACCESSORY OFF-STREET PARKING	COMMERCIAL ' X 1000 COMM. FAC. ' X 1000	WAIVED WAIVED		WAIVED WAIVED		OK OK- ASSUMED AMBULATORY DIAGNOSTIC

61-32
ROOSEVELT AVE.

61-32 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

06.07.18
PROGRESS SET

ZONING ANALYSIS

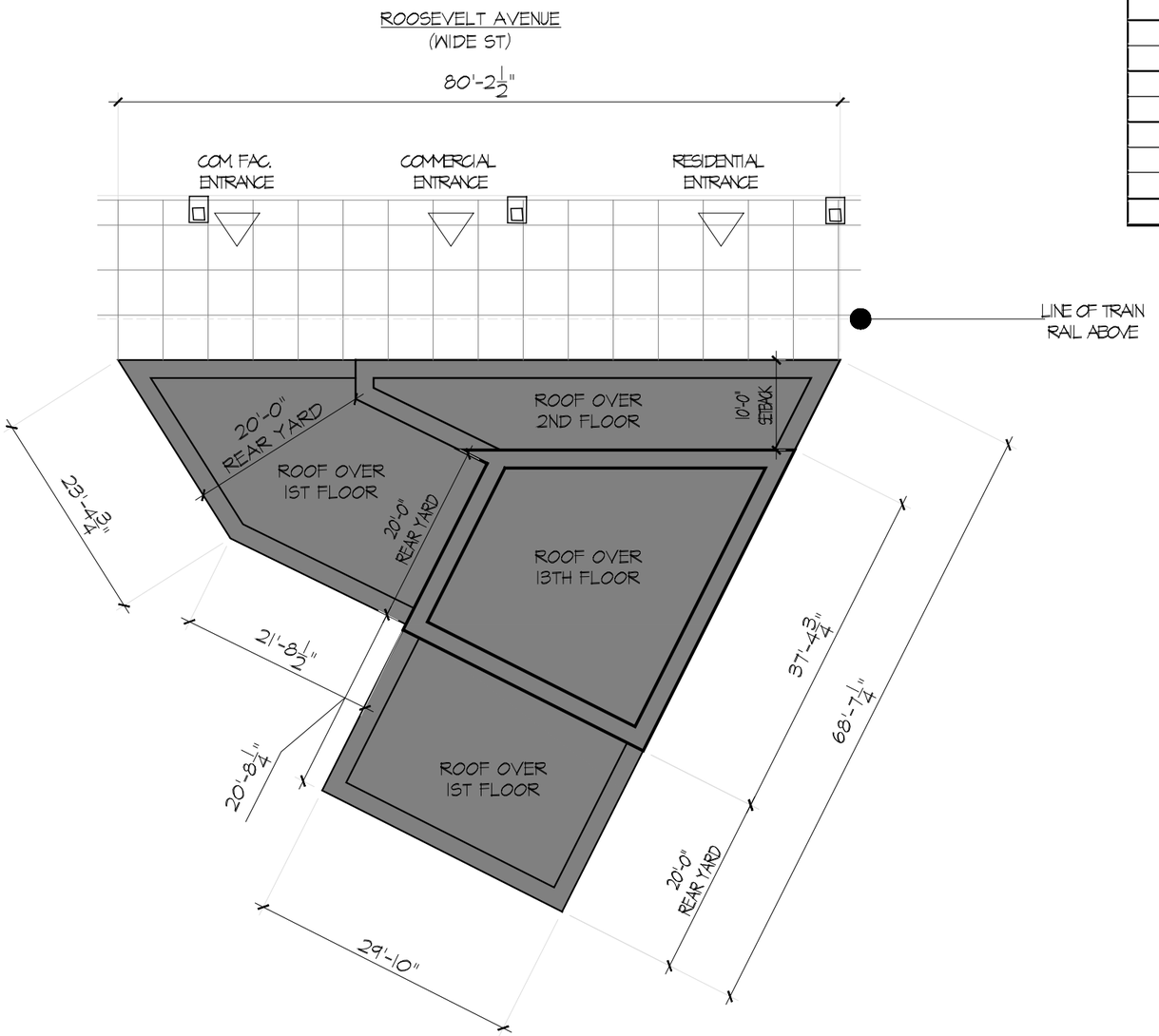
Z-101.00

REZONE: C4-4
ZONE: R6 / C1-4 06.07.18
BLOCK: 1294 LOTS: 55 & 56



SCHEMATIC PLOT PLAN

SCALE 1/16 " = 1'-0"



QUALITY HOUSING DEDUCTIONS			
FLOOR	GROSS SQ. FT.	COMMERCIAL SQ.FT.	COMM. FACILITY SQ. FT.
C	2462	2462	
1	2462	1619	843
2	1374		1374
3	894		894
4	894		894
5	894		894
6	894		894
7	894		894
8	894		894
9	894		894
10	894		894
11	894		894
12	894		894
13	894		894
TOTAL	16532	4081	11451

61-32 ROOSEVELT AVE.

61-32 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.18.19
PROGRESS SET

SCHEMATIC PLOT PLAN

Z-100.00

REZONE: C4-4
ZONE: R6 / C1-4 06.07.18
BLOCK: 1294 LOTS: 55 & 56



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SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	1294	1.REZONE TO C4-4 (MIH)	CONST. CLASS 1-B 2HR RATED	
Lots:	55 & 56		BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	61-32 ROOSEVELT AVENUE		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	R6 / C1-4		BUILDING TO BE DESIGNED	
Proposed Zoning:	C4-4		PER 2014 NYC BUILDING CODE	
Community District:	2 QUEENS		PER NYC ENERGY CODE	
Zoning Section Map:	9a			
Zoning Lot Area:	2,461.79			

ZR - Section	Title	Description	Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
32-00	USES	USE GROUP 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10			2, 4 & 6		OK
35-23	QUALITY HOUSING PROGRAM	R7-2			YES		OK
23-32	MIN. LOT AREA	1,700 INTERIOR LOT 2,462 SQ. FT.					
35-31 / 33-122 35-31 / 33-123	FAR	C4-4 COMMERCIAL COMMUNITY FACILITY	3.4 6.5		0.78 4.77		OK OK
35-31 / 33-122 35-31 / 33-123	FLOOR AREA	C4-4 COMMERCIAL 2,461.79 X 3.4 = COMMUNITY FACILITY 2,461.79 X 6.5 =	8,370 16,002		1919 11736		OK OK
		TOTAL DEVELOPMENT 2,461.79 X 6.5 =	16,002		13,670		OK
36-21 / 36-231 36-21 / 36-231	ACCESSORY OFF-STREET PARKING	COMMERCIAL ' X 1000 COMM. FAC. ' X 1000	WAIVED WAIVED		WAIVED WAIVED		OK OK- ASSUMED AMBULATORY DIAGNOSTIC

61-32
ROOSEVELT AVE.

61-32 ROOSEVELT AVE.
WOODSIDE, NY

AUFGANG ARCHITECTS

11.18.19
PROGRESS SET

ZONING ANALYSIS

Z-101.00

REZONE: C4-4
ZONE: R6 / C1-4 06.07.18
BLOCK: 1294 LOTS: 55 & 56



Attachment B

NYC Landmarks Preservation Commission Correspondence

NYC Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 19DCP218Q
Project: ROOSEVELT AVENUE
Date Received: 7/12/2019

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

Properties with no Architectural or Archaeological significance:

1) 6126 ROOSEVELT AVENUE, BBL: 4012940055
2) 6132 ROOSEVELT AVENUE, BBL: 4012940056
3) 6202 ROOSEVELT AVENUE, BBL: 4012940058
4) 6204 ROOSEVELT AVENUE, BBL: 4012940060
5) 3950 63 STREET, BBL: 4012940068
6) 3956 63 STREET, BBL: 4012940073
7) 63 STREET, BBL: 4012940076

Gina Santucci 8/9/2019

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 33459_FSO_GS_08092019.docx

NYC Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-Q
Project: ROOSEVELT AVENUE
Date received: 6/21/2018

Properties with no Architectural or Archaeological significance:

1) ADDRESS: 6126 ROOSEVELT AVENUE, BBL: 4012940055
2) ADDRESS: 6132 ROOSEVELT AVENUE, BBL: 4012940056
3) ADDRESS: 6202 ROOSEVELT AVENUE, BBL: 4012940058
4) ADDRESS: 6204 ROOSEVELT AVENUE, BBL: 4012940060
5) ADDRESS: 3950 63 STREET, BBL: 4012940068
6) ADDRESS: 3956 63 STREET, BBL: 4012940073
7) ADDRESS: 63 STREET, BBL: 4012940076

Gina Santucci

6/28/2018

SIGNATURE DATE

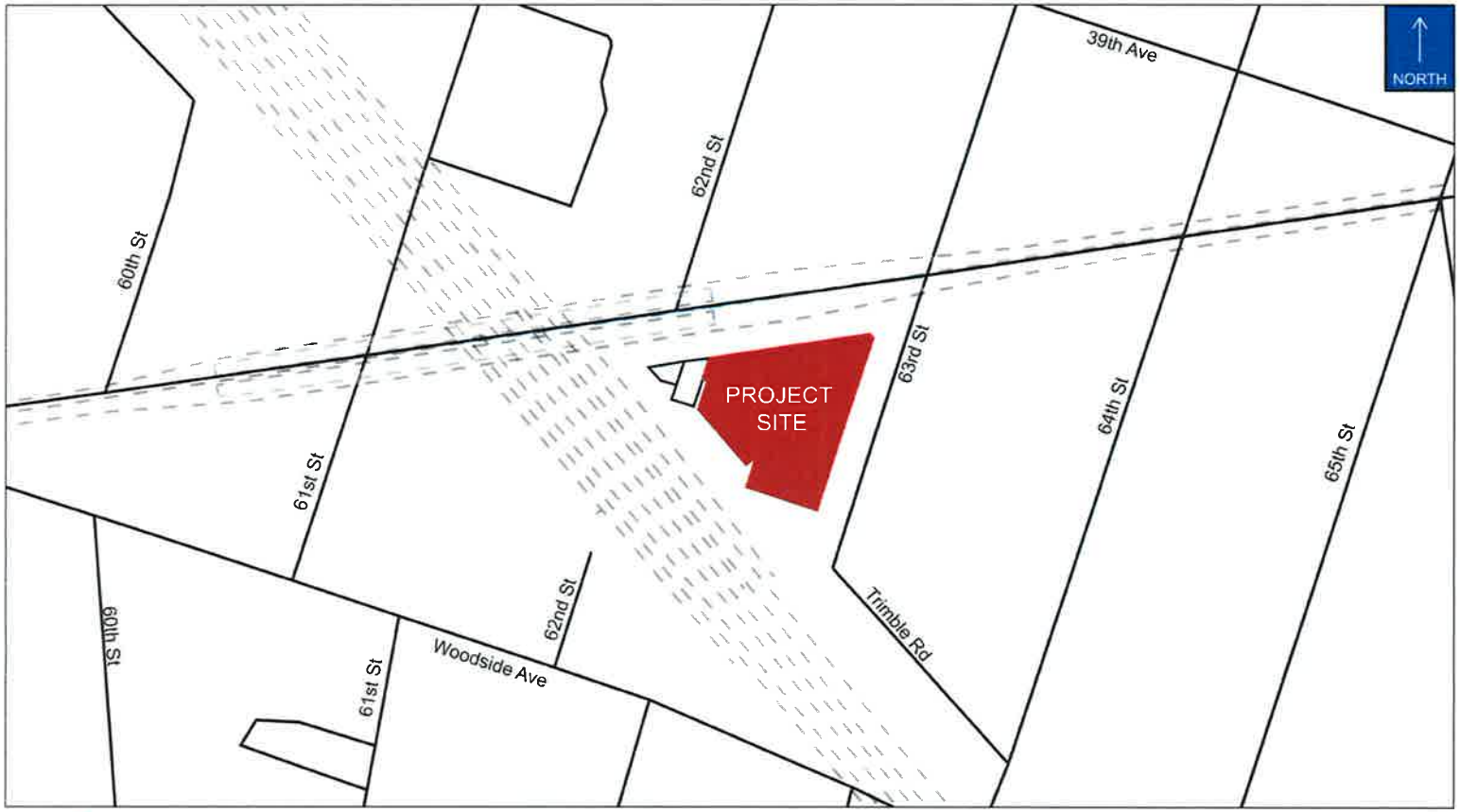
Gina Santucci, Environmental Review Coordinator

