

**ENVIRONMENTAL ASSESSMENT STATEMENT
AND
SUPPLEMENTAL REPORT**

for the

**Proposed
38th Street Astoria Rezoning**

PREPARED BY:

**ENVIRONMENTAL STUDIES CORPORATION
55 WATER MILL ROAD
GREAT NECK, NY 11021**

APRIL 2019



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 38th Street Astoria Rezoning

3. Reference Numbers

CEQR REFERENCE NUMBER (to be assigned by lead agency)
08DCP045Q

BSA REFERENCE NUMBER (if applicable)

ULURP REFERENCE NUMBER (if applicable)
N180037ZRQ; 180036ZMQ

OTHER REFERENCE NUMBER(S) (if applicable)
(e.g., legislative intro, CAPA) P2012Q0022

4a. Lead Agency Information

NAME OF LEAD AGENCY

NYC Department of City Planning

NAME OF LEAD AGENCY CONTACT PERSON

Olga Abinader

4b. Applicant Information

NAME OF APPLICANT

Domenico and Maria Pinto

NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON

John Strauss for Hiram A. Rothkrug, Environmental Studies Corp.

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5. Project Description

The Applicant, Domenico and Maria Pinto, is proposing the following actions on a portion of Block 645 bounded by 37th and 38th Streets between 34th and 35th Avenues in the Astoria neighborhood of Queens, Community District 1:

- A zoning map amendment to the New York City Zoning Map, section 9b, to rezone the Project Area as follows: Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30, 31, 126, 127, and 131 from M1-1 to R6A; and Block 545, Lots 30-38, 40, 42, 44-47, and 131 from M1-1 to R6A/C1-3; and

- A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (“MIH”) Areas for Community District 1, Queens to establish an MIH Area coterminous with the Project Area.

The proposed Zoning Map Change and Zoning Text Amendment would facilitate a proposal by the Applicant to construct a new seven-story, cellar and sub-cellar mixed-use UG2 residential and UG6 commercial building totaling 95,065 gross square feet (gsf) in size on the Applicant owned property (Block 645, Lots 36, 37, 38, 40, and 42). The building would include 62 dwelling units, 13 to 16 units of which would be affordable to lower income residents, 2,645 gsf of retail space, and 80 parking spaces accessory to the residential uses within a 38,926 gsf parking garage. In order to develop the proposed project, the Applicant owned property would be merged into a single zoning lot and the existing development would be demolished. The remainder of the Proposed Project Area, Block 645, Lots 15, 17, 19, 20, 22-25, 28, 44-47, 126, 127, and 131, is not proposed for development and is not controlled by the Applicant. See attached Project Description.

Project Location

BOROUGH Queens

COMMUNITY DISTRICT(S) 1

STREET ADDRESS 34-10/12/20/22/24 38th Street
(Applicant Site)

TAX BLOCK(S) AND LOT(S) Block 645, Lots 1, 36-38, 40, 42
(Applicant site); Block 645, Lots 15, 17, 19, 20, 22-25, 28, 44-47,

ZIP CODE 11101

126, 127, and 131 (Non-Applicant properties)	
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Block bounded by 37 th & 38 th Streets and 34 th & 35 th Avenues	
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1, M1-5	ZONING SECTIONAL MAP NUMBER 9b
6. Required Actions or Approvals (check all that apply)	
City Planning Commission: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNIFORM LAND USE REVIEW PROCEDURE (ULURP)	
<input type="checkbox"/> CITY MAP AMENDMENT <input checked="" type="checkbox"/> ZONING MAP AMENDMENT <input checked="" type="checkbox"/> ZONING TEXT AMENDMENT <input type="checkbox"/> SITE SELECTION—PUBLIC FACILITY <input type="checkbox"/> HOUSING PLAN & PROJECT <input type="checkbox"/> SPECIAL PERMIT (if appropriate, specify type: <input type="checkbox"/> modification; <input type="checkbox"/> renewal; <input type="checkbox"/> other); EXPIRATION DATE:	<input type="checkbox"/> ZONING CERTIFICATION <input type="checkbox"/> ZONING AUTHORIZATION <input type="checkbox"/> ACQUISITION—REAL PROPERTY <input type="checkbox"/> DISPOSITION—REAL PROPERTY <input type="checkbox"/> OTHER, explain: <input type="checkbox"/> CONCESSION <input type="checkbox"/> UDAAP <input type="checkbox"/> REVOCABLE CONSENT <input type="checkbox"/> FRANCHISE
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION ZR 23-933, Appendix F; ZR 19b	
Board of Standards and Appeals: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input type="checkbox"/> VARIANCE (use) <input type="checkbox"/> VARIANCE (bulk) <input type="checkbox"/> SPECIAL PERMIT (if appropriate, specify type: <input type="checkbox"/> modification; <input type="checkbox"/> renewal; <input type="checkbox"/> other); EXPIRATION DATE:	
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION	
Department of Environmental Protection: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If "yes," specify:	
Other City Approvals Subject to CEQR (check all that apply)	
<input type="checkbox"/> LEGISLATION <input type="checkbox"/> RULEMAKING <input type="checkbox"/> CONSTRUCTION OF PUBLIC FACILITIES <input type="checkbox"/> 384(b)(4) APPROVAL <input type="checkbox"/> OTHER, explain:	<input type="checkbox"/> FUNDING OF CONSTRUCTION, specify: <input type="checkbox"/> POLICY OR PLAN, specify: <input type="checkbox"/> FUNDING OF PROGRAMS, specify: <input type="checkbox"/> PERMITS, specify:
Other City Approvals Not Subject to CEQR (check all that apply)	
<input type="checkbox"/> PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)	<input type="checkbox"/> LANDMARKS PRESERVATION COMMISSION APPROVAL <input checked="" type="checkbox"/> OTHER, explain: Dept. of Buildings building permit
State or Federal Actions/Approvals/Funding: <input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.	
<input checked="" type="checkbox"/> SITE LOCATION MAP <input checked="" type="checkbox"/> TAX MAP <input checked="" type="checkbox"/> PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP	<input checked="" type="checkbox"/> ZONING MAP <input type="checkbox"/> FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S) <input checked="" type="checkbox"/> SANBORN OR OTHER LAND USE MAP
Physical Setting (both developed and undeveloped areas)	
Total directly affected area (sq. ft.): 67,918 (Project Area); 15,603 (Proposed Development Site)	Waterbody area (sq. ft) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 65,918 SF	Other, describe (sq. ft.): 2,000 SF landscaped yards
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): 95,065	
NUMBER OF BUILDINGS: 1	GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 95,065
HEIGHT OF EACH BUILDING (ft.): 75'	NUMBER OF STORIES OF EACH BUILDING: 7
Does the proposed project involve changes in zoning on one or more sites? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
If "yes," specify: The total square feet owned or controlled by the applicant: 15,603	
The total square feet not owned or controlled by the applicant: 52,315	
Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):	

AREA OF TEMPORARY DISTURBANCE: sq. ft. (width x length) VOLUME OF DISTURBANCE: 312,570 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 15,603 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.)	53,494	2,645	0	0
Type (e.g., retail, office, school)	62 units	retail	0	0

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 151 NUMBER OF ADDITIONAL WORKERS: 10

Provide a brief explanation of how these numbers were determined: Residents: Based on average household size of 2.44 residents per dwelling unit (2010 Census data); Workers: assumes 3 workers per 1,000 gsf retail space, .04 workers per dwelling unit (62 units)

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: The existing condition is expected to remain on all lots within the Project Area with the exception of Block 645, Lot 15.

9. Analysis Year [CEQR Technical Manual Chapter 2](#)

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2021 (Proposed Development Site); 2026 (Projected Development Sites 2-5)

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

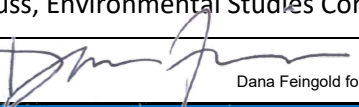
INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Is there the potential to affect an applicable public policy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," complete the Consistency Assessment Form .		
2. SOCIOECONOMIC CONDITIONS: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of 200 or more residential units?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Generate a net increase of 200,000 or more square feet of commercial space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Directly displace more than 500 residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Directly displace more than 100 employees?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Affect conditions in a specific industry?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. COMMUNITY FACILITIES: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Indirect Effects		
o 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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o Health Care Facilities and Fire/Police Protection: Would the project result in the introduction of a sizeable new neighborhood?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. OPEN SPACE: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Is the project located within an under-served area in the Bronx , Brooklyn , Manhattan , Queens , or Staten Island ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Is the project located within a well-served area in the Bronx , Brooklyn , Manhattan , Queens , or Staten Island ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(d) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

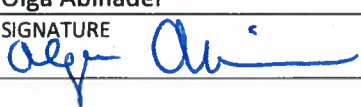
	YES	NO
5. SHADOWS: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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 attached report.		
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Has a Phase I Environmental Site Assessment been performed for the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See attached report.		
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
(f) Would the proposed project be located in an area that is partially sewer or currently unsewered?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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): 3,174		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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): 7,349,803		
(b) Would the proposed project affect the transmission or generation of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. TRANSPORTATION: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16 ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? <i>**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.</i>	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>
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 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Stationary Sources: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17 ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17 ? (Attach graph as needed) See attached report.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Does the proposed project involve multiple buildings on the project site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. GREENHOUSE GAS EMISSIONS: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project fundamentally change the City's solid waste management system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18 ?	<input type="checkbox"/>	<input type="checkbox"/>
16. NOISE: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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;	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
Hazardous Materials; Noise?		
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20 , "Public Health." Attach a preliminary analysis, if necessary.		
18. NEIGHBORHOOD CHARACTER: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21 , "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. CONSTRUCTION: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o The operation of several pieces of diesel equipment in a single location at peak construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Closure of a community facility or disruption in its services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Activities within 400 feet of a historic or cultural resource?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o Disturbance of a site containing or adjacent to a site containing natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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 attached report.		
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 John Strauss, Environmental Studies Corp.	DATE April 19, 2019	
SIGNATURE  Dana Feingold for John Strauss		
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.	Potentially Significant Adverse Impact	
	YES	NO
IMPACT CATEGORY		
Land Use, Zoning, and Public Policy	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Socioeconomic Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Community Facilities and Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Open Space	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Shadows	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Historic and Cultural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Urban Design/Visual Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Natural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hazardous Materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water and Sewer Infrastructure	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Solid Waste and Sanitation Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transportation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Greenhouse Gas Emissions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Health	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Neighborhood Character	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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? 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Check determination to be issued by the lead agency:		
<input type="checkbox"/> 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 <i>Positive Declaration</i> and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).		
<input type="checkbox"/> Conditional Negative Declaration: A <i>Conditional Negative Declaration</i> (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.		
<input checked="" type="checkbox"/> 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 <i>Negative Declaration</i> . The <i>Negative Declaration</i> 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 Acting Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning, acting on behalf of the City Planning Commission	
NAME Olga Abinader	DATE April 19, 2019	
SIGNATURE 		

NEGATIVE DECLARATION (Use of this form is optional)

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 project. Based on a review of information about the project contained in this environmental assessment statement and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed project 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 project: and related actions sought before the City Planning Commission would have no significant effect on the quality of the environment. Reasons supporting this Determination are noted below.

1. Hazardous Materials, Air Quality and Noise

An (E) Designation (E-533) for hazardous materials, air quality and noise has been incorporated into the proposed actions. Refer to "Determination of Significance Appendix: (E) Designation" for a list of the sites affected by the proposed (E) designation and the applicable (E) designation requirements. The analysis for hazardous materials, air quality, and noise concluded that with the (E) designation requirements in place, the proposed actions would not result in significant adverse impacts.

2. Land Use, Zoning and Public Policy

The EAS includes a Land Use, Zoning and Public Policy analysis which concludes that the proposed actions would facilitate development of underutilized property in order to provide market rate and affordable housing which is representative of the general development trend in the area which has resulted in the conversion of underutilized and vacant lands to residential and commercial uses. The EAS further concludes that the proposed actions could alter existing development patterns in the future, but would be in compliance with City policies to encourage the development of new housing, especially affordable housing, in underutilized areas of the City. The proposed actions would not cause any impacts with respect to zoning or public policy.

3. Open Space

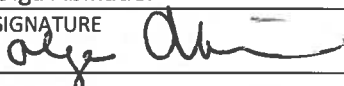
A detailed analysis of the effects of the proposed actions on Open Space was conducted and it was determined that no significant impacts on any open space resources. A significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than five percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction as little as one percent may be considered significant.

The total residential study area open space ratio would decrease by 0.9% percent or 0.02084 acres per 1,000 residents; the active residential study area open space ratio would decrease by 0.9% percent or 0.00014 acres per 1,000 residents; and the passive residential study area open space ratio would decrease by 0.9% to 0.00005 acres per 1,000 residents. The total, active, and passive open space ratios would remain below the City's guideline ratios of 2.5 acres, 2.0 acres, and 0.5 acres (respectively) per 1,000 residents. However, the proposed actions would not result in significant direct impacts on any open space, and would result in negligible decrease in the future with the action open space ratios within the project study areas. The proposed actions would not result in any adverse shadow, air, noise, or other environmental impacts that would affect the usefulness of any study area open space. In addition, there are two playgrounds outside the 1/2 mile study area, a community garden within the study area which was not included in the quantitative analysis, and a private residential open space on Projected Development Site 1 which would help satisfy some of the active and passive open space needs. The analysis concludes that the proposed actions would not result in any significant adverse impact on Open Space resources.

4. Urban Design and Visual Resources

The Urban Design and Visual Resources analysis concludes that the proposed actions would not have the potential to affect urban design and visual resources in the study area. The proposed actions would facilitate the development of residential and local retail uses and accessory parking on 5 parcels which would represent a transitional building form relative to surrounding development patterns. The proposed project would not block view corridors or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. It is therefore concluded that the proposed actions would not result in significant adverse impacts on Urban Design and Visual Resources.

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).

TITLE Acting Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning, acting on behalf of the City Planning Commission
NAME Olga Abinader	DATE 4/19/2019
SIGNATURE 	

TITLE Chair, Department of City Planning	
NAME Marisa Lago	DATE 4/22/2019
SIGNATURE	

Appendix 1: (E) Designations

To ensure that there would be no significant adverse hazardous material, air quality or noise impacts associated with the proposed project, an E designation (E-533) will be placed on the project sites as follows:

The E designation requirements related to hazardous materials and air quality would apply to:

Projected Development Site 1:

Block 645, Lots 36, 37, 38, 40, 42

Projected Development Site 2:

Block 645, Lot 15

Projected Development Site 3:

Block 645, Lot 44, 45, 46, 47

Projected Development Site 4:

Block 645, Lot 25, 28, 30, 31, 126, 127

Projected Development Site 5:

Block 645, Lot 32, 33, 34, 35, 131

Hazardous Material

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

Air Quality

Block 645, Lots: 36, 37, 38, 40, 42 (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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 88 feet above grade, and at least 40 feet from the lot line facing 37th Street to avoid any potential significant air quality impacts.

Block 645, Lot 15 (Projected Development Site 2): 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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 48 feet above grade, and at least 40 feet from the lot line facing 38th Street to avoid any potential significant air quality impacts.

Block 645, Lots: 44, 45, 46, 47 (Projected Development Site 3): 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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 68 feet above grade, and at least 40 feet from the lot line facing 37th Street, and at least 58 feet from the lot line facing 34th Avenue to avoid any potential significant air quality impacts.

Block 645, Lots: 25, 28, 30, 31, 126, 127 (Projected Development Site 4): 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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 68 feet above grade, and at least 40 feet from the lot line facing 38th Street to avoid any potential significant air quality impacts.

Block 645, Lots: 32, 33, 34, 35, 131 (Projected Development Site 5): 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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 68 feet above grade, and at least 40 feet from the lot line facing 37th Street, and at least 55 feet from the Projected Development Site 5 lot line facing 35th Avenue to avoid any potential significant air quality impacts.

The E designation requirements related to noise would apply to:

Projected Development Site 4:
Block 645, Lot 25, 28, 30, 31, 126, 127

Noise

In order to ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on façades facing 34th Avenue and 37th Street in order to maintain an interior noise level of 45 dB(A). To maintain a closed window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning.

38TH STREET ASTORIA REZONING

Reasonable Worst-Case Development Scenario

INTRODUCTION-

The Applicant, Domenico and Maria Pinto, is proposing the following actions on Block 645 bounded by 37th and 38th Streets between 34th and 35th Avenues in the Astoria neighborhood of Queens, Community District 1:

- A zoning map amendment to the New York City Zoning Map, section 9b, to rezone the Project Area as follows: Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30, 31, 126, 127, and 131 from M1-1 to R6A; and Block 645, Lots 30-38, 40, 42, 44-47, and 131 from M1-1 to R6A/C1-3; and
- A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (“MIH”) Areas for Community District 1, Queens to establish an MIH Area coterminous with the Project Area. Per MIH guidelines, 25% or 30% - Option 1 or Option 2 - will be mapped over the Project Area. Under Option 1, 25% of residential floor area must be for affordable housing units for residents with incomes averaging 60% AMI (\$46,620 for a family of three) with at least 10% of the residential floor area affordable at or below 40% AMI. Under Option 2, 30% of residential floor area must be for affordable housing units for residents with incomes averaging 80% AMI (\$62,150 for a family of three). The Applicant has chosen Option 2 under the MIH Text Amendment provisions applicable to the Proposed Actions. The final Option applicable to the Proposed Actions will be determined by the City Planning Commission (CPC) and the City Council.

The proposed Zoning Map Change and Zoning Text Amendment would facilitate a proposal by the Applicant to construct a new seven-story, cellar and sub-cellar mixed-use UG2 residential and UG6 commercial building totaling 95,065 gross square feet (gsf) in size on the Applicant owned property (Block 645, Lots 36, 37, 38, 40, and 42). The building would include 62 dwelling units, 13 (under Option 1) to 16 (Under Option 2) units of which would be affordable to lower income residents, 2,645 gsf of retail space, and 80 parking spaces accessory to the residential uses within a 38,926 gsf parking garage. In order to develop the proposed project, the Applicant owned property would be merged into a single zoning lot and the existing development would be demolished. The remainder of the Proposed Project Area, Block 645, Lots 15, 17, 19, 20, 22-25, 28, 44-47, 126, 127, and 131, is not proposed for development and is not controlled by the Applicant.

ACTIONS NECESSARY TO FACILITATE THE PROPOSAL

The Applicant, Domenico and Maria Pinto, proposes the following actions in the Astoria neighborhood of Queens, Community District 1:

- I. A zoning map amendment to ZR section 9b to change the existing zoning on Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30, 31, 126, 127, and 131 from M1-1 to R6A; on Block 545, Lots 30-38, 40, 42, 44-47, and 131 from M1-1 to R6A/C1-3; and
- II. A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (“MIH”) Areas for Community District 1, Queens to establish an MIH Area coterminous with the Project Area.

DESCRIPTION OF THE SURROUNDING AREA

The Project Area is located in the southeastern portion of the Astoria neighborhood of Queens, Community District 1 approximately two blocks north of Northern Boulevard. The 400-foot radius study area is predominantly developed with relatively small one- to four-story, one- and two-family and multiple dwellings to the north of the Project Area; considerably larger one- to five-story buildings housing warehouses, commercial uses, auto related facilities, and multi-family residences to the east; large one- to three-story buildings and parking facilities primarily associated with Paramount Studios to the west; and a mixture of large one- to four-story commercial and educational related buildings to the south of the site. Many of the businesses in the surrounding area, which is home to Paramount Studios, are related to the production of television and film. The business activity of the studio, and the surrounding residential uses, has also resulted in a number of commercial and community facility uses locating in larger loft buildings originally designed for manufacturing use.

DESCRIPTION OF THE PROPOSED PROJECT AREA

The Project Area is located within an M1-1 zoning district. M1 districts permit Use Groups 4-14, 16, and 17. The M1-1 district allows for up to 1.0 Floor Area Ratio (FAR) of manufacturing and commercial use and 2.4 FAR of UG 4 community facility use. The Project Area consists of Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30-38, 40, 42, 44-47, 126, 127, and 131, totaling approximately 67,918 square feet of land area. Of this total land area, 15,603 square feet belongs to the Proposed Development Site that is owned by the Applicant. Non-Applicant owned sites total 52,315 square feet in area. The following discussion provides a description of the Applicant owned Proposed Development Site, and the Non-Applicant owned sites.

Proposed Development Site (Applicant-Owned)

Block 645, Lots 36, 37, 38, 40, and 42 – The combined lot area is 15,603 square feet and the 5 contiguous lots are developed with approximately 10,871 gsf of floor area including 6 dwelling units and two garage buildings. The combined lots are developed to an FAR of 0.7 relative to the maximum permitted commercial FAR of 1.0. The component lots are developed as follows:

- Block 645, Lot 36 - 2,586 square foot lot developed with a two-story, 1,350 gsf building containing two dwelling units.
- Block 645, Lot 37 - 2,583 square foot lot developed with a one-story 2,500 gsf garage occupied by a storage company.
- Block 645, Lot 38 - 5,175 square foot lot developed with a two-story 2,324 gsf building containing two dwelling units.
- Block 645, Lot 40 - 2,668 square foot lot developed with a two-story 2,112 gsf building containing two dwelling units.
- Block 645, Lot 42 - 2,589 square foot lot developed with a one-story 2,585 gsf garage used for storage by a sidewalk food vendor company.

Non-Applicant Owned Sites

Block 645, Lot 15 – The 5,000 square foot lot is developed with a one-story 5,000 square foot warehouse building occupied by a sign manufacturing business.

Block 645, Lot 17 – The 3,150 square foot lot is developed with a four-story, 9,000 gsf building containing eight rent-stabilized dwelling units.

Block 645, Lot 19 – The 3,100 square foot lot is developed with a four-story, 9,000 gsf building containing eight rent-stabilized dwelling units.

Block 645, Lot 20 – The 3,042 square foot lot is developed with a four-story, 9,000 gsf building containing eight rent-stabilized dwelling units.

Block 645, Lot 22 – The 3,045 square foot lot is developed with a four-story, 9,000 gsf building containing eight rent-stabilized dwelling units.

Block 645, Lot 23 – The 1,740 square foot lot is developed with a two-story, 2,640 gsf building containing two dwelling units.

Block 645, Lot 24 – The 3,095 square foot lot is developed with a four-story, 9,600 gsf building containing eight rent-stabilized dwelling units.

Block 645, Lot 25 – The 2,419 square foot lot is developed with a two-story, 3,288 gsf building containing two dwelling units.

Block 645, Lot 28 – The 1,161 square foot lot is developed with a three-story, 2,554 gsf building containing three dwelling units.

Block 645, Lot 30 – The 1,462 square foot lot is developed with a three-story, 2,860 gsf building containing three dwelling units.

Block 645, Lot 31 – The 1,333 square foot lot is developed with a three-story, 2,590 gsf building containing three dwelling units.

Block 645, Lot 32 – The 764 square foot lot is developed with a two-story, 1,436 gsf mixed-use building containing one dwelling unit and a 718 gsf retail store.

Block 645, Lot 33 – The 2,581 square foot lot is developed with a two-story, 2,736 gsf building containing two dwelling units.

Block 645, Lot 34 – The 2,581 square foot lot is developed with a two-story, 1,872 gsf building containing two dwelling units.

Block 645, Lot 35 – The 2,583 square foot lot is developed with a two-story, 1,920 gsf building containing two dwelling units.

Block 645, Lot 44 – The 2,500 square foot lot is developed with a two-story, 3,168 gsf building containing two dwelling units.

Block 645, Lot 45 – The 2,521 square foot lot is developed with a two-story, 3,168 gsf building containing two dwelling units.

Block 645, Lot 46 – The 2,521 square foot lot is developed with a two-story, 2,508 gsf building containing two dwelling units.

Block 645, Lot 47 – The 2,521 square foot lot is developed with a two-story, 2,508 gsf building containing two dwelling units.

Block 645, Lot 126 – The 2,208 square foot lot is developed with a three-story, 2,240 gsf building containing three dwelling units.

Block 645, Lot 127 – The 2,208 square foot lot is developed with a three-story, 2,240 gsf building containing three dwelling units.

Block 645, Lot 131 – The 780 square foot lot is developed with a two-story, 1,436 gsf mixed-use building containing one dwelling unit and a 718 gsf retail store.

Summary

Table 1 (below) presents a zoning summary of the above including the zoning lot size, the total development gsf and gsf by use, whether the existing use conforms with the R5 district use regulations; whether the existing development square footage conforms with the R5 district bulk maximum FAR regulations, and the ownership of each lot.

Block/Lot Nos.	Zoning Lot Size (SF)	Total GSF	Resid GSF	Com'l/ Man GSF	Conform (Use)	Compliance (Bulk- Max FAR, Exstg FAR)	Owner
15	5,000	5,000	0	5,000 manuf	Yes	Max M/C FAR 1.0; 1.0 Yes	CZ Realty Group LLC
17	3,150	9,000	9,000	0	No	Max M/C FAR 1.0; 2.86 No	Cynajko, R.
19	3,100	9,000	9,000	0	No	Max M/C FAR 1.0; 2.9 No	Mavrikos, A.
20	3,042	9,000	9,000	0	No	Max M/C FAR 1.0; 2.96 No	Blue Sky Entity, LLC
22	3,045	9,000	9,000	0	No	Max M/C FAR 1.0; 2.96 No	B & R Improvements
23	1,740	2,640	2,640	0	No	Max M/C FAR 1.0; 1.52 No	Blazevik, W.
24	3,095	9,600	9,600	0	No	Max M/C FAR 1.0; 3.1 No	Carmela, C.
25	2,419	3,288	3,288	0	No	Max M/C FAR 1.0; 1.36 No	Narine, K.
28	1,161	2,554	2,554	0	No	Max M/C FAR 1.0; 2.2 No	Kaloutzis Family Trust
30	1,462	2,860	2,860	0	No	Max M/C FAR 1.0; 1.96 No	Kostas, A.
31	1,333	2,590	2,590	0	No	Max M/C FAR 1.0; 1.94 No	Kraljic, J.
32	764	1,436	718	718 retail	Yes rtl/No resid	Max M/C FAR 1.0; 0.94 rtl Yes; 0.94 resid No	Chiare, A.
33	2,581	2,736	2,736	0	No	Max M/C FAR 1.0; 1.06 No	The Gregurovich Family
34	2,581	1,872	1,872	0	No	Max M/C FAR 1.0; 0.73 No	Ferrari Realty Corp.
35	2,583	1,920	1,920	0	No	Max M/C FAR 1.0; 0.74 No	Pantelis, B.
36	2,586	1,350	1,350	0	No	Max M/C FAR 1.0; 0.52 No	D. Pinto
37	2,583	2,500	0	2,500 storage	Yes	Max M/C FAR 1.0; 0.97 Yes	Empire MG Properties
38	5,175	2,324	2,324	0	No	Max M/C FAR 1.0; 0.45 No	D. Pinto
40	2,668	2,112	2,112	0	No	Max M/C FAR 1.0; 0.79 No	Empire MG Properties
42	2,589	2,585	0	2,585 storage	Yes	Max M/C FAR 1.0; 1.0 Yes	Empire MG Properties

44	2,500	3,168	3,168	0	No	Max M/C FAR 1.0; 1.27 No	Lauretano, A.
45	2,521	3,168	3,168	0	No	Max M/C FAR 1.0; 1.26 No	Rafiq, A.
46	2,521	2,508	2,508	0	No	Max M/C FAR 1.0; 0.99 No	Timal, V.
47	2,521	2,508	2,508	0	No	Max M/C FAR 1.0; 0.99 No	Baricevic, S.
126	2,208	2,240	2,240	0	No	Max M/C FAR 1.0; 1.01 No	Mastrogiacomo, D.
127	2,208	2,240	2,240	0	No	Max M/C FAR 1.0; 1.01 No	Bonelli, R.
131	780	1,436	718	718 retail	Yes rtl/No resid	Max M/C FAR 1.0; 0.92 rtl Yes; 0.92 resid No	Chiare, A. & M.
Total	67,918	100,635	89,114	11,521			

DESCRIPTION OF THE PROPOSED DEVELOPMENT

As stated above, the Applicant intends to rezone the Project Area as follows: the existing M1-1 zoning district on Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30, 31, 126, 127, and 131 to R6A; and the existing M1-1 district on Block 645, Lots 30-38, 40, 42, 44-47, and 131 to R6A/C1-3. The Applicant owned Proposed Development Site, Block 645, Lots 36, 37, 38, 40, and 42, would be rezoned to R6A/C1-3.

The R6A district is a contextual district in which the Quality Housing bulk regulations are mandatory. The permitted residential and community facility FAR is 3.0, but with the Mandatory Inclusionary Housing Program zoning bonus this can be increased to 3.6. R6A districts have a minimum/maximum building base height that ranges from 40 to 60 feet and a maximum building height of 70 feet. However, under the ZQA Text Amendment, the maximum building base height may increase to 65 feet and the maximum building height to 80 feet with non-qualifying ground floor or 85 feet with qualifying ground floor (8-stories). Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 8 floors. Off-street parking is required for 50 percent of the residential dwelling units, but is not required for affordable housing units within specified Transit Zones. Residential and community facility Use Groups 1-4 are permitted in the R6A district.

The C1-3 district is designed to accommodate the retail and personal service shops needed in residential neighborhoods. The C1-3 commercial overlay district permits commercial Use Groups 5 and 6, which includes local retail establishments, as well as residential and community facility Use Groups 1 through 4. It would allow a maximum commercial FAR of 2.0 in the proposed R6A district. The proposed C1-3 district requires one accessory parking space per 400 square foot of general retail or service floor area.

The Applicant proposes to clear the Proposed Development Site of existing development and develop the Site with a new seven-story, cellar and sub-cellar 95,065 gsf/56,139 zsf building which would reach a height of 75'. The building would contain 62 residential dwelling units including 13 to 16¹ income restricted units and 46 to 49 market rate units which would average approximately 839 square feet in size within approximately 52,000 gsf of floor area². Option 2 has been chosen under the MIH provisions applicable to the Proposed Actions. Under this

¹ 13 affordable units under MIH Option 1 and 16 affordable units under MIH 2. The details of the proposed development assume 16 affordable units and 46 market rate units as chosen by the Applicant.

² Excludes residential lobby and non-residential spaces including parking, mechanical spaces, and retail space.

option, 30% of the residential floor area must be for affordable housing units for residents with incomes averaging 80% of AMI which is \$62,150 per year for a family of three. The final decision on whether MIH Option 1 or Option 2 would apply to the Proposed Actions will be determined by the CPC and City Council as part of the approval of the project.

The building would contain 2,645 gsf of ground floor local retail space. No parking would be required or provided for the income restricted units, as the site is in a Transit Zone, or the local retail space in the building but 23 parking spaces would be required and provided for the 46 market rate units (50% parking required). Due to a parking shortage in the immediately surrounding area, a total of 80 parking spaces accessory to the residential uses would be provided in the building within a 38,926 gsf parking garage. Access to the parking would be provided via a curb cut on 38th Street. An outdoor recreational area for the residential tenants of the building would be provided on the top of the roof of the 7-story building and would measure approximately 1,853 square feet, which is 3.3% of the residential floor area of the development. The recreational area would include a passive recreational landscaped sitting area and a swimming pool.

The total proposed zoning floor area of 56,139 zsf on the 15,603 square foot Proposed Development Site represents an FAR of 3.6 comprised of a residential FAR of 3.43 and a commercial FAR of 0.17.

BUILD YEAR/PROJECT PHASING

Based on an estimated 12-month approval process and an 18-month construction period, it is anticipated that construction and occupancy on the Applicant's Proposed Development Site (Projected Development Site 1) would be completed by 2021. However, in order to accommodate the four additional sites that are projected to be developed as a result of the Proposed Actions, the Build Year has been extended for five more years until 2026.

PURPOSE AND NEED OF THE PROPOSED ACTIONS

The Proposed Actions would permit the development of approximately 62 new housing units, including 13 to 16 affordable units, and 2,645 gsf of local retail space in the Astoria neighborhood area of Queens on currently underutilized land. The Proposed Development Site (Projected Development Site 1) is within one block of three subway lines as well as several bus routes. It is in an area that already has substantial residential and commercial retail development, with which these uses would be totally consistent. The Proposed Actions are needed to allow the proposed residential uses to be developed, and to provide sufficient floor area for the project to be economically feasible.

The proposed new mixed-use residential/commercial building would be built pursuant to Quality Housing standards, insuring a better designed residential environment. The Applicant seeks to develop a portion of the zoning lot with affordable housing consistent with the standards of the Quality Housing Program as well as the Mandatory Inclusionary Housing (MIH) Program zoning regulations. The development of the building with affordable housing is consistent with the expressed desires of the City's current mayoral administration to substantially increase the amount of affordable housing, particularly in areas such as this with substantial mass transit access.

The Astoria housing market is emerging as an affordable market rental option that is within close proximity to excellent mass transit. In addition, there is a high demand for affordable

housing within this neighborhood of Queens. This portion of the Astoria neighborhood has a very mixed-use character. The manufacturing uses in this area include automotive uses (repair and storage), light manufacturing, and warehouses. Many of the businesses in the surrounding area, which is home to the Kaufman Astoria Studios, are related to the production of television and film. The business activity of the studio, and the surrounding residential uses, has also resulted in a number of commercial and community facility uses locating in larger loft buildings originally designed for manufacturing use. This includes several restaurants, schools, and office uses. Steinway Street is lined with continuous retail uses at the ground floor, and some residential and commercial uses above.

Proposed R6A and R6A/C1-3 Zoning Districts

The Applicant seeks to develop market rate and affordable housing consistent with the standards of the Quality Housing Program as well as the Mandatory Inclusionary Housing Program zoning regulations.