File Name: 33459_FSO_DNP_06212018.doc

Attachment C

Transportation Attachment

62-02 Roosevelt Avenue, Queens, NY



Projected Sites
62-04 Roosevelt Ave

Projected Sites Location

Figure 1



Projected Sites
62-04 Roosevelt Ave

• Analyzed Intersection

Analyzed Intersections
Figure 2



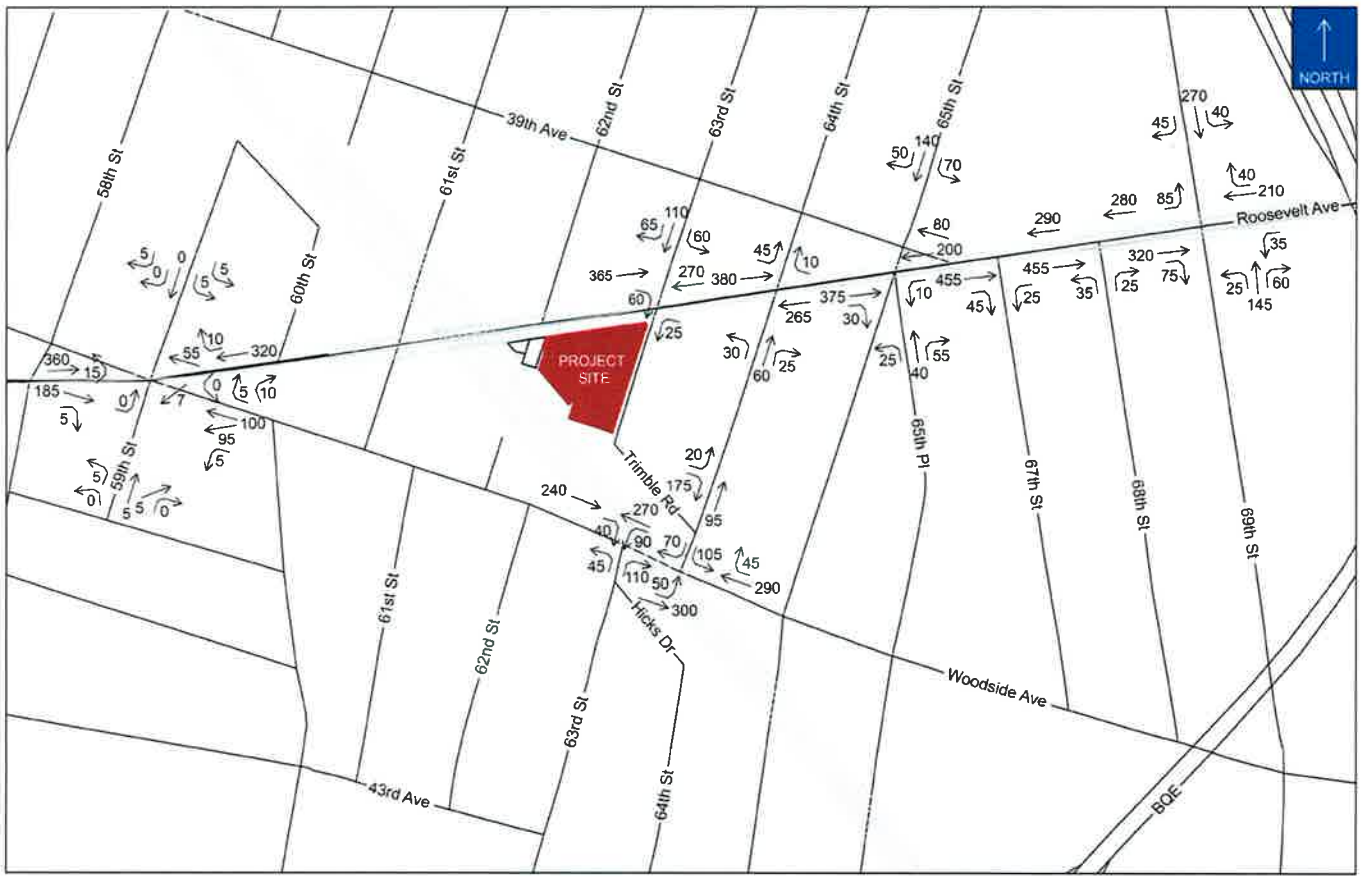
Projected Sites
62-04 Roosevelt Ave

2018 Existing Traffic Volumes
AM Peak Hour
Figure 3



Projected Sites
62-04 Roosevelt Ave

2018 Existing Traffic Volumes
Weekday Midday Peak Hour
Figure 4



Projected Sites
62-04 Roosevelt Ave

2018 Existing Traffic Volumes
PM Peak Hour
Figure 5



Projected Sites
62-04 Roosevelt Ave