The rezoning of the existing M1-1 portion of the block to an R6A/C1-3 district and an R6A district is proposed for the following reasons. The existing M1-1 district mapped on the northern portion of Block 645 does not reflect the predominant use or bulk of the buildings in that area. This area is overwhelmingly residential and is improved upon with a mix of residential building types. Specifically, of the 27 lots located in the M1-1 portion of Block 645, 24 contain nonconforming residential uses. Of the three non-residential uses, two are part of Projected Development Site 1 and would not remain once the proposed building is constructed. The R6A district would serve as a transition between the greater bulk in the adjacent M1-5 district to the lesser bulk and lesser permitted uses in the R5 district to the north.

The C1-3 commercial overlay district is appropriate along the eastern half of the proposed R6A district (fronting on 38th Street) to reflect the commercial use on the eastern side of 38th Street and to facilitate the proposed mixed-use development. The C1-3 commercial overlay would allow the existing commercial uses in this area to legally remain and would accommodate the commercial floor area proposed to be included in Projected Development Site 1 controlled by the Applicant. Additional commercial development would also be anticipated on Projected Development Sites 5 and 6 which would be located within the commercial overlay.

Proposed Mandatory Inclusionary Housing Text Amendment

In order to qualify for the benefits of the MIH Program, the Projected Development Sites must also be designated a Mandatory Inclusionary Housing Area (MIHA) pursuant to ZR Section 23-90. The proposed text change would amend Appendix F of the Zoning Resolution to graphically delineate the Project Area as an MIHA.

The Applicant has reviewed the MIH options available for his property and has decided that the 30% affordable option at 80% of AMI (Option 2) is desirable for Projected Development Site 1. The affordable apartments generated through MIH would be permanently affordable, making them a long-term, sustainable source of affordable housing. Under Option 2, 30% of residential floor area must be for affordable housing units for residents with incomes averaging 80% AMI (\$62,150 per year for a family of three). These rents can be adjusted on an annual basis as approved by HDC/HPD as applicable. The final decision on whether MIH Option 1 or 2 would apply to the Proposed Actions will be determined by the CPC and City Council as part of the approval of the project.

NO-ACTION SCENARIO

Under the No-Action Scenario for the Project Build Year of 2026, it is assumed that the Applicant Owned Proposed Development Site 1 (Projected Development Site 1), identified as Block 645, Lots 36, 37, 38, 40 and 42 in Queens, would remain in its current condition. No changes would be made to the three existing two-family dwellings and two storage garages on Projected Development Site 1.

No new residential development would occur on the property under the property's existing M1-1 zoning as residential use is not permitted as-of-right in this manufacturing zoning district. No other development would occur on Projected Development Site 1 as the property is currently developed to an FAR of 0.7 relative to the maximum permitted commercial/manufacturing FAR of 1.0 (10,871 gsf of existing development divided by total lot area of 15,603). The property is therefore developed close to the maximum permitted commercial/manufacturing FAR, and no additional commercial/manufacturing development on the site would be likely. In addition, Projected Development Site 1 is currently partially developed with three residential dwellings which are not permitted to be enlarged as residential uses are not permitted in manufacturing districts.

A maximum community facility FAR of 2.4 would be permitted on the M1-1 zoned Projected Development Site 1. The parcel currently does not contain any community facility uses and it is not likely that such uses would be established on the property due to its existing residential development pattern. In addition, market conditions are not supportive of the development of new community facility uses on this parcel.

Under the No-Action Scenario for the Project Build Year of 2026, it is assumed that existing conditions would continue on the Non-Applicant Owned lots in the Project Area, identified as Block 645, Lots 17, 19, 20, 22-25, 28, 30-35, 44-47, 126, 127, and 131 in Queens. No new residential development would occur on any of the Non-Applicant Owned lots as the properties' existing M1-1 zoning do not permit residential uses as-of-right.

Projected Development Site 2 (Block 645, Lot 15), which is 5,000 sf in size and is zoned M1-1, is currently developed with a warehouse at an FAR of 1.0 relative to the permitted manufacturing/commercial FAR of 1.0. The current use could not be enlarged with additional manufacturing/commercial floor area. Projected Development Site 3 (Block 645, Lots 44-47), Projected Development Site 4 (Block 645, Lots 25, 28, 30, 31, 126, and 127), and Projected Development Site 5 (Block 645, Lots 32-35 and 131) are each developed in excess of the maximum permitted manufacturing/commercial FAR of 1.0 and therefore no additional manufacturing or commercial floor area would be permitted.

A maximum community facility FAR of 2.4 would be permitted on the lots zoned M1-1. None of these parcels currently contains any community facility uses and it is not likely that such uses would be established on these lots due to their existing residential, commercial, and manufacturing development pattern. In addition, market conditions are not supportive of the development of new community facility uses on these parcels.

No additional manufacturing or commercial development would occur on the properties zoned M1-1 (Block 645, Lots 17, 19, 20, and 22-24) as all these properties are developed in excess of the permitted manufacturing/commercial FAR of 1.0.

Summary

Under No-Action conditions, the 5 Projected Development Sites would be developed with 40,874 gsf of residential space for 39 dwelling units, and 11,521 gsf of commercial space.

WITH-ACTION SCENARIO

The With-Action Scenario reflects the proposed Zoning for Quality and Affordability (ZQA) and Mandatory Inclusionary Housing (MIH) Text Amendments. The With-Action Scenario analyzes residential buildings with affordable housing on all sites where future residential development would be feasible. The MIH 30% Option 1 (30% of residential floor area for residents with incomes averaging 80% AMI) has been chosen for all projected development sites. The final decision on whether MIH Option 1 or 2 would apply to the Proposed Actions will be determined by the CPC and City Council as part of the approval of the project.

Projected Development Sites

Applicant Owned

Projected Development Site 1 (Block 645, Lots 36, 37, 38, 40, and 42) – The proposed rezoning to R6A/C1-3 zoning districts on the Projected Development Site would limit the use and bulk of future development to generally match the proposed project. The Proposed Actions would rezone Projected Development Site 1 to an R6A/C1-3 district which would serve as a transition between the greater bulk in the adjacent M1-5 district on Projected Development Site 2 to the lesser bulk in the R5 district to the north of the Project Area. The C1-3 commercial overlay district is appropriate to reflect the commercial use on the eastern side of 38th Street and to facilitate the proposed mixed-use development on Projected Development Site 1.

The With-Action RWCDs would be the same as the proposed development. Typically, based on the standard average unit size of 1,000 gsf per dwelling unit, the approximately 52,000 square feet of habitable residential floor area in the building on Projected Development Site 1 would contain 52 dwelling units. However, as the proposed project has a smaller dwelling unit size and more units, it is more conservative to analyze that scenario. Therefore, under the With-Action Scenario, the building would contain 62 residential dwelling units on the second through seventh stories, including 13 (under MIH Option 1) to 16 (under MIH Option 2) income restricted units and 46 to 49 market rate units, and averaging approximately 839 square feet in size.

The With-Action Scenario for the Project Build Year of 2026 would entail the clearance of existing development and the construction on Projected Development Site 1 of a new seven-story, cellar and sub-cellar 95,065 gsf/56,139 zsf building. Although the Applicant's proposed project is for a 75-foot tall building, for conservative analysis purposes, a building height of 85 feet is assumed. The building would contain 62 residential dwelling units³ within approximately 52,000 gsf of floor area which would average approximately 839 gsf in size. 13 of the units would be affordable to lower income residents under the MIH 25% option (Option 1) and 16 of the units would be affordable to lower income residents under the MIH 30% option (Option 2). The remaining 70% to 75% or 46 to 49 of the units would be market rate. While the final decision of which Option would apply to the project will be determined by the CPC and

³ Excludes residential lobby and non-residential spaces including parking, mechanical spaces, and retail space.

the City Council, Option 2 has been chosen by the Applicant.

The building would also contain 2,645 gsf of ground floor local retail space. No parking would be required or provided for the income restricted units, as the site is in a Transit Zone, or the local retail space in the building but 23 parking spaces would be required for the 46 market rate units (50% parking required). Due to a shortage of parking in the area the building would provide 80 residential parking spaces within a 38,926 gsf parking garage. Access to the parking would be provided via a curb cut on 38th Street. An outdoor recreational area for the project's residential tenants would be provided on the top of the roof of the 7-story building and would measure approximately 1,853 square feet, which is 3.3% of the residential floor area of the development. The recreational area would include a passive recreational landscaped sitting area and a swimming pool.

Non-Applicant Owned

Lots identified as soft sites where potential development could occur in the future under the proposed rezoning share one or more of the following characteristics:

- soft sites are typically significantly larger than 3,000 square feet in size either as a single lot or multiple lots in common ownership,
- lots proposed to be zoned R6A are developed to less than 50% of the permitted FAR of 3.6 with the bonus for mandatory inclusionary housing,
- lots are not subject to any pending discretionary approvals from government agencies related to additional development⁴, and
- lots are not subject to government imposed restrictions including rent stabilization regulations.

The Non-Applicant Owned Projected Development Sites include the following:

Projected Development Site 2 (Block 645, Lot 15) – It is assumed that the existing 1-story, 5,000 gsf/zsf warehouse building on the 5,000 square foot lot would be demolished and an 18,390 gsf/ 18,000 zsf 4-story residential building would be constructed under the proposed R6A district FAR of 3.6 with the inclusionary housing bonus. The 18,390 gsf residential building would provide 18 dwelling units. 5 to 6 of the 18 dwelling units would be considered affordable under either Option 1 or Option 2, respectively. (The analysis assumes 6 affordable units.) The new building would total approximately 18,390 gsf/18,000 zsf (3.6 FAR) in size and would contain 4 stories reaching a height of 45 feet. The 6 parking spaces required for the 12 market rate units would be waived.

Projected Development Site 3 (Block 645, Lots 44-47) – It is assumed that lots 44, 45, 46, and 47 would be merged and the existing development on these lots would be demolished in order to construct a new building under the proposed R6A/C1-3 with an FAR of 3.6 with the inclusionary housing bonus. The existing development is comprised of four residential buildings, each of which contains two dwelling unit for a total of 8 residential units. The 10,018 square foot site is projected to be developed with a total of 37,147 gsf/36,065 zsf of floor area comprised of 4,450 gsf/4,320 zsf of ground floor commercial space and 32,697 gsf/31,745 zsf of residential floor area for 32 dwelling units. 8 to 10 of the 32 dwelling units would be considered affordable under either Option 1 or Option 2, respectively. (The analysis assumes 10 affordable

units.). The building would contain 6 stories reaching a height of 65 feet. No parking would be required or provided for the income restricted units on the site (per ZR Section 25-251) but 11 parking spaces would be required for 50% of the 22 market rate units (per ZR Section 25-23). The 14 parking spaces required for the commercial space would be waived as it is less than the 15 minimum spaces requirement.

Projected Development Site 4 (Block 645, Lots 25, 28, 30, 31, 126, and 127) – It is assumed that lots 25, 28, 30, 31, 126, and 127 would be merged and the existing development on these lots would be demolished in order to construct a new building under the proposed R6A with an FAR of 3.6 with the inclusionary housing bonus. The existing development is comprised of six residential buildings, each of which contains two or three dwelling unit for a total of 17 residential units. The 10,995 square foot site is projected to be developed with a total of 40,769 gsf/39,582 zsf of residential floor area for 41 dwelling units. 10 to 12 of the 41 dwelling units would be considered affordable under either Option 1 or Option 2, respectively. (The analysis assumes 12 affordable units.) The building would contain 6 stories reaching a height of 65 feet. No parking would be required or provided for the income restricted units on the site (per ZR Section 25-251) but 14 parking spaces would be required for 50% of the 29 market rate units (per ZR Section 25-23).

Projected Development Site 5 (Block 645, Lots 32-35 and 131) – It is assumed that lots 32-35 and 131 would be merged and the existing development on these lots would demolished in order to construct a new building under the proposed R6A/C1-3 with an FAR of 3.6 with the inclusionary housing bonus. The existing development is comprised of three residential buildings, each of which contains two dwelling units, and two mixed-use buildings which each contain one dwelling unit and one retail store for a total of 8 dwelling units and two retail stores. The 9,310 square foot site is projected to be developed with a total of 34,521 gsf/33,516 zsf of floor area comprised of 4,450 gsf/4,320 zsf of ground floor commercial space and 30,071 gsf/29,196 zsf of residential floor area for 30 dwelling units. 8 to 9 of the 30 dwelling units would be considered affordable under either Option 1 or Option 2, respectively. (The analysis assumes 9 affordable units.) The building would contain 6 stories reaching a height of 65 feet. No parking would be required or provided for the income restricted units on the site (per ZR Section 25-251) but 10 parking spaces would be required for 50% of the 21 market rate units (per ZR Section 25-23). The 14 parking spaces required for the commercial space would be waived as it is less than the 15 minimum spaces requirement.

Other Sites

Other Sites are sites where additional development would be allowed but which are not seen as Projected Development Sites by the project build year of 2026. Lots 17, 19, 20, 22, and 24 are excluded as soft sites on the basis of their built FAR, which exceeds 50% of the proposed FAR of 3.6 with inclusionary housing. Although Lot 23 is developed to an FAR of 1.52, which is less than 50% of the proposed permitted FAR of 3.6, it is not considered likely to be redeveloped given that it is a small intervening lot (1,740 sf) located between adjacent buildings with FARs of 2.96 on Lot 22 and 3.1 on Lot 24.

Summary

Under With-Action conditions the 5 Projected Development Sites would be developed with 175,421 gsf of residential space for 183 dwelling units (including 131 to 140 market rate and 43

to 52 affordable units), 11,545 gsf of commercial space, and 115 accessory residential parking spaces.

INCREMENT

Under No-Action conditions, the 5 Projected Development Sites would be developed with 40,874 gsf of residential space for 39 dwelling units, and 11,521 gsf of commercial space.

Under With-Action conditions the 5 Projected Development Sites would be developed with 175,421 gsf of residential space for 183 dwelling units (including 131 to 140 market rate and 43 to 52 affordable units), 11,545 gsf of commercial space, and 115 accessory residential parking spaces.

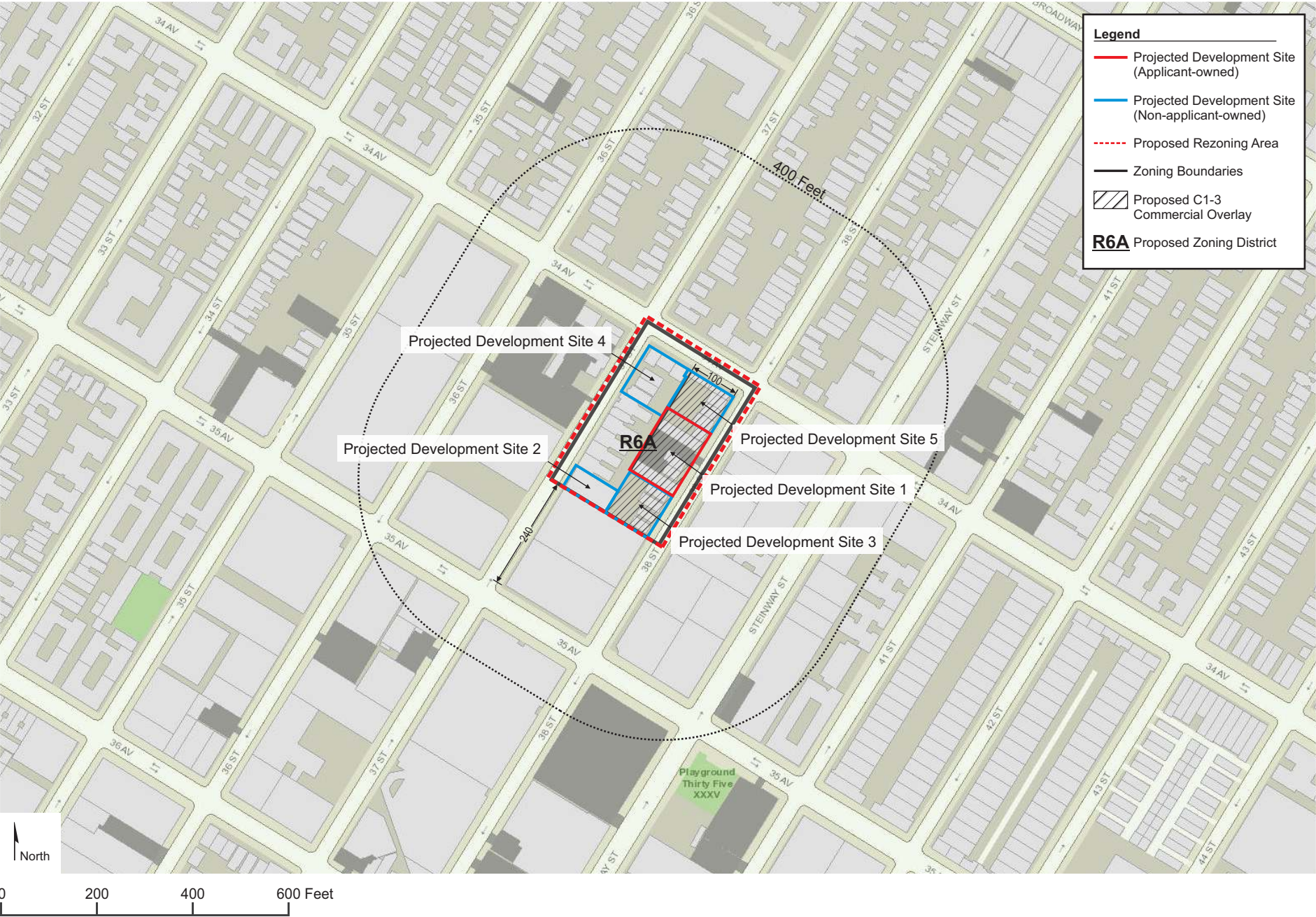
The increment between the No-Action and With-Action development scenarios would be 134,547 gsf of additional residential space for 144 additional dwelling units (including 92 to 101 market rate and 43 to 52 affordable units), 24 gsf of additional commercial floor area, and 115 new residential accessory parking spaces. In order to allow for the projected development, the following existing/no-action development would be demolished.

- Site 1: 5,786 gsf of residential floor area containing 6 dwelling units and 5,085 of garage/warehouse space
- Site 2: 5,000 gsf of warehouse space
- Site 3: 4 residential buildings comprised of 11,352 gsf of floor area and 8 dwelling units
- Site 4: 6 residential buildings comprised of 15,772 gsf of floor area and 17 dwelling units
- Site 5: 3 residential and 2 mixed-use buildings comprised of 7,964 gsf of residential floor area with 8 dwelling units and 1,436 gsf of commercial floor area

All the projected residential and commercial development would be new development as all existing dwelling units and commercial space on these sites would be removed. These changes are reflected in the increment numbers above. Table 2 below summarizes the No-Action and With-Action conditions for the 5 Projected Development Sites within the Project Area.

Table 2: No-Action and With-Action Summary of Projected Development Sites Within Project Area

		No-Action			With-Action						
Block 645/ Lot Nos./ (Site #)	Zoning Lot Size (SF)	Total GSF	Resid GSF/# of DU	Com'l/ M/Gar GSF	Total GSF	Resid GSF	Total DU/ Afford	Com'l GSF	Com Facil GSF	Pkg GSF/ Spcs	Increment
36, 37, 38, 40, 42 (Site 1)	15,603	10,871	5,786/6	5,085 (G)	95,065	53,494	62/13- 16	2,645	0	38,926 /80	+56 DUs, -2,440 C/G, +80 pkg
15 (Site 2)	5,000	5,000	0	5,000 (M)	18,390	18,390	18/5-6	0	0	0	+ 18 DUs, - 5,000 M
44-47 (Site 3)	10,018	11,352	11,352/8	0	37,147	32,697	32/8-10	4,450	0	11	+24 DUs, +4,450 C, +11 pkg
25, 28, 30, 31, 126, 127 (Site 4)	10,995	15,772	15,772/17	0	40,769	40,769	41/10- 12	0	0	14	+24 DUs, +14 pkg
32-35, 131 (Site 5)	9,310	9,400	7,964/8	1,436	34,521	30,071	30/8-9	4,450	0	10	+22 DUs, +3,014 C, +10 pkg
TOTAL	51,426	52,395	40,874/39	11,521	225,892	175,421	183/43- 52	11,545	0	38,926 /115	+ 144 DUs, + 24 C, +115 pkg





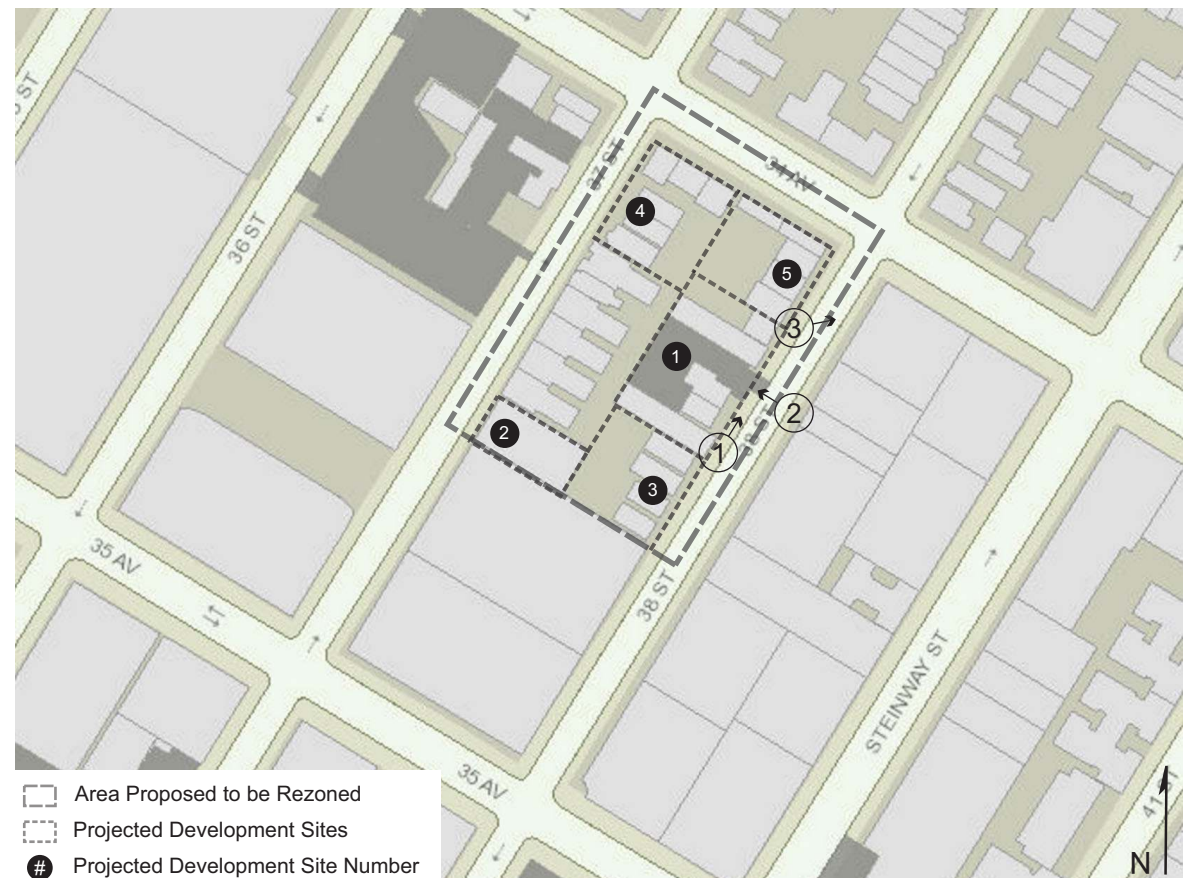
1. View of the sidewalk along the west side of 38th Street facing northeast (Site at left).



2. View of the Site facing northwest from 38th Street.



3. View of the east side of 38th Street facing east from the Site.





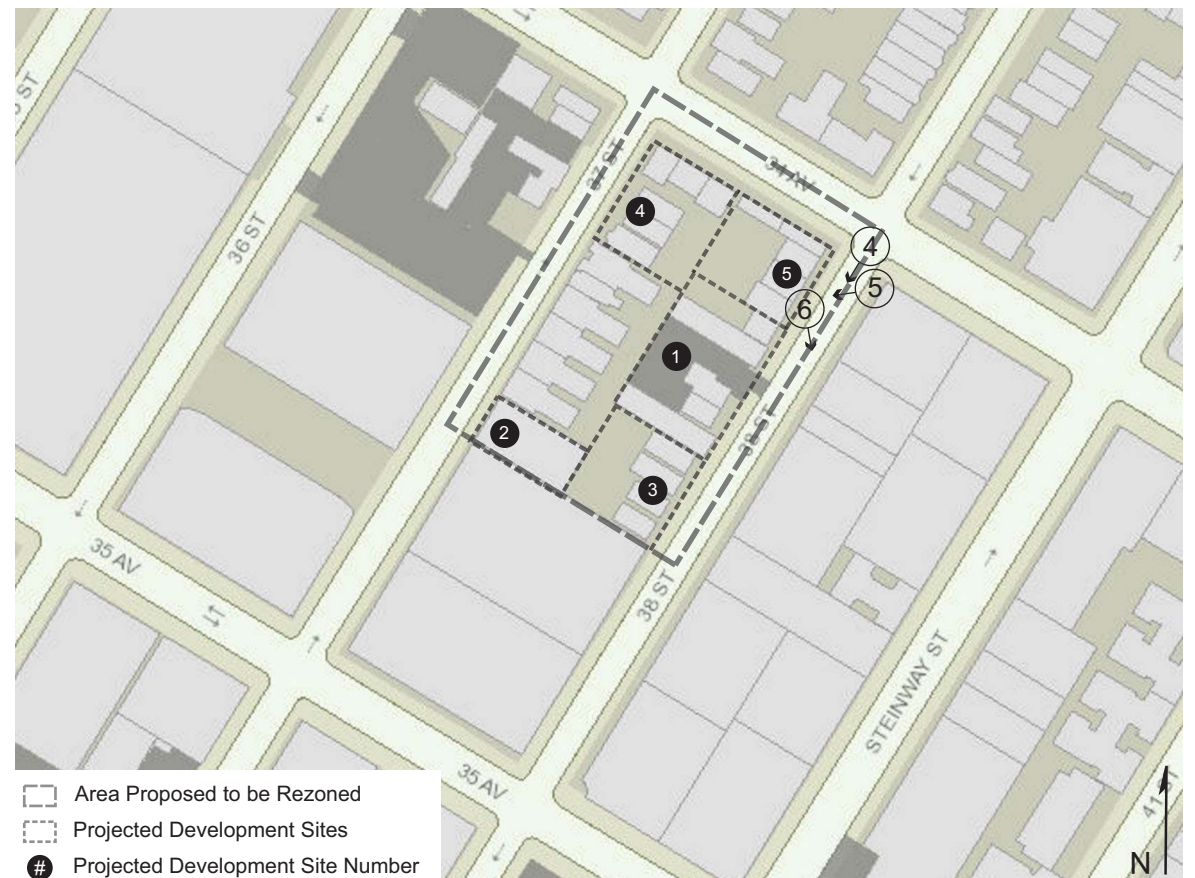
4. View of 38th Street facing south from 34th Avenue (Site ahead at right).



5. View of the west side of 38th Street just south of 34th Avenue.



6. View of the east side of 38th Street just south of 34th Avenue.





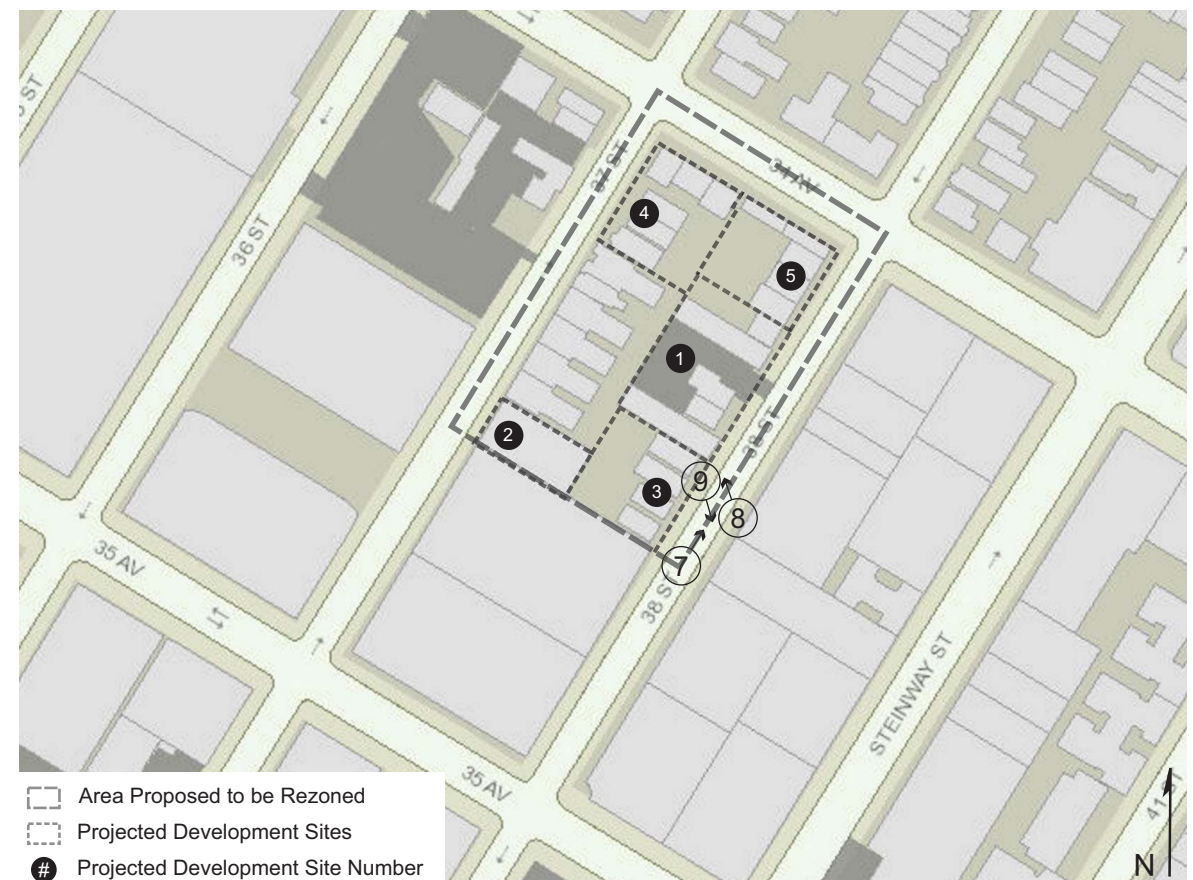
7. View of 38th Street facing north between 34th and 35th Avenues (Site ahead at left)..



8. View of the Site facing north from 38th Street.



9. View of the east side of 38th Street facing south from the Site.





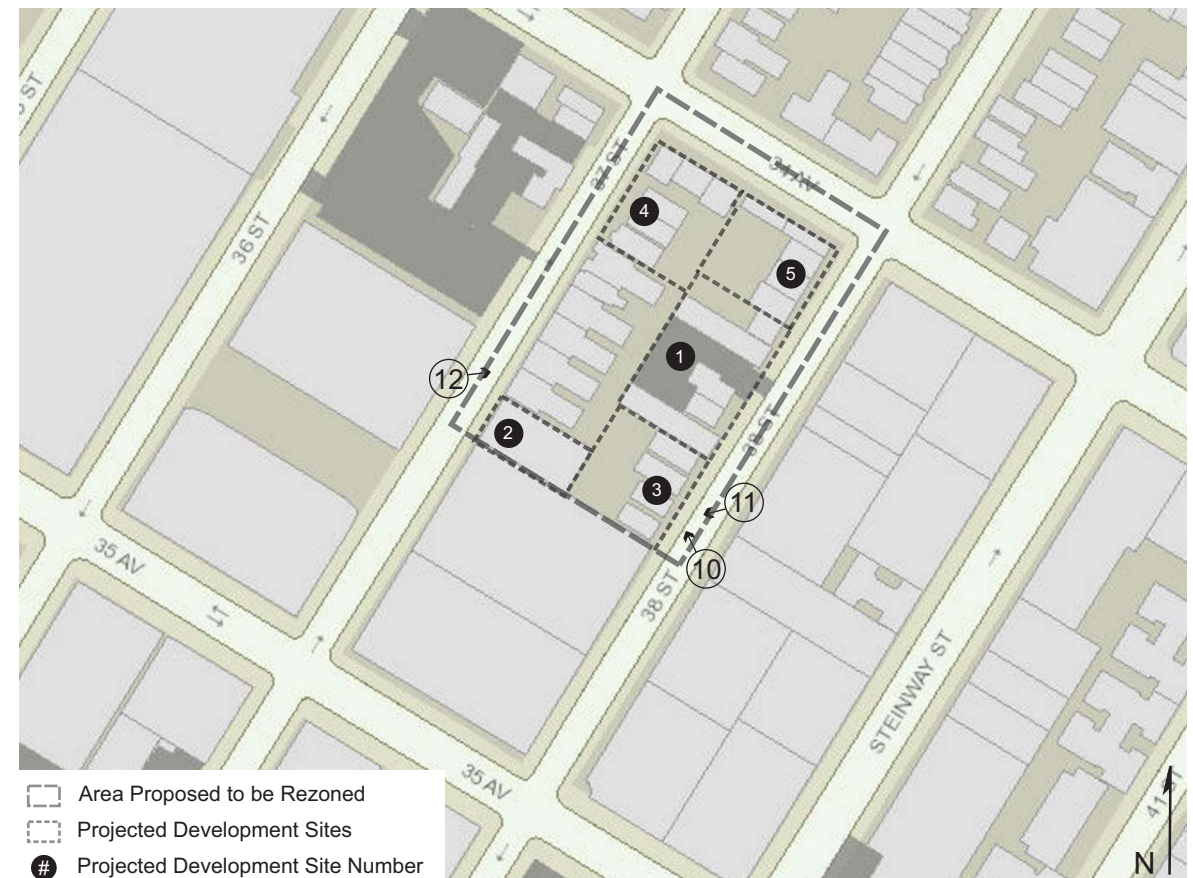
10. View of the Project Area facing west from 38th Street.