2018 Existing Traffic Volumes
Saturday Peak Hour
Figure 6



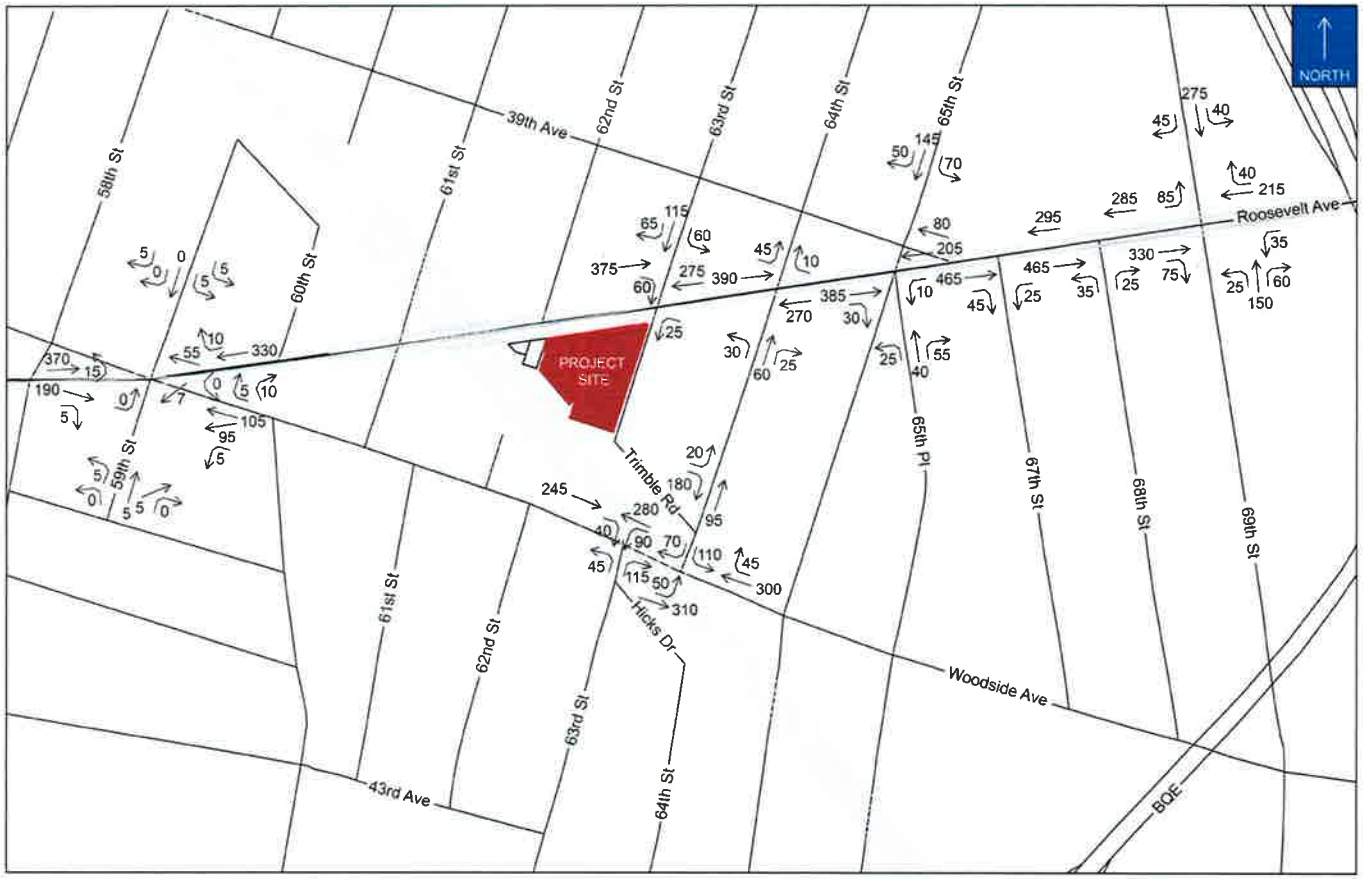
Projected Sites
62-04 Roosevelt Ave

2023 No-Build Traffic Volumes
AM Peak Hour
Figure 7



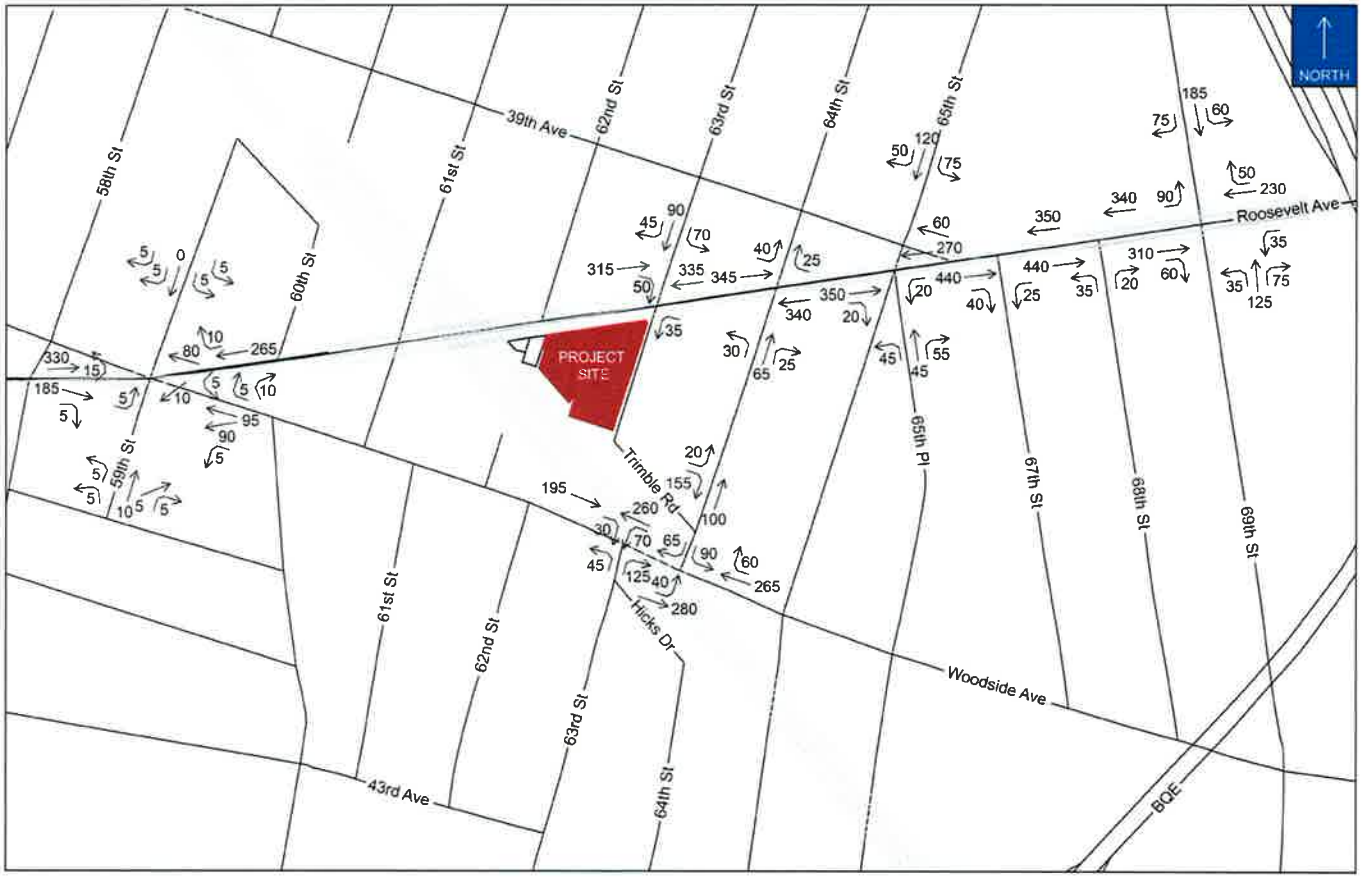
Projected Sites
62-04 Roosevelt Ave

2023 No-Build Traffic Volumes
Weekday Midday Peak Hour
Figure 8



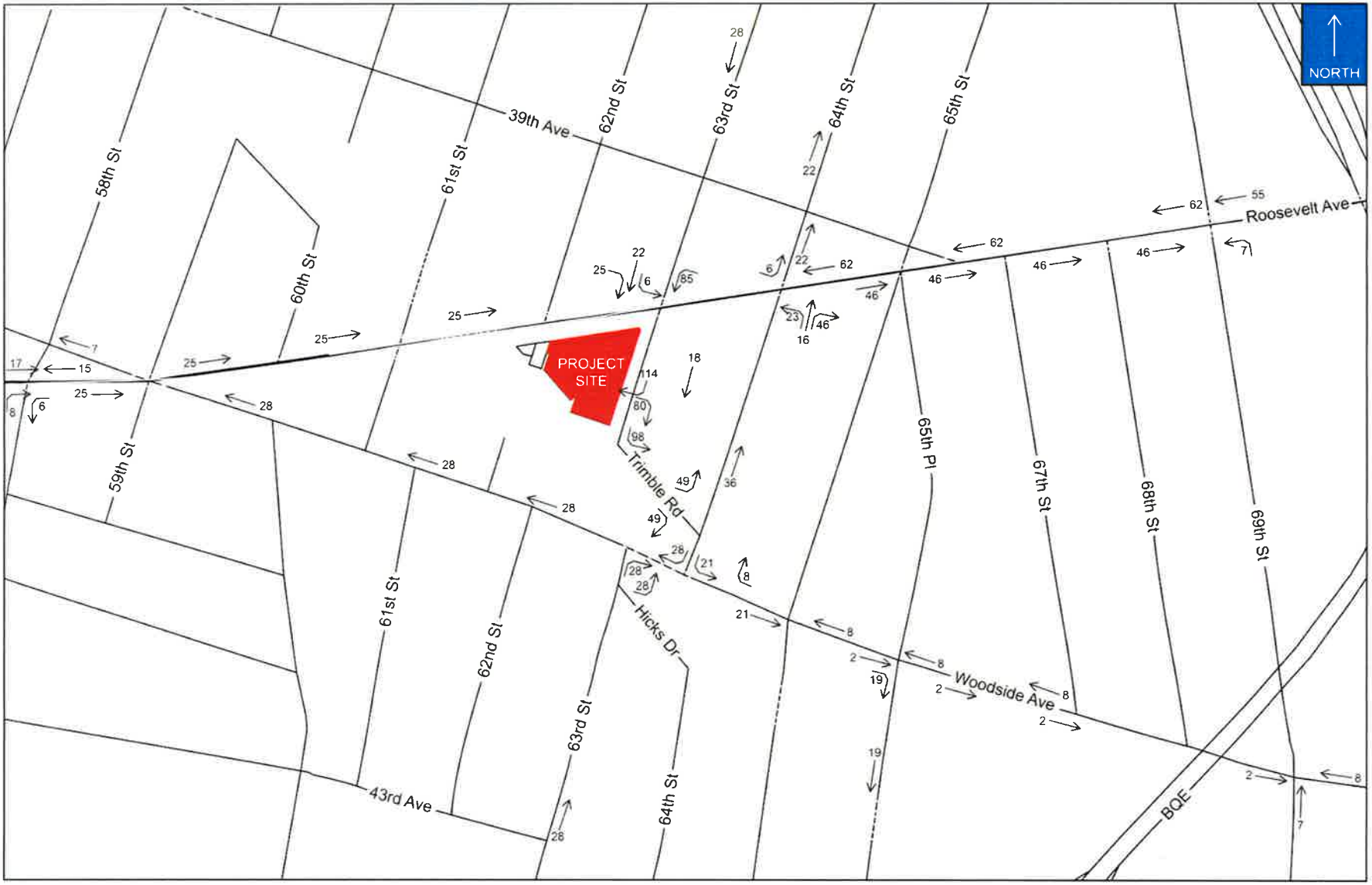
Projected Sites
62-04 Roosevelt Ave

2023 No-Build Traffic Volumes
PM Peak Hour
Figure 9



Projected Sites
62-04 Roosevelt Ave

2023 No-Build Traffic Volumes
Saturday Peak Hour
Figure 10

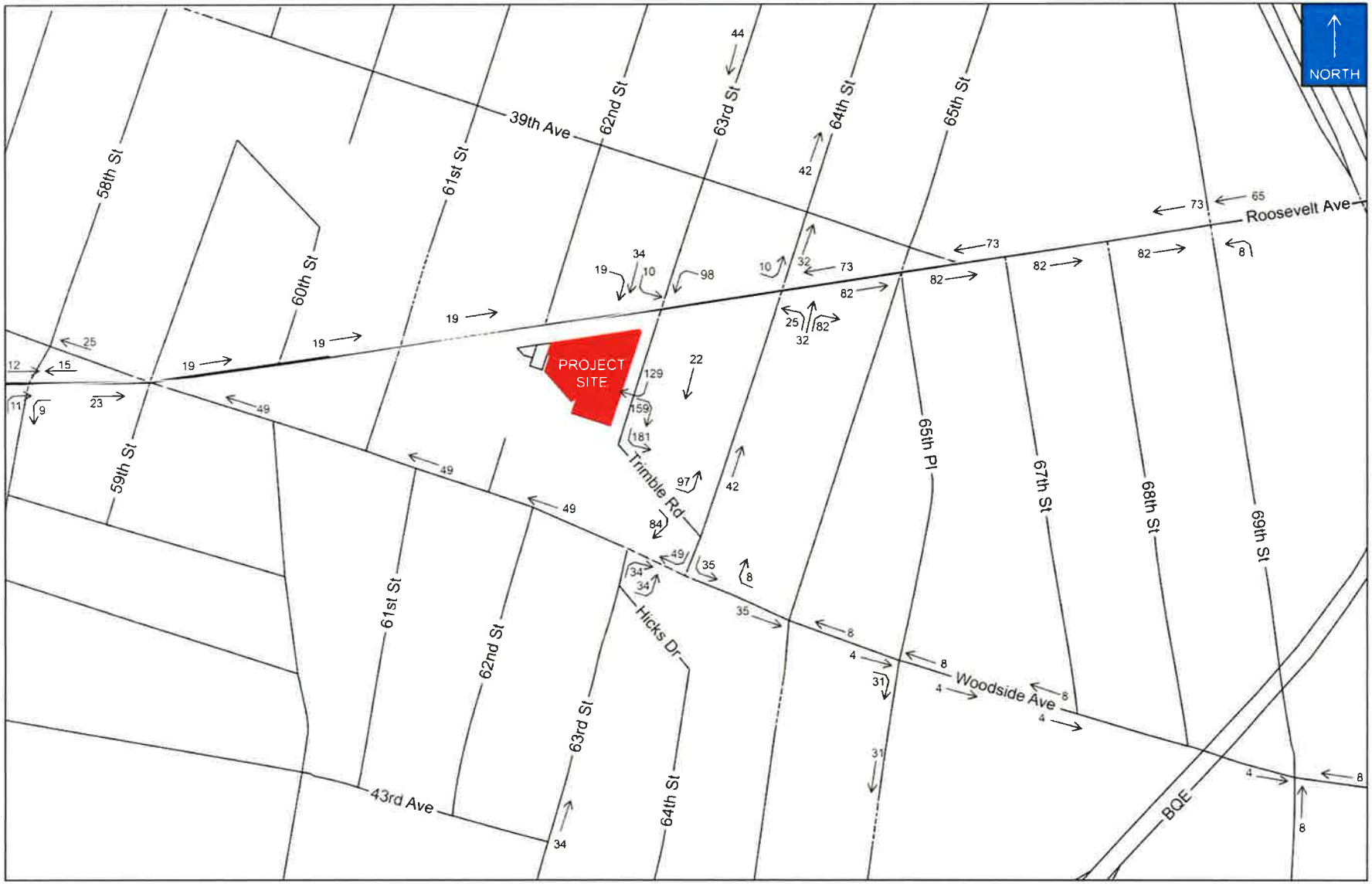


Project Site
62-04 Roosevelt Ave