11. View of the Project Area facing northwest from 38th Street.



12. View of the Project Area facing east from 37th Street.





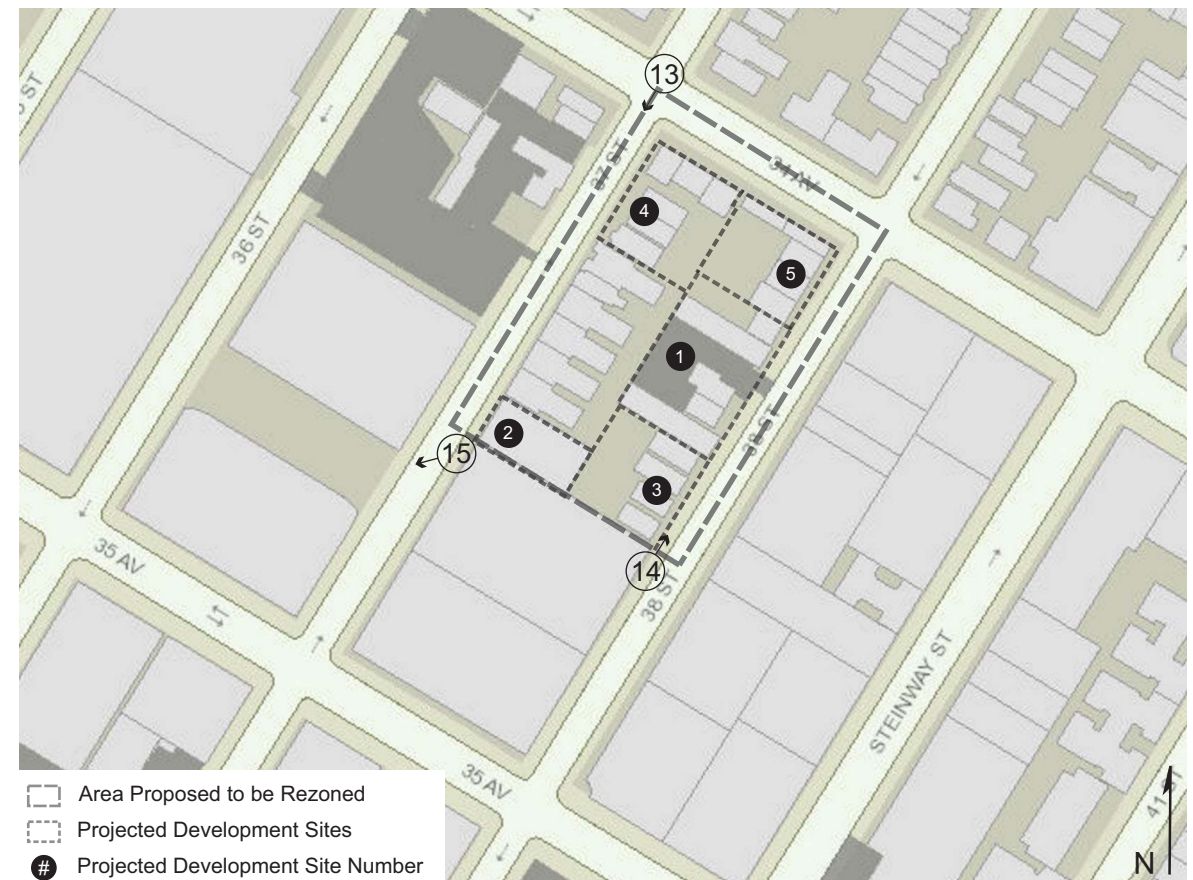
13. View of 37th Street facing south from 34th Avenue.



14. Sidewalk view of the east side of 38th Street facing northeast (Project Area at left).



15. View of the west side of 37th Street between 34th and 35th Avenues facing southwest from the Project Area.





16. View of the sidewalk along the west side of 38th Street facing southwest (Site at right).

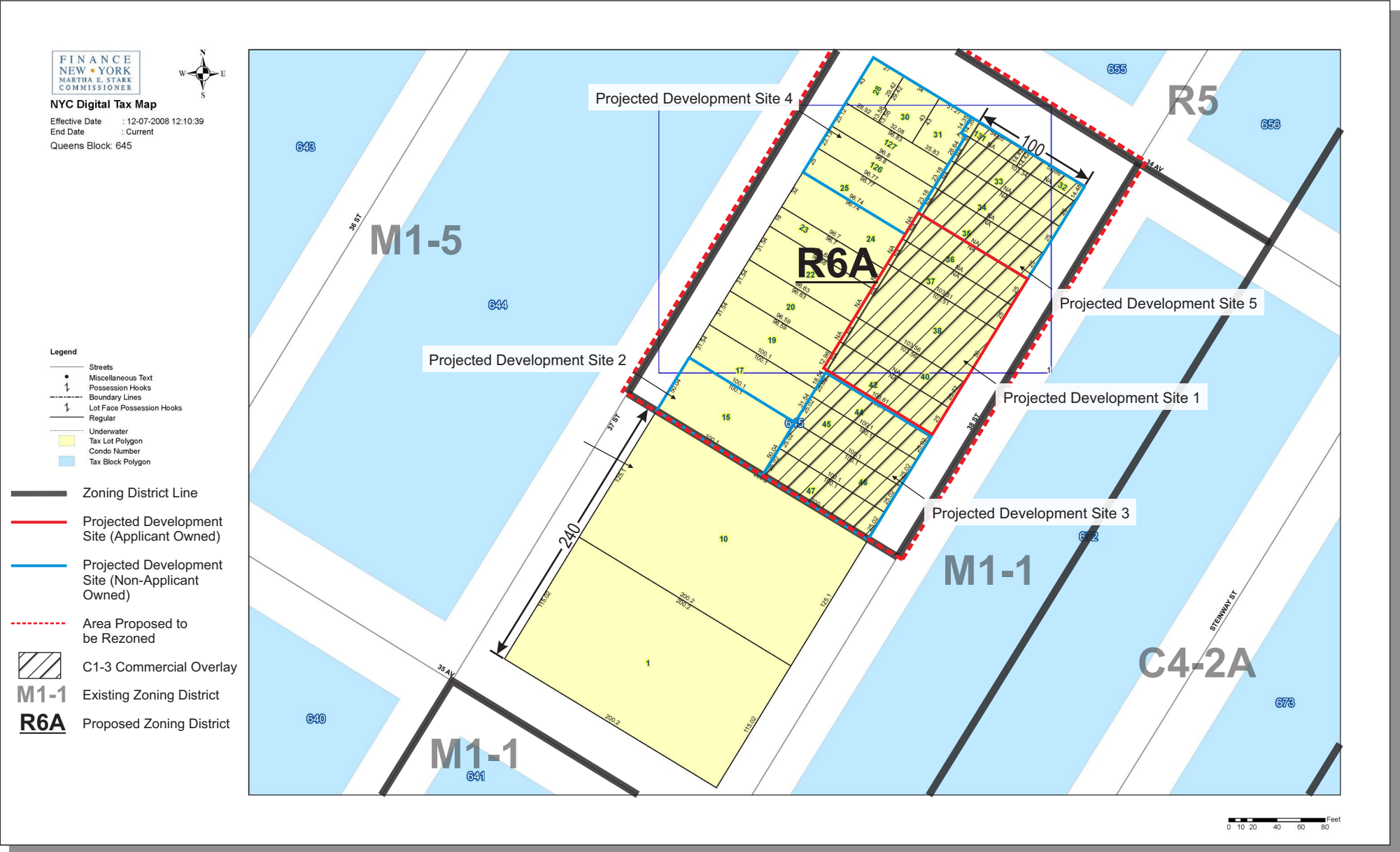


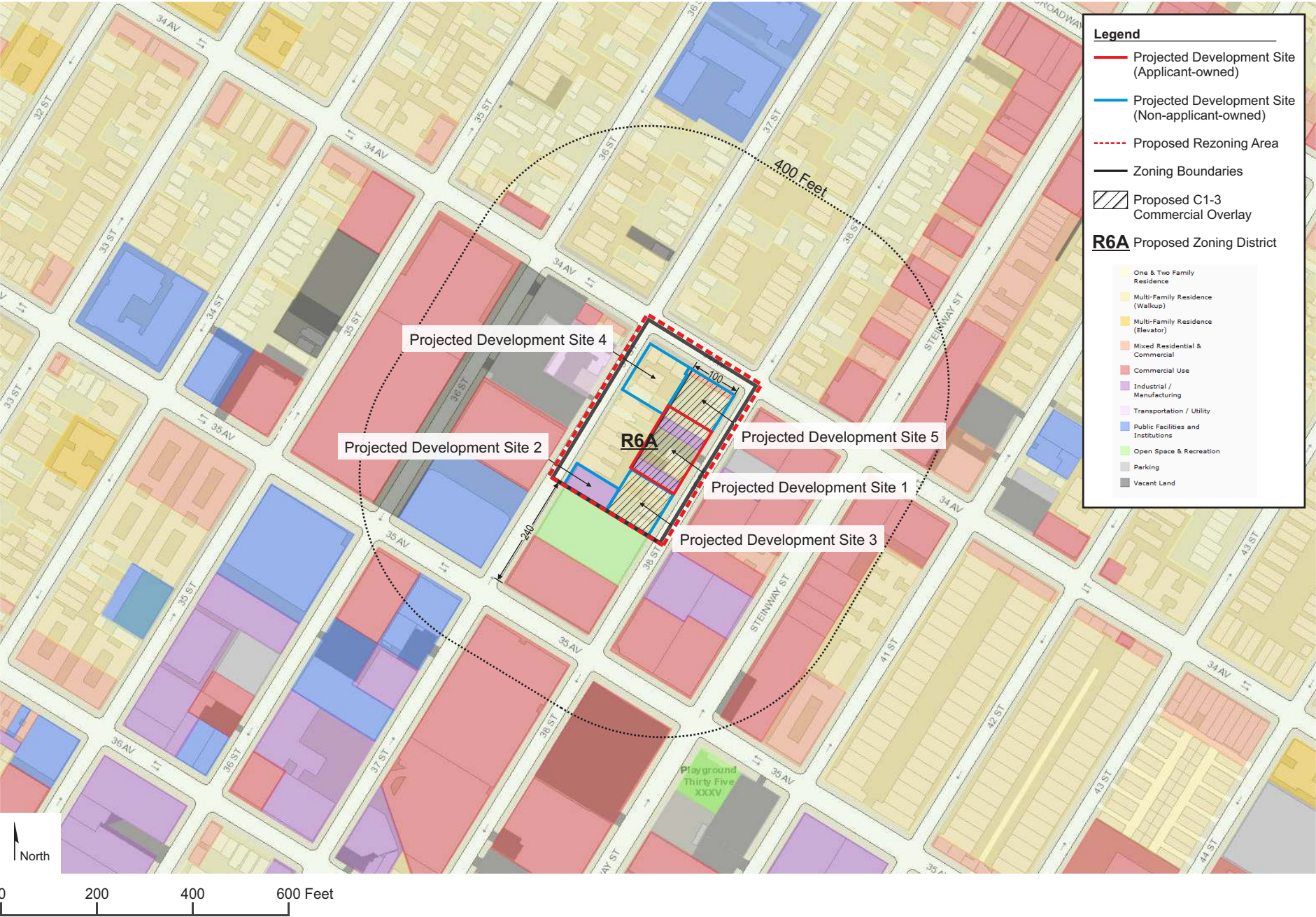
17. View of 37th Street facing southeast from 34th Avenue.



18. View of 38th Street facing south from the Project Area.







Site

Click blue box on map to view sketch map of proposed map change



ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

Major Zoning Classifications:

The number(s) and/or letter(s) that follows an R, C or M District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.

- R – RESIDENTIAL DISTRICT
- C – COMMERCIAL DISTRICT
- M – MANUFACTURING DISTRICT

SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.

AREA(S) REZONED

Effective Date(s) of Rezoning:

07-24-2014 C 140275 ZMQ

Special Requirements:

For a list of lots subject to GEOR environmental requirements, see APPENDIX C.

For a list of lots subject to "D" restrictive declarations, see APPENDIX D.

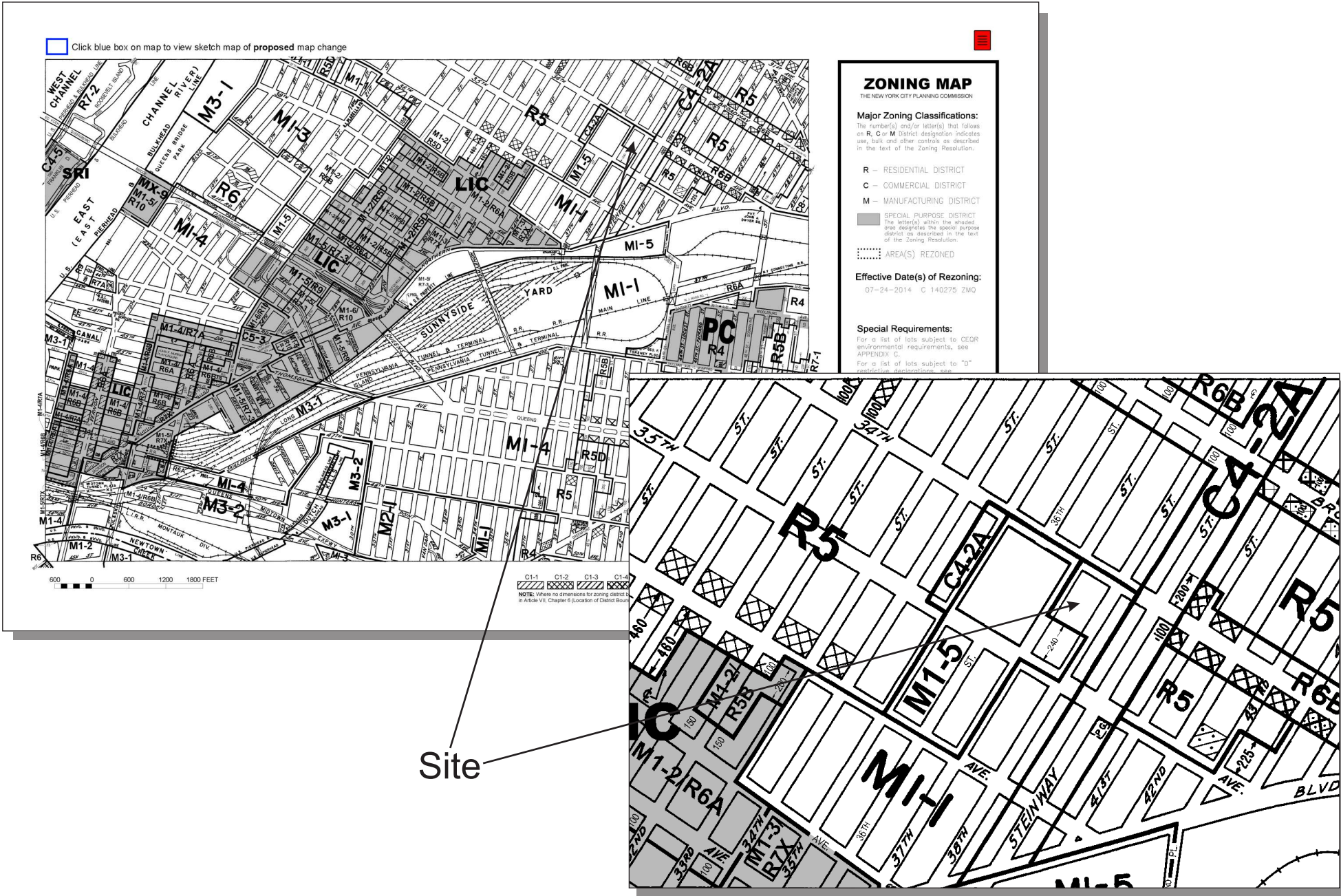
For Inclusionary Housing designated areas on this map, see APPENDIX F.

MAP KEY

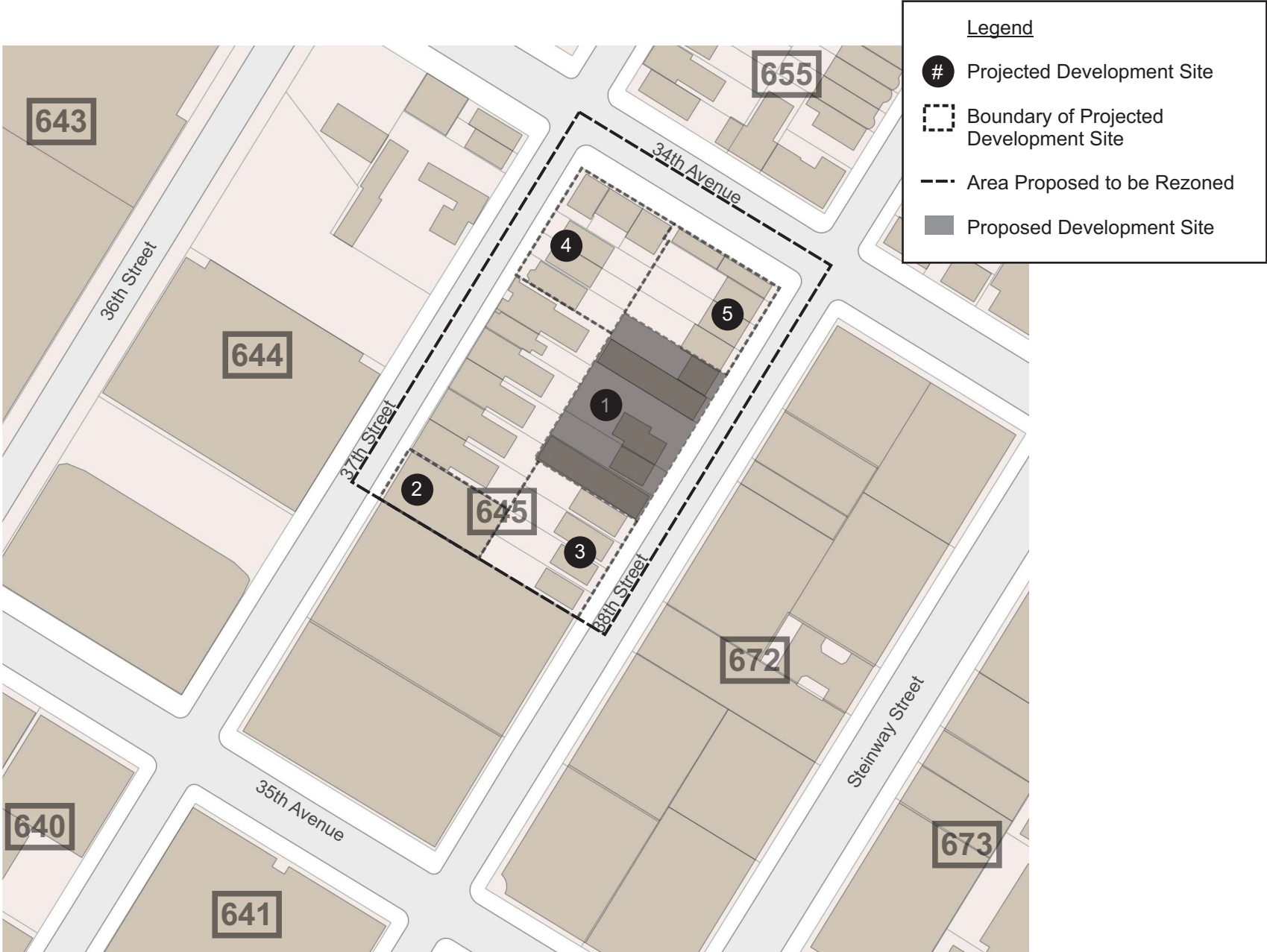
8c	9a	9c
8d	9b	9d
12c	13a	13c

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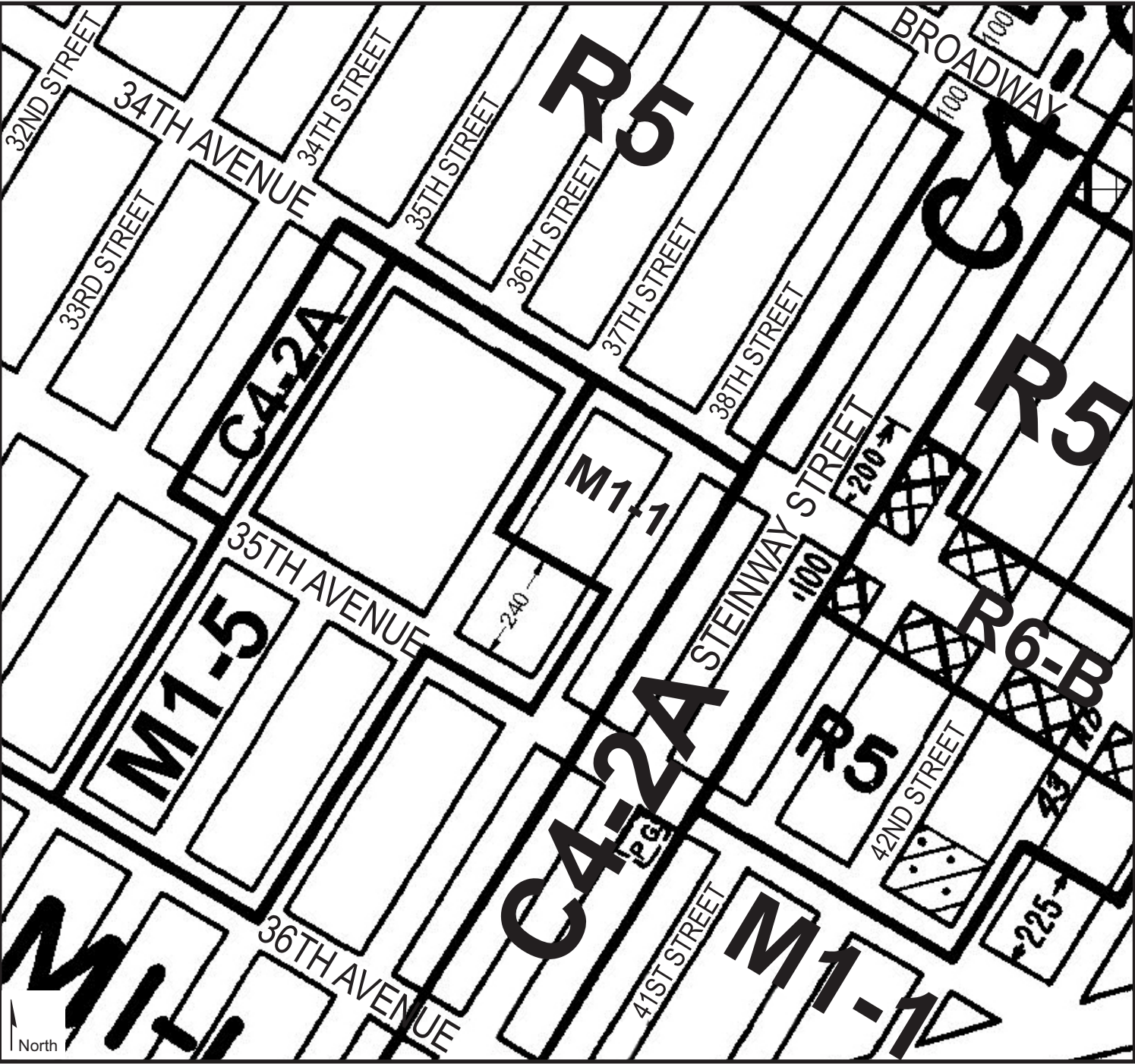
NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: www.nyc.gov/planning or contact the Zoning Information Desk at (212) 720-3291.



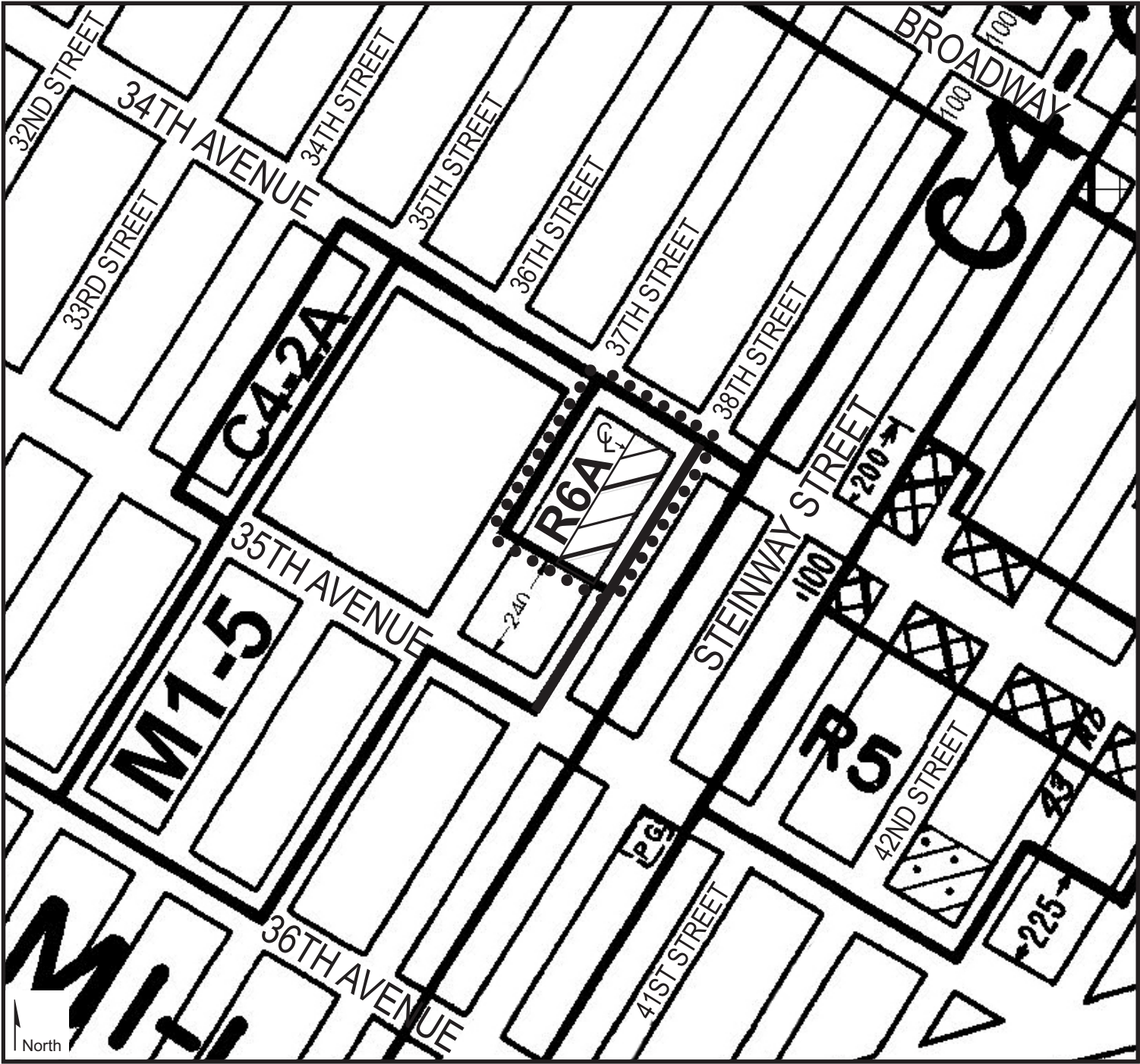




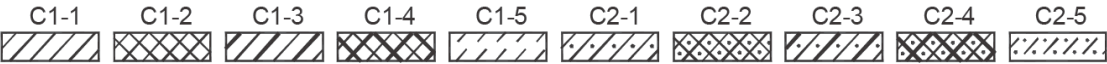
Zoning Change Map



Current Zoning Map (9b)



Proposed Zoning Map (9b) - Project Area is outlined with dotted lines
Rezoning from M1-1 to R6A
Rezoning from M1-1 to R6A/C1-3



38TH STREET, ASTORIA REZONING

ENVIRONMENTAL ASSESSMENT STATEMENT

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, open space, shadows, historic resources, urban design, hazardous materials, transportation, air quality, noise, and construction as further detailed below. The subject heading numbers below correlate with the relevant chapters of the *CEQR Technical Manual*.

1. LAND USE, ZONING, AND PUBLIC POLICY

Introduction

The analysis of land use, zoning, and public policy characterizes the existing conditions of the Project Area 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 38th Street Rezoning project; and identifies and addresses any potential impacts related to land use, zoning, and public policy resulting from the 38th Street Rezoning project.

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 area to be rezoned, which is the area within which the 38th Street Rezoning project has the potential to affect land use or land use trends. The 400-foot radius study area is generally bounded by an area between Steinway Street and 41st Street on the east, an area between 35th and 36th Streets on the west, an area between 34th Avenue and Broadway on the north, and an area between 35th and 36th Avenues on the south. 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

Existing Conditions

Project Area

The Project Area (the area subject to the Zoning Map and Zoning Text Amendment) includes the northern approximately two-thirds of Block 645, bounded by 37th Street, 38th Street, 34th Avenue, and 35th Avenue in the Astoria neighborhood of Queens. The Project Area consists of Tax Block 645, lots 15, 17, 19, 20, 22-25, 28, 30-38, 40, 42, 44-47, 126, 127, and 131 and totals approximately 67,918 square feet in land area. The subject area has 200 feet of frontage along 34th Avenue and approximately 340 feet of frontage along 37th and 38th Streets.

The Applicant for the proposed rezoning owns approximately 15,603 square feet of the block including lots 36, 37, 38, 40, and 42, identified as Projected Development Site 1 as further described below. Additional development is projected to occur on Lots 15 (Projected Development Site 2), 44-47 (Projected Development Site 3), 25, 28, 30, 31, 126, and 127 (Projected

Development Site 4), and 32-35 and 131 (Projected Development Site 5). No development would occur on Lots 17, 19, 20, 22, and 24 as their built FAR exceeds 50% of the proposed FAR of 3.6 with inclusionary housing. Although Lot 23 is developed to an FAR of 1.52, which is less than 50% of the proposed permitted FAR of 3.6, it is not considered likely to be redeveloped given that it is a small intervening lot (1,740 sf) located between adjacent buildings with FARs of 2.96 on Lot 22 and 3.1 on Lot 24.

The Applicant owned Projected Development Site 1 (Block 645, Lots 36, 37, 38, 40, and 42) has a combined lot area of 15,603 square feet and consists of 5 contiguous lots developed with approximately 10,871 gsf of floor area including 6 dwelling units and two garage buildings. The component lots are developed as follows:

- Block 645, Lot 36 - 2,586 square foot lot developed with a two-story, 1,350 gsf building containing two dwelling units.
- Block 645, Lot 37 - 2,583 square foot lot developed with a one-story 2,500 gsf garage occupied by a storage company.
- Block 645, Lot 38 - 5,175 square foot lot developed with a two-story 2,324 gsf building containing two dwelling units.
- Block 645, Lot 40 - 2,668 square foot lot developed with a two-story 2,112 gsf building containing two dwelling units.
- Block 645, Lot 42 - 2,589 square foot lot developed with a one-story 2,585 gsf garage used for storage by a sidewalk food vendor company.

Projected Development Site 2 (Block 645, Lot 15) is a 5,000 square foot lot developed with a one-story 5,000 square foot warehouse building occupied by a sign manufacturing business.

Projected Development Site 3 (Block 645, Lots 44-47) has a combined lot area of 10,018 square feet and consists of 4 contiguous lots developed with approximately 11,352 gsf of floor area including 8 dwelling units. The component lots are developed as follows:

- Block 645, Lot 44 - 2,500 square foot lot developed with a two-story, 3,168 gsf building containing two dwelling units.
- Block 645, Lot 45 - 2,521 square foot lot developed with a two-story, 3,168 gsf building containing two dwelling units.
- Block 645, Lot 46 - 2,521 square foot lot developed with a two-story, 2,508 gsf building containing two dwelling units.
- Block 645, Lot 47 - 2,521 square foot lot developed with a two-story, 2,508 gsf building containing two dwelling units.

Projected Development Site 4 (Block 645, Lots 25, 28, 30, 31, 126, and 127) has a combined lot area of 10,995 square feet and consists of 6 contiguous lots developed with approximately 15,772 gsf of floor area including 17 dwelling units. The component lots are developed as follows:

- Block 645, Lot 25 - 2,419 square foot lot developed with a two-story, 3,288 gsf building containing two dwelling units.

- Block 645, Lot 28 – 1,161 square foot lot developed with a three-story, 2,554 gsf building containing three dwelling units.
- Block 645, Lot 30 – 1,462 square foot lot developed with a three-story, 2,860 gsf building containing three dwelling units.
- Block 645, Lot 31 – 1,333 square foot lot developed with a three-story, 2,590 gsf building containing three dwelling units.
- Block 645, Lot 126 - 2,208 square foot lot developed with a three-story, 2,240 gsf building containing three dwelling units.
- Block 645, Lot 127 – 2,208 square foot lot developed with a three-story, 2,240 gsf building containing three dwelling units.

Projected Development Site 5 (Block 645, Lots 32-35 and 131) has a combined lot area of 9,310 square feet and consists of 5 contiguous lots developed with approximately 7,964 gsf of floor area including 8 dwelling units. The component lots are developed as follows:

- Block 645, Lot 32 – 764 square foot lot developed with a two-story, 1,436 gsf mixed-use building containing one dwelling unit and a 718 gsf retail store.
- Block 645, Lot 33 – 2,581 square foot lot developed with a two-story, 2,736 gsf building containing two dwelling units.
- Block 645, Lot 34 – 2,581 square foot lot developed with a two-story, 1,872 gsf building containing two dwelling units.
- Block 645, Lot 35 – 2,583 square foot lot developed with a two-story, 1,920 gsf building containing two dwelling units.
- Block 645, Lot 131 – 780 square foot lot developed with a two-story, 1,436 gsf mixed-use building containing one dwelling unit and a 718 gsf retail store.

Information about each of the lots on Block 645 is provided in Table 4-1. This information includes the following by lot number: zoning district, lot size in square feet, building square footage, number of building stories, residential and commercial square footage in each building, number of dwelling units, and a description of commercial and other non-residential uses on each lot.

Table 4-1

Existing Development on Block 645

Lot #	Zone	Lot SF	Bldg SF	No. of Stories	Resid SF/DUs	Comm'l SF by Use	Other Uses
15	M1-1	5,000	5,000	1	0	5,000 manuf/warehouse	10 accessory pkg. spaces
17	M1-1	3,150	9,000	4	9,000/8	0	
19	M1-1	3,100	9,000	4	9,000/8	0	
20	M1-1	3,042	9,000	4	9,000/8	0	
22	M1-1	3,045	9,000	4	9,000/8	0	
23	M1-1	1,740	2,640	2	2,640/2	0	

24	M1-1	3,095	9,600	4	9,600/8	0	
25	M1-1	2,419	3,288	2	3,288/2	0	
28	M1-1	1,161	2,554	3	2,554/3	0	
30	M1-1	1,462	2,860	3	2,860/3	0	
31	M1-1	1,333	2,590	3	2,590/3	0	
32	M1-1	764	1,436	2	718/1	718 retail (restaurant)	
33	M1-1	2,581	2,736	2	2,736/2	0	
34	M1-1	2,581	1,872	2	1,872/2	0	
35	M1-1	2,583	1,920	2	1,920/2	0	
36	M1-1	2,586	1,350	2	1,350/2	0	
37	M1-1	2,583	2,500	1	0	2,500 warehouse	
38	M1-1	5,175	2,324	2	2,324/2	0 (home-based driving school)	14 accessory pkg. spaces
40	M1-1	2,668	2,112	2	2,112/2	0	
42	M1-1	2,589	2,585	1	0	2,585 warehouse	
44	M1-1	2,500	3,168	2	3,168/2	0	
45	M1-1	2,521	3,168	2	3,168/3	0	
46	M1-1	2,521	2,508	2	2,508/2	0	
47	M1-1	2,521	2,508	2	2,508/2	0	
126	M1-1	2,208	2,240	3	2,240/3	0	
127	M1-1	2,208	2,240	3	2,240/3	0	
131	M1-1	780	1,436	2	718/1	718 retail	
28 lots		67,918	100,635		89,114/82	11,521	24 accessory pkg. spaces

400-Foot Radius Project Study Area

The 400-foot radius study area is predominantly developed with relatively small one- to four-story, one- and two-family and multiple dwellings to the north of the Project Area; considerably larger one- to five-story buildings housing warehouses, commercial uses, auto related facilities, and multi-family residences to the east; large one- to three-story buildings and parking facilities primarily associated with Kaufman Astoria Studios to the west; and a mixture of large one- to four-story commercial and educational related buildings to the south of the Project Area.

The manufacturing uses in this area include automotive uses (repair and storage), light manufacturing, and warehouses. Many of the businesses in the surrounding area, which is home to the Kaufman Astoria Studios, are related to the production of television and film. The business activity of the studio, and the surrounding residential uses, has also resulted in a number of commercial and community facility uses locating in larger loft buildings originally designed for manufacturing use. This includes several restaurants, schools, and office uses.

Steinway Street is lined with continuous retail uses at the ground floor, and some residential and commercial uses above.

The project study area portions of Blocks 646, 647, 655, and 656 located to the north of the Project Area across 34th Avenue are developed with relatively small one- to four-story, one- and two-family and multiple dwellings and a few small one- and two-story commercial buildings. The affected area of Block 676 contains a large one-story commercial structure and a relatively large five-story multiple dwelling with ground floor retail stores.

The project study area portions of Blocks 672 and 673 located to the east of the Project Area across 38th Street are developed with relatively bulky one- to five-story buildings that occupy most of their lot areas and contain warehouses, commercial uses, auto repair facilities, and multi-family residences some of which also contain ground floor retail space. A lighting supply warehouse, a shoe warehouse, a thrift store, a Gold's Gym, and two auto repair garages are located directly across 38th Street from the Project Area.

The project study area portions of Blocks 643 and 644 located to the west of the Project Area across 36th Street are developed with large one- to three-story buildings and parking facilities primarily associated with Kaufman Astoria Studios. The three-story American Museum of the Moving Image is located across 37th Street from the property as are several garages, a parking lot, and a large vacant parcel. The three-story Kaufman Astoria Television Studios building occupies all of block 643 further to the west across 36th Street.

The project study area portion of Block 645 located to the south of the Project Area is developed with two buildings. The immediately adjoining property (Lot 10) consists of a 25,032 square foot lot developed with a four-story, 53,550 square foot commercial building. The first floor of the building is occupied by paddle ball courts, indoor golf, and a swimming pool (as well as parking for 33 cars); the second and third floors are occupied by a physical culture establishment. Lot 1 located south of this property and fronting on 35th Avenue, consists of a 23,027 square foot parcel developed with a three-story and cellar, 86,094 gsf commercial building. It contains three eating and drinking establishments at the ground floor, a physical culture establishment at the second floor, and other commercial uses throughout the remainder of the building.

The project study area portions of Blocks 645, 640, 641, and 668 located to the south of the Project Area across 35th Avenue exhibit a very mixed development pattern. Block 641 directly south of the Project Area is developed with a relatively new multiplex movie theatre. The project study area portion of Block 640 further to the west contains a four-story school (Our World Neighborhood Charter School) and a four-story office building. Block 668 to the east of the multiplex theater is developed with a large one-story commercial building.

Future No-Action Scenario

Project Area

Under the No-Action Scenario for the Project Build Year of 2026, it is assumed that the Applicant Owned Proposed Development Site (Projected Development Site 1), identified as Block 645, Lots 36, 37, 38, 40 and 42, would remain in its current condition. No changes would be made to the three existing two-family dwellings and two storage garages on Projected Development Site 1.

No new residential development would occur on the property under the property's existing M1-1 zoning as residential use is not permitted as-of-right in this manufacturing zoning district. No other development would occur on Projected Development Site 1 as the property is currently developed to an FAR of 0.7 relative to the maximum permitted commercial/manufacturing FAR of 1.0 (10,871 gsf of existing development divided by total lot area of 15,603). The property is therefore developed close to the maximum permitted commercial/manufacturing FAR, and no additional commercial/manufacturing development on the site would be likely. In addition, Projected Development Site 1 is currently partially developed with three residential dwellings which are not permitted to be enlarged as residential uses are not permitted in manufacturing districts.

A maximum community facility FAR of 2.4 would be permitted on the M1-1 zoned Projected Development Site 1. The parcel currently does not contain any community facility uses and it is not likely that such uses would be established on the property due to its existing residential development pattern. In addition, market conditions are not supportive of the development of new community facility uses on this parcel.

Under the No-Action Scenario for the Project Build Year of 2026, it is assumed that existing conditions would continue on the Non-Applicant Owned lots in the Project Area, identified as Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30-35, 44-47, 126, 127, and 131. No new residential development would occur on any of the Non-Applicant Owned lots as the properties' existing M1-1 zoning does not permit residential uses as-of-right.

Projected Development Site 2 (Block 645, Lot 15), which is 5,000 sf in size and is zoned M1-1, is currently developed with a warehouse at an FAR of 1.0 relative to the permitted manufacturing/commercial FAR of 1.0. The current use could not be enlarged with additional manufacturing/commercial floor area. It is therefore assumed for the purposes of the No-Action scenario that the existing warehouse on the site would remain.

Projected Development Site 3 (Block 645, Lots 44-47), Projected Development Site 4 (Block 645, Lots 25, 28, 30, 31, 126, and 127), and Projected Development Site 5 (Block 645, Lots 32-35 and 131) are each developed in excess of the maximum permitted manufacturing/commercial FAR of 1.0 and therefore no additional manufacturing or commercial floor area would be permitted.

A maximum community facility FAR of 2.4 would be permitted on the lots zoned M1-1. None of these parcels currently contains any community facility uses and it is not likely that such uses would be established on these lots due to their existing residential, commercial, and manufacturing development pattern. In addition, market conditions are not supportive of the development of new community facility uses on these parcels.

No additional manufacturing or commercial development would occur on the properties zoned M1-1 (Block 645, Lots 17, 19, 20, and 22-24) as all these properties are developed in excess of the permitted manufacturing/commercial FAR of 1.0.

Therefore, under No-Action conditions, the 5 Projected Development Sites would be developed with 40,874 gsf of residential space for 39 dwelling units, and 11,521 gsf of commercial space.

400-Foot Radius Project Study Area

No new development projects have been identified for the 400-foot radius project study area

based on a review of the NYC Department of City Planning's (DCP) Land Use & CEQR Application Tracking System (LUCATS) for Queens Community District 1 back to the year 2010. Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2026. Within the study area, most of the existing dwellings, the television studio and uses related thereto, the commercial office and retail uses, the warehouses, the auto related facilities, the schools, and the parking lots are expected to remain. No other new development on the few existing vacant lots or redevelopment of the existing warehouse buildings within the 400-foot study area would be anticipated to occur by 2026.

There has been little or no manufacturing development and limited new commercial construction in the study area in recent years. This trend is not expected to change between now and the project build year of 2026.

Future With-Action Scenario

Project Area

Summary

Under No-Action conditions, the 5 Projected Development Sites would be developed with 40,874 gsf of residential space for 39 dwelling units, and 11,521 gsf of commercial space. Under With-Action conditions the 5 Projected Development Sites would be developed with 175,421 gsf of residential space for 183 dwelling units (including 131 to 140 market rate and 43 to 52 affordable units), 11,545 gsf of commercial space, and 115 accessory residential parking spaces.

The increment between the No-Action and With-Action development scenarios would be 134,547 gsf of additional residential space for 144 additional dwelling units (including 92 to 101 market rate and 43 to 52 affordable units), 24 gsf of additional commercial floor area, and 115 new residential accessory parking spaces. In order to allow for the projected development, the following existing/no-action development would be demolished.

- Site 1: 5,786 gsf of residential floor area containing 6 dwelling units and 5,085 of garage space
- Site 2: 5,000 gsf of warehouse space
- Site 3: 4 residential buildings comprised of 11,352 gsf of floor area and 8 dwelling units
- Site 4: 6 residential buildings comprised of 15,772 gsf of floor area and 17 dwelling units
- Site 5: 3 residential and 2 mixed-use buildings comprised of 7,964 gsf of residential floor area with 8 dwelling units and 1,436 gsf of commercial floor area

All the projected residential and commercial development would be new development as all existing dwelling units and commercial space on these sites would be removed. These changes are reflected in the increment numbers above. The projected development on each of the 5 Development Sites is detailed below.

Applicant Owned Projected Development Site 1

The With-Action Scenario for the Project Build Year of 2026 would entail the clearance of existing development and the construction on Projected Development Site 1 of a new seven-story, cellar and sub-cellar 95,065 gsf/56,139 zsf building. Although the Applicant's proposed project is for a 75-foot tall building, for conservative analysis purposes, a building height of 85

feet is assumed. The building would contain 62 residential dwelling units¹ within approximately 52,000 gsf of floor area which would average approximately 839 gsf in size. 13 of the units would be affordable to lower income residents under the MIH 25% option (Option 1) and 16 of the units would be affordable to lower income residents under the MIH 30% option (Option 2). The remaining 70% to 75% or 46 to 49 of the units would be market rate. While the final decision of which Option would apply to the project will be determined by the CPC and the City Council, Option 2 has been chosen by the Applicant.

The building would also contain 2,645 gsf of ground floor local retail space. No parking would be required or provided for the income restricted units, as the site is in a Transit Zone, or the local retail space in the building but 23 parking spaces would be required for the 46 market rate units (50% parking required). Due to a shortage of parking in the area the building would provide 80 residential parking spaces. Access to the parking would be provided via a curb cut on 38th Street. An outdoor recreational area for the project's residential tenants would be provided on the top of the roof of the 7-story building and would measure approximately 1,853 square feet, which is 3.3% of the residential floor area of the development. The recreational area would include a passive recreational landscaped sitting area and a swimming pool.

Non-Applicant Owned Sites

For Projected Development Site 2 it is assumed that the existing 1-story, 5,000 gsf/zsf warehouse building on the 5,000 square foot lot would be demolished and an 18,390 gsf/18,000 zsf 4-story residential building would be constructed under the proposed R6A district FAR of 3.6 with the inclusionary housing bonus. The 18,390 gsf residential building would provide 18 dwelling units. 5 to 6 of the 18 dwelling units would be considered affordable under either Option 1 or Option 2, respectively. (The analysis assumes 6 affordable units.) The new building would total approximately 18,390 gsf/18,000 zsf (3.6 FAR) in size and would contain 4 stories reaching a height of 45 feet. The 6 parking spaces required for the 12 market rate units would be waived.

Projected Development Site 3 consists of four lots that would be merged and the existing development on these lots would be demolished in order to construct a new building under the proposed R6A/C1-3 with an FAR of 3.6 with the inclusionary housing bonus. The existing development is comprised of four residential buildings, each of which contains two dwelling unit for a total of 8 residential units. The 10,018 square foot site is projected to be developed with a total of 37,147 gsf/36,065 zsf of floor area comprised of 4,450 gsf/4,320 zsf of ground floor commercial space and 32,697 gsf/31,745 zsf of residential floor area for 32 dwelling units. 8 to 10 of the 32 dwelling units would be considered affordable under either Option 1 or Option 2, respectively. (The analysis assumes 10 affordable units.). The building would contain 6 stories reaching a height of 65 feet. No parking would be required or provided for the income restricted units on the site (per ZR Section 25-251) but 11 parking spaces would be required for 50% of the 22 market rate units (per ZR Section 25-23). The 14 parking spaces required for the commercial space would be waived as it is less than the 15 minimum spaces requirement.

Projected Development Site 4 consists of six lots that would be merged and the existing development on these lots would be demolished in order to construct a new building under the proposed R6A with an FAR of 3.6 with the inclusionary housing bonus. The existing

¹ Excludes residential lobby and non-residential spaces including parking, mechanical spaces, and retail space.

development is comprised of six residential buildings, each of which contains two or three dwelling unit for a total of 17 residential units. The 10,995 square foot site is projected to be developed with a total of 40,769 gsf/39,582 zsf of residential floor area for 41 dwelling units. 10 to 12 of the 41 dwelling units would be considered affordable under either Option 1 or Option 2, respectively. (The analysis assumes 12 affordable units.) The building would contain 6 stories reaching a height of 65 feet. No parking would be required or provided for the income restricted units on the site (per ZR Section 25-251) but 14 parking spaces would be required for 50% of the 29 market rate units (per ZR Section 25-23).

Projected Development Site 5 consists of five lots that would be merged and the existing development on these lots would be demolished in order to construct a new building under the proposed R6A/C1-3 with an FAR of 3.6 with the inclusionary housing bonus. The existing development is comprised of three residential buildings, each of which contains two dwelling units, and two mixed-use buildings which each contain one dwelling unit and one retail store for a total of 8 dwelling units and two retail stores. The 9,310 square foot site is projected to be developed with a total of 34,521 gsf/33,516 zsf of floor area comprised of 4,450 gsf/4,320 zsf of ground floor commercial space and 30,071 gsf/29,196 zsf of residential floor area for 30 dwelling units. 8 to 9 of the 30 dwelling units would be considered affordable under either Option 1 or Option 2, respectively. (The analysis assumes 9 affordable units.) The building would contain 6 stories reaching a height of 65 feet. No parking would be required or provided for the income restricted units on the site (per ZR Section 25-251) but 10 parking spaces would be required for 50% of the 21 market rate units (per ZR Section 25-23). The 14 parking spaces required for the commercial space would be waived as it is less than the 15 minimum spaces requirement.

Under With-Action conditions the 5 Projected Development Sites would be developed with 175,421 gsf of residential space for 183 dwelling units (including 131 to 140 market rate and 43 to 52 affordable units), 11,545 gsf of commercial space, and 115 accessory residential parking spaces.

The With-Action Scenario analyzes residential buildings with affordable housing on all sites where future residential development would be feasible. Per MIH guidelines, 25% or 30% - Option 1 or Option 2 - will be mapped over the Project Area. Under Option 1, 25% of residential floor area must be for affordable housing units for residents with incomes averaging 60% AMI (\$46,620 for a family of three) with at least 10% of the residential floor area affordable at or below 40% AMI. Under Option 2, 30% of residential floor area must be for affordable housing units for residents with incomes averaging 80% AMI (\$62,150 for a family of three). The Applicant has chosen Option 2 under the MIH Text Amendment provisions applicable to the Proposed Actions and all projected development sites within the Project Area. The final Option applicable to the Proposed Actions will be determined by the City Planning Commission (CPC) and the City Council.

No development would occur on Lots 17, 19, 20, 22, and 24 as their built FAR exceeds 50% of the proposed FAR of 3.6 with inclusionary housing. Although Lot 23 is developed to an FAR of 1.52, which is less than 50% of the proposed permitted FAR of 3.6, it is not considered likely to be redeveloped given that it is a small intervening lot (1,740 sf) located between adjacent buildings with FARs of 2.96 on Lot 22 and 3.1 on Lot 24.

Table 4-1 below summarizes the No-Action and With-Action conditions for the 5 Projected Development Sites within the Project Area.

Table 4-1 No-Action and With-Action Development Scenarios and Increment											
		No-Action				With-Action					
Block 645 Lot Nos. (Site #)	Zoning Lot Size (SF)	Total GSF	Resid GSF/# of DU	Com'l/ M/Gar GSF	Total GSF	Resid GSF	Total DU/ Afford	Com'l GSF	Com Facil GSF	Pkg GSF/ Spcs	Increment
36, 37, 38, 40, 42 (Site 1)	15,603	10,871	5,786/6	5,085 (G)	95,065	53,494	62/13-16	2,645	0	38,926 /80	+56 DUs, -2,440 C/G, +80 pkg
15 (Site 2)	5,000	5,000	0	5,000 (M)	18,390	18,390	18/5-6	5,000	0	0	+18 DUs, 5,000 M
44-47 (Site 3)	10,018	11,352	11,352/8	0	37,147	32,697	32/8-10	4,450	0	11	+24 DUs, +4,450 C, +11 pkg
25, 28, 30, 31, 126, 127 (Site 4)	10,995	15,772	15,772/17	0	40,769	40,769	41/10-12	0	0	14	+24 DUs, +14 pkg
32-35, 131 (Site 5)	9,310	9,400	7,964/8	1,436	34,521	30,071	30/8-9	4,450	0	10	+22 DUs, +3,014 C, +10 pkg
TOTAL	51,426	52,395	40,874 /39	11,521	225,892	175,421	183/43-52	11,545	0	38,926 /115	+144 DUs, +24 C, +115 pkg

400-Foot Radius Project Study Area

The Proposed Actions would not result in any changes in land use within the 400-foot radius project study area.

Conclusion

The Applicant seeks to develop an underutilized property in order to provide market rate and affordable housing. Five parcels within the Project Area are projected to be developed with 175,421 gsf of residential space for 183 dwelling units (including 131 to 140 market rate and 43 to 52 affordable units), 11,545 gsf of commercial space, and 115 accessory residential parking spaces. This would be a net increase over the No-Action condition of 134,547 gsf of additional residential space for 144 additional dwelling units (including 92 to 101 market rate and 43 to 52 affordable units), 24 gsf of additional commercial floor area, and 115 new residential accessory parking spaces. This would constitute a significant land use change in the Project Area but the Applicant believes this change would be beneficial as it would fully develop these underutilized sites and would provide market rate and affordable housing, local retail and community facility space, and residential accessory parking.

The project would be representative of the general development trend in the area which has resulted in the conversion of underutilized and vacant lands to productive residential and commercial use. Given the character and development of the immediate vicinity, the most appropriate contextual development scenario for the subject site would be the proposed project. The project would be in scale with the surrounding development in that it would represent a transition between the smaller residential buildings to the north and the larger, bulkier

residential, commercial, and mixed-use buildings elsewhere in the area.

The projected developments would replace some existing dwelling units, a commercial building, and a garage as well as vacant undeveloped lands within the Project Area but this impact would not be considered significant. The proposed project would not create additional non-conforming uses within the Project Area or the 400-foot radius study area since residential use already exists and is permitted in these areas. The projected developments could alter existing development patterns in the future, especially on the underdeveloped parcels in the vicinity of the site, by encouraging the development of additional residential uses. However, this would be in compliance with City policies to encourage the development of new housing, especially affordable housing, in underutilized areas of the City.

Based on the above analyses, it has been determined that 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.

Zoning

Existing Conditions

Project Area

The Project Area (the area subject to the Zoning Map and Zoning Text Amendment) includes the northern approximately two-thirds of Block 645, totaling approximately 67,918 square feet in land area, and is entirely located within the M1-1 zoning district.

The M1 district is often a buffer between M2 and M3 districts and adjacent residential or commercial districts. Light industries typically found in M1 areas include woodworking shops, auto storage and repair shops, and wholesale service and storage facilities. Offices and most retail uses are also permitted. Strict performance standards are common to all M1 districts. The M1-1 district permits a maximum FAR of 1.0 for manufacturing and commercial uses and 2.4 for Use Group 4 community facility uses.

The Food Retail Expansion to Support Health (FRESH) program is mapped over the entire Project Area. 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. Stores that benefit from the FRESH program must provide a minimum of 6,000 square feet of retail space for a general line of food and nonfood grocery products intended for home preparation, consumption and utilization. The Project Area is eligible for various tax incentives related to grocery store development and operation.

The Project Area is within the Transit Zone as shown on Transit Zone Map 4 which is subject to reduced parking requirements for income-restricted units. The Project Area is accessible via mass transit to the entire New York City metropolitan area via the E, M, and R subway lines at the Steinway Street subway station located approximately two blocks from the Area. There is bus service along Steinway Street including the 101 bus and along 35th Avenue with the number 66 bus line.

400-Foot Radius Project Study Area

The 400-foot radius surrounding the Project Area is zoned M1-5 to the west and south across 35th Avenue; M1-1 to the east across 38th Street and south of 35th Avenue from 37th Street; R5 to the north of 34th Avenue; and C4-2A along both sides of Steinway Street to the east. The M1-1 zoning district is discussed for the Project Area above while the M1-5, R5, and C4-2A districts are discussed below.

The R5 zoning district typically produces three-story attached houses and small apartment buildings. R5 districts provide a transition between lower and higher density neighborhoods, and are widely mapped in Queens, Brooklyn, and the Bronx. The portion of Astoria where the Project Area is located is considered to be a typical R5 neighborhood. The R5 zoning district requires a minimum lot size of 3,800 square feet and a minimum lot width of 40 feet for detached, single or two-family units, and a minimum lot size of 1,700 square feet and a minimum lot width of 18 feet for other types of residential developments. The maximum residential FAR in the R5 zone is 1.25 with a maximum lot coverage of 55 percent and a maximum permitted building height of 40 feet, and the maximum community facility FAR is 2.0. The R5 zoning district regulations also require that one parking space be provided for each dwelling unit or 85 percent of the dwelling units if grouped.

C4 zoning districts are mapped in regional commercial centers that are located outside of the central business districts. In these areas, specialty and department stores, theaters, and other commercial and office uses serve a larger area and generate more traffic than neighborhood shopping areas. The C4-2 district is mapped in more densely built areas such as Steinway Street in Astoria. The C4-2A district is a contextual district that permits a commercial and community facility FAR of 3.0 and a residential FAR of 3.0 with a residential district equivalent of the R6A district.

The M1 district is often a buffer between M2 and M3 districts and adjacent residential or commercial districts. Light industries typically found in M1 areas include woodworking shops, auto storage and repair shops, and wholesale service and storage facilities. Offices and most retail uses are also permitted. Strict performance standards are common to all M1 districts. The M1-5 district permits a maximum FAR of 5.0 for manufacturing and commercial uses and 6.5 for Use Group 4 community facility uses.

The 400-foot radius project study area west of 38th Street and south of 34th Avenue is located within the boundaries of the FRESH program described under the Project Area above. The project study area is eligible for various tax incentives related to grocery store development and operation.

The 400-foot radius project study area is within the Transit Zone as shown on Transit Zone Map 4 which is subject to reduced parking requirements for income-restricted units. The radius area is accessible via mass transit to the entire New York City metropolitan area via the E, M, and R subway lines at the Steinway Street subway station located approximately two blocks from the Area. There is local bus service including the 101 bus along Steinway Street and the number 66 bus line along 35th Avenue.

Future No-Action Scenario

Project Area

In the future and absent the action, the proposed area to be rezoned would continue to be governed by the provisions of the existing M1-1 zoning district. In the future, without the action, new development in the Project Area would remain within the boundaries of the City's FRESH Program and the Transit Zone, and would therefore remain subject to the provisions of these Programs.

400-Foot Radius Project Study Area

Based on a review of DCP's LUCATS listings for Queens Community District 1, no rezoning actions are proposed for the 400-foot radius project study area. No rezoning actions are presently being contemplated by the DCP, as indicated on the DCP website, for the study area by the final project build year of 2026. In the future, without the action, new development within the 400-foot radius project study area would remain within the boundaries of the City's FRESH Program and the Transit Zone, and would therefore remain subject to the provisions of these programs.

Future With-Action Scenario

Project Area

The Applicant proposes the following zoning map amendment and zoning text amendment to rezone an existing M1-1 zoning district to R6A and R6A/C1-3 districts in the Astoria neighborhood within Queens Community District 1.

- A zoning map amendment to the New York City Zoning Map, section 9b, to rezone the Project Area as follows: Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30, 31, 126, 127, and 131 from M1-1 to R6A (MIH); and Block 545, Lots 30-38, 40, 42, 44-47, and 131 from M1-1 to R6A/C1-3 (MIH); and
- A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing ("MIH") Areas for Community District 1, Queens to establish an MIH Area coterminous with the Project Area.

As described above, the Project Area is projected to be developed with 175,421 gsf of residential space for 183 dwelling units (including 131 to 140 market rate and 43 to 52 affordable units), 11,545 gsf of commercial space, and 115 accessory residential parking spaces. This would be a net increase over the No-Action condition of 371,371 gsf of 134,547 gsf of additional residential space for 144 additional dwelling units (including 92 to 101 market rate and 43 to 52 affordable units), 24 gsf of additional commercial floor area, and 115 new residential accessory parking spaces.

Table 4-2 below summarizes the major provisions of the existing and proposed zoning districts as applicable to the 5 Projected Development Sites.

<div>Table 4-2</div> <div>No-Action and With-Action Development Scenarios</div>										
Proj Devel Site #/Lot Size (sf)	Existing Zoning					Proposed Zoning				
	Zoning	Max FAR	Max GSF	Max Ht	Use Groups	Zoning	Max FAR	Max GSF	Max Ht	Use Grps
1/15,603	M1-1	1.0 M/C, 2.4 CF	15,603 M/C; 37,447 CF	30' before setback	4-14, 16, 17	R6A/C1- 3	R6A: 3.0 R/CF, 3.6 (MIH), C1-3: 2.0 C	46,809 R/CF; 56,170 R (MIH); 31,206 C	85'	1-4, 5-6
2/5,000	M1-1	1.0 M/C, 2.4 CF	5,000 M/C; 12,000 CF	30' before setback	4-14, 16, 17	R6A	3.0 R/CF, 3.6 (MIH)	15,000 R/CF; 18,000 R (MIH)	85'	1-4
3/10,018	M1-1	1.0 M/C, 2.4 CF	10,018 M/C; 24,043 CF	30' before setback	4-14, 16, 17	R6A/C1- 3	R6A: 3.0 R/CF, 3.6 (MIH), C1-3: 2.0 C	30,054 R/CF; 36,064 R (MIH); 20,036 C	85'	1-4, 5-6
4/10,995	M1-1	1.0 M/C, 2.4 CF	10,995 M/C; 26,388 CF	30' before setback	4-14, 16, 17	R6A	3.0 R/CF, 3.6 (MIH)	32,985 R/CF; 39,582 R (MIH)	85'	1-4
5/9,310	M1-1	1.0 M/C, 2.4 CF	9,310 M/C; 22,344 CF	30' before setback	4-14, 16, 17	R6A/C1- 3	R6A: 3.0 R/CF, 3.6 (MIH), C1-3: 2.0 C	27,930 R/CF; 33,516 R (MIH); 18,620 C	85'	1-4, 5-6

Proposed R6A and R6A/C1-3 Districts

The proposed Zoning Map Amendment would include rezoning the Proposed Development Site from its existing M1-1 district to the proposed R6A/C1-3 district which is required in order to develop the proposed residential and commercial uses and density on the property. It is required to allow residential uses on the property and in order to allow the proposed bulk of the new building to be increased from the current permitted FAR of 1.0 for manufacturing and commercial uses and 2.4 for community facility uses to 3.0 for residential and community facility uses, 2.0 for commercial uses, and a residential FAR of 3.6 as a bonus for inclusionary housing.

The proposed zoning change also involves rezoning properties in addition to the Proposed Development Site from M1-1 to R6A and R6A/C1-3. The M1-1 district permits an FAR of 1.0 for manufacturing and commercial uses and 2.4 for community facility uses.

The R6A district is a contextual district in which the Quality Housing bulk regulations are mandatory. The permitted residential and community facility FAR is 3.0, but with the Mandatory Inclusionary Housing Program zoning bonus this can be increased to 3.6. R6A districts have a minimum/maximum building base height that ranges from 40 to 60 feet and a maximum building height of 70 feet. However, under the ZQA Text Amendment, the maximum building base height may increase to 65 feet and the maximum building height to 80 feet with non-qualifying ground floor or 85 feet with qualifying ground floor (8-stories).

Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 8 floors. Off-street parking is required for 50 percent of the residential dwelling units, but is not required for affordable housing units within specified Transit Zones. Residential and community facility Use Groups 1-4 are permitted in the R6A district.

The C1-3 district is designed to accommodate the retail and personal service shops needed in residential neighborhoods. The C1-3 commercial overlay district permits commercial Use Groups 5 and 6, which includes local retail establishments, as well as residential and community facility Use Groups 1 through 4. It would allow a maximum commercial FAR of 2.0 in the proposed R6A district. The proposed C1-3 district requires one accessory parking space per 400 square foot of general retail or service floor area.

The rezoning of the existing M1-1 portion of the block to an R6A/C1-3 district and an R6A district is proposed for the following reasons. The existing M1-1 district mapped on the northern portion of Block 645 does not reflect the predominant use or bulk of the buildings in that area. This area is overwhelmingly residential and is improved upon with a mix of residential building types. Specifically, of the 27 lots located in the M1-1 portion of Block 645, 24 contain nonconforming residential uses. Of the three non-residential uses, two are part of Projected Development Site 1 and would not remain once the proposed building is constructed. The R6A district would serve as a transition between the greater bulk in the adjacent M1-5 district to the lesser bulk and lesser permitted uses in the R5 district to the north.

The C1-3 commercial overlay districts is appropriate along the eastern half of the proposed R6A district (fronting on 38th Street) to reflect the commercial use on the eastern side of 38th Street and to facilitate the proposed mixed-use development. The C1-3 commercial overlay would allow the existing commercial uses in this area to legally remain and would accommodate the commercial floor area proposed to be included in Projected Development Site 1 controlled by the Applicant. Additional commercial development would also be anticipated on Projected Development Sites 5 and 6 which would be located within the commercial overlay.

Mandatory Inclusionary Housing Text Amendment

The proposed text amendment of ZR Appendix F is necessary to establish an MIH Area coterminous with the Project Area. Pursuant to the MIH program, a percentage of the new dwelling units in the proposed development must be affordable units, resulting in an affordable housing set-aside for either 25 percent of the residential floor area at an average of 60 percent of AMI (Option 1) or 30 percent of the residential floor area at an average of 80 percent AMI/(Option 2). The Applicant seeks Option 2 for the Development Site, resulting in approximately 16 permanently affordable units. Option 2 has been chosen under the Mandatory Inclusionary Housing (MIH) Text Amendment provisions applicable to the Proposed Actions. The MIH program would ensure that development within the Project Area would address the need for low-income housing. The final decision on whether MIH Option 1 or 2 would apply to the Proposed Actions will be determined by the CPC and City Council as part of the approval of the project.

Other Zoning Provisions

As the Proposed Actions would occur within the Transit Zone, no parking would be required for the income restricted units.

While the Project Area is within the boundaries of the City's FRESH program, the proposed development would not be relevant to the FRESH program as no grocery stores are proposed as part of the project.

400-Foot Radius Project Study Area

The Proposed Actions would not result in any changes in zoning or to the City's FRESH program and Transit Zone in the 400-foot radius project study area.