151 In/117 Out

Project Generated Incremental Vehicle Trips
Weekday AM Peak Hour

Figure 11

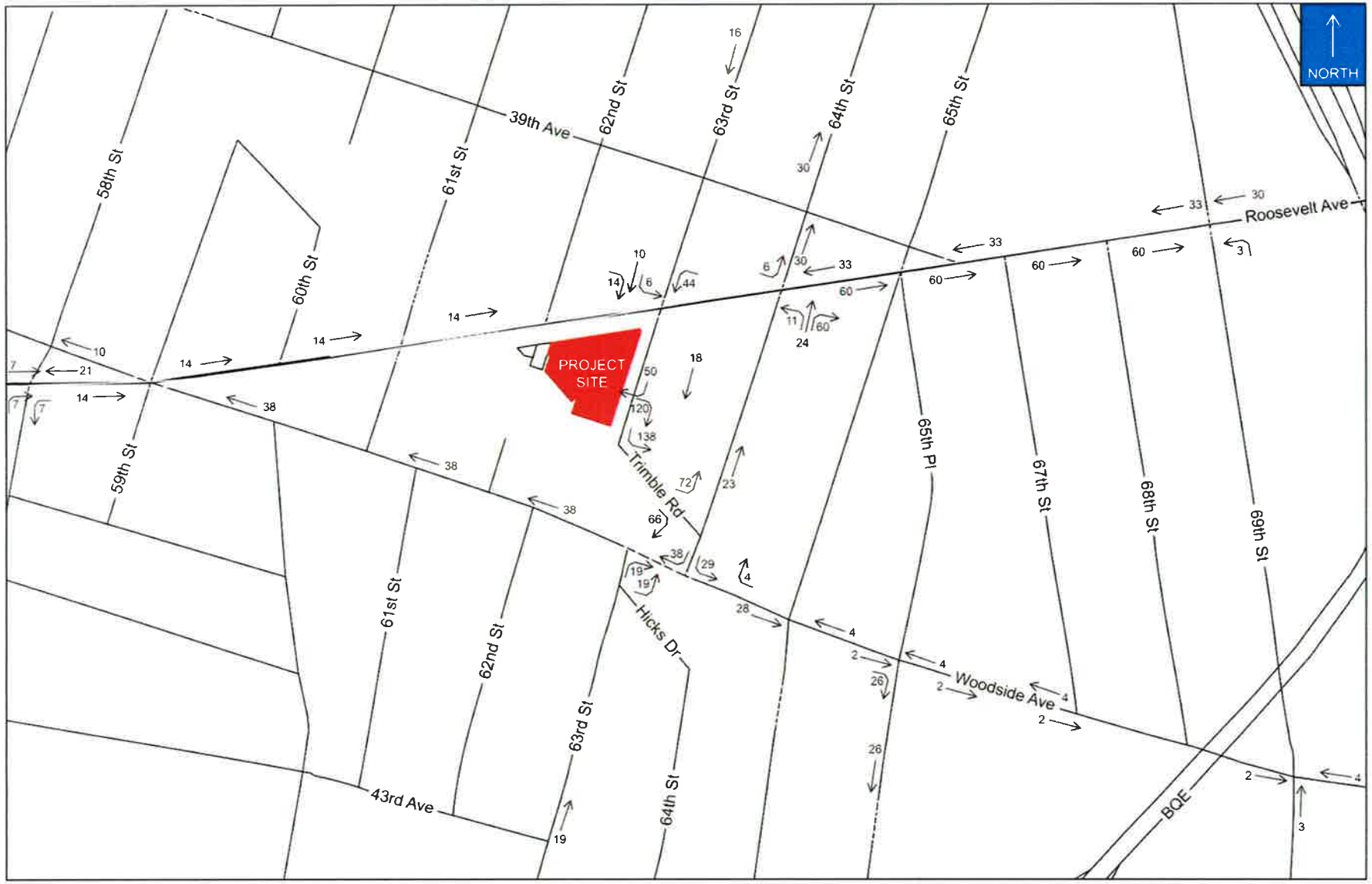


Project Site
62-04 Roosevelt Ave

178 In/208 Out

Project Generated Incremental Vehicle Trips
Weekday Midday Peak Hour

Figure 12

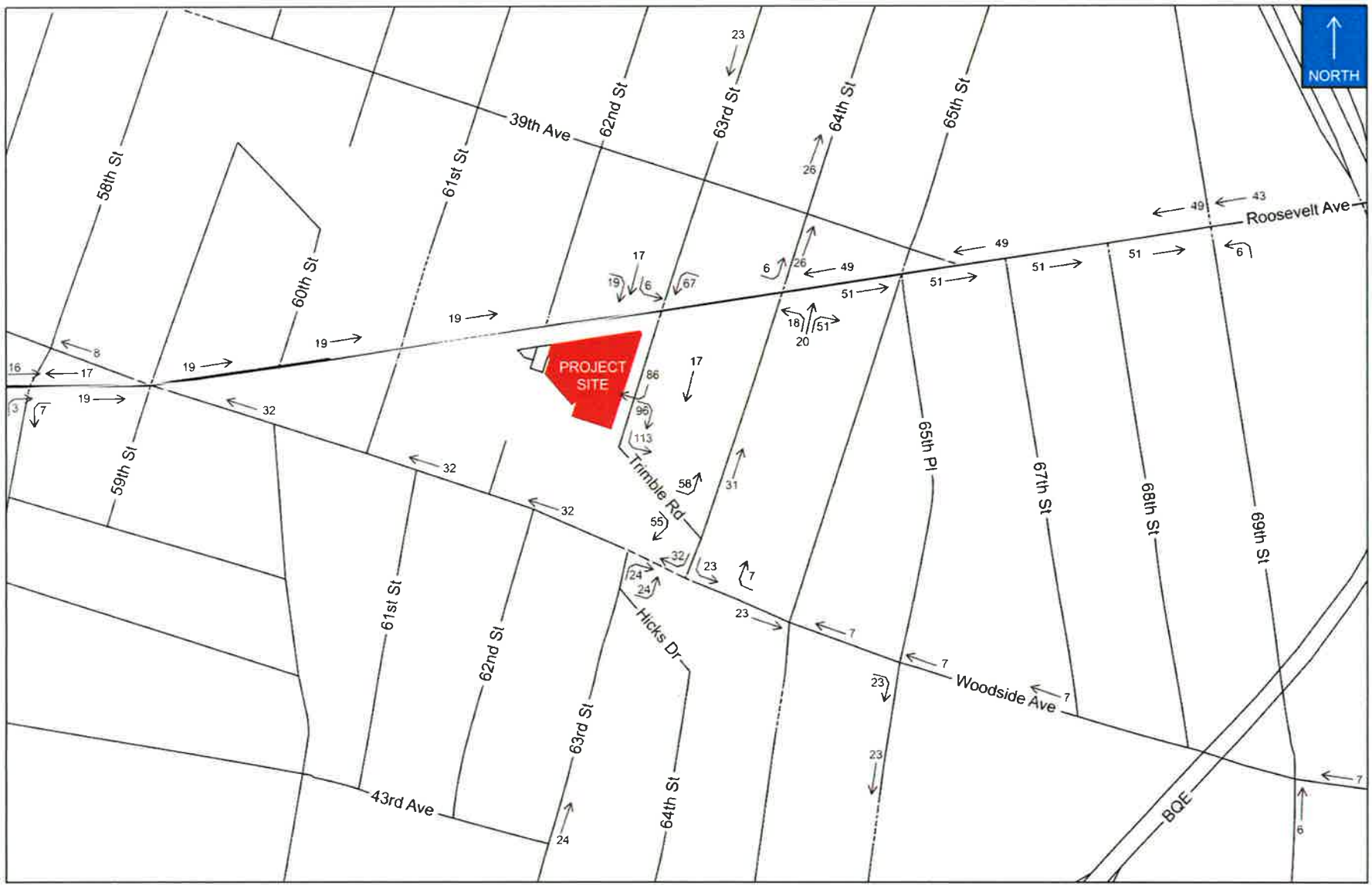


Project Site
62-04 Roosevelt Ave

86 In/156 Out

Projected Generated Incremental Vehicle Trips
Weekday PM Peak Hour

Figure 13

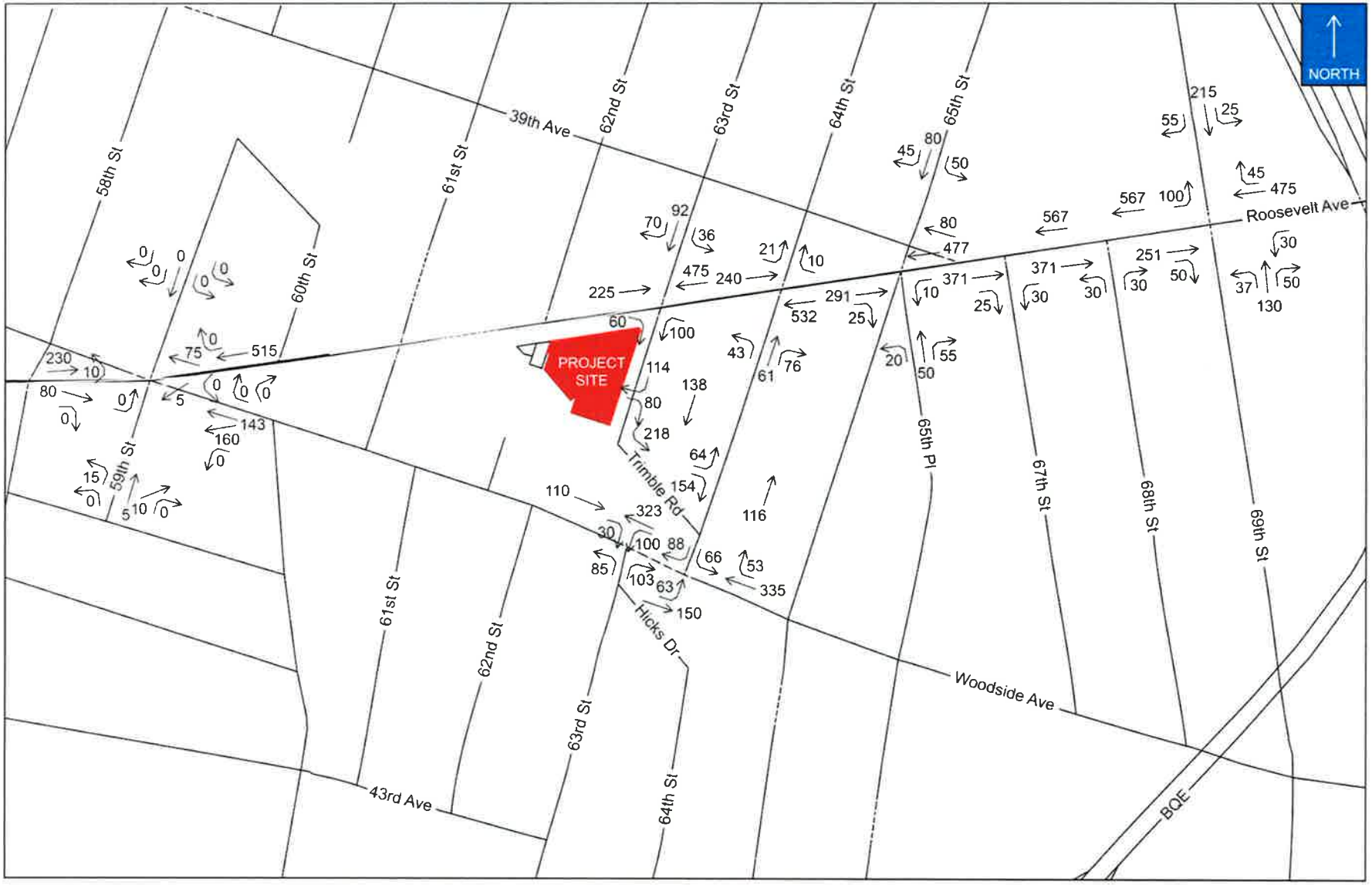


Project Site
62-04 Roosevelt Ave

123 In/132 Out

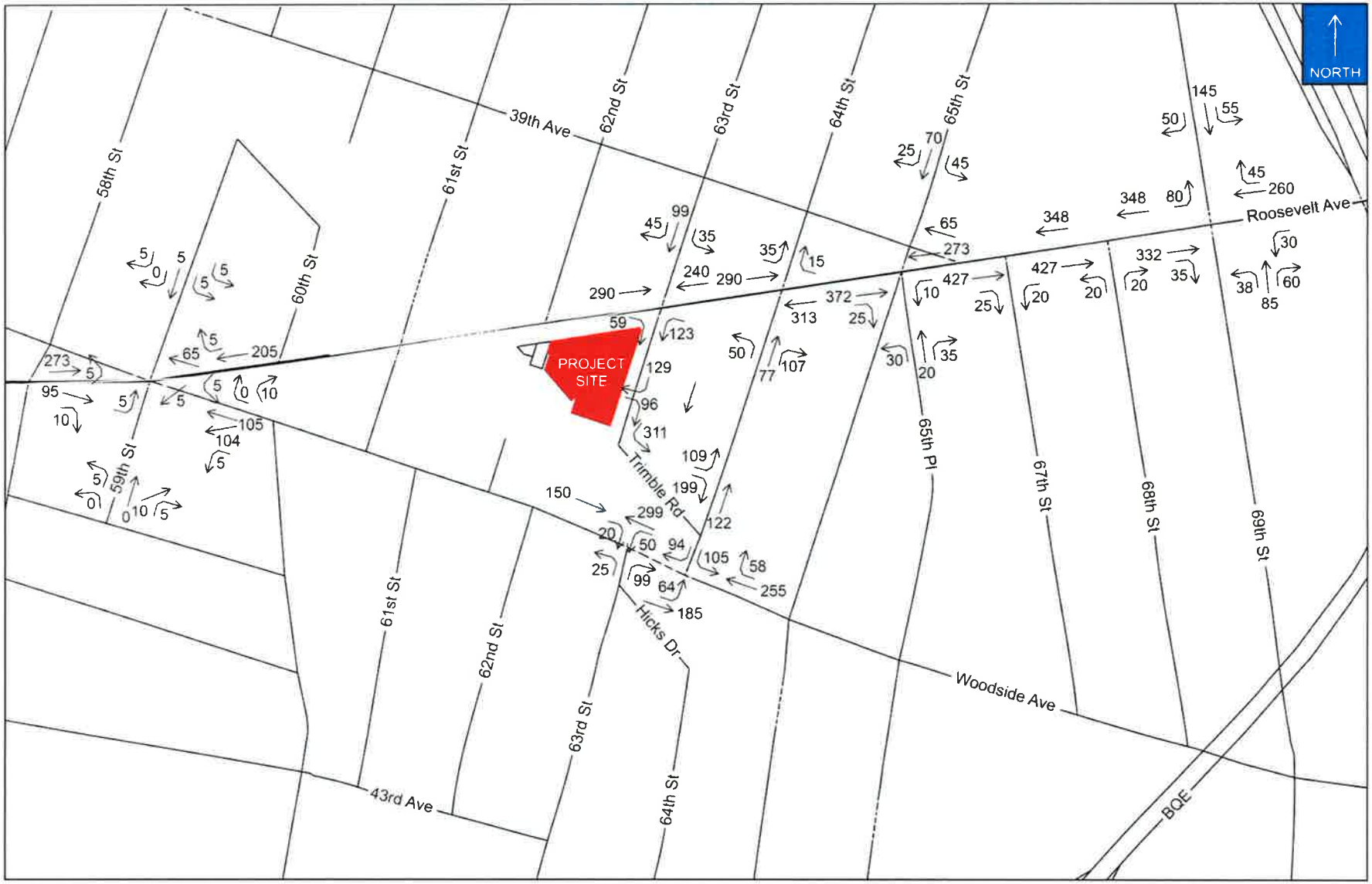
Project Generated Incremental Vehicle Trips
Saturday Midday Peak Hour