Conclusion

The proposed zoning map and zoning text amendments would only apply to the Project Area and would not affect lots beyond this area. The Proposed Actions would not result in any significant impacts to zoning patterns in the area since the mapping of the proposed R6A and R6A/C1-3 zoning districts and the mapping of the MIH in the Project Area would result in development that would be transitional in size and form to the existing neighborhood context while also providing enough floor area to develop a reasonable number of affordable dwelling units. The proposed zoning map amendment to establish R6A and R6A/C1-3 zoning districts within the Project Area is necessary for the proposed development project to occur and creates a transition between the existing R5 district mapped to the north and the M1-5 district that would remain mapped to the south.

Based on the above analysis, it has been determined that no potentially significant adverse impacts related to zoning are expected to occur as a result of the Proposed Actions. Therefore, further analysis of zoning is not warranted.

Public Policy

Existing Conditions

According to the *CEQR Technical Manual*, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. Public policies applicable to the Project Area and 400-foot radius project study area are discussed below.

Project Area and 400-Foot Radius Project Study Area

The Astoria neighborhood of Queens, which is located in Queens Community District 1, is primarily a multi-family residential community with a number of developed commercial streets proceeding through the neighborhood, and a more industrial character in its southern reaches along its border with the Long Island City neighborhood. Astoria contains little open space except for several large areas along its eastern border and along the East River to the west. According to the 2010 U. S. Census, the area's population decreased by 9.5 percent from 211,220 persons in 2000 to 191,105 people in 2010.

The Project Area and the surrounding 400-foot radius study area are not located within the boundaries of any 197-a Community Development Plans, Urban Renewal Area plans, or the City's Coastal Zone Boundary, and also are not within a historic district or a critical environmental area. However, the NYC Landmarks Preservation Commission designated and NYS and National Register listed Famous Player's-Lasky Studio (Paramount Studios Building No. 1) is located at the western edge of the project study area between 35th and 36th Streets. This resource is subject to the provisions of Federal, New York State, and New York City Landmarks

Laws.

DCP has undertaken the Western Queens Transportation Study with the goal of improving mobility and enhancing connections both within western Queens and to other areas of the city, including nearby Roosevelt Island and northern Brooklyn. The objectives of this study are to:

- Enhance the connections between the various neighborhoods of western Queens.
- Create and enhance connections to neighborhoods outside western Queens, including Roosevelt Island.
- Link existing and new development and improve access and mobility throughout the neighborhood.
- Connect new and existing destinations such as waterfront parks and cultural institutions.

The study is a comprehensive examination of transportation facilities in an area encompassing Roosevelt Island to the west, Steinway Street to the east, Newtown Creek to the south, and Astoria Boulevard to the north. The Project Area is located within these boundaries. This report presents analysis based upon factors including fieldwork, analysis of existing land use and zoning, recent and potential future development, demographics, literature search, field data, and crash data. Extensive community outreach was performed to gain an understanding of community needs and desires.

The recommendations in the final report include:

- Identifying ways to improve transit service for waterfront communities on the East River;
- Changes to the bus network to improve access to Roosevelt Island, Halletts Point, and Hunter's Point;
- Expanded East River ferry service;
- A new entrance ramp to the Long Island Expressway;
- Traffic calming, intersection improvements, and streetscape enhancements along the 21st Street and Vernon Boulevard corridors;
- Improved access to Roosevelt Island via a protected bike lane and a redesigned bridge/ parking garage complex;
- A proposed new approach to urban design and streetscape improvements for mixed-use industrial streets;
- Strategic intersection improvements throughout the study area.

All of the recommendations in this report require further analyses and design work by the applicable operating agency, such as the New York City Department of Transportation or the Metropolitan Transportation Authority. The Department of City Planning will continue its dialogue with those agencies to facilitate implementation.

The Steinway Street Business Improvement District (BID) is located adjacent to the Project Area to the east along 38th Street. The Steinway Street BID encompasses all 300 businesses located on Steinway Street from 28th Avenue to 35th Avenue. The Business Improvement District was established in 1991 to enhance the retail mix, provide maintenance and security services, and offer seasonal promotions for customers. Since that time it has also started beautification efforts to forge a visually pleasing and pedestrian friendly shopping district. New trees have been planted, colorful banners and flower baskets installed, and tree pits planted with flowers. Benches for shoppers' convenience will be added in the next few months.

Future No-Action Scenario

In the future without the action, the Project Area and the 400-foot radius project study would continue to be subject to the recommendations of the Western Queens Transportation Study. The provisions of the Steinway Street BID would continue to apply to the affected portion of the project study area. Finally, any development within 400 feet of the LPC designated and NYS and National Register listed Famous Player's-Lasky Studio (Paramount Studios Building No. 1) would continue to be subject to the provisions of Federal, New York State, and New York City Landmarks Laws. No other public policy initiatives would pertain to the Project Area or to the 400-foot study area around the Area by the final project build year of 2026. In addition, no changes are anticipated to any public policy documents relating to the Project Area or the surrounding study area by the project build year.

Future With-Action Scenario

Project Area

As part of the Mayor's Housing New York plan, the City Council has approved a citywide zoning text amendment to authorize a Mandatory Inclusionary Housing (MIH) program (ULURP # 160051ZRY). The purpose of the MIH program is to promote neighborhood economic diversity in locations where land use actions create substantial new housing opportunities. The text amendment will have no effect until mapped through subsequent discretionary actions of the CPC, each of which will be subject to a public review process and separate environmental review. As with zoning actions generally, MIH Areas may be applied through DCP-initiated actions or as part of private applications, including certain zoning map amendments, text amendments, and Special Permits that create opportunities for significant new housing development. The MIH program would require (through zoning) that when CPC actions create significant new housing capacity in medium and high-density areas, either 25 or 30 percent of new housing would be permanently affordable. Under the proposal, the CPC and ultimately the City Council would apply at least one of these requirements to each MIH area:

- 25 percent of residential floor area must be for affordable housing units for residents with incomes averaging 60 percent Area Median Income (AMI) (\$46,620 for a family of three) with no unit targeted at a level exceeding 130% AMI; or
- 30 percent of residential floor area must be for affordable housing units for residents with incomes averaging 80 percent AMI (\$62,150 for a family of three) with no unit targeted at a level exceeding 130% AMI.

In addition to the options above, the City Council and the CPC could decide to apply one or both of the following options:

- A deep affordability option, where
 - o 20% of the total residential floor area must be for housing units for residents with incomes averaging 40% AMI (\$31,080 per year for a family of three);
 - o No direct subsidies could be used for these units except where needed to support more affordable housing; or
- An additional, limited workforce option for markets where moderate-income development is marginally feasible without subsidy. Under this option,

- 30 percent of the residential floor area must be for housing units for residents with incomes averaging 115 percent AMI (\$104,895/year for a family of three);
- No units could go to residents with incomes above 130 percent AMI (\$101,010/year for a family of three);
- No direct subsidies could be used for these affordable housing units; and
- This option would not be available in Manhattan CDs 1-8, which extend south of 96th Street on the east side and south of 110th Street on the west side.

Requirements would apply to developments, enlargements and residential conversions of more than ten units. Developments between 11 and 25 units would have the optional alternative of making a payment into an affordable housing fund, to be used to support affordable housing within that Community District. As indicated, the Proposed Actions include a Zoning Text Amendment to modify ZR Section 23-933, Appendix F to designate the newly mapped R6A and R6A/C1-3 districts as Inclusionary Housing designated areas. Under the MIH provisions applicable to the project, Option 2 has been chosen under the Mandatory Inclusionary Housing (MIH) Text Amendment provisions applicable to the Proposed Actions. Under this option, 30% of the residential floor area must be for affordable housing units for residents with incomes averaging 80% AMI (\$62,150 per year for a family of three). It is currently anticipated that 123 affordable units would be developed on Projected Development Sites 1 through 7, including 16 on the Applicant property.

Recommendations from the Western Queens Transportation Study would generally be beneficial to the proposed development in the Project Area.

400-Foot Radius Project Study Area

The Proposed Actions would not affect the Famous Player's-Lasky Studio (Paramount Studios Building No. 1) to the east of the Project Area. The project would be designed and built to conform and comply with LPC regulations pertaining to historic resources (see Construction section). The Proposed Actions would also not affect the Steinway Street BID.

Recommendations from the Western Queens Transportation Study would generally be beneficial to the 400-foot radius project study area.

Conclusion

No impact to public policies would occur as a result of the Proposed Actions. The action would be an appropriate development in the Project Area and would be a positive contribution to Queens Community District 1 and to the surrounding neighborhood. The proposed project would meet the City's public policy goals as explained above as well as similar State and national public policy goals related to the provision of affordable housing.

Based on the above analyses, it has been determined that no potentially significant adverse impacts related to public policy are expected to occur as a result of the Proposed Actions. Therefore, further analysis of public policy is not warranted.

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 therefore 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. These impacts are typically generated by new residential development. Under No-Action conditions, the 5 Projected Development Sites would be developed with 39 dwelling units. Under With-Action conditions, the 5 Projected Development Sites would be developed with 183 dwelling units (including 131 to 140 market rate and 43 to 52 affordable units). The increment between the No-Action and With-Action development scenarios would be 144 additional dwelling units (including 92 to 101 market rate and 43 to 52 affordable units).

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. Per the 2014 *CEQR Technical Manual*, in Queens, an analysis of public elementary and intermediate schools is warranted when a project introduces more than 124 incremental residential units (that is, units assumed to be inhabited by families with school-aged children, or pupils). Public high school analyses are warranted when a larger increment -- 1,068 residential units -- is anticipated. These thresholds are informed by Projected Public School Ratios -- residential multipliers indicating how many pupils may be generated by new housing.

Recently, new Projected Public School Ratios data was released by the SCA as part of the documents used in drafting the DOE/SCA FY2020-2024 Capital Plan Proposed November 2018. It utilizes the 2012-2016 American Community Survey -- Public Use Microdata Sample and is available at SCA's website under Capital Plan Reports & Data. According to this data, multipliers for Primary and Intermediate Schools have been refined to reflect how many pupils are generated by new housing at the school district level (multipliers for High Schools have been maintained at the borough level). As a result, the thresholds for determining when public schools analyses are necessary have changed. For elementary and intermediate schools, in school district 30 in Queens if a project is anticipated to introduce more than 250 incremental residential units, an analysis is warranted. For high schools in Queens the new threshold is 384

incremental residential units. The 2014 CEQR Technical Manual has not been updated to reflect these new thresholds. However, DCP as lead agency, in consultation with the Mayor's Office of Environmental Coordination (MOEC) has determined that the 2012-2016 American Community Survey - Public Use Microdata Sample data should be utilized as the basis for determining the need for a public schools CEQR analysis, in order to present a reasonable and accurate environmental assessment.

Based on the above, the Proposed Actions would have no adverse impacts to public schools, and further analysis would not be required.

Other Community Facilities

The development of 144 dwelling units of housing in the Project Area would not be anticipated to exceed the thresholds of concern for any other community facilities and services. Under the criteria in Table 6-1, the development of up to 52 dwelling units at or below 80% of Area Median Income (AMI) would not exceed the minimum number of 144 dwelling units for conducting a detailed analysis of impacts to publicly funded child care. Based on the *CEQR Technical Manual*, the Proposed Actions would have no adverse impacts to libraries, health care facilities, or fire and police protection.

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 either overtax, or not be met by existing or proposed services or facilities. Development under the Proposed Actions would not adversely affect public schools, publicly financed child care services, hospitals and other health care facilities, public libraries, 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 Project 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 Project 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 Project Area is located along the southeastern edge of the Astoria neighborhood of Queens, which is considered to be an underserved area relative to open space resources. If a project is located in an underserved area, the *CEQR Technical Manual* requires that an open space assessment be conducted if that project would generate more than 50 residents or 125 workers.

The With-Action RWCDS includes the development of 62 dwelling units of housing on the Applicant owned Projected Development Site 1 plus 116 new dwelling units on the Non-Applicant Owned Projected Development Sites 2 through 5 in the Project Area for a total of 183

dwelling units. The No-Action RWCDs development on Projected Development Site 1 would consist of 6 existing dwelling units while the No-Action RWCDs on Projected Development Sites 2 through 5 would include 33 existing dwelling units for a total of 39 dwelling units. Therefore, based on the above, the Proposed Actions would result in the development of a net increase of 144 dwelling units in the Project Area. Based on 2010 Census data, the average household size is 2.36 persons per dwelling unit in the Census Tracts located within ¼-mile of the Project Area (55, 57, 59, 61, 155, 157, and 159). The development of 144 dwelling units would therefore be expected to generate approximately 340 residents in the Project Area. The Proposed Actions would result in a development that would exceed the threshold number of 50 new residents and a preliminary quantitative analysis of indirect open space impacts is therefore required.

There are 26 existing jobs in the Project Area on the 5 Projected Development Sites. 16 of these jobs would be lost as the buildings they are located in would be demolished to accommodate the projected developments. The Proposed Actions would generate approximately 41 new jobs. Therefore, there would be a net increase of 25 new jobs. The new jobs anticipated to be generated are based on the following estimates:

- 3 workers per 1,000 square feet of floor area for the proposed 11,545 gsf of new retail space on Projected Development Sites 1, 3, and 5 (35 workers),
- .04 workers per dwelling unit for the proposed net new 144 dwelling units on Projected Development Sites 1 through 5 (6 workers).

New employees would therefore not exceed the threshold number of 125 new workers, and a quantitative analysis of indirect open space impacts for employees would not be required.

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 ratio based on the residential population of the study area and the acreage of all publicly accessible open space resources within the study area. 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 *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 project study area exhibits a low open space ratio of 0.0227 acres per 1,000 residents, (based on 0.8 acres of existing open space within a ½-mile radius divided by the 2010 Census study

area population of 35,224 residents), indicating a shortfall of open space.

Existing Conditions

Study Area Population

The residential study area population was estimated using data from the 2010 U. S. Census of Population and Housing for the accessible census tracts located fully or at least 50 percent within the one-half mile study area. As shown in Table 7-1, in 2010 the study area contained a total of 35,224 residents within the eleven relevant census tracts.

Table 7-1

Residential Study Area Population

Census Tract	Total Residential Population (2010)
51	2,231
53	5,340
55	1,067
57	4,321
59	4,169
61	5,644
153	2,145
155	2,251
157	1,543
159	4,136
161	2,377
Study Area Total	35,224

Study Area Open Space

The one-half mile residential open space study area is generally bounded by an area between 30th and 31st Avenues on the north, Skillman Avenue on the south, 49th Street on the east, and Crescent Street on the west. Within the census tracts that are fully or at least 50 percent within this area, there are 2 publicly owned and accessible facilities providing a total of 0.8 acres of open space resources. See Figure 7-1, Open Space Facilities and Census Tracts and Table 7-2, Inventory of Open Space Resources.

Table 7-2

Inventory of Open Space Resources

Map Key	Open Space Name and Location	Total Size (acres)	Area Within ½ Mile
1	Playground Thirty-Five 35 Ave. bet. Steinway St. and 41 St.	0.22	0.22
2	Sean's Place 38 St. bet. 31 Ave. and Broadway	0.58	0.58
TOTAL		0.8	0.8

Assessment of Open Space Adequacy

The residential open space ratio was calculated based on the residential study area population shown in Table 7-1 and the total open space acreage within ½-mile shown in Table 7-2. The resultant ratio is 0.02271 acres per 1,000 residents based on 0.8 acres of existing open space divided by the 2010 Census study area population of 35,224 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.

Future No-Action Condition

Study Area Population

As stated above, the 2010 census residential population of the half-mile open space study area was 35,224 persons. In order to account for background growth to the 2026 project build year, a conservative annual growth rate of 0.5% per year was applied to the 2010 residential population of the ½-mile open space study area. This growth factor would result in the addition of 2,818 additional residents. Therefore, the open space study area would have a No-Action residential population of 38,042 persons in 2026.

Study Area Open Space

There would be no increase or decrease in the 0.8 acres of existing open space area within the ½-mile project study area by the project build year of 2026.

Assessment of Open Space Adequacy

The future no-action residential open space ratio within a ½-mile radius of the Project Area would be approximately 0.02103 based on the area residential population of 38,042 persons in 2026 and the 0.8 acres of open space area.

Future With-Action Scenario

Study Area Population

As discussed above, the Proposed Actions are expected to generate approximately 340 new residents based on existing census data (average household size) for the census tracts located within ½-mile of the Project Area. Adding this population to the future no-action residential population of 38,042 would result in a total study area population of approximately 38,382 residents.

Study Area Open Space

No new publicly accessible open space and recreational resources are planned to be added to the residential study area by 2026 with the Proposed Actions. Therefore, in 2026 with the Proposed Actions, the residential project study area would contain approximately 0.8 acres of open space resources, the same as under currently existing and future no-action conditions.

The proposed development on Projected Development Site 1 would contain an outdoor recreational area for the residential tenants of the building on the top of the roof of the 7-story building which would measure approximately 1,853 square feet. The recreational area would include a passive recreational landscaped sitting area and a swimming pool. This outdoor recreational area would be provided for use by project residents, and as they would not be publicly accessible, the area has not been included in any calculations of publicly accessible

open space.

Assessment of Open Space Adequacy

The future with-action residential open space ratio within a ½-mile radius of the Project Area would be approximately 0.02084 based on the area residential population of 38,382 persons in 2026 and the 0.8 acres of open space area.

The projected residential open space ratio in 2026 with the Proposed Actions would be 0.02084 acres per 1,000 residents compared with the projected ratio of 0.02103 acres in the study area in the future without the project. This represents a decrease of approximately 0.00019 acres or 0.9% 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 7-3 shows the calculation of residential open space ratios for the existing, Future No-Action, and Future With-Action Scenarios.

Table 7-3

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)	0.8	0.8	0.8
Study Area Population	35,224	38,042	38,382
Open Space Ratio (Acres/1,000 Residents)	0.02271	0.02103	0.02084 – 0.00019ac/0.9% decrease

Conclusion

The open space ratio for the ½-mile radius residential study area is less than 0.25-acres which is considered to be very low. In addition, the decrease in the open space ratio of 0.9% is just below than 1% for the study area. Therefore, a detailed open space analysis is provided below.

Detailed Analysis

Study Area Population by Age Group

The residential study area population and age breakdown was estimated using data from the 2010 U. S. Census of Population and Housing for the accessible census tracts located fully or at least 50 percent within the one-half mile study area. As shown in Table 7-4, in 2010 the study area contained a total of 35,224 residents within the eleven relevant census tracts. 16.5% of the area population was younger than 20 years of age while 9.6% was 65 years of age or older. 73.9% of the area population was between the ages of 20 and 64.

Table 7-4**Residential Study Area Population by Age Group (2010)**

Age Category	Persons	Percent of Population
5 and younger	1,639	4.7%
5-9	1,372	3.9%
10-14	1,313	3.7%
15-19	1,471	4.2%
20-64	26,037	73.9%
65 and older	3,392	9.6%
	35,224	100.0%

Study Area Open Space

The study area contains 2 publicly accessible open spaces, which total approximately 0.8 acres. This includes approximately 0.582 acres of active and 0.218 acres of passive open space (see Table 7-2 and Figure 7-1). In terms of publicly accessible open space, the study area includes primarily active open space within children's playgrounds and ball courts. The passive open space primarily consists of bench seating and landscaped areas. Both facilities in the study area are managed by the Department of Parks and Recreation.

A field survey of Playground Thirty-Five and Sean's Place was conducted on Monday 04/23/18 between 12 and 1 PM. The weather was warm and sunny. Both facilities are completely surrounded by fencing and are open between 6 AM and 9 PM. Based on the most recent DPR inspection conducted on October 30, 2017, the overall cleanliness and condition of Playground Thirty-Five was acceptable. The most recent DPR inspection conducted on January 30, 2018 for Sean's Place also found the overall cleanliness and condition to be acceptable. Sean's Place was recently reconstructed with approximately \$1 million of improvements completed in November 2017.

Both Playground Thirty-Five and Sean's Place experienced low to moderate usage during the field survey and usage was primarily comprised of young children under the age of 5 and their mothers using the playground equipment (moderate usage). Several people were also sitting on the benches located in both parks (low usage). Both facilities were approximately 75% in full sun with the remaining approximately 25% in shadow.

Table 7-5
Inventory of Open Space Resources

Map Key	Open Space Resource Name	Address	Total Size (Acres)	Agency	Features	Passive Acres (total & within 1/4-mile)	Active Acres	Condition	Utilization
1	Playground Thirty-Five	35 Ave. bet. Steinway St. and 41	0.22	DPR	children's playground equipment,	0.044/ 0.044	0.176	very good	low to moderate

		St.			benches, trees				
2	Sean's Place	38 St. bet. 31 Ave. and Broadway	0.58	DPR	children's playground equipment, handball and basketball courts, spray shower, benches, trees	0.174/0	0.406	very good	Low to moderate
Total			0.8			0.218/0.044	0.582		

Additional Open Space Resources

One community garden is located within the open space study area but as it does not contain a playground it has not been included in the quantitative analysis. Two public parks are located just outside the ½-mile open space radius area and have not been included in the quantitative analysis as they are located outside the census tract boundaries included in the study area. However, these public parks and open space resources serve the area's residential population. A description of these facilities follows below:

- The 0.29-acre Arrow Community Garden and multi-purpose community center is located on 35th Street between 35th Avenue and 36th Avenue within the ¼-mile radius worker study area in census tract 57.

- The 2.4-acre Dutch Kills Playground occupies most of the block bounded by 28th and Crescent Streets between 36th and 37th Avenues. Although the playground is located outside of census tract 51, which is within ½-mile of the proposed rezoning area, it lies directly adjacent to the outer boundary of this census tract. The facility includes children's playground equipment, a spray shower, basketball and handball courts, a roller hockey rink, tennis and volleyball courts, areas with bench seating, and areas planted with trees and other landscaping.

- The 2.2-acre Astoria Heights Playground occupies approximately the northern three-quarters of the block bounded by 30th Road and 31st Avenue between 45th and 46th Streets. The playground nearly touches the boundary of the ½-mile radius but is not included in any of the census tracts within the study area. The facility includes children's playground equipment, a fitness equipment area with swimming pool for adults, a track, a spray shower, basketball and handball courts, tennis and volleyball courts, areas with bench seating and picnic tables, and areas planted with trees and other landscaping.

Dutch Kills and Astoria Heights playgrounds are similar to the two facilities included in the detailed analysis above relative to play facilities for children and passive open space areas. However, both playgrounds are considerably larger than the two facilities located within the study area and offer a greater range of recreational features for older adults. These two playgrounds provide a total of 4.6-acres of publicly accessible open space just beyond ½-mile of the proposed rezoning area. Approximately 75% of this acreage or 3.67 acres is active open space and approximately 25% or 1.22-acres is passive open space.

Assessment of Open Space Adequacy

The existing residential open space ratio was calculated based on the residential study area population discussed above and shown in Table 7-4 and the passive, active, and total open

space acreage within ½-mile shown in Table 7-5.

With a total of 0.8 acres of publicly accessible open space (of which 0.218 are for passive use and 0.582 are for active use) and a total residential population of 35,224 persons, the study area has a total open space ratio of 0.02271 acres per 1,000 residents (see Table 7-3). 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 0.01652 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 0.00619 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 7-6: Residential Open Space Ratios (Existing Condition)

	Existing Conditions	DCP Guideline
Publicly Accessible Open Space (Acreage)	0.8	-
Study Area Residential Population	35,224	-
Open Space Ratio (Acres/1,000 Residents)	0.02271	2.5
Active Open Space Ratio (Acres/1,000 Residents)	0.01652	2.0
Passive Open Space Ratio (Acres/1,000 Residents)	0.00619	0.5

Future No-Action Condition

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 7-3 and the passive, active, and total open space acreage within ½-mile shown in Table 7-5.

With a total of 0.8 acres of publicly accessible open space (of which 0.218 are for passive use and 0.582 are for active use) and a total future no-action residential population of 38,042 persons, the study area would have a total open space ratio of 0.02103 acres per 1,000 residents (see Table 7-7). 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 0.01530 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 0.00573 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 7-7: Residential Open Space Ratios (No-Action Condition)

	No-Action Conditions	DCP Guideline
Publicly Accessible Open Space (Acreage)	0.8	-
Study Area Residential Population	38,042	-
Open Space Ratio (Acres/1,000 Residents)	0.02103	2.5

Active Open Space Ratio (Acres/1,000 Residents)	0.01530	2.0
Passive Open Space Ratio (Acres/1,000 Residents)	0.00573	0.5

Future With-Action Condition

The residential open space ratio was calculated based on the future with-action residential study area population discussed above and shown in Table 7-3 and the passive, active, and total open space acreage within ½-mile shown in Table 7-5.

With a total of 0.8 acres of publicly accessible open space (of which 0.218 are for passive use and 0.582 are for active use) and a total future with-action residential population of 38,382 persons, the study area would have a total open space ratio of 0.02084 acres per 1,000 residents (see Table 7-8). The future with action open space ratio would decrease by 0.00019 acres or 0.9% relative to the no-action open space ratio of 0.02103. 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 0.01517 acres per 1,000 residents. The future with-action active open space ratio would decrease by 0.00013 acres or 0.9% relative to the no-action active open space ratio of 0.0153. 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 0.00568 acres of passive open space per 1,000 residents. The future with-action passive open space ratio would decrease by 0.00005 acres or 0.9% relative to the no-action passive open space ratio of 0.00573. 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 1,853 square feet (0.43 acres) of private open space would be provided on the Applicant's Projected Development Site 1 which would serve to meet at least a portion of the open space needs of the project's residents.

Table 7-8: Residential Open Space Ratios (With-Action Condition and Incremental Change)

	Future No-Action	Future With-Action	DCP Guideline	Change
Publicly Accessible Open Space (Acreage)	0.8	0.8	-	
Study Area Residential Population	38,042	38,382	-	
Open Space Ratio (Acres/1,000 Residents)	0.02103	0.02084	2.5	- 0.00018 ac (-0.9%)
Active Open Space Ratio (Acres/1,000 Residents)	0.01530	0.01516	2	- 0.00014 ac (-0.9%)
Passive Open Space Ratio (Acres/1,000 Residents)	0.00573	0.00568	0.5	-0.00005 ac (-0.9%)

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 project 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.

At 0.02084 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 0.9% in the residential open space ratio in the project 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 0.01516 acres per 1,000 residents would represent a decrease by 0.00014 acres or 0.9% relative to the no-action active open space ratio of 0.0153. The active open space ratio would remain well below DCP's planning guideline of 2.0 acres per 1,000 residents.

The future with-action passive open space ratio of 0.00568 acres of passive open space per 1,000 residents would decrease by 0.00005 acres or 0.9% relative to the no-action passive open space ratio of 0.00573. The passive open space ratio would remain well below DCP's goal of 0.5 acres per 1,000 residents.

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 low amount of open space in the study area, the open space in the study area comes close to this breakdown. The 0.582 acres of active open space would represent approximately 73% of the total open space acreage of 0.8 acres while the 0.218 acres of passive open space would represent approximately 27% of the total acreage.

Qualitative Impact

The Proposed Actions would not result in the creation of any new publicly accessible open space. However, under the Proposed Actions, the proposed development on Projected Development Site 1 would provide 1,853 square feet (0.43 acres) of common recreational space.

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 project residents.

The quantitative open space analysis did not include a 0.29-acre community garden located within the project study area or two large playgrounds located adjacent to the ½-mile study area that serve the area's residential and worker populations. Dutch Kills and Astoria Heights playgrounds are similar to the two facilities included in the detailed analysis above relative to play facilities for children and passive open space areas. However, both playgrounds are considerably larger than the two facilities located within the study area and offer a greater range of recreational features for older adults. These two playgrounds provide a total of 4.6-acres of publicly accessible open space just beyond ½-mile of the proposed rezoning area. Approximately 75% of this acreage or 3.67 acres is active open space and approximately 25% or 1.22-acres is passive open space.

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 conditions. The project development associated with the proposed rezoning 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 through 5 would not cast new shadows on any open space resources as there are no open space resources within the maximum shadows radius of the Project Development Sites.

Conclusion

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 the action open space ratios within the project study areas. In addition, there are two large playgrounds totaling 4.6-acres in size adjacent to the ½-mile project study area as well as a 0.29-acre community garden within the project study area which have not been included in the quantitative assessment. Finally, a 0.43-acre private residential open space will be provided on Projected Development Site 1 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.



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.

The heights to the tops of the roofs of the buildings on the Projected Development Sites would be as listed below. Total building heights include a 3' parapet wall.

- Projected Development Site 1: 95.0'
- Projected Development Site 2: 55.0'
- Projected Development Site 3: 75.0'
- Projected Development Site 4: 75.0'
- Projected Development Site 5: 75.0'

According to the *CEQR Technical Manual*, a shadows assessment is not required unless the project would include a structure or an addition to a structure at least 50 feet in height 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 shadows analysis is required for this project since the block on which the Projected Development Sites are located is in close proximity to an open space resource and because the Proposed Actions would result in the development of five new structures that would exceed 50 feet in height.

There are no shadows sensitive historic resources or any important natural resource within the maximum shadows radius of the project.

Preliminary Screening Assessment

Tier 1 Screening Assessment

There is one shadow sensitive resource in the vicinity of the Projected Development Sites, that being Playground Thirty-Five on 35th Avenue between Steinway Street and 41st Street. Playground Thirty-Five is labeled "1" on the attached Tier 1 Screening Assessment diagram.

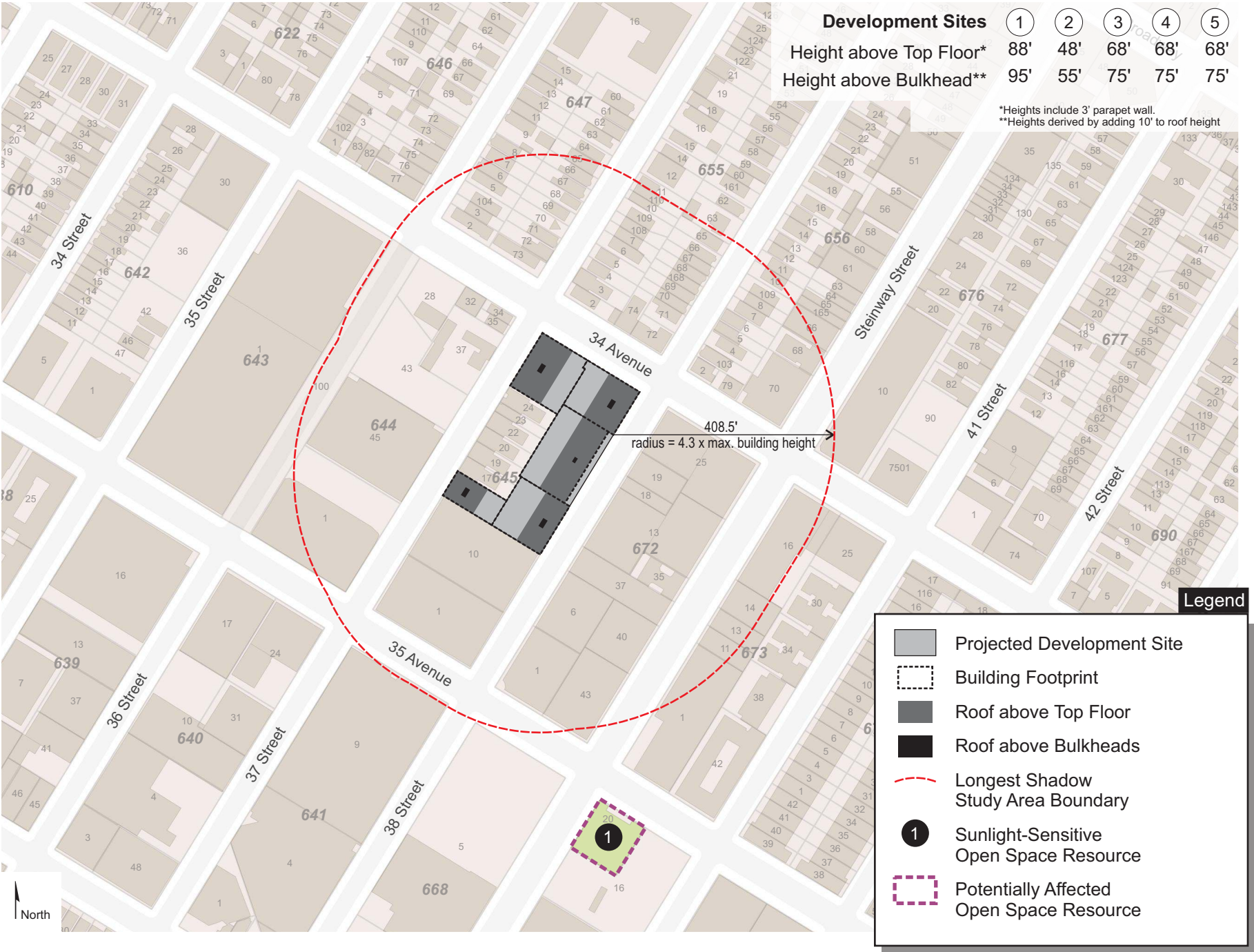
The longest shadow of 408.5 feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum proposed building height of 95 feet including the 3-foot parapet wall on the roof of the building on Projected Development Site 1 (the tallest of the five projected buildings).