Figure 14



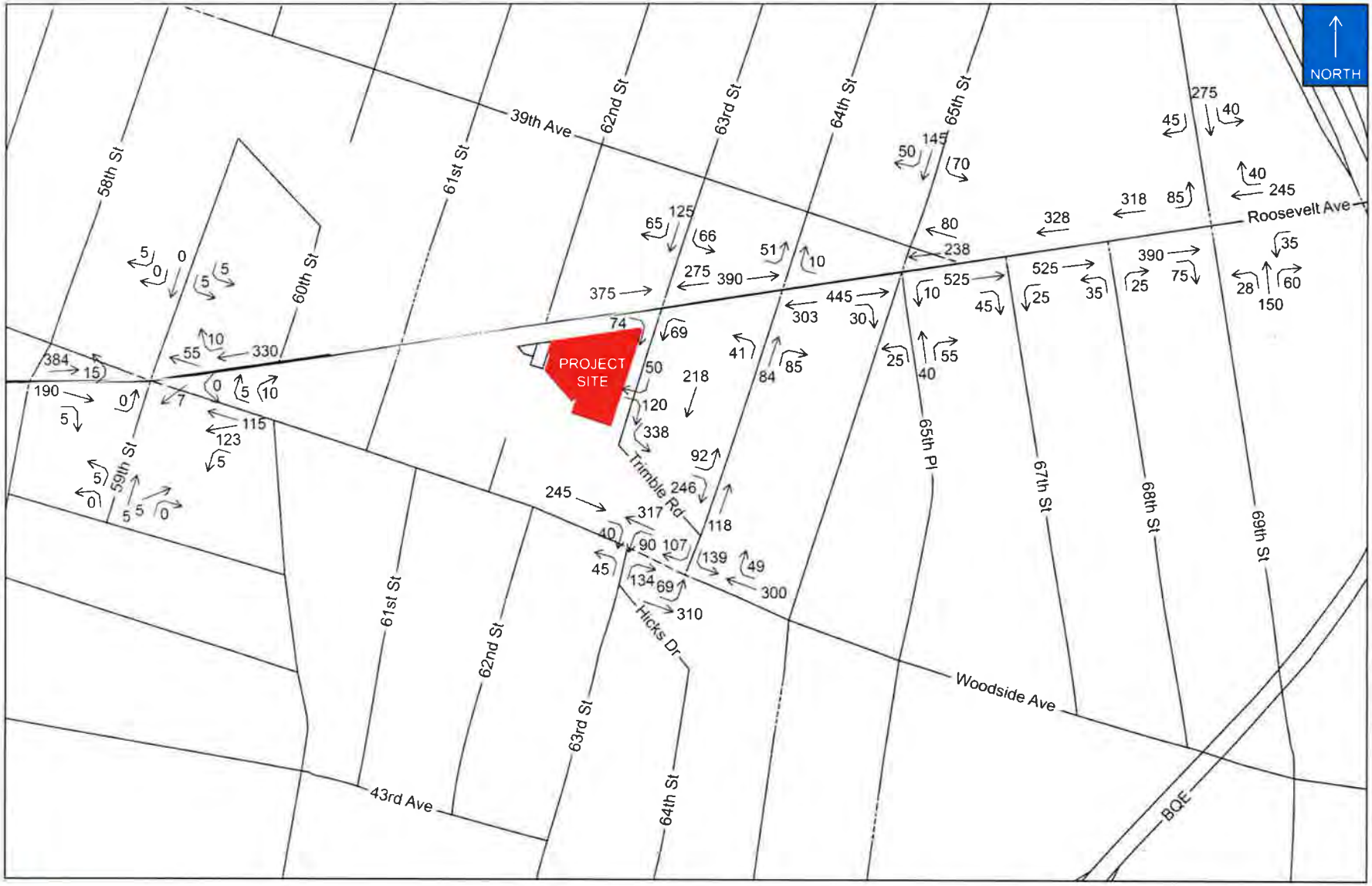
Project Site
62-04 Roosevelt Ave

2023 Build Traffic Volumes
AM Peak Hour
Figure 15



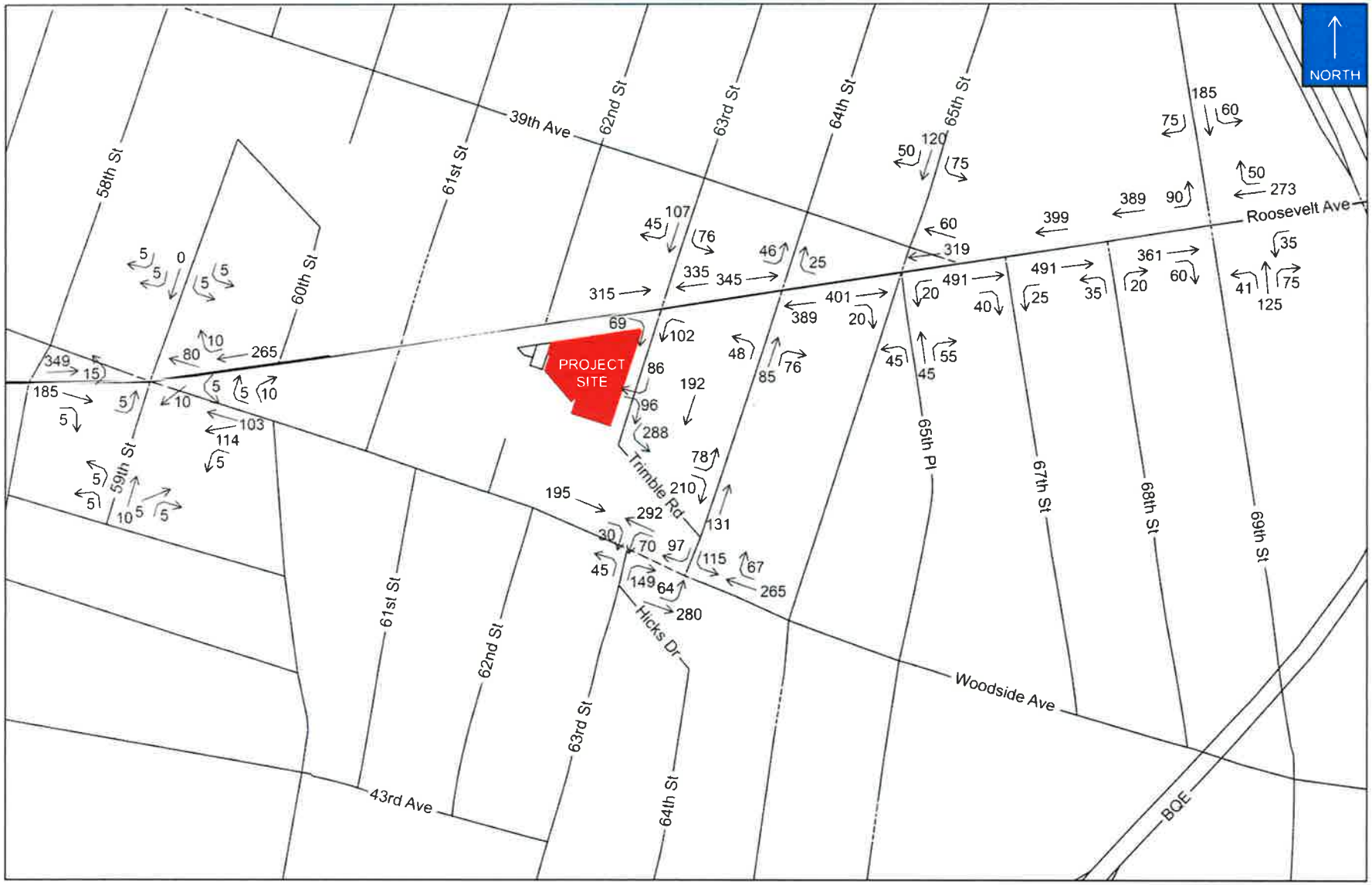
Project Site
62-04 Roosevelt Ave

2023 Build Traffic Volumes
Weekday Midday Peak Hour
Figure 16



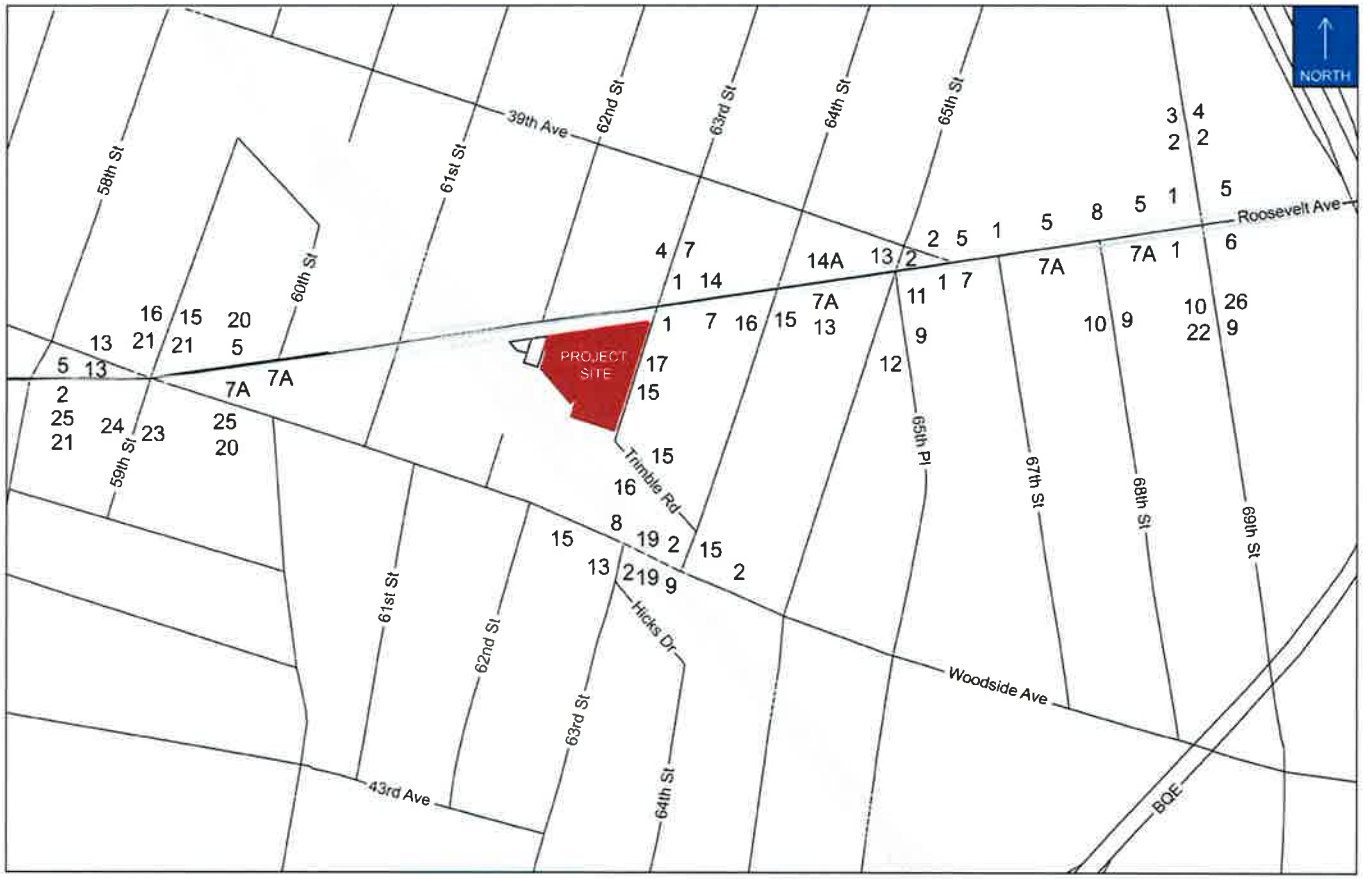
Project Site
62-04 Roosevelt Ave

2023 Build Traffic Volumes
PM Peak Hour
Figure 17



Project Site
62-04 Roosevelt Ave

2023 Build Traffic Volumes
Saturday Peak Hour
Figure 18



Projected Sites
62-04 Roosevelt Ave

On-Street Parking Regulations
Figure 19

2): No Standing Anytime

Table 16

2018 Existing Conditions Level of Service (LOS) Analysis-Signalized and Unsignalized Intersections

Intersection & Approach	AM Peak Hour				Midday Peak Hour			
	Lane Group	V/C Ratio	Delay (Sec.)	LOS	Lane Group	V/C Ratio	Delay (Sec.	LOS
Signallized Intersections								
Roosevelt Avenue and 69th Street								
Eastbound	LTR	0.33	11.4	B	LTR	0.29	10.9	B
Westbound	LTR	0.33	11.1	B	LTR	0.19	9.8	A
Northbound	LTR	0.35	35.1	D	LTR	0.31	34.4	C
Southbound	LTR	0.45	36.7	D	LTR	0.42	36.4	D
Roosevelt Avenue and 65th Street								
Eastbound	TR	0.17	9.7	A	TR	0.2	9.9	A
Westbound	LT	0.23	10.2	B	LTR	0.12	9.2	A
Northbound	LTR	0.32	35.3	D	LTR	0.25	34.2	C
Southbound	LTR	0.43	37.5	D	LTR	0.34	35.4	D
Roosevelt Avenue and 64th Street								
Eastbound	LT	0.18	9.8	A	LT	0.22	10.2	B
Westbound	TR	0.27	10.5	B	TR	0.15	9.5	A
Northbound	LTR	0.13	31.6	C	LTR	0.13	31.6	C
Roosevelt Avenue and 63rd Street								
Eastbound	TR	0.16	9.6	A	TR	0.2	9.9	A
Westbound	LT	0.3	10.8	B	LT	0.17	9.7	A
Southbound	LTR	0.23	32.9	C	LTR	0.18	32.2	C
Roosevelt Ave/Woodside Ave/59th Street								
Eastbound	LTR	0.18	5.9	A	LTR	0.21	6.1	A
Westbound	LTR	0.19	9.3	A	LTR	0.13	8.9	A
Northbound	LTR	0.33	38	D	LTR	0.07	28.1	C
Southbound	LTR	0	27.2	C	LTR	0.07	28.1	C
Woodside Avenue and 63rd Street								
Eastbound	TR	0.09	5.6	**A**	TR	0.1	5.7	**A**
Westbound	LT	0.29	6.8	**A**	LTR	0.21	6.2	**A**
Northbound	LR	0.42	22.1	**C**	LR	0.25	19.5	**B**
Unsignalized Intersection								
Roosevelt Avenue and 67th Street								
Westbound	LT	0.04	10	B	LT	0.03	10	B
Roosevelt Avenue and 68th Street								
Northbound	L	0.11	19.5	C	L	0.06	16.8	C
	R	0.05	11.5	B	R	0.04	11.5	B
Trimble Road and 64th Street								
Eastbound	L	0.02	9.1	A	L	0.02	9.1	A
	R	0.11	8.8	A	R	0.12	8.8	A
Woodside Avenue and 64th Street								
Eastbound	LT	0.03	8.3	A	LT	0.03	8.1	A
Southbound	LR	0.19	12.4	B	LR	0.21	12.7	B

Table 16 Continued)

2018 Existing Conditions Level of Service (LOS) Analysis-Signalized and Unsignalized Intersections

Intersection & Approach	PM Peak Hour				Saturday Peak Hour			
	Lane Group	V/C Ratio	Delay (Sec.)	LOS	Lane Group	V/C Ratio	Delay (Sec.	LOS
Signallized Intersections								
Roosevelt Avenue and 69th Street								
Eastbound	LTR	0.39	12	B	LTR	0.37	11.8	B
Westbound	LTR	0.21	10	B	LTR	0.22	10.1	B
Northbound	LTR	0.39	35.7	D	LTR	0.41	36.3	D
Southbound	LTR	0.55	38.9	D	LTR	0.54	39.1	D
Roosevelt Avenue and 65th Street								
Eastbound	TR	0.26	10.5	B	TR	0.23	10.2	B
Westbound	LT	0.12	9.3	A	LTR	0.16	9.6	A
Northbound	LTR	0.34	35.7	D	LTR	0.45	38.8	D
Southbound	LTR	0.63	43.4	D	LTR	0.62	43.3	D
Roosevelt Avenue and 64th Street								
Eastbound	LT	0.32	11.2	B	LT	0.29	10.8	B
Westbound	TR	0.16	9.6	A	TR	0.21	10	A
Northbound	LTR	0.15	31.9	C	LTR	0.15	31.9	C
Roosevelt Avenue and 63rd Street								
Eastbound	TR	0.27	10.6	B	TR	0.23	10.1	B
Westbound	LT	0.19	9.9	A	LT	0.24	10.3	B
Southbound	LTR	0.3	33.9	C	LTR	0.25	33.2	C
Roosevelt Ave/Woodside Ave/59th Street								
Eastbound	LTR	0.35	7	A	LTR	0.31	6.8	A
Westbound	LTR	0.16	9	A	LTR	0.15	9	A
Northbound	LTR	0.06	28	C	LTR	0.12	28.9	C
Southbound	LTR	0.08	28.4	C	LTR	0.1	28.8	C
Woodside Avenue and 63rd Street								
Eastbound	TR	0.18	6	**A**	TR	0.14	5.8	**A**
Westbound	LT	0.28	6.7	**A**	LTR	0.24	6.4	**A**
Northbound	LR	0.42	22.2	**C**	LR	0.47	23	**C**
Unsignalized Intersection								
Roosevelt Avenue and 67th Street								
Westbound	LT	0.04	10.9	B	LT	0.04	10.7	B
Roosevelt Avenue and 68th Street								