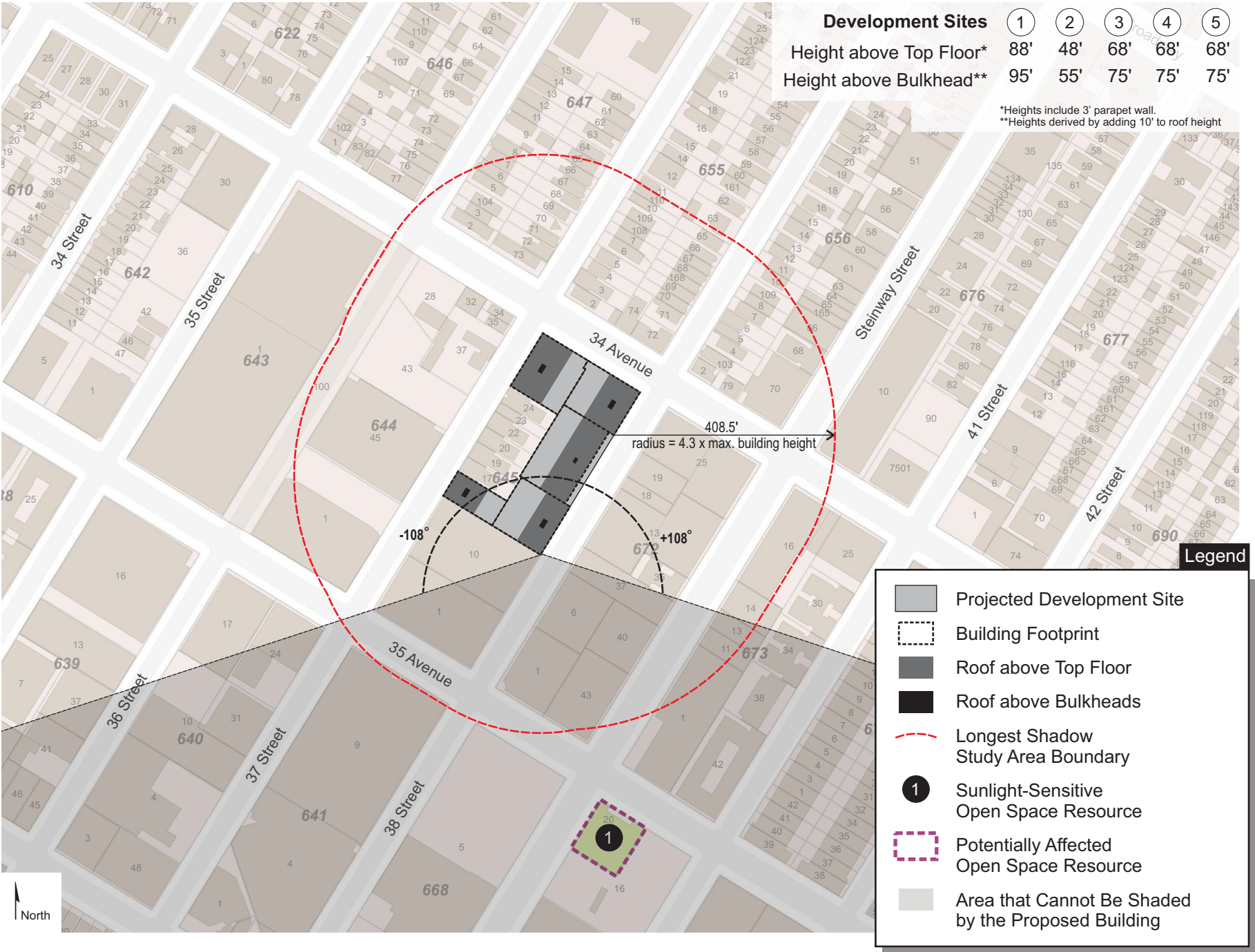
As illustrated on the figure, the entirety of Playground Thirty-Five on 35th Avenue between

Steinway Street and 41st Street is located beyond the maximum shadows radius of Building 1 and would therefore not be shaded by the project. Therefore, as no new shadows on open space resources would result from the project, no further assessment is required.

Conclusion

Buildings on Projected Development Sites 1 through 5 would not cast any new shadows on parks, historic resources, or any important natural resources. There are no shadow sensitive resources within the maximum shadows radius of the Project Development Sites. Therefore, the Proposed Actions would not result in any significant shadows impacts, and no further assessment is needed for the project.





9. HISTORIC AND CULTURAL RESOURCES

The 2014 *City Environmental Quality Review (CEQR) Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks (NYCL); properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed in the State/National Registers of Historic Places (S/NR) or contained within a district listed in or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHL); and properties not identified by one of the programs listed above, but that meet their eligibility requirements. An assessment of historic/archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures or within historic districts, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

As discussed in the Project Description, the Proposed Actions consist of the following on Block 645 bounded by 37th and 38th Streets between 34th and 35th Avenues in the Astoria neighborhood of Queens:

- A zoning map amendment to the New York City Zoning Map, section 9b, to rezone the Project Area as follows: Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30, 31, 126, 127, and 131 from M1-1 to R6A (MIH); and Block 545, Lots 30-38, 40, 42, 44-47, and 131 from M1-1 to R6A/C1-3 (MIH); and
- A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing ("MIH") Areas for Community District 1, Queens to establish an MIH Area coterminous with the Project Area.

The Project Area is not a Federal, State, or New York City designated Historic District and does not contain any individually designated historic resources. There is one individually designated resource located within 400 feet of the Project Area, that being the Paramount Studios Building No. 1 at 34-12 36th Street which occupies roughly the southern half of Block 643 bounded by 35th and 36th Streets from 34th to 35th Avenues. This property was designated by the LPC on March 14, 1978. The property is also NYS and National Register listed. The LPC Designation report summarizes the resource as follows:

The Paramount Studios, Building No. 1 (Main Building) is one of the few active studios in New York dating from the early 1900s when the city was the motion picture capital of the nation. The studio was built in 1920-1921 as the eastern production headquarters for the renowned Famous Players Lasky Corporation, forerunner of Paramount Pictures. The studio building is a tangible reminder of the history and evolution of the motion picture and entertainment industry. During World War II, as the U.S. Army Signal Corps Pictorial Center, it served as the production headquarters for educational, indoctrination, training, entertainment, and propaganda films which played a significant role in the war effort. Paramount Studios is once again an integral part of the New York film industry, and the building retains one of the largest sound stages in the world.

Records in the Queens Building Department indicate that the building was begun in August 1920 and was completed in February 1921. The Fleischman Construction Company of New York was responsible for the design and construction. The building was constructed of reinforced and cast concrete with terra cotta and masonry block used for decorative and facing

materials. Modified classical detail enhances the overall design. The main facade on 35th Avenue is three stories high and monumentally scaled. The central portion is highlighted by a striking double-height porte-cochere which is five bays wide and flanked by end pylons. This was the main entrance for the stars working at the studio. The piers which compose the porte-cochere are clad with terra cotta and support a classically-inspired entablature at the second floor. The third story is also subdivided into five bays, each punctuated by three window openings. Each bay is flanked by pilasters which continue the vertical line of the piers below. Decorative pendentive forms adorn these pilasters. The parapet above the third story is enhanced by a geometrically-patterned bandcourse. The central portion is flanked by narrower end sections set with window openings between two-story paneled pilasters. The first floor central window in each section is enhanced by a pediment. A bandcourse separates the second and third stories. Paneled pilasters flank the third story windows, and the third floor parapet is adorned with a geometrically patterned bandcourse like that used on the central portion.

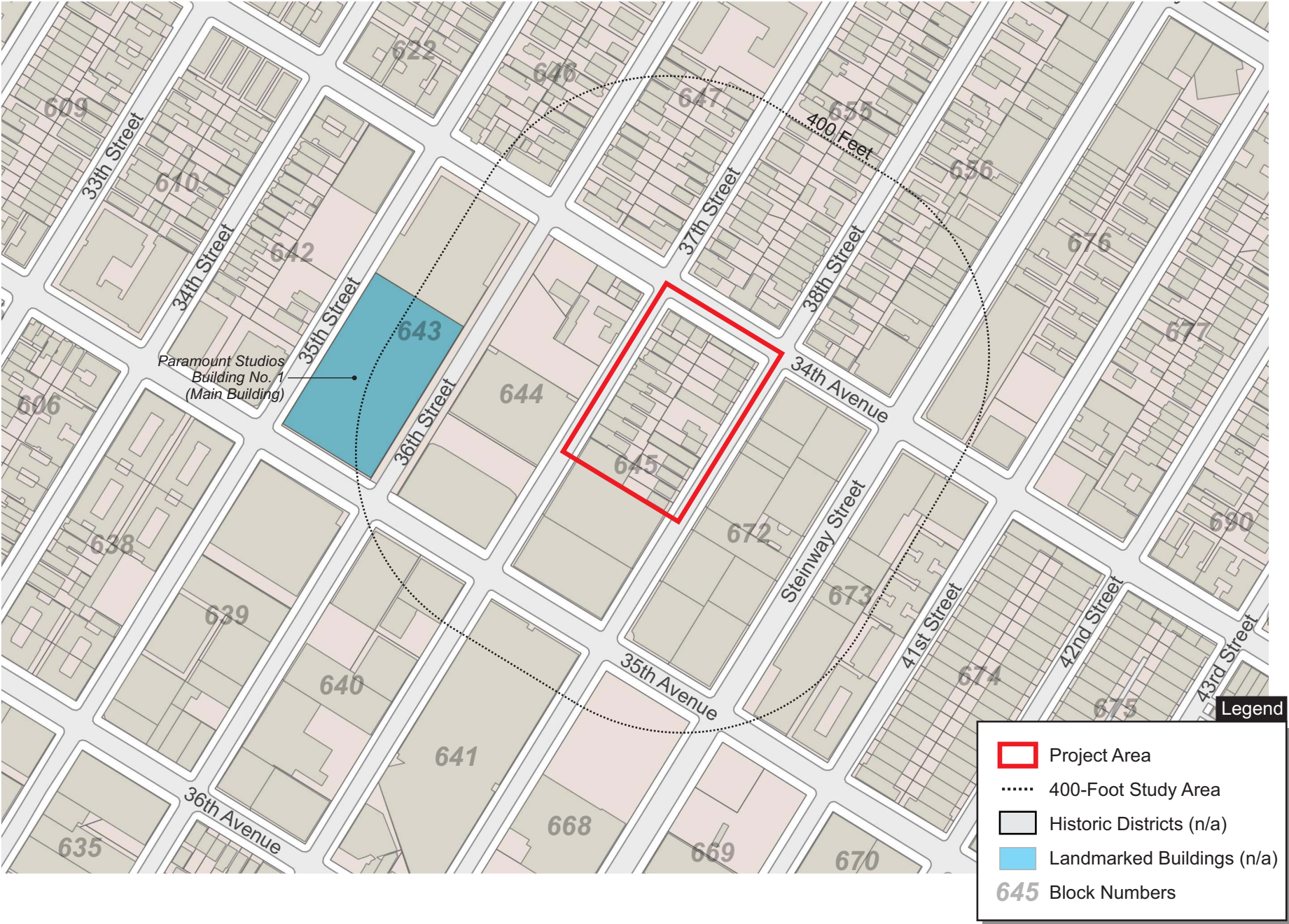
On the basis of a careful consideration of the history, the architecture and other features of this building, the Landmarks Preservation Commission finds that the Paramount Studios, Building No. 1 (Main Building), has a special character, special historical and aesthetic interest and value as part of the development, heritage and cultural characteristics of New York City.

An assessment of archaeological resources is typically required for projects that involve in-ground disturbance, unless such disturbance occurs in an area that has already been excavated. The Proposed Actions are expected to cause additional in-ground disturbance on Projected Development Sites 1 through 5.

The LPC was consulted to provide a determination of potential historic and archaeological impacts of the project. In a memo dated November 28, 2017, LPC indicated that the Project Area has no architectural or archaeological significance. LPC also indicates that the following resource is located within the radius (see attached Historic and Cultural Resources Appendix).

Paramount Studios Complex is listed on the National Register (90NR01612). PARAMOUNT STUDIOS, BUILDING NO. 1 (MAIN BUILDING), 35-11 35th Avenue, Astoria, Borough of Queens is LPC Individual Landmark.

The Proposed Actions would not result in any significant adverse impacts to historic or archaeological resources.



10. URBAN DESIGN/VISUAL RESOURCES

Introduction

An assessment of urban design is needed when a project may have effects on any of the elements that contribute to the pedestrian experience of public space. 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.

The Proposed Actions include:

- (1) A zoning map amendment to ZR section 9b to change the existing zoning on Block 645, Lots 15, 17, 19, 20, 22-25, 28, 30, 31, 126, 127, and 131 from M1-1 to R6A (MIH); and on Block 545, Lots 30-38, 40, 42, 44-47, and 131 from M1-1 to R6A/C1-3 (MIH); and
- (2) A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing ("MIH") Areas for Community District 1, Queens to establish an MIH Area coterminous with the Project Area.

The maximum floor area that could be built on Block 645 in the future without the Proposed Actions under the existing zoning is approximately 67,918 zsf of manufacturing or commercial space or 163,003 zsf of community facility space. Under the existing zoning, no new residential development would be permitted on the Applicant's Projected Development Site 1.

In the future with the Proposed Actions, the proposed zoning would permit a maximum floor area of approximately 244,504 zsf of residential or community facility space, and 75,496 zsf of commercial space.

Under No-Action conditions, the 5 Projected Development Sites would be developed with 40,874 gsf of residential space for 39 dwelling units, and 11,521 gsf of commercial space. Under the proposed rezoning, a RWCDs of 53,494 square feet of residential floor area comprised of 62 dwelling units and 2,645 square feet of retail space would be permitted on the Applicant's Projected Development Site 1. The requested rezoning would also result in a RWCDs of 116,927 square feet of residential floor area comprised of 122 dwelling units and 13,900 square feet of retail space on the non-Applicant owned Projected Development Sites 2 through 5. The increment between the No-Action and With-Action development scenarios would be 134,547 gsf of additional residential space for 144 additional dwelling units (including 92 to 101 market rate and 43 to 52 affordable units), 24 gsf of additional commercial floor area, and 115 new residential accessory parking spaces. In order to allow for the projected development, the following existing/no-action development would be demolished.

- Site 1: 5,786 gsf of residential floor area containing 6 dwelling units and 5,085 of garage/warehouse space
- Site 2: 5,000 gsf of warehouse space
- Site 3: 4 residential buildings comprised of 11,352 gsf of floor area and 8 dwelling units
- Site 4: 6 residential buildings comprised of 15,772 gsf of floor area and 17 dwelling units

- Site 5: 3 residential and 2 mixed-use buildings comprised of 7,964 gsf of residential floor area with 8 dwelling units and 1,436 gsf of commercial floor area

All the projected residential and commercial development would be new development as all existing dwelling units and commercial space on these sites would be removed. These changes are reflected in the increment numbers above.

The Proposed Actions would also result in modification of the existing yard, height, and setback requirements relevant to the property. A preliminary urban design assessment is therefore required.

Preliminary Assessment

Existing Conditions

Project Area

The Project Area includes the northern approximately two-thirds of Block 645, bounded by 37th Street, 38th Street, 34th Avenue, and 35th Avenue in the Astoria neighborhood of Queens, and consists of approximately 67,918 square feet of land area. The uses on the Applicant's property proposed for redevelopment include three 2-family dwellings and two 1-story garage structures used for storage. The remainder of Block 645 is predominantly residentially developed, and includes apartment buildings, attached rowhouses, and a few detached homes. Specifically, the western frontage of 38th Street between 34th and 35th Avenues (Block 645, Lots 32-47) includes numerous two-story attached rowhouses. The eastern frontage of 37th Street between 34th and 35th Avenues (Block 645, Lots 17-31, 126-127, & 131) includes several attached larger apartment buildings ranging in height from two- to four-stories. One lot along 37th Street (lot 15) contains a one-story warehouse structure occupied by a sign manufacturing shop. Two buildings on the block also contain ground floor retail uses with residential space on the second floor above (lots 32 and 131).

400-Foot Radius Project Study Area

Relative to the 400-foot radius study area, the Applicant's proposed development site presents a transitional development pattern that relates to the relatively small one- to four-story residential buildings and the considerably larger one- to five-story buildings housing warehouses, commercial uses, auto related facilities, and multi-family residences to the east; the large one- to three-story buildings and parking facilities primarily associated with Kaufman Astoria Studios to the west; and the mixture of large one- to four-story commercial and educational related buildings to the south of the site. The physical development pattern of the Applicant's property mirrors that of its surroundings in that the residential portion of the site is similar to the areas to the north containing buildings often set back from the street line and covering only a portion of their lot areas, while the commercially built portion of the site contains buildings covering most or all of their lots similar to areas to the east, west, and south.

Streets within the radius area are of a generally uniform width of 80 feet for the east-west running avenues and 60 feet for the north-south running streets except for Steinway Street which is a major two-way street that measures 80 feet in width.

Views of the street frontages of several blocks distant from the site are available in all directions along 37th and 38th Streets and 34th and 35th Avenues bordering the property due to the rather flat topography of the area. With the possible exception of views of the landmarked Famous

Players-Lasky Studio building over the unbuilt portion of Block 644 across 37th Street from the site, area views would generally not be considered significant. The Famous Players-Lasky Studio building is listed because of its historic associations and not due to any distinguishing architectural characteristics. Views of this rather undistinguished utilitarian appearing structure would therefore not be considered to be of great significance.

An aerial photograph of the project study area and 18 ground level photographs of the site area and the immediate context are attached which show existing conditions on the site and in the surrounding area. Zoning calculations of the existing conditions on the site, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below.

Future No-Action Scenario

Project Area

Under this scenario, it is likely that the existing buildings and uses in the Project Area would remain unchanged as detailed in the land use chapter above. T

400-Foot Radius Project Study Area

No new development projects have been identified for the 400-foot radius project study area based on a review of DCP's LUCATS for Queens Community District 1 back to the year 2010. Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2026. Within the study area, most of the existing dwellings, the television studio and uses related thereto, the commercial office and retail uses, the warehouses, the auto related facilities, the schools, and the parking lots are expected to remain. No other new development on the few existing vacant lots or redevelopment of the existing warehouse buildings within the 400-foot study area would be anticipated to occur by 2026. There has been little or no manufacturing development and limited new commercial construction in the study area in recent years. This trend is not expected to change between now and the project build year of 2026.

No significant changes to the urban design character of the Project Area are anticipated to occur in the future without the Proposed Actions. Only minimal changes to the urban design character of the surrounding 400-foot radius project study area are anticipated to occur in the future without the Proposed Actions. No significant impacts to the visual resources in the vicinity of the site would occur.

Zoning calculations of future No-Action conditions on the site, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below.

Future With-Action Scenario

The development anticipated to result from the proposed rezoning action would result in the removal of the existing residences on the Applicant owned lots 36, 38, and 40 and the one-story garage/warehouse structures on the Applicant owned lots 37 and 42. A new seven-story, cellar and sub-cellar mixed-use UG2 residential and UG6 commercial building totaling 95,065 gsf in size on the Applicant owned property (Projected Development Site 1). Although the Applicant's proposed project is for a 75-foot tall building, for conservative analysis purposes, a building height of 85 feet is assumed. The building would include 62 dwelling units, 13 to 16 units of which would be affordable to lower income residents, 2,645 gsf of retail space, and 80 parking

spaces accessory to the residential uses. Driveway access would be provided via a new curb cut onto 38th Street.

The remainder of the Project Area would not be physically affected by the subject action. The existing development on lots 15, 17, 19, 20, 22-25, 28, 44-47, 126, 127, and 131 including 76 dwelling units; 1,436 square feet of office space, retail and indoor recreational space; and 5,000 square feet of warehouse/manufacturing space would remain. The proposed project would link the block with the R5 residential area located immediately to the north while maintaining the existing connection with the M1-5 and M1-1 areas to the south and west.

The proposed new building on Projected Development Site 1 would be sited towards the street (no front yard is proposed), and would include a 65-foot street wall height for the entirety of the lot width. An outdoor recreational area for the project's residential tenants would be provided on the top of the roof of the 7-story building and would measure approximately 1,853 square feet. The recreational area would include a passive recreational landscaped sitting area and a swimming pool. The proposed building would provide a 30-foot rear yard. The incorporation of setbacks, the rear yard, and open space into the design of the building would serve to minimize the massing of the structure relative to their surroundings, and especially in relation to the low-rise and low lot coverage residential buildings along the 38th Street frontage of the block.

While clearly a larger and bulkier building than the existing development on lots 36, 37, 38, 40, and 42, the proposed building has been designed as a transitional development between the smaller residential buildings to the north and the bulkier commercial and residential buildings to the south, east, and west. It has also been designed to meet the building and lot requirements relevant to the proposed R6A/C1-3 zoning district. The proposed development would replace the existing older and in part obsolete buildings with a modern mixed-use structure that would be compatible with the existing residential and other developments in the surroundings. The project would have no adverse impacts on the existing development that would remain on the block.

The proposed development would not affect views available to the landmarked Famous Players-Lasky Studio building over the undeveloped portion of the block located to the west of the Project Area. It would also not affect such urban design elements as block forms and street patterns in the area.

Although induced development resulting from the Proposed Actions is not considered likely on Lots 17, 19, 20, 22, 23, and 24, potential induced development may occur on Lot 15 (Projected Development Site 2), Lots 44-47 (Projected Development Site 3), Lots 25, 28, 30, 31, 126, and 127 (Projected Development Site 4), and Lots 32-35 and 131 (Projected Development Site 5).
REVIEW REST OF PARAGRAPH Induced development on Projected Development Sites 2 through 5 is likely to consist of up to approximately 122 dwelling units (including 81 to 87 market rate and 31 to 37 affordable units), 13,900 gsf of commercial space, and 35 accessory residential parking spaces. This development would require the demolition of a 5,000 gsf warehouse on Projected Site 2, four residential buildings containing 8 dwelling units on Projected Development Site 3, six residential buildings containing 17 dwelling units on Projected Development Site 4, and three residential and two mixed-use buildings containing 8 dwelling units and 1,436 gsf of commercial floor area on Projected Development Site 5.

The With-Action development would change the low-density residential and mixed-use

character of the Project Area to a higher density community with a significantly greater number of residential dwelling units. In addition to a significantly greater amount of floor area, most building heights would be significantly greater under the With-Action Scenario with new buildings ranging from 4- to 13-stories in height. The new development would result in buildings ranging in height from four to seven stories. The existing buildings in the Project Area are one- to four-stories in height. Parking for the With-Action development would be provided underground while most of the parking spaces for the Existing/No-Action Scenario are provided at-grade. Such development would not affect views available to the landmarked Famous Players-Lasky Studio building located across 35th Street from these lots. It would also not affect such urban design elements as block forms and street patterns in the area.

Zoning calculations of future With-Action conditions on the site, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below.

Table 10-1
Zoning Calculations Relevant to Urban Design Analysis ²

Item	Existing Conditions	No-Action Conditions	With-Action Conditions
Development Scenario	16 residential dwellings; 2 resid/comm'l bldgs.; 2 garages; 1 man/whse bldg. 39 DUs; 1,436 sf retail; 5,000 sf whse/man; 5,085 sf garage	16 residential dwellings; 2 resid/comm'l bldgs.; 2 garages; 1 man/whse bldg. 39 DUs; 1,436 sf retail; 5,000 sf whse/man ; 5,085 sf garage	4 office/retail/resid bldgs, 1 resid building 183 DUs; 11,545 sf retail; , 115 parking spaces
Building Floor Area	100,635 sf	100,635 sf	225,892 sf
Lot Coverage	61,126 sf (90.0%)	61,126 sf (90.0%)	67,918 sf (100%)
Building Heights	1- to 4-stories	1- to 4-stories	One 7-story, three 6-story, one 4-story bldgs

Conclusion

The Proposed Actions would result in the development of residential and local retail uses and accessory parking on 5 parcels located in an area developed with similar uses. The Proposed Actions would result in the development of increased density on these 5 parcels resulting in taller buildings with additional square footage.

The mapping of the proposed R6A and R6A/C1-3 districts is the most appropriate zoning for the area as these districts would result in a development that would be closest in size and form to the existing neighborhood context while also providing enough floor area to develop a reasonable number of affordable dwelling units.

The purpose of the zoning map and text amendments is to provide sufficient floor area to accommodate the proposed new buildings in a complying manner. In addition, in order to be

² Includes Projected Development Sites 1 through 5.

able to use the MIH Program provisions of the Zoning Resolution, a site has to be zoned R6A or higher.

The With-Action Development Scenario would not result in any significant impacts to the visual resources in the vicinity of the Project Area. Views to the landmarked Famous Players-Lasky Studio building would still be available from the streets bordering the Project Area.

The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. Although the project would alter the context of a built visual resource, specifically the landmarked Famous Players-Lasky Studio building located one block west of the Project Area, the development that would be facilitated by the Proposed Actions would represent a visual improvement to the area.

The proposed project would conform with a predominant land use type in the project study area, and would represent a transitional building form relative to surrounding development patterns. It would not affect such urban design elements as block forms and street patterns. The proposed project would not result in any adverse environmental impacts to urban design and visual character. It is therefore concluded that further analysis of urban design and visual resource impacts resulting from the proposed development is not warranted.





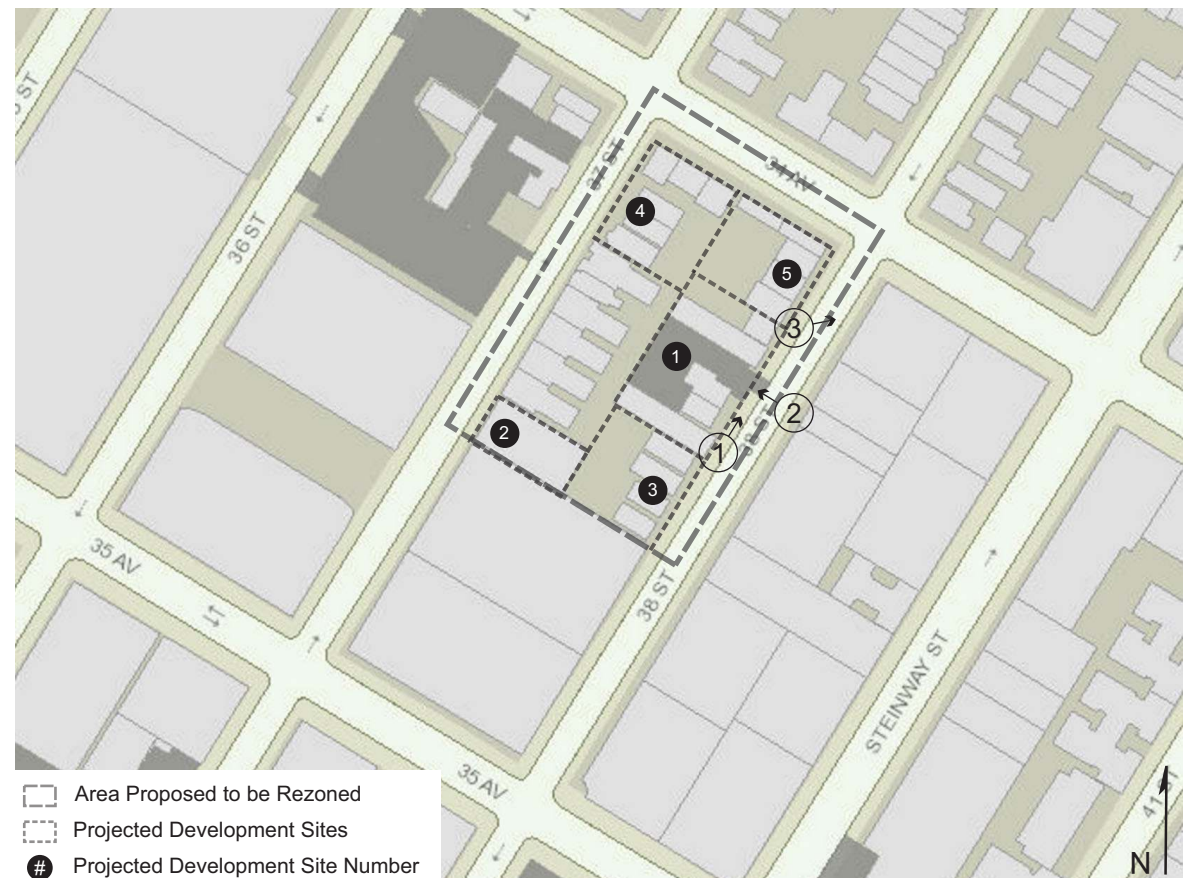
1. View of the sidewalk along the west side of 38th Street facing northeast (Site at left).



2. View of the Site facing northwest from 38th Street.



3. View of the east side of 38th Street facing east from the Site.





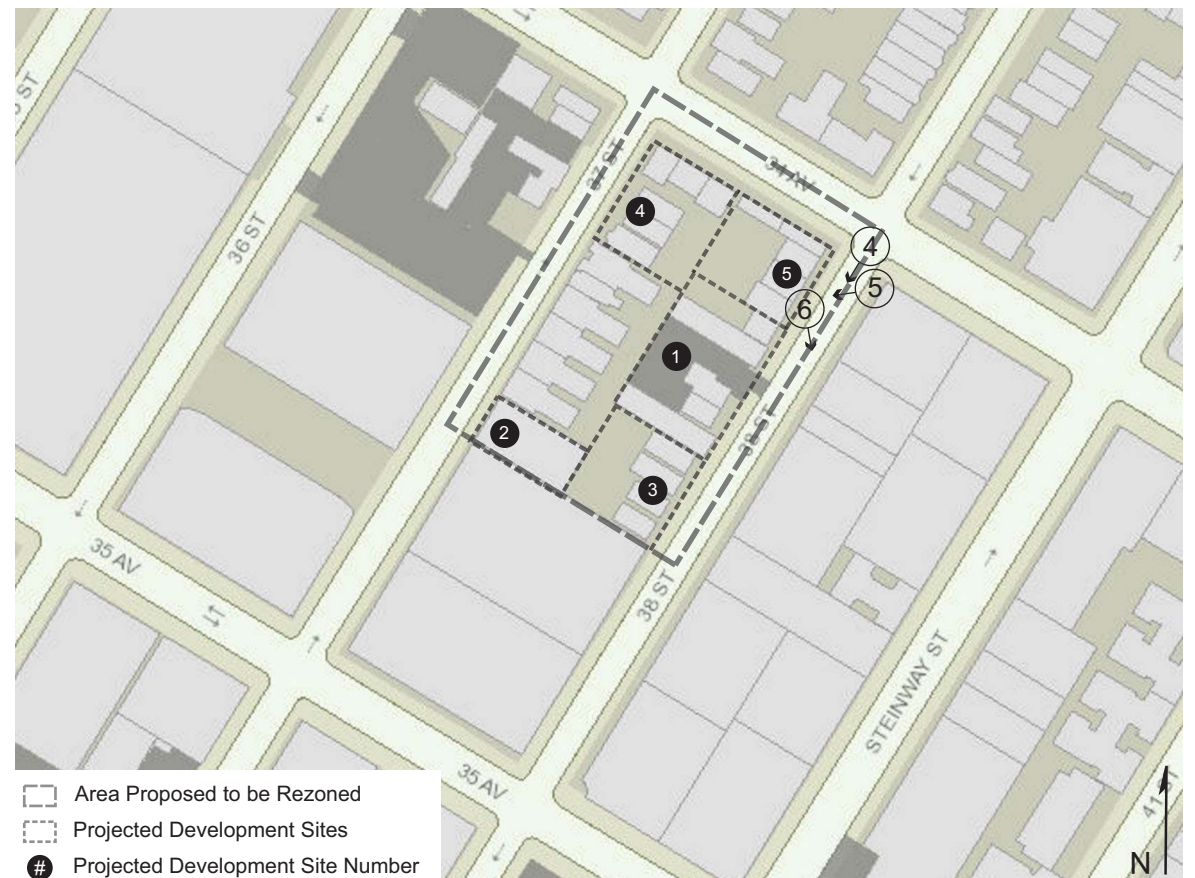
4. View of 38th Street facing south from 34th Avenue (Site ahead at right).



5. View of the west side of 38th Street just south of 34th Avenue.



6. View of the east side of 38th Street just south of 34th Avenue.





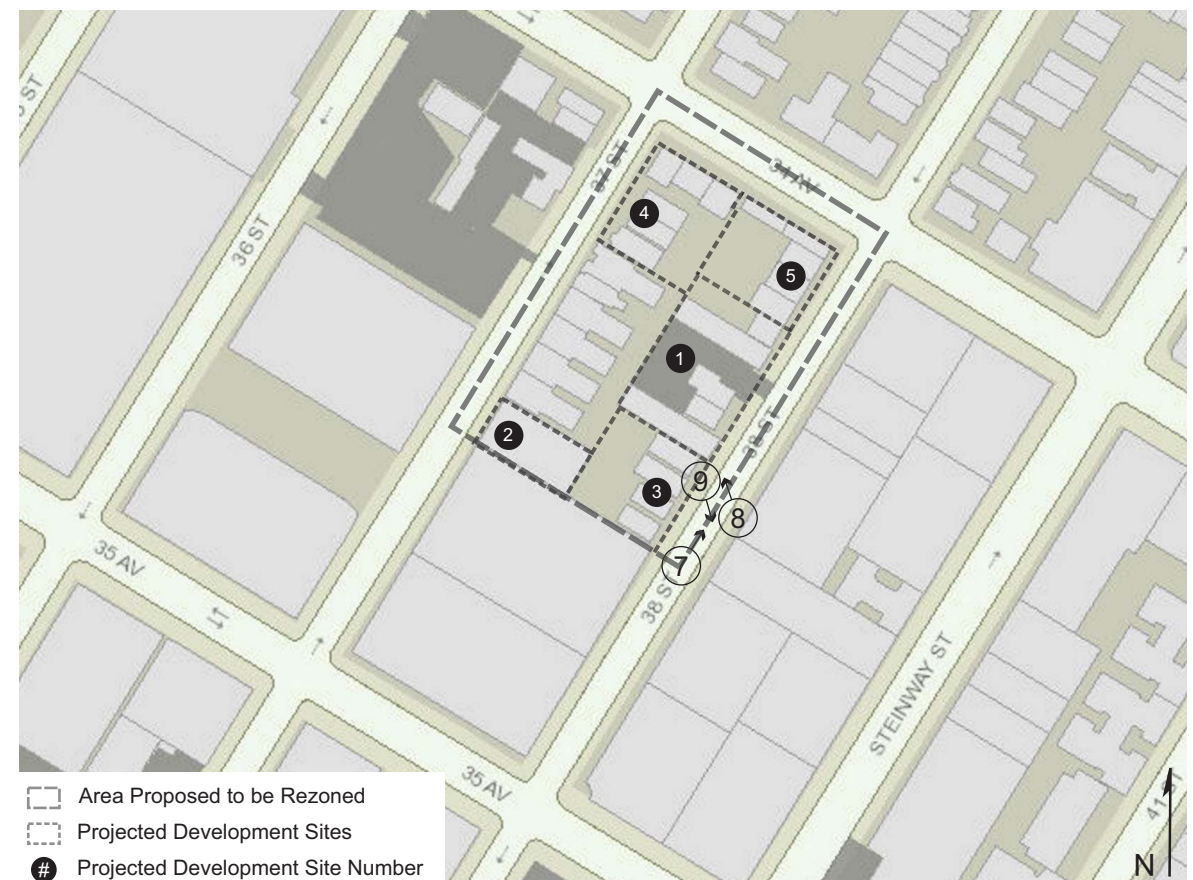
7. View of 38th Street facing north between 34th and 35th Avenues (Site ahead at left)..



8. View of the Site facing north from 38th Street.



9. View of the east side of 38th Street facing south from the Site.





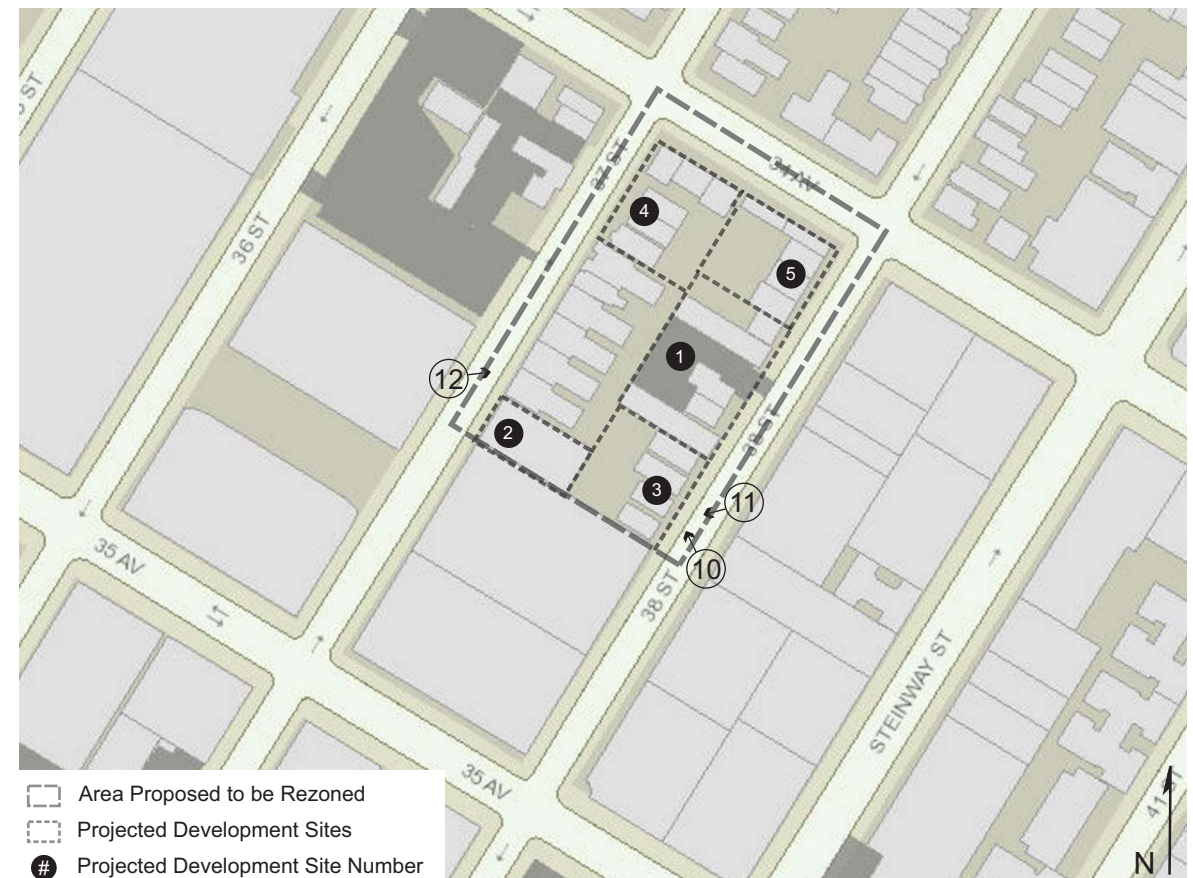
10. View of the Project Area facing west from 38th Street.



11. View of the Project Area facing northwest from 38th Street.



12. View of the Project Area facing east from 37th Street.





13. View of 37th Street facing south from 34th Avenue.



14. Sidewalk view of the east side of 38th Street facing northeast (Project Area at left).



15. View of the west side of 37th Street between 34th and 35th Avenues facing southwest from the Project Area.





16. View of the sidewalk along the west side of 38th Street facing southwest (Site at right).



17. View of 37th Street facing southeast from 34th Avenue.



18. View of 38th Street facing south from the Project Area.



37th Street facing northeast (Site at right)



No-Action Scenario

37th Street facing northeast (Site at right)



With-Action Scenario
Projected Development Site

37th Street facing northeast (Site at right)



No-Action Scenario

37th Street facing northeast (Site at right)



With-Action Scenario
 # Projected Development Site

38th Street facing northeast (Site at left)



No-Action Scenario

38th Street facing northeast (Site at left)



With-Action Scenario
 # Projected Development Site

38th Street facing northeast (Site at left)



No-Action Scenario

38th Street facing northeast (Site at left)



With-Action Scenario
Projected Development Site

38th Street facing northeast (Site at left)



No-Action Scenario

38th Street facing northeast (Site at left)



With-Action Scenario
 # Projected Development Site

12. HAZARDOUS MATERIALS

Projected Development Site 1

Introduction

EPDSCO, Inc., has performed a Phase I Environmental Site Assessment (ESA) of the property located on Block 645, Lots 36, 37, 38, 40 & 42, in the Borough of Queens, in the City of New York. This ESA, dated March 2014, was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-05).

The purpose of the ESA is to identify, to the extent feasible in accordance with ASTM E 1527-05, recognized environmental conditions in connection with the site with regard to hazardous materials as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. Additionally, several ASTM "Non-Scope" items including asbestos-containing materials, lead-based paints, and radon are also discussed. Recognized Environmental Conditions are identified through research into the history and uses of the site and surrounding area, an inspection of the subject property and a survey of adjoining and nearby uses, and a review of available regulatory agency records and environmental databases.

The following summarizes the findings, conclusions, and recommendations of the Phase I ESA.

Phase I ESA

The subject lot at 34-10 38th Street (Block 645, Lot 36) consists of a 2,500+/- square foot rectangular parcel that is occupied by a 2-story (and basement), wood frame residential dwelling. Exterior portions of this lot consist of an open, unpaved rear yard. Heat for this building is provided by an oil-fired boiler located in the basement of the building.

The subject lot at 34-12 38th Street (Block 645, Lot 37) consists of a 2,500+/- square foot rectangular parcel. The lot is fully occupied by a 1-story (on slab) warehouse building that was vacant at the time of the site visit. Heat for this building is provided by gas-fired space heaters.

The subject lot at 34-20 38th Street (Block 645, Lot 38) consists of a rectangular shaped parcel, a total of 5,000 square feet, and is occupied by a two-story (plus basement), wood-frame residential dwelling. Exterior areas of this lot consist of a concrete and asphalt paved driveway and a paved rear yard. Heat for this building is provided by an oil-fired boiler in the basement of the building.

The subject lot at 34-22 38th Street (Block 645, Lot 40) consists of a rectangular shaped parcel, a total of 2,500 square feet, and is occupied by a two-story (plus basement), wood-frame residential dwelling. Heat and hot water for the building are provided by gas-fired systems. Exterior areas of this lot consist of a paved rear yard.

The subject lot at 34-24 38th Street (Block 645, Lot 42) consists of a rectangular shaped parcel, approximately 2,500 square feet in area. This site is occupied by a 2-story (on slab), masonry and wood-frame warehouse building which occupies the entire lot. At the time of the site visit, this building was being used as a warehouse for food service equipment. Heat for this building is provided by gas-fired space heaters.

The subject lots at 34-10, 34-20, and 34-22 38th Street have been occupied by residential dwellings since at least 1898. Residential dwellings are not types of operations which typically store or use significant quantities of hazardous materials.

The building located at 34-12 38th Street (Lot 37) was constructed sometime between 1936 and 1947 as a 1-story warehouse building. Identified former uses in this building include the storage of bailed waste paper in the 1940s; a food products warehouse in the 1950s; furniture storage in the 1970s and 1980s; and general warehousing from the 1990s to the present. There are not any indications of the past storage or use of hazardous materials, or the presence of underground petroleum storage tanks, found for this lot.

The building located at 34-24 38th Street (Lot 42) was constructed in 1963. Identified former occupants of this building include Royal Chico Toys, Inc. in 1967; Rothman & Werling, Inc. from 1983 to 2000; and International Souvlaki Corp. in 2005. There are not any indications of the past storage or use of hazardous materials, or the presence of underground petroleum storage tanks, found for this lot.

There is a 275-gallon aboveground fuel oil tank in the basement of the building located at 34-10 38th Street (Lot 36), and there is a 275-gallon aboveground fuel oil tank located in the basement of the building at 34-20 38th Street (Lot 38). Both of these tanks are currently in use for the oil-fired heating systems in these buildings. No staining, fuel oil odors, or other indications of past fuel oil spills or leaks were observed around either of these tanks. There were not any indications of the presence of additional petroleum storage tanks found at the subject property during the site visit.

Accessible portions of all of the lots were inspected for the presence of floor drains, trench drains, drywells, pits, etc. One trench drain and two small storm drains were observed in the exterior areas of the property at 34-20 38th Street (Lot 38). In addition, a trench drain and a floor drain were observed in the floor of the building at 34-12 38th Street (Lot 37), and one trench drain was observed in the floor of the building at 34-24 38th Street (Lot 2). The drainage destination of these structures could not be determined from the information reviewed for this report; however, it is likely that they discharge to the municipal sewer system. There was not any oil/chemical staining or other visible indications of past spills, leaks, or discharges of hazardous materials observed around any of the drainage structures observed at these sites.

Given the age of the subject buildings, it is possible that they contain asbestos-containing building materials, such as roofing materials, boiler, hot water tank, pipe, or other thermal insulation materials, vinyl flooring, etc., in addition to lead-based paints, in areas of the buildings that have not been recently renovated.

None of the properties appear in the following Federal or State environmental databases reviewed: the USEPA's Superfund, CERCLIS or ERNS databases, the NYSDEC's Solid Waste Facilities database, Spill Logs database, PBS database or the Registry of Inactive Hazardous Waste Disposal (IHWD) Sites.

A review of Sanborn historical maps shows that land uses in the area surrounding the properties were comprised of a mix of residential, commercial/retail, auto-related, warehousing, and industrial uses from at least the 1930s to the 1990s. An ice manufacturing operation is shown in the adjoining building at 34-38 through 34-46 38th Street on the 1915

through 1986 Sanborn maps (which building is currently occupied by a sports and fitness club). The 1981 through 1986 Sanborn maps indicate the presence of an ammonia tank in this building. The building located at 34-29 37th Street (currently occupied by Tower Sign and Awnings) contains a wire products company on the 1970 through 1996 Sanborn maps. The 1947 and 1950 Sanborn maps show a wood showcase manufacturing operation in this building. The 1936 Sanborn map shows this building occupied by Duffy Arnold Grease Co., Inc. and indicates the storage of oils and greases in the basement of the building.

The 1970 through 1996 Sanborn maps show the presence of a gasoline filling station at 36-06 34th Avenue, approximately 350 feet northwest of the study area. Other identified industrial or manufacturing uses in the area include a metal finishing company at 34-11 36th Street (formerly Levco Metal Finishers), textile printing operations, stationary manufacturing, oriental rug finishing, air condition manufacturing, auto repair garages (some with buried gasoline tanks), plastic products manufacturing, paint and ink manufacturing, cloth waterproofing operations, dry cleaning companies, metal and iron works, lumber yards, electrical parts manufacturing, machine shops and others.

Given the industrial history of the surrounding area and the identified spill incidents and hazardous waste disposal sites, it is possible that groundwater in the area of the properties has been impacted by past industrial operations and/or leaking underground storage tanks from off-site sources.

Conclusions

The Phase I ESA has revealed no evidence of recognized environmental conditions in connection with the subject property, with the following exceptions:

- The possible presence of asbestos-containing materials and lead-based paints in the subject buildings.
- The possible presence of groundwater contamination in the study area from past off-site industrial operations and/or underground petroleum storage tanks.

Projected Development Site 1 (Applicant controlled)

An "E" designation (E-533) for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on the property. The Applicant will be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-533) will be assigned for hazardous materials on the following property:

Block 645, Lots 36, 37, 38, 40, and 42

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

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Actions to result in significant adverse impacts related to hazardous materials on Projected Development Site 1.

Projected Development Sites 2 through 5

Projected Development Sites 2 through 5 are not under the control or ownership of the Applicant and they are not included in the proposed development plans for this project. An "E" designation (E-533) for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on these properties. These applicant(s) should be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-533) will be assigned for hazardous materials on the following properties:

Block 645, Lots 15, 25, 28, 30, 31, 32-35, 44-47, 126, 127, and 131

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

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Actions to result in significant adverse impacts related to hazardous materials on Projected Development Sites 2 through 5.

16. TRANSPORTATION

Introduction

In order to determine the potential for the proposed mixed-use development to result in significant adverse transportation impacts, a trip generation screening analysis was performed pursuant to the methodologies identified in the *2014 CEQR Technical Manual*. Based on the proposed mixed-use development trip generation screening (Level One) analysis results, it was determined that the Proposed Actions would not result in significant adverse impacts as is described below.

The Applicant's Proposed Development Site (Projected Development Site (1) is located within the block bounded by 37th Street on the west, 38th Street on the east, 34th Avenue on the north, and 35th Avenue on the south in the Astoria neighborhood of Queens, Community District 1. The Proposed Actions would facilitate the development of five (5) Projected Development Sites with 175,421 gsf of residential space for 183 dwelling units (including a total of 131 to 140 market rate and 43 to 52 affordable units), 11,545 gsf of commercial local retail space, and 115 accessory residential parking spaces. The accessory residential parking facilities would be accessed via four (4) ingress and egress points, one (1) along 37th Street, two (2) along 38th Street, and one (1) along 34th Avenue, as illustrated on the Site Plan (See Site Plan With Action Scenario for Projected Development Sites 1-5).

Absent the Proposed Actions, the 5 Projected Development Sites would be developed with 40,874 gsf of residential space for 39 dwelling units and 11,521 gsf of commercial local retail space.

The increment between the No-Action and With-Action development scenarios would be 134,547 gsf of new additional residential space for 144 dwelling units (including a total of 92 to 101 market-rate and 43 to 52 affordable units), 24 gsf of new additional commercial local retail space, and 115 new residential accessory parking spaces.

Analysis Framework

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 additional 144 dwelling units, 43 to 52 of which would be considered affordable, 24 gross square feet of local retail space, and 115 accessory parking spaces.

Based on standard and approved trip generation rates and modal split and temporal distribution as is detailed below and summarized in **Table 1**, the proposed incremental development would generate a net total of 15, 8, 14 and 12 vehicle trip ends, during the AM, Midday, PM and Saturday Midday peak hours, respectively as summarized **Table 3**. All peak hour net vehicle trip ends would not exceed the CEQR 50-vehicle peak hour trip end threshold and, therefore in accordance with the *CEQR Technical Manual* criteria, the project generated net vehicular trips would not result in any conditions that would typically trigger the need for a detailed assessment of traffic or parking impacts.

Build Year/Project Phasing

Based on an estimated 12-month approval process and an 18-month construction period, it is anticipated that construction and occupancy on the Applicant's Proposed Development Site (Projected Development Site 1) would be completed by 2021. However, in order to accommodate the four additional sites that are projected to be developed as a result of the Proposed Actions, the Build Year has been extended for five more years until 2026.

Trip Generation Rates

Residential Development

2014 CEQR Technical Manual (table 16-2) criteria were utilized for trip generation rates, including truck trips, daily temporal distribution, and 2013-2017 American Community Survey (ACS) Journey-to Work (JTW) data for Census Tract #'s 53, 55, 57, 59, and 157 in Queens, NY for modal split information and vehicle occupancy rates, as is summarized in **Exhibit A, B, and Table 1. See Census Tract Map.**

The estimated modal split data for residential development found that approximately 12% would travel by car, 0.5% percent would travel by taxi, 1% percent would travel by bus, 75% would travel by subway, 7% percent would travel by foot, and 4.5% percent would travel by other mode of travel, such as bicycle, as shown in **Exhibits A and B.**

Local Commercial Retail Space

Trip generation rates, daily temporal distribution, modal split information, vehicle occupancy rates, and truck trip rates were estimated utilizing the recently surveyed and approved DOT rates for Queens neighborhood (Transit-Zone, within a ¼ mile of a subway station), as is summarized in **Table 1.**

The estimated modal split results for local commercial retail use found that approximately 11% would travel by car, zero (0%) percent would travel by taxi, 3% percent would travel by bus, 4% percent would travel by subway and 82% would travel by foot. The above information is summarized in **Table 1.**

Person and Vehicle Trips

Person Trips

The proposed rezoning would generate a total of 116, 59, 127, and 110 net person trip ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Table 2.**

Vehicle Trips

The proposed rezoning would generate a total of 15, 8, 14, and 12 net vehicle trip ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Table 3.**

Based on trip generation analysis, a Level One Screening analysis, all peak hour net vehicle trip ends would not exceed the CEQR 50-vehicle trip end threshold and therefore in accordance with the CEQR Technical Manual criteria, the project generated net vehicular trips would not result in any conditions that would typically trigger the need for a detailed assessment of traffic or parking impacts.

Transit and Pedestrians

Bus Trips

The proposed rezoning would generate a total of 1, 1, 1, and 1 net bus trip ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Table 2**. Currently, there are two bus lines in the study area, Q101 along Steinway Street and Q66 along 35th Avenue. 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 200 bus trip ends/and 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.

Subway Trips

The proposed rezoning would generate a total of 87, 44, 96, and 83 net subway trip ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Table 2**. Currently, there are two (2) subway stations in the study area, the Steinway Street subway station (E, M, and R trains within a ¼ mile radius) and the 36 Avenue/Washington Avenue subway station (N and W trains). Therefore, no subway station would experience the CEQR 200-subway trip end threshold.

The Proposed Actions would generate less than 200 subway trip ends per subway station 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 subway impacts.

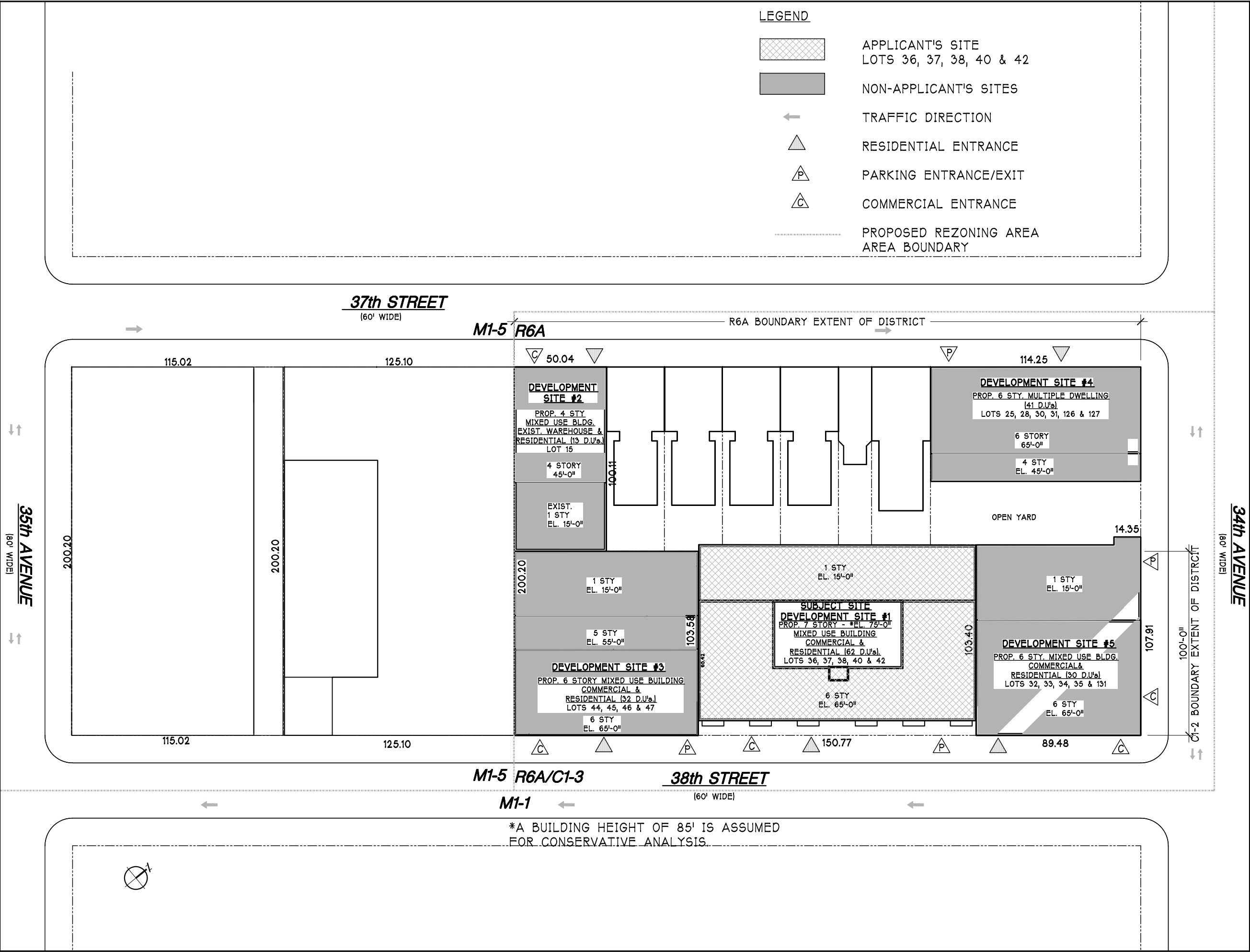
Pedestrian Trips

The proposed rezoning would generate a total of 102, 51, 112, and 97 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 2**.

The Proposed Actions would generate less than 200 pedestrian trip ends during the Weekday AM, Midday, PM, and Saturday 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 pedestrian impacts.

Conclusion

In accordance with the threshold guidelines as detailed in the 2014 *CEQR Technical Manual*, the Proposed Actions are not expected to result in significant adverse impacts related to transit or pedestrian conditions. Specifically, the Proposed Actions are unlikely to have a significant effect on traffic flow, parking and operating conditions, vehicular safety, transit provision, and pedestrian safety.



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

DRAWING NO: P-11

DRAWN BY: N.M.M.

CHECKED BY: G.J.C.

JOB No: 06104

SCALE: AS NOTED

DATE: 10-11-18

DRAWING TITLE: SITE PLAN W/ ACTION SCENARIO DEV. SITES # 1 - 7 FOR ILLUSTRATIVE PURPOSES ONLY

PREMISES: 34-10/12/20/22/24 38TH ST. & 37-11 35TH AVENUE ASTORIA, QUEENS, NY

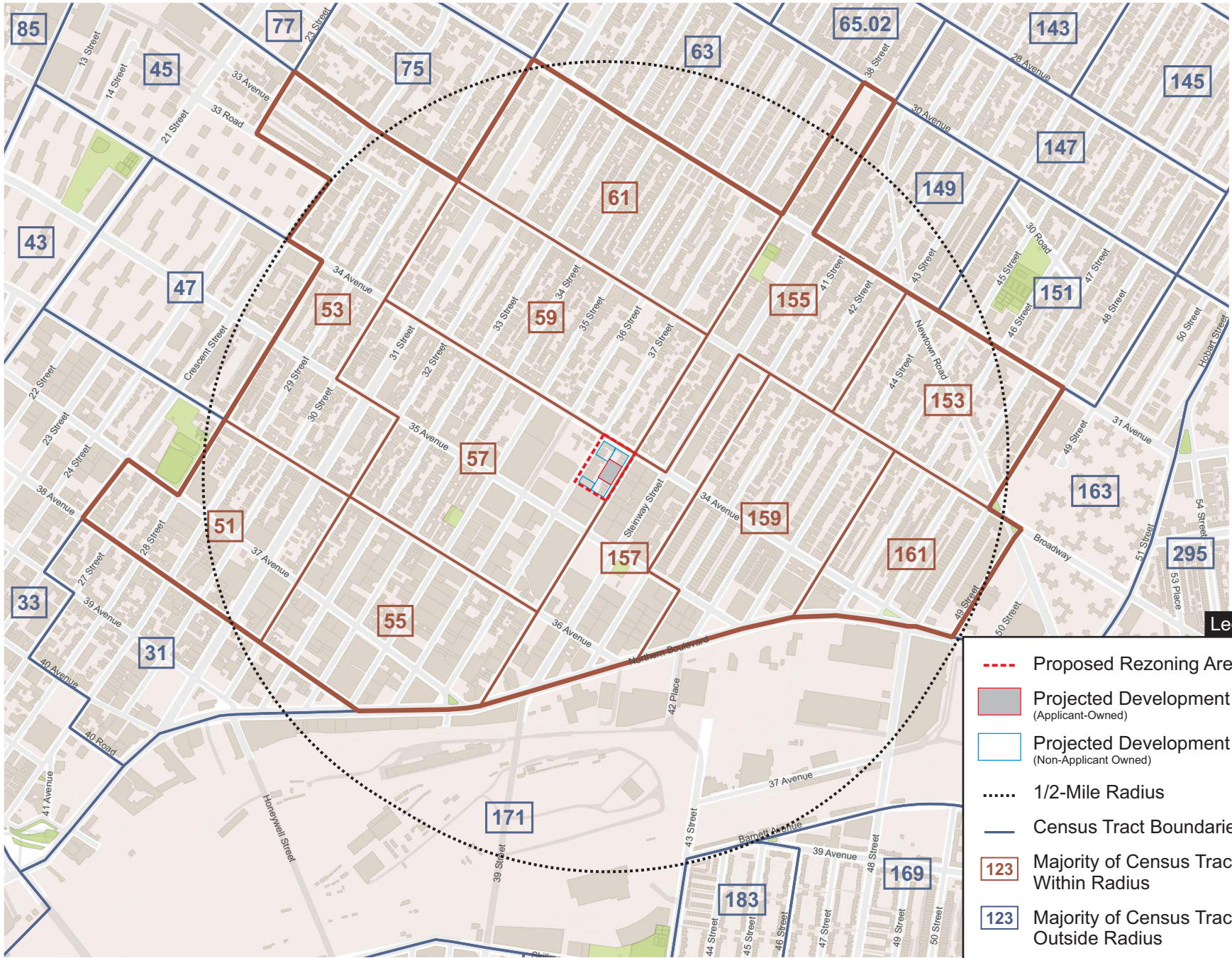
SEAL:

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Legend

Proposed Rezoning Area

Projected Development Site
(Applicant-Owned)

Projected Development Site
(Non-Applicant Owned)

1/2-Mile Radius

Census Tract Boundaries

123

Majority of Census Tract
Within Radius

123

Majority of Census Tract
Outside Radius

Table 1 : Transportation Planning Factors_REVISED
37th/38th Streets between 34th 35th Avenues, Astoria Queens, NY

Land Use:	Residential	Commercial Retail
	d.u.	Space-sq.ft.
Size/Units:	144	24
	(1)	(1)
Trip Generation:		
Weekday	8.075	205
Saturday	9.6	240
	per d.u.	per 1,000 sq.ft.
Linked-Trip:	0%	25%
Temporal Distribution:	(1)	(1)
AM Peak Hour	10%	3%
MD Peak Hour	5%	19%
PM Peak Hour	11%	10%
Saturday Midday Peak Hour	8%	10%
	(2)	(4)
Modal Split :	all periods	all periods
Auto	12%	11%
Taxi	0.05%	0%
Subway	75%	4%
Bus	1%	3%
Walk	7%	82%
Other	5%	0%
Total	100%	100%
	(3)	(4)
In/Out Splits:	In/Out	In/Out
AM Peak Hour	20/80	50/50
MD Peak Hour	50/50	50/50
PM Peak Hour	65/35	50/50
Saturday Midday Peak Hour	50/50	50/50
Vehicle Occupancy:	(2)	(4)
Auto	1.08	1.5
Taxi	1.4	1.6
Truck Trip Generation:	(1)	(1)
Weekday	0.06	0.35
Saturday	0.02	0.04
	per 1,000 sqft	per 1,000 s.f.
	(1)	(1)
AM Peak Hour	12%	8%
MD Peak Hour	9%	11%
PM Peak Hour	2%	2%
Saturday Midday Peak Hour	9%	11%
AM/MD/PM/Saturday Midday	50/50	50/50

Sources:

(1)-2014 CEQR Technical Manual, Table 16-2.

(2)-2013-2017 (ACS)-Journey-to-Work (JTW) Census Tract #'s 53, 55, 57, 59 and 157 in Queens NY

(3)-Astoria Cove FEIS.

(4)-NYCDOT

Table 2 : Estimated Person Trips-REVISED
37th/38th Streets between 34th 35th Avenues, Astoria Queens, I

Land Use:	Residential	Commercial Retail	Total Net	
	d.u.	Space-sq.ft.	Demand	
Size/ Units:	144	24		
Peak hour Trips				
AM Peak Hour	116	0	116	
Midday Peak Hour	58	1	59	
PM Peak Hour	128	0	128	
Saturday Midday Peak Hour	111	0	111	
<u>Person Trips:</u>				
<i>AM Peak Hour</i>				
Auto	14	0	14	
Taxi	0	0	0	
Subway	87	0	87	87
Bus	1	0	1	1
Walk	8	0	8	8
Other	5	0	5	5
Total	116	0	116	102
<i>Midday Peak Hour</i>				
Auto	7	0	7	
Taxi	0	0	0	
Subway	44	0	44	44
Bus	1	0	1	1
Walk	4	1	5	5
Other	3	0	3	3
Total	58	1	59	51
<i>PM Peak Hour</i>				
Auto	15	0	15	
Taxi	0	0	0	
Subway	96	0	96	96
Bus	1	0	1	1
Walk	9	0	9	9
Other	6	0	6	6
Total	127	0	127	112
<i>Saturday Midday Peak Hour</i>				
Auto	13	0	13	
Taxi	0	0	0	
Subway	83	0	83	83
Bus	1	0	1	1
Walk	8	0	8	8
Other	5	0	5	5
Total	110	0	110	97

Table 3 : Estimated Vehicular Trips-REVISED
37th/38th Streets between 34th 35th Avenues, Astoria Queens, N

<u>Vehicular Trips</u>	Residential	Commecial Retail	Total
AM Peak Hour			
Auto (Total)	13	0	13
Taxi	0	0	0
Taxi (Balanced)	0	0	0
Truck	1	0	1
Truck(Balanced)	2	0	2
Total	15	0	15
Midday Peak Hour			
Auto (Total)	6	0	6
Taxi	0	0	0
Taxi (Balanced)	0	0	0
Truck	1	0	1
Truck(Balanced)	2	0	2
Total	8	0	8
PM Peak Hour			
Auto (Total)	14	0	14
Taxi	0	0	0
Taxi (Balanced)	0	0	0
Truck	0	0	0
Truck(Balanced)	0	0	0
Total	14	0	14
Saturday Midday Peak Hour			
Auto (Total)	12	0	12
Taxi	0	0	0
Taxi (Balanced)	0	0	0
Truck	0	0	0
Truck(Balanced)	0	0	0
Total	12	0	12

Exhibit A

Modal Split Information

2013-2017 ACS 5-YEAR Journey-to-Work (R JTW) for Census Tract numbers 53, 55, 57, 59 and 157 in Queens, NY

37th/38th Streets between 34th and 35th Avenue, Astoria Queens New York

2013-2017 ACS 5-Year, Journey-to-Work:

Census Tract	Total Workers	Car or Van Drive-Alone	Carpool	Bus	Street Car	Subway	R.R.	Ferry	Taxi	Motor cycle	Bicycle	Walked	Other Means	Worked @ Home	Total
53	3047	195	24	80	0	2457	35	0	11	0	63	108	0	74	3,047
55	511	54	12	13	0	328	4	0	11	0	0	48	0	41	511
57	2432	239	70	12	0	1736	45	0	0	0	52	230	18	30	2,432
59	2,621	371	59	0	0	1,924	8	0	8	0	22	180	9	40	2,621
157	769	71	19	16	0	520	5	0	4	0	35	71	0	28	769
Total	9,380	930	184	121	0	6,965	97	0	34	0	172	637	27	213	9,380
		0.099	0.020	0.013	0.00	0.743	0.010	0.00	0.00	0.00	0.02	0.068	0.00	0.023	1.00

Exhibit B

Modal Split summary

Vehicle Occupancy Information

2013-2017 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 53, 55, 57, 59 and 157 in Queens, NY

2013-2017 ACS-5 Year (JTW), Vehicle Occupancy Rate:

Auto 0.12
Taxi 0.00 4
Bus 0.01
Subway 0.75
Walk 0.07
Other 0.04
Total 1.00

Census Tract	Total	Drove alone	Total	2person	carpool 3 Person	4 Person	5 or 6 Person	7 or more Person	Total
53	276	252	24	24	0	0	0	0	24
55	67	63	4	4	0	0	0	0	4
57	309	239	70	70	0	0	0	0	70
59	430	371	59	52	0	0	7	0	59
0	0	0	0	0	0	0	0	0	0
157	90	71	19	19	0	0	0	0	19
	1,172	996		85	0	0	2	0	1,082

Vehicle Occupancy = 1.083

Table-vehicle ownership

Car Ownership Information

2013-2017 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract #'s 53, 55, 57, 59 and 157 in queens, NY

37-38 streets astoria. Queens New York

2013-2017 ACS 5-Year, Car ownership:

Census Tract	Total units	Unites with No- Vehicle	Unites with One-Vehicle	Unites with Two-Vehicle	Unites with Three-Vehicle	Unites with Four-Vehicle	Total
53	2351	1529	740	64	18	0	2,351
55	369	250	100	15	4	0	369
57	1672	1102	528	42	0	0	1,672
59	1765	1078	564	123	0	0	1,765
157	627	464	153	10	0	0	627
Total Units	6,784	4,423	2,085	254	22	0	6,784
Total Cars		0	2,085	508	66	0	2,659

Car Ownership

0.392

17. AIR QUALITY

Introduction

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered. The analysis framework, as mandated by the State Environmental Review Act, follows the *New York City Environmental Quality Review 2014 Technical Manual*. Per the *CEQR Technical Manual*, the potential for significant adverse air quality impacts are predicted for the following emission sources:

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

The Project Area

The Project Area is located in the Astoria neighborhood of Queens, Community District 1. Five Projected Development Sites incorporating 20 lots on Block 645 were identified. Four of the Projected Development Sites would contain mixed-use, primarily residential buildings; the other Projected Development Site would consist of a residential building. Table 17-1 summarizes the Projected Development Sites.

Table 17-1. The Projected Development Sites

Site ID	Lot	Building Height	Total Floor	Floor Area Residential
Projected Development Site 1	36, 37, 38, 40, 42	85	95,065	53,494
Projected Development Site 2	15	45	18,390	18,390
Projected Development Site 3	44, 45, 46, 47	65	37,147	32,697
Projected Development Site 4	25, 28, 30, 31, 126,	65	40,769	40,769
Projected Development Site 5	32, 33, 34, 35, 131	65	34,521	30,071

Projected Development Site 1

Projected Development Site 1, the Applicant owned property, would facilitate a mixed-use, predominantly residential building. The 7-story plus cellar and sub-cellar building would rise to a height of 85 feet, the Reasonable Worst Case Development Scenario (RWCDS). 80 cellar level parking spaces would be provided for the residential units. The building's HVAC system would operate on natural gas.

Projected Development Site 2

Projected Development Site 2 would facilitate a residential, 4-story, 45-foot tall building. The building's HVAC system would operate on natural gas.

Projected Development Site 3

Projected Development Site 3 would facilitate a mixed-use, predominantly residential, 6-story, 65-foot tall building. 11 parking spaces would be provided for the residential units. The building's HVAC system would operate on natural gas.

Projected Development Site 4

Projected Development Site 4 would facilitate a residential, 6-story, 65-foot tall building. 14 parking spaces would be provided for the residential units. The building's HVAC system would operate on natural gas.

Projected Development Site 5

Projected Development Site 5 would facilitate a mixed-use, predominantly residential, 6-story, 65-foot tall building. 10 parking spaces would be provided for the residential units. The building's HVAC system would operate on natural gas.

Each building would provide for a backyard per the zoning requirements, which was considered in the analysis.

Air Pollutants and Applicable Standards and Guidelines

National Air Quality Standards

The U.S. Environmental Protection Agency (EPA) has identified six pollutants, known as criteria pollutants which are being of concern nationwide, and established threshold concentrations based upon adverse effect on human health.

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 pollutant for which a detailed analysis was conducted, together with their health-related averaging periods, are presented in Table 17-2.

New York State Standards

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the New York State Department of Environmental Conservation (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.

NYC Guidelines

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply a PM_{2.5} and CO 8-hour averaging time significant impact criteria (based on concentration increments). These criteria are called *de minimis* and they 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 concentrations for stationary sources are evaluated as follows:

- Predicted 24-hour maximum PM_{2.5} concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average PM_{2.5} concentration increments greater than 0.3 µg/m³ at any receptor location for stationary sources.

Background Concentrations

Determination of significant impact criteria is evaluated by adding the background concentrations at the nearest NYSDEC monitoring station to the concentrations of criteria pollutants in the ambient air of the existing and planned land uses.

Background concentrations of the criteria pollutants for which a detailed analysis was conducted were obtained from the NYSDEC's annual report for 2017 at the Queens College monitoring stations (the nearest monitoring station). Table 17-2 shows the background concentrations and the NAAQS.

Table 17-2. The NAAQS and Background Concentrations at the Nearest NYSDEC Monitoring Stations

Pollutant	Averaging Period	National and State Standards	Background Concentration
NO ₂	1-Hour concentration	188 µg/m ³	112.2 µg/m ³
	Annual arithmetic mean	100 µg/m ³	32.4 µg/m ³
PM _{2.5}	24-Hour concentration	35 µg/m ³	18.9 µg/m ³
	Average of 3 consecutive annual means	12 µg/m ³	7.3 µg/m ³
PM ₁₀	24-hour concentration	150 µg/m ³	35 µg/m ³

The *de minimis* criteria for PM_{2.5} stationary sources were evaluated as described in the NYC Guidelines. The concentrations increments are presented below:

- 24-hour PM_{2.5} 8.05 µg/m³
- Annual PM_{2.5} 0.3 µg/m³ (for stationary source)

NO₂ NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO₂, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The 1-hour NO₂ NAAQS standard of 0.100 ppm (188 ug/m³) is the 3-year average of the 98th percentile (8th Highest) of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO₂ concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO₂; Tier 2 applies a conservative ambient NO_x/NO₂ ratio of 80% to the NO_x 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 NO₂ within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO₂ concentrations or total 1-hour NO₂ concentrations if hourly NO₂ 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 of NO_x/NO₂ ratio of 80% to the NO_x modeled concentration to determine whether violation of the NAAQS is likely to occur. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO₂ NAAQS were estimated.

Mobile Source Analysis

Introduction

Projects may result in significant mobile source impacts when they create mobile sources of pollutants, change traffic patterns, or add new uses near mobile sources of pollutants. Per CEQR guidelines, a detailed analysis is conducted to predict whether the Proposed Actions could potentially have a significant adverse air quality impact if certain threshold criteria are met or exceeded, while proposed projects that do not meet or exceed the threshold criteria (screen out) are not expected to have a mobile source impact. Projects that require a detailed analysis model the ambient air CO and PM₁₀/PM_{2.5} concentrations – the mobile source pollutants of concern – and compare the modeled concentrations with the applicable air quality standard.

Mobile Source Screen

Project-Generated Traffic

Per the *CEQR Technical Manual*, localized increases in CO and PM_{2.5} levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed development. As such, screening analyses for CO and PM_{2.5} were carried out to determine whether the project-generated traffic have the potential to cause significant impact. The project-generated traffic is the vehicular trips in any given hour, determined as the difference between the Future With No-Action and the Future With Action.

According to the transportation analysis for this project, the Proposed Actions would generate a total of 15 (13 autos and 2 trucks), 8 (6 autos and 2 trucks), 14 (14 autos and 0 trucks), 12 (12 autos and 0 trucks) net vehicle trip ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively.

For this area of the City, the threshold volume for a detailed analysis of CO concentration, using MOVES2014 and CAL3QHC or AERMOD, is an increment of 170 vehicles. PM_{2.5} threshold criterion is an increment of applies heavy-duty diesel vehicles (HDDVs) screen.

As outlined in the Transportation section and shown above, the maximum trip generation increment between the Future With No-Action and the Future With Action does not exceed the threshold of 170 vehicular trip generation.

According to *CEQR Technical Manual*, PM_{2.5} detailed analysis is required if a threshold criterion, determined by project-generate peak hour HDDVs traffic or its equivalent in vehicular

emission, is exceeded. The threshold criteria depend 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 roadways around the Project Area are categorized as paved roads with less than 5000 vehicles. As such, the analysis assumed that the peak hour traffic would travel on a paved road, which is the most stringent road type.

As the PM_{2.5} screen does not apply to passenger cars, the NYSDEC vehicle population by source type database (part of MOVES2014a database for the county of Queens) was consulted. The database shows that there are 453,895 and 296,515 passenger cars and passenger trucks in Queens. This translates to 60.5% and 39.5% LDGV and LDGT1 distribution, and at most 4 net equivalent trucks trip ends (5 LDGT1 and 2 HDDVs) during the AM peak hour period. As such, the peak hour vehicle trip ends pass the PM_{2.5} screening analysis.

Therefore, no intersection detailed air quality analysis was required, and no significant mobile source air quality impacts are expected at intersections affected by the proposed project.

Parking Garage

Based on CEQR recommendations, the maximum capacities of parking garages are evaluated with 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 off-street parking spaces. If the threshold is met or exceeded, a detailed analysis is warranted. As previously mentioned, Projected Development Site 1 would contain 80 accessory parking spaces; the most parking spaces out of all the Project Development Sites. As the Projected Development Site 1 does not exceed the parking space threshold, no other Projected Development Sites would exceed the parking spaces threshold criterion. Therefore, no detailed air quality analysis is required, and no significant mobile source air quality impacts are expected as a result of the parking facilities.

Project HVAC Systems Analysis

Introduction

The HVAC analysis considers the potential for emissions from the HVAC systems of the projected developments to significantly impact existing land uses (project-on-existing), and the potential of each of the projected developments to significantly impact each other (project-on-project).

As outlined in the *CEQR TM*, the analysis of buildings' HVAC systems follows stationary sources methodology, and based on CEQR recommendations, 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. 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.

Screening Analysis

As outlined in the *CEQR TM*, 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 whose height is at least as great as the venting stack height, the building's residential or non-residential use, and the square footage of the development that would be served by the system. The *CEQR TM* provides a screening analysis based on these factors, which was utilized to determine the potential for significant impacts from the projected buildings' HVAC systems.

If the actual distance between a stack and the affected building is greater than the threshold distance for a building size, 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 anticipated developments within the proposed rezoning area would consist of 5 buildings. Each of the five buildings would be equipped with its own separate natural gas fueled heat and hot water system. Therefore, screening analyses were performed for natural gas use and environmental designations added to specify use of natural gas only.

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

1. The impact of Projected Development Site 2 on existing land uses that are at least 45 feet tall.
2. The cumulative impact of the Projected Development Sites on existing land uses that are at least 65 feet tall.

Per *CEQR TM*, the *CEQR* nomograph depicted on Figure 17-7 of the *CEQR TM* for a 30-foot stack height was applied. 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. Figures 17-1 and 17-2 show the screening analyses.

Figure 17-1. Projected Development Site 2 Minimum Distance Nomograph.

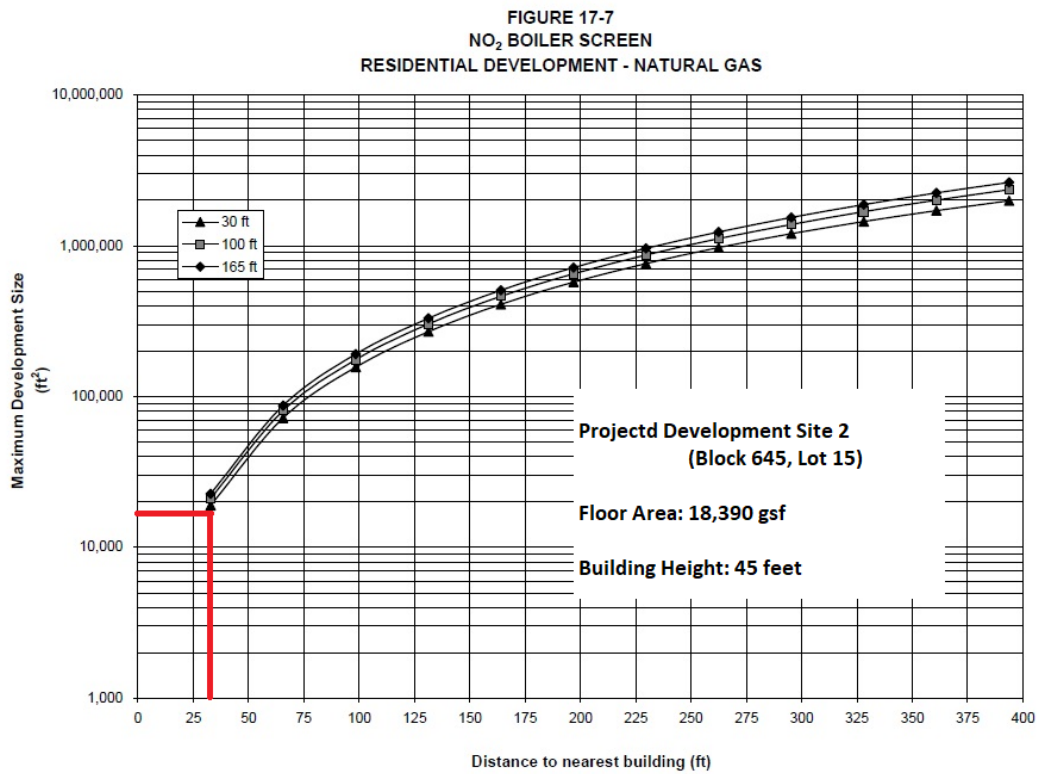
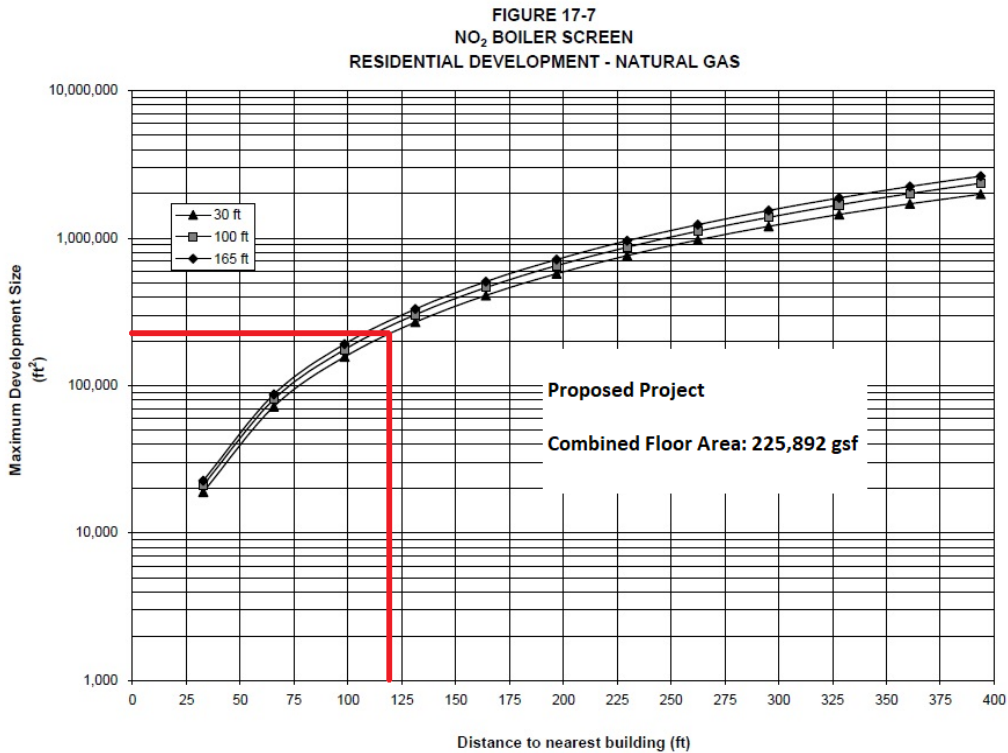


Figure 17-2. Proposed Project Minimum Distance Nomograph



The screening analysis Figure 17-1 nomograph shows that a detailed analysis would be required for any existing land uses that are 45 feet or taller and at a distance of less than 30 feet from Projected Development Site 2. A review of existing land uses in the area shows that the 4-story building at 34-27 37th Street (Block 645, Lot 17) is 47'-6" tall. This building is adjacent to Projected Development Site 2. Therefore, the screening analysis is not applicable, and a detailed analysis was conducted.

The screening analysis Figure 17-2 nomograph shows that a detailed analysis would be required for any existing land use that is 65 feet or taller and at a distance of less than 120 feet from the Project Area. A review of existing land uses in the area shows that the nearest building of similar or greater height is the under construction 4-story commercial building at 36-02 34th Avenue (Block 644, Lots 28 and 43), which is approximately 80 feet from Projected Development Sites 2 and 4. Therefore, the screening analysis failed and a detail analysis was performed.

Table 17-3 depicts the project-on-existing screening analyses results, where "Use AERMOD" indicate that a detailed analysis using AERMOD dispersion analysis was required.

Table 17-3. 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
Site 2	15	45	18,390	N.A.	645/ 17	0	Use AERMOD
Proposed Project	Project Area	65	225,892	120	644/ 28, 43	80	Use AERMOD

Project-on-Project Screening Analysis

As previously mentioned, the screening analysis is only applicable to a single smokestack, and this CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. Projected Development Site 2 is the lowest building (45 feet), and therefore screens out. Each of the other Projected Development Sites are affected by at least three other Projected Development Sites, and therefore a detail analysis was performed for these sites.

Detailed Analysis

Methodology

AERMOD dispersion analyses were run to determine whether exhaust from the HVAC systems of the anticipated for development buildings might have a significant adverse impact on another anticipated for development building (project-on-project). In accordance with CEQR guidance, these analyses were conducted assuming stack tip downwash, urban dispersion surface roughness length of 1.0-meter, elimination of calms, and population of 2,000,000. Building Profile Input Program (BPIP) was run with the downwash effect enabled. Flat terrain option was specified in the AERMOD models.

The developments' HVAC equipment would be fueled by natural gas. Per the *CEQR Technical Manual*, the pollutants of concern for natural gas fueled boilers are NO₂ and PM_{2.5}. The boilers heat capacities were calculated from the annual fuel usage and the buildings' gross floor area assuming that the buildings' fuel usage would resemble that of a residential building. Pertinent energy intensity values were obtained from the *CEQR Technical Manual Appendix* for residential buildings, and the assumption that all fuel would be consumed during the 100-day (or 2,400 hour) heating season. Emission factors were obtained from the EPA AP-42 manual. Table 17-4 shows the short-term and annual emission rates.

Table 17-4. The Developments' HVAC Equipment

Projected Development Site ID	Stack Height (ft)	HVAC Equipment (MMBtu/hr)	Pollutant	Short-term Emission Rate (lb/hr)	Annual Emission Rate (lb/yr)
Site 1	88	2.4	NO ₂	0.234	562
			PM _{2.5}	0.018	43
Site 2	48	0.5	NO ₂	0.045	109
			PM _{2.5}	0.003	8
Site 3	68	0.9	NO ₂	0.091	220
			PM _{2.5}	0.007	17
Site 4	68	1.0	NO ₂	0.100	241
			PM _{2.5}	0.008	18
Site 5	68	0.9	NO ₂	0.085	204
			PM _{2.5}	0.006	16

The diameter of the stacks was 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 stack exit temperature was assumed to be 300°F (423°K), which is appropriate for boilers. Per guidance from the Department of City Planning on other projects, the stacks exit velocities of boilers with heat capacity of less than 1.0 MMBtu were calculated according to the EPA Method 19 and adjusted to exit temperature of 423 K. Boilers with a heat capacity of at least 1.0 MMBtu applied exit velocity corresponding to DEP "CA Permit" database.

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. As such, stacks were placed 10 feet from the edge of the roof, 3 feet above the roofline, and as close as possible to the receiving building. If an impact was predicted, a stack setback distance was applied until no impact was predicted. Where a stack setback distance was required, this setback distance was also applied in the other models.

Receptors on that receiving building were placed all around the buildings' envelopes in 10-foot increments, and on all floor levels. All receptors were placed at a height of 6-foot above the modeled floor level, where ground floor receptors were placed at a height of 6 feet above grade. The analysis assumed that all the ground floor levels are 15 feet high, and each other floor is 10 feet high. Each Projected Development Site was modeled with a 30 feet backyard (per the zoning requirement) and a 15 feet high ground floor level.

All analyses were conducted using the latest five consecutive years of meteorological data

(2013-2017). 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.

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.

NO₂ 1-hour was initially modeled with a Tier 1 approach, followed by a Tier 2 application of NO_x/NO₂ ratio of 80% to the NO_x modeled concentration if impact was predicted. A Tier 3 with NO₂ and ozone background concentrations was applied if impact was still predicted. 2013-2017 Ozone hourly background concentrations were obtained from the NYSDEC³ Queens College monitoring station. The maximum ozone hourly concentration was filled for missing values. 2015-2017 NO₂ 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)⁴.

AERMOD calculates concentrations according to the dispersion option, pollutant and averaging time, and output specified in the model, where the model is capable of handling multiple sources in a single run. As such, each pollutant was modeled separately and two stacks, one for the short-term and the other for annual averaging times, were created, except the NO₂ 1-hour Tier 3 analysis.

Results of Dispersion Analyses

As stated in the AERMOD Setting section, each pollutant averaging time was modeled twice — with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The results are compared with the 24-hour/annual PM_{2.5} significant impact criteria, and the 1-hour/annual NO₂ NAAQS. Result of the project-on-project HVAC NO₂ and PM_{2.5} analyses are shown in Table 17-5.

Table 17-5. Detailed HVAC Analysis Results

Receiving Building	24-hr PM _{2.5}	Annual PM _{2.5}	1-hr NO ₂			Annual NO ₂	
			Modeled Conc.	With Background Conc.	Tier No.	Modeled Conc.	With Background Conc.
	µg/m ³	µg/m ³	µg/m ³	µg/m ³		µg/m ³	µg/m ³
Project-on-Existing							
Lot 17	0.91	0.05	28.8	141	1	0.7	33.1
Block 644, Lots 28, 43			31.8	144	1	0.5	32.9

³ <http://www.nyaqinow.net/>

⁴ https://www.epa.gov/sites/production/files/2015-07/documents/appwno2_2.pdf

Project-on-Project							
Site 1	4.03	0.27	Tier 3	187.8	3	3.5	35.9
Site 3	2.18	0.09	65.1	177	2	1.4	33.7
Site 4	0.57	0.04	14.9	127	1	0.59	33.0
Site 5	0.50	0.05	10.2	122	1	0.68	33.1
Threshold	8.05	0.3		188			100

As seen in Table 17-5, the NO₂ 1-hour predicted concentrations on the Applicant building, Projected Development Site 1, was modeled with a Tier 3 approach (background concentration included in the model). The NO₂ 1-hour impact on Projected Development Site 3 applied a Tier 2 approach of a NO_x/NO₂ ratio of 80% to the NO_x modeled concentration. All other NO₂ 1-hour impacts were modeled with a Tier 1 approach. In addition, the 1-hour NO₂ impact on Projected Development Site 1 was 187.8 µg/m³, which rounds to 188 µg/m³, which does not exceed the NAAQS.

Stacks' set back distances from Projected Development Site 1 were required for Projected Development Sites 3 and 5. Projected Development Site 3 required a stack set back distance of 58 feet, and Projected Development Site 5 required a stack set back distance of 55 feet. These setback distances were specified in the E-Designation language.

With these stacks restrictions and the HVAC system fueled by natural gas, the PM_{2.5} impacts are less than the significant impact criteria of 8.05 µg/m³ and 0.3 µg/m³ for 24-hour and annual averaging times, respectively, and both the 1-hour and annual NO₂ predicted concentrations do not exceed the 1-hour and annual NAAQS of 188 µg/m³ and 100 µg/m³, respectively.

Therefore, with (E) Designations in place, the emissions of the proposed project HVAC systems would not significantly impact any of the other projected buildings.

E Designation (E-533)

The HVAC analysis for the Proposed Actions concluded that fuel would need to be restricted to the exclusive use of natural gas in the HVAC systems of all the Projected Development Sites. In addition, the minimum stack height of each of the Projected Development Sites would need to be specified, and Projected Development Sites 4, 5, and 7 would require stacks' setback distances.

The E-Designation language (E-533) is as follows:

Block 645, Lots: 36, 37, 38, 40, 42 (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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 88 feet above grade, and at least 40 feet from the lot line facing 37th Street to avoid any potential significant air quality impacts.

Block 645, Lot 15 (Projected Development Site 2): 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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 48 feet above grade, and at least 40 feet from the lot line facing 38th Street to avoid any potential significant air quality impacts.

Block 645, Lots: 44, 45, 46, 47 (Projected Development Site 3): 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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 68 feet above grade, and at least 40 feet from the lot line facing 37th Street, and at least 58 feet from the lot line facing 34th Avenue to avoid any potential significant air quality impacts.

Block 645, Lots: 25, 28, 30, 31, 126, 127 (Projected Development Site 4): 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) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 68 feet above grade, and at least 40 feet from the lot line facing 38th Street to avoid any potential significant air quality impacts.

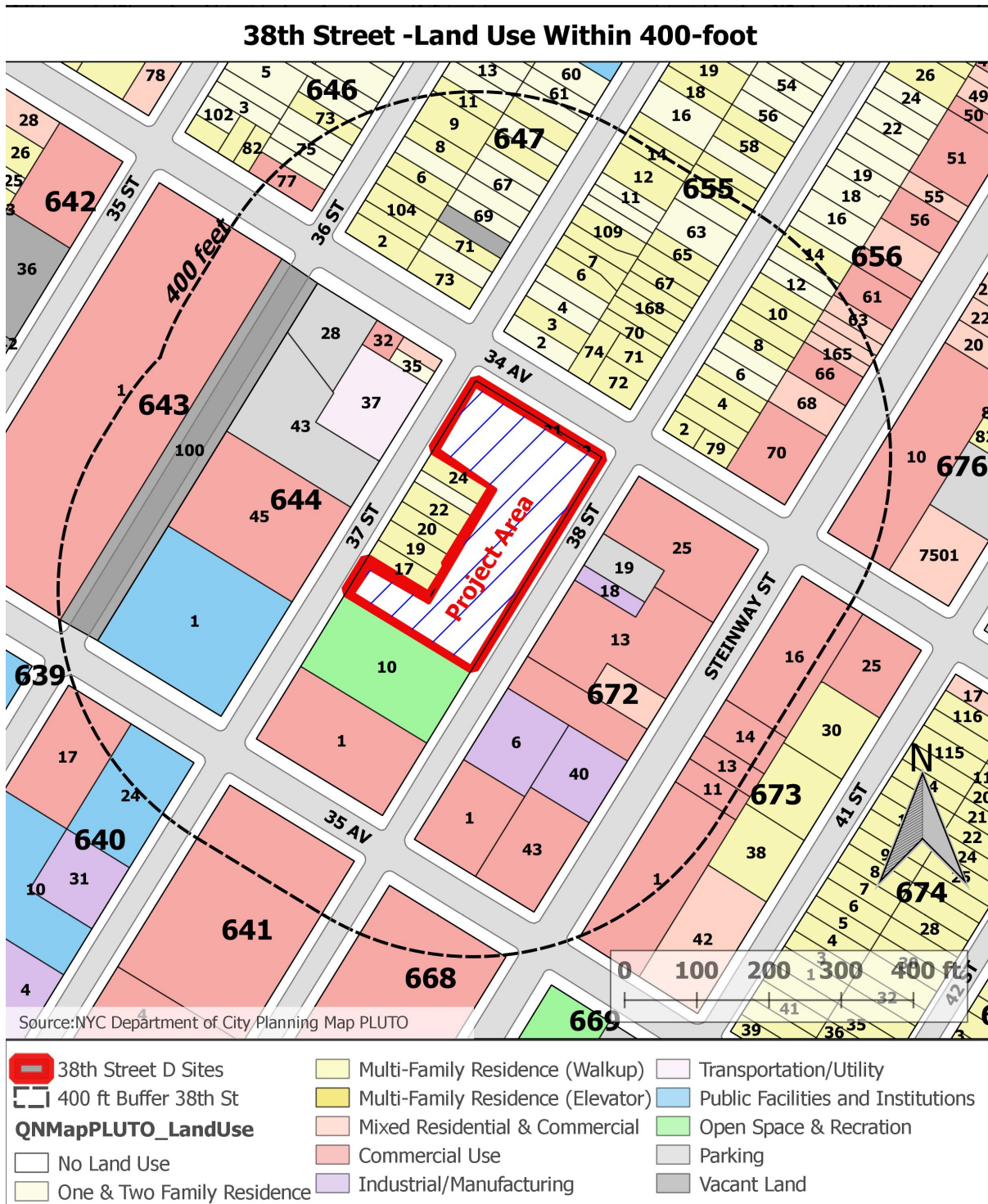
Block 645, Lots: 32, 33, 34, 35, 131 (Projected Development Site 5): Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) systems and hot water systems, ensure that the stack(s) is located at the highest tier and at least 68 feet above grade, and at least 40 feet from the lot line facing 37th Street, and at least 55 feet from the Projected Development Site 5 lot line facing 35th Avenue to avoid any potential significant air quality impacts.

Industrial

Introduction

As outlined in 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 type permits. Figure 17-4 shows the 400-foot study area.

Figure 17-4. Potential Industrial or manufacturing Uses within 400 feet of the Project Area



The land survey study identified 47 non-residential land uses in the 400-foot study area. The New York City Department of Environmental Protection (DEP) online Clean Air Tracking System (CATS) was consulted to determine whether air emissions permits had been issued for any of the nonresidential zoned lots, and the current use of each of these nonresidential uses was identified. Tables 17-6 show operational permits and boiler permits, where industrial processing permits start with a “P” and combustion permits with a “C”.

Table 27-6. Land Survey Study of Industrial Sources Within 400 Feet of the Project Area

Block	Lot	Land Use (Lots within 400 feet)	CATS info - Permit No.	Current Use (Land Survey)
640	17	35-01 36 Street	Cancelled: CA128479, CA274086	1st floor Restaurant; Above floors offices
641	9	35-01 37 Street	Cancelled: PA169673	Cinema and parking on roof
643	100	35-23 35 Avenue	No Record	36th Street
	1	34-12 36 Street	Current: CB126107, CB097405 Expired: CA130788 Cancelled: CA257083	Kaufman Astoria Studios (Production center); Theatre Development Fund; Perimeter Watch (Network security);
644	34	34-02 37 Street	No Record	Residential
	43	34-20 37 Street	Expired: PA045473 Cancelled: PA087588, PA087688, PA039781, PA045373, PA047973, PA048073, PA048373, PA072084, PA078173, CA175958, PA045473 PA048273	Parking Lot
	45	34-37 36 Street	No Record	Kaufman Astoria Studios (Production center)
	32	36-12 34 Avenue	No Record	Small offices & dry cleaning
	28	36-06 34 Avenue	Expired: PA045273, PA039481 Cancelled: PA064681, PA039581 CA146481, CA146581, PA048173 PA071984, PA045573, PA045273 PA049373, PA039681, GA020188	"Parking Lot/ DOB database: new building Filing a four stories new building as per plans filed herewith"
	37	34-12 37 Street	No Record	
645	131	37-14 34 Avenue	No Record	Development Site
	1	37-11 35 Avenue	Cancelled: PA072174	Eating establishments, gym, offices
	42	34-24 38 Street	No Record	Development Site
	32	37-18 34 Avenue	No Record	Development Site
	15	34-29 37 Street	Cancelled: PA184672	Development Site
	10	34-37 37 Street	No Record	Recreation/sport Facility
	37	34-12 38 Street	No Record	Development Site
646	77	32-90 36 Street	No Record	Development Site
647	70	32-82 37 Street	No Record	New 3 family dwelling units

					and 3 open parking spaces
668	5	35-30 Steinway Street	No Record		P.C. Richard and Son
669	20	35-01 Steinway Street	No Record		Play ground
Block	Lot	Land Use (Lots within 400 feet)	CATS info	Permit No.	Current Use (Land Survey)
656	70	32-84 Steinway Street	No Record		Furniture & apparel retail
	63	32-64 Steinway Street	No Record		Tailor shop, residential above
	66	32-72 Steinway Street	No Record		Astoria Urgent Medical care
	65	32-68 Steinway Street	No Record		Furniture, residential above
	68	32-78 Steinway Street	Current: CA002986		Mobile phone & Pediatric, residential above
	64	32-66 Steinway Street	Expired: CA135791		Travel agency, residential above
	165	32-70 Steinway Street	No Record		Mobile phone retail, residential above
672	1	38-01 35 Avenue	Cancelled: CA208495		Applebee's, food court
	19	34-11 38 Street	Current: PA034786		Auto Body Shop
	43	34-50 Steinway Street	No Record		Riviera Gentleman's Club
	18	34-13 38 Street	No Record		Energea Music Production School
	37	34-30 Steinway Street	Expired: CA048098 Cancelled: CA242282		Weinstock Lighting
	6	34-35 38 Street	No Record		Warehouse
	13	34-14 Steinway