Northbound	L	0.14	20.8	C	L	0.14	20.8	C
	R	0.05	12.2	B	R	0.04	12	B
Trimble Road and 64th Street								
Eastbound	L	0.02	9.3	A	L	0.02	9.3	A
	R	0.18	9.1	A	R	0.15	9	A
Woodside Avenue and 64th Street								
Eastbound	LT	0.05	8.2	A	LT	0.04	8.1	A
Southbound	LR	0.38	16.7	C	LR	0.29	14.3	B

Table 17

2023 No-BuildConditions Level of Service (LOS) Analysis-Signalized and Unsignalized Intersections

Intersection & Approach	AM Peak Hour				Midday Peak Hour			
	Lane Group	V/C Ratio	Delay (Sec.)	LOS	Lane Group	V/C Ratio	Delay (Sec.	LOS
Signallized Intersections								
Roosevelt Avenue and 69th Street								
Eastbound	LTR	0.34	11.5	B	LTR	0.3	10.9	B
Westbound	LTR	0.33	11.2	B	LTR	0.19	9.8	A
Northbound	LTR	0.36	35.2	D	LTR	0.31	34.4	C
Southbound	LTR	0.46	36.8	D	LTR	0.43	36.5	D
Roosevelt Avenue and 65th Street								
Eastbound	TR	0.17	9.7	A	TR	0.2	9.9	A
Westbound	LT	0.24	10.2	B	LTR	0.12	9.2	A
Northbound	LTR	0.32	35.3	D	LTR	0.25	34.2	C
Southbound	LTR	0.43	37.5	D	LTR	0.34	35.4	D
Roosevelt Avenue and 64th Street								
Eastbound	LT	0.19	9.8	A	LT	0.23	10.2	B
Westbound	TR	0.28	10.6	B	TR	0.15	9.5	A
Northbound	LTR	0.13	31.6	C	LTR	0.13	31.6	C
Roosevelt Avenue and 63rd Street								
Eastbound	TR	0.17	9.6	A	TR	0.21	10	A
Westbound	LT	0.31	10.9	B	LT	0.17	9.7	A
Southbound	LTR	0.23	32.9	C	LTR	0.18	32.2	C
Roosevelt Ave/Woodside Ave/59th Street								
Eastbound	LTR	0.18	5.9	A	LTR	0.22	6.1	A
Westbound	LTR	0.2	9.3	A	LTR	0.13	8.9	A
Northbound	LTR	0.33	38	D	LTR	0.07	28.1	C
Southbound	LTR	0	27.2	C	LTR	0.07	28.1	C
Woodside Avenue and 63rd Street								
Eastbound	TR	0.09	5.6	**A**	TR	0.11	5.7	**A**
Westbound	LT	0.29	6.8	**A**	LTR	0.21	6.3	**A**
Northbound	LR	0.42	22.1	**C**	LR	0.25	19.5	**B**
Unsignalized Intersection								
Roosevelt Avenue and 67th Street								
Westbound	LT	0.04	10	B	LT	0.03	10.1	B
Roosevelt Avenue and 68th Street								
Northbound	L	0.12	19.8	C	L	0.07	17	C
	R	0.06	11.6	B	R	0.04	11.5	B
Trimble Road and 64th Street								
Eastbound	L	0.02	9.1	A	L	0.02	9.1	A
	R	0.11	8.8	A	R	0.12	8.8	A
Woodside Avenue and 64th Street								
Eastbound	LT	0.03	8.3	A	LT	0.03	8.1	A
Southbound	LR	0.19	12.4	B	LR	0.21	12.7	B

Table 17 (Continued)

2023 No-Build Conditions Level of Service (LOS) Analysis-Signalized and Unsignalized Intersections

Intersection & Approach	PM Peak Hour				Saturday Peak Hour			
	Lane Group	V/C Ratio	Delay (Sec.)	LOS	Lane Group	V/C Ratio	Delay (Sec.)	LOS
Signallized Intersections								
Roosevelt Avenue and 69th Street								
Eastbound	LTR	0.4	12.1	B	LTR	0.38	11.9	B
Westbound	LTR	0.21	10.1	B	LTR	0.23	10.2	B
Northbound	LTR	0.39	35.8	D	LTR	0.42	36.4	D
Southbound	LTR	0.56	39.1	D	LTR	0.55	39.3	D
Roosevelt Avenue and 65th Street								
Eastbound	TR	0.27	10.5	B	TR	0.23	10.2	B
Westbound	LT	0.12	9.3	A	LTR	0.17	9.6	A
Northbound	LTR	0.34	35.8	D	LTR	0.45	38.9	D
Southbound	LTR	0.64	43.9	D	LTR	0.63	43.6	D
Roosevelt Avenue and 64th Street								
Eastbound	LT	0.33	11.3	B	LT	0.29	10.9	B
Westbound	TR	0.16	9.6	A	TR	0.21	10	A
Northbound	LTR	0.15	31.9	C	LTR	0.15	31.9	C
Roosevelt Avenue and 63rd Street								
Eastbound	TR	0.28	10.6	B	TR	0.23	10.2	B
Westbound	LT	0.2	9.9	A	LT	0.24	10.3	B
Southbound	LTR	0.31	34	C	LTR	0.26	33.3	C
Roosevelt Ave/Woodside Ave/59th Street								
Eastbound	LTR	0.35	7.1	A	LTR	0.32	6.8	A
Westbound	LTR	0.16	9.1	A	LTR	0.15	9	A
Northbound	LTR	0.06	28	C	LTR	0.12	28.9	C
Southbound	LTR	0.08	28.4	C	LTR	0.1	28.8	C
Woodside Avenue and 63rd Street								
Eastbound	TR	0.18	6.1	**A**	TR	0.14	5.9	**A**
Westbound	LT	0.28	6.8	**A**	LTR	0.24	6.5	**A**
Northbound	LR	0.42	22.2	**C**	LR	0.47	23	**C**
Unsignalized Intersection								
Roosevelt Avenue and 67th Street								
Westbound	LT	0.04	10.9	B	LT	0.04	10.7	B
Roosevelt Avenue and 68th Street								
Northbound	L	0.15	21.1	C	L	0.15	21.1	C
	R	0.05	12.3	B	R	0.04	12	B
Trimble Road and 64th Street								
Eastbound	L	0.02	9.3	A	L	0.02	9.3	A
	R	0.18	9.1	A	R	0.16	9	A
Woodside Avenue and 64th Street								
Eastbound	LT	0.05	8.3	A	LT	0.04	8.2	A
Southbound	LR	0.4	17.2	C	LR	0.31	14.6	B

Table 18

2023 BuildConditions Level of Service (LOS) Analysis-Signalized and Unsignalized Intersections

Intersection & Approach	AM Peak Hour				Midday Peak Hour			
	Lane Group	V/C Ratio	Delay (Sec.)	LOS	Lane Group	V/C Ratio	Delay (Sec.	LOS
Signallized Intersections								
Roosevelt Avenue and 69th Street								
Eastbound	LTR	0,39	12.1	B	LTR	0.36	11.7	B
Westbound	LTR	0.37	11.6	B	LTR	0.24	10.3	B
Northbound	LTR	0.38	35.7	D	LTR	0.34	34.9	C
Southbound	LTR	0.46	36.8	D	LTR	0.43	36.5	D
Roosevelt Avenue and 65th Street								
Eastbound	TR	0.21	10	A	TR	0.25	10.4	B
Westbound	LT	0.28	10.6	B	LTR	0.17	9.6	A
Northbound	LTR	0.32	35.3	D	LTR	0.25	34.2	C
Southbound	LTR	0.43	37.5	D	LTR	0.34	35.4	D
Roosevelt Avenue and 64th Street								
Eastbound	LT	0.2	9.9	A	LT	0.25	10.4	B
Westbound	TR	0.32	11	B	TR	0.2	9.9	A
Northbound	LTR	0.26	33.3	C	LTR	0.33	34.4	C
Roosevelt Avenue and 63rd Street								
Eastbound	TR	0.18	9.8	A	TR	0.22	10.1	B
Westbound	LT	0.42	12.3	B	DefL	0.33	12.5	B
					TR	0.27	10.9	B
Southbound	LTR	0.26	33.3	C	LTR	0.24	33	C
Roosevelt Ave/Woodside Ave/59th Street								
Eastbound	LTR	0.2	6	A	LTR	0.23	6.2	A
Westbound	LTR	0.22	9.4	A	LTR	0.16	9.1	A
Northbound	LTR	0.33	38	D	LTR	0.07	28.1	C
Southbound	LTR	0	27.2	C	LTR	0.07	28.1	C
Woodside Avenue and 63rd Street								
Eastbound	TR	0.09	5.6	**A**	TR	0.11	5.7	**A**
Westbound	LT	0.31	6.9	**A**	LTR	0.24	6.4	**A**
Northbound	LR	0.5	23.7	**C**	LR	0.36	21	**C**
Unsignalized Intersection								
Roosevelt Avenue and 67th Street								
Westbound	LT	0.05	10.3	B	LT	0.03	10.5	B
Roosevelt Avenue and 68th Street								
Northbound	L	0.13	22.2	C	L	0.08	19.9	C
	R	0.06	11.8	B	R	0.04	11.9	B
Trimble Road and 64th Street								
Eastbound	L	0.09	9.7	A	L	0.14	10.1	B
	R	0.16	9	A	R	0.2	9.2	A
Woodside Avenue and 64th Street								
Eastbound	LT	0.06	8.4	A	LT	0.06	8.2	A
Southbound	LR	0.3	14.3	B	LR	0.39	15.7	C

Table 18 (Continued)

2023 Build Conditions Level of Service (LOS) Analysis-Signalized and Unsignalized Intersections

Intersection & Approach	PM Peak Hour				Saturday Peak Hour			
	Lane Group	V/C Ratio	Delay (Sec.)	LOS	Lane Group	V/C Ratio	Delay (Sec.)	LOS
Signallized Intersections								
Roosevelt Avenue and 69th Street								
Eastbound	LTR	0,44	12.7	B	LTR	0.42	12.5	B
Westbound	LTR	0.21	10.1	B	LTR	0.26	10.5	B
Northbound	LTR	0.39	35.8	D	LTR	0.44	36.9	D
Southbound	LTR	0.56	39.1	D	LTR	0.55	39.3	D
Roosevelt Avenue and 65th Street								
Eastbound	TR	0.31	10.9	B	TR	0.27	10.5	B
Westbound	LT	0.14	9.4	A	LTR	0.2	9.9	A
Northbound	LTR	0.34	35.8	D	LTR	0.45	38.9	D
Southbound	LTR	0.65	44.2	D	LTR	0.63	43.6	D
Roosevelt Avenue and 64th Street								
Eastbound	LT	0.34	11.4	B	LT	0.31	11.1	B
Westbound	TR	0.19	9.8	A	TR	0.27	10.5	B
Northbound	LTR	0.3	34	C	LTR	0.29	33.8	C
Roosevelt Avenue and 63rd Street								
Eastbound	TR	0.29	10.7	B	TR	0.25	10.3	B
Westbound	LT	0.27	10.7	B	LT	0.35	11.5	B
Southbound	LTR	0.33	34.4	C	LTR	0.29	33.7	C
Roosevelt Ave/Woodside Ave/59th Street								
Eastbound	LTR	0.37	7.3	A	LTR	0.33	6.9	A
Westbound	LTR	0.19	9.2	A	LTR	0.18	9.2	A
Northbound	LTR	0.06	28	C	LTR	0.12	28.9	C
Southbound	LTR	0.08	28.4	C	LTR	0.1	28.8	C
Woodside Avenue and 63rd Street								
Eastbound	TR	0.18	6.1	**A**	TR	0.14	5.9	**A**
Westbound	LT	0.31	6.9	**A**	LTR	0.27	6.6	**A**
Northbound	LR	0.48	23.3	**C**	LR	0.54	24.7	**C**
Unsignalized Intersection								
Roosevelt Avenue and 67th Street								
Westbound	LT	0.05	11.3	B	LT	0.04	11	B
Roosevelt Avenue and 68th Street								
Northbound	L	0.17	23.9	C	L	0.17	23.7	C
	R	0.05	12.6	B	R	0.04	12.3	B
Trimble Road and 64th Street								
Eastbound	L	0.13	9.9	A	L	0.11	9.9	A
	R	0.25	9.5	A	R	0.22	9.3	A
Woodside Avenue and 64th Street								
Eastbound	LT	0.07	8.3	A	LT	0.06	8.3	A
Southbound	LR	0.57	22.2	C	LR	0.45	17.7	C

Attachment D

NYC Department of Environmental Protection Correspondence

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

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September 25, 2018

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

Re: Roosevelt Avenue Rezoning
Block 1294, Lots 55, 56, 58, 60, 68, 73 and 76
CEQR # 77DCP466Q

Dear Mr. Katz:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the August 2018 Environmental Assessment Statement (EAS) and the June 2018 Phase I Environmental Site Assessment (Phase I) prepared by Environmental Studies Corporation, on behalf of VS PBS Venture 1, LLC and Mare Nostrum Elements, Inc. (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment and zoning text amendment from the New York City Department of City Planning (DCP) to change the zoning district on the southwest corner of Roosevelt Avenue and 63rd Street (rezoning area) in the Woodside neighborhood of Queens Community District 2. The proposed actions would modify an R6 district with a C1-4 overlay measuring 100 feet deep from Roosevelt Avenue to a C4-4 zoning district. The applicant also seeks a zoning text amendment to designate the rezoning area as a Mandatory Inclusionary Housing area. Scenario 1 of the proposed actions would facilitate the development of a new 13-story mixed-use building on Lots 58, 60, 68 and 73 (Projected Development Site 1) to include 181,912 gross square feet (gsf) of residential space, 77,594 gsf of commercial space, and 8,013 gsf of community facility space. Accessory parking would be provided in the building cellar. Lots 58, 60, 68 and 73 are currently improved with one and two-story buildings. Block 1294, Lots 55, p/o 56 and 76 would be affected by the proposed actions but are not under the applicant's control. Lot 76 is owned and operated by the Long Island Railroad and is not anticipated for redevelopment in the future with the proposed actions. Under Scenario 1, Block 1294, Lot 55 and p/o 56 (Projected Development Site 2) would consist of a 13-story mixed-use building to contain 14,443 gsf of residential space, 1,189 gsf of commercial space, and 500 gsf of community facility space. Scenario 2 for Projected Development Site 1 would consist of a 12-story mixed-use building to contain 87,589 gsf of commercial space and 169,687 gsf of community facility space. Accessory parking would be provided in the building cellar. Scenario 2 for Projected Development Site 2 would consist of a 13-story mixed-use building to contain 4,381 gsf of commercial space, and 11,751 gsf of community facility space.

Block 1294, Lots 58, 60, 68, and 73

The June 2018 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including retail stores, a custom architectural metal and glass window frame and façade manufacturing company, manufacturer of medals, medallions, trophies and other novelty items, a movie theater, a restaurant, a dry cleaner, industrial lift truck sales and service companies, printers, railroad tracks, an auto sales and service garage, a tool and die manufacturer, an electronics manufacturer, etc. Based on the age of the subject buildings, asbestos containing materials and lead based paints could be present in the on-site structures. Regulatory databases identified 9 spills within 1/8 mile; 9 underground storage tank sites and 53 aboveground storage tank sites within 1/4 mile; and 46 leaking storage tank sites and 1 brownfield site within 1/2 mile of the project site.

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

Projected Development Site 1: Block 1294, Lots 58, 60, 68, and 73 (Sites under the control or ownership of the applicant) and Projected Development Site 2: Block 1294, Lots 55 and 56 (Sites not under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP concurs with the EAS recommendation that an (E) designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for Block 1294, Lots 55, 56, 58, 60, 68, and 73. The (E) designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Block 1294, Lot 76

- The EAS recommends an (E) designation for hazardous materials for Block 1294, Lot 76. However, since Block 1294, Lot 76 is not anticipated to be redeveloped as a result of the proposed actions, it is not necessary to place an (E) designation for this site.

Future correspondence and submittals related to this project should include the following CEQR # **77DCP466Q**. If you have any questions, you may contact me at (718) 595-4358.

Sincerely,

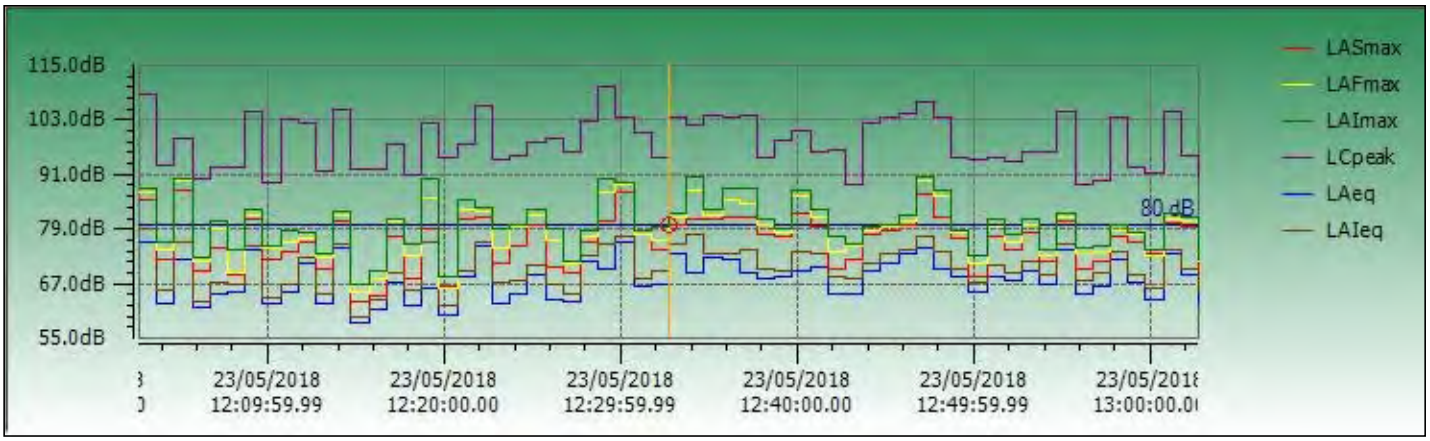
Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard; T. Estesen; M. Wimbish; R. Dobruskin – DCP; O. Abinader – DCP
M. Bertini – OER

Attachment E

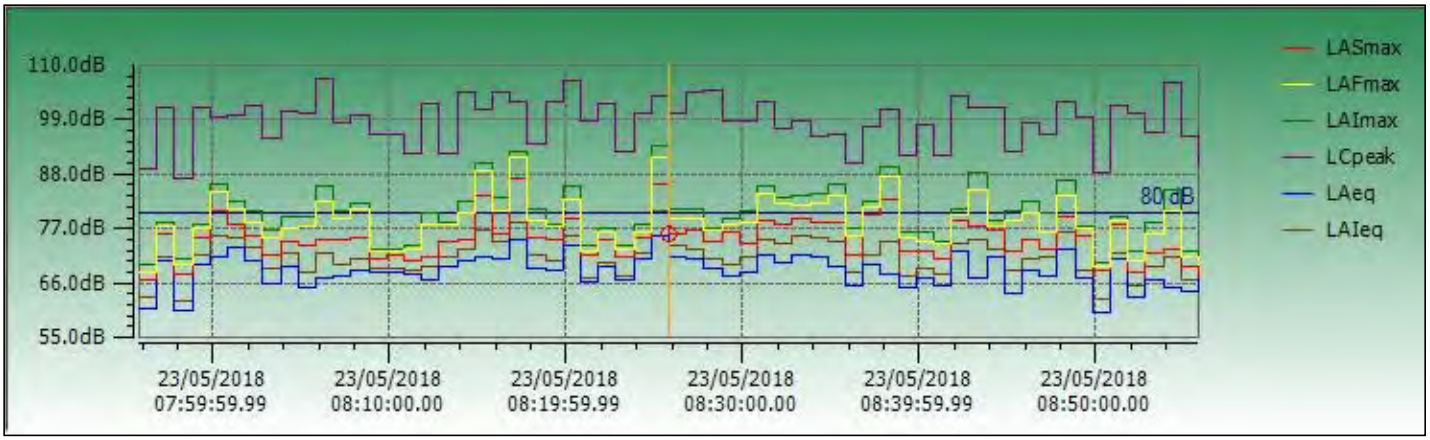
Noise Attachments

Instrument Model	CEL-633C		
LAImin with Time	54.4 dB (5/23/2018 12:31:16 PM)	Calibration (After) Date	5/23/2018 1:06:46 PM
LCpeak	110.2 dB	Calibration (Before) Date	5/23/2018 12:02:09 PM
LCpeak with Time	110.2 dB (5/23/2018 12:29:25 PM)	Calibration (Before) Offset	12.4
LAE	105.8 dB	Calibration (Before) SPL	114 dB
LAIeq	72.6 dB	Calibration Drift	-0.4 dB
LCeq	81.3 dB	LAeq	70.2 dB
LCeq-LAeq	11.1 dB	LAF 10%	74 dB
Lepd(Projected)	70.2 dB	LAF 50%	63.5 dB
Lex8h(Projected)	70.2 dB	LAF 90%	58.5 dB
LZeq	83 dB	LAF 95%	57.5 dB
Lepd	61.2 dB	LAF variable%	56 dB
Lex8h	61.2 dB	Battery Low	No
Overload	No	Duration	01:00:18 HH:MM:SS
Pause Duration	00:00:00 HH:MM:SS	End Date & Time	5/23/2018 1:03:02 PM
Response	Random	Run Number	4
Result	Cumulative	Serial Number	5044720
LAFmax	89.8 dB	Start Date & Time	5/23/2018 12:02:44 PM
LAFmax with Time	89.8 dB (5/23/2018 12:05:31 PM)	Site	Unallocated
LAFmin	53.8 dB	Location	Unallocated
LAFmin with Time	53.8 dB (5/23/2018 12:04:21 PM)	Person	Unallocated
LAImin	54.4 dB	Process	Unallocated
LAImax with Time	90.6 dB (5/23/2018 12:34:18 PM)		
LAImax	90.6 dB		
Notes			



Instrument Model	CEL-633C		
LAImin with Time	53.0 dB (5/23/2018 8:50:42 AM)	Calibration (After) Date	5/23/2018 9:00:37 AM
LCpeak	107.1 dB	Calibration (Before) Date	5/23/2018 7:47:37 AM

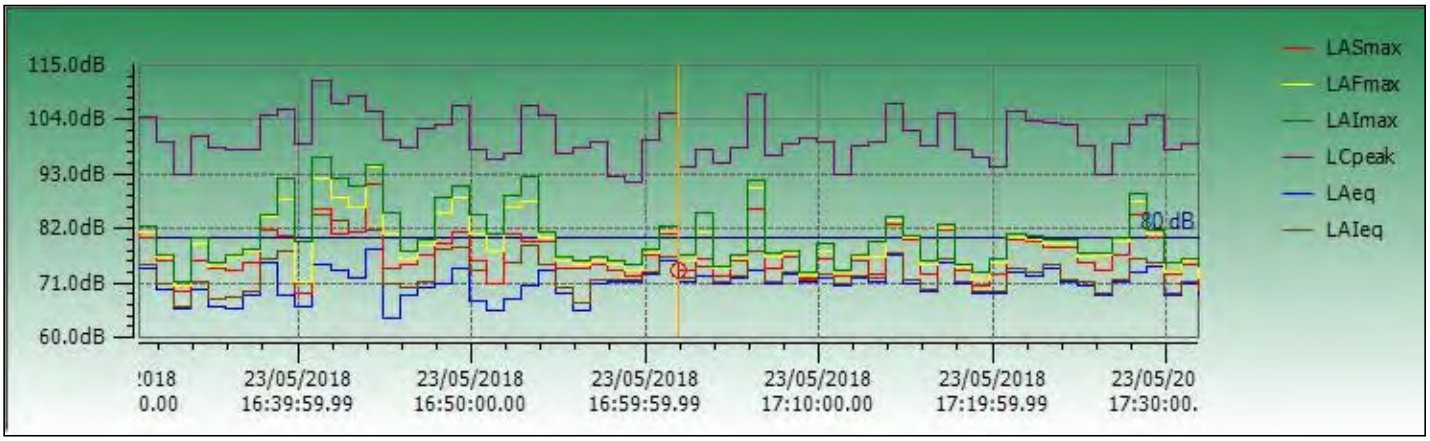
LCpeak with Time	107.1 dB (5/23/2018 8:06:08 AM)	Calibration (Before) Offset	12.6
LAE	105.1 dB	Calibration (Before) SPL	114 dB
LAleq	72.7 dB	Calibration Drift	-0.4 dB
LCeq	81.1 dB	LAeq	69.6 dB
LCeq-LAeq	11.5 dB	LAF 10%	73.5 dB
Lepd(Projected)	69.6 dB	LAF 50%	66.5 dB
Lex8h(Projected)	69.6 dB	LAF 90%	60.5 dB
LZeq	82.8 dB	LAF 95%	59 dB
Lepd	60.6 dB	LAF variable%	56 dB
Lex8h	60.6 dB	Battery Low	No
Overload	No	Duration	01:00:03 HH:MM:SS
Pause Duration	00:00:00 HH:MM:SS	End Date & Time	5/23/2018 8:55:52 AM
Response	Free Field	Run Number	1
Result	Cumulative	Serial Number	5044720
LAFmax	91.6 dB	Start Date & Time	5/23/2018 7:55:49 AM
LAFmax with Time	91.6 dB (5/23/2018 8:16:54 AM)	Site	Unallocated
LAFmin	52.1 dB	Location	Unallocated
LAFmin with Time	52.1 dB (5/23/2018 8:54:24 AM)	Person	Unallocated
LAImin	53 dB	Process	Unallocated
LAImax with Time	93.8 dB (5/23/2018 8:24:50 AM)		
LAImax	93.8 dB		
Notes			



Instrument Model	**CEL-633C**

LAImin with Time	57.2 dB (5/23/2018 4:35:21 PM)	Calibration (After) Date	5/23/2018 5:32:58 PM
LCpeak	112 dB	Calibration (Before) Date	5/23/2018 4:28:51 PM
LCpeak with Time	112.0 dB (5/23/2018 4:41:46 PM)	Calibration (Before) Offset	12.6
LAE	107.5 dB	Calibration (Before) SPL	114 dB
LAleq	75.2 dB	Calibration Drift	-0.2 dB
LCeq	83.4 dB	LAeq	71.8 dB

LCeq-LAeq	11.6 dB	LAF 10%	74.5 dB
Lepd(Projected)	71.8 dB	LAF 50%	69.5 dB
Lex8h(Projected)	71.8 dB	LAF 90%	61.5 dB
LZeq	85.3 dB	LAF 95%	60 dB
Lepd	62.8 dB	LAF variable%	59 dB
Lex8h	62.8 dB	Battery Low	No
Overload	No	Duration	01:01:06 HH:MM:SS
Pause Duration	00:00:00 HH:MM:SS	End Date & Time	5/23/2018 5:31:58 PM
Response	Random	Run Number	5
Result	Cumulative	Serial Number	5044720
LAFmax	94.4 dB	Start Date & Time	5/23/2018 4:30:52 PM
LAFmax with Time	94.4 dB (5/23/2018 4:44:08 PM)	Site	Unallocated
LAFmin	56.8 dB	Location	Unallocated
LAFmin with Time	56.8 dB (5/23/2018 4:31:37 PM)	Person	Unallocated
LAImin	57.2 dB	Process	Unallocated
LAImax with Time	96.6 dB (5/23/2018 4:41:46 PM)		
LAImax	96.6 dB		
Notes			



Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**				
Serial Number	1274486	LAS	10%	77 dB	Result
LASmax	84.1 dB	LAS	50%	65 dB	
LASmin	56.4 dB	LAS	90%	59 dB	
Start Date & Time	10/29/2019 12:00:04 PM	Calibration (Before) Date		10/29/2019 11:58:13 AM	
Duration	01:00:04 HH:MM:SS	Calibration (After) Date		10/29/2019 1:00:33 PM	
LAeq	72.5 dB	Calibration Drift		0.1 dB	
End Date & Time	10/29/2019 1:00:08 PM	Battery Low		No	
Notes					

Instrument Model	**CEL-633C**			
Serial Number	1274486	LAS 10%	81.5 dB	Result
LASmax	89.8 dB	LAS 50%	72 dB	
LASmin	57.2 dB	LAS 90%	63 dB	
Start Date & Time	10/29/2019 7:30:01 AM	Calibration (Before) Date	10/29/2019 7:19:54 AM	
Duration	01:00:02 HH:MM:SS	Calibration (After) Date	10/29/2019 8:35:46 AM	
LAeq	77.2 dB	Calibration Drift	0.2 dB	
End Date & Time	10/29/2019 8:30:03 AM	Battery Low	No	
Notes				

Instrument Model	**CEL-633C**			
Serial Number	1274486	LAS 10%	77.5 dB	Result
LASmax	85.2 dB	LAS 50%	65.5 dB	
LASmin	55.7 dB	LAS 90%	58 dB	
Start Date & Time	10/29/2019 4:30:05 PM	Calibration (Before) Date	10/29/2019 4:29:15 PM	
Duration	01:00:05 HH:MM:SS	Calibration (After) Date	10/29/2019 5:30:39 PM	
LAeq	72.6 dB	Calibration Drift	0.0 dB	
End Date & Time	10/29/2019 5:30:10 PM	Battery Low	No	
Notes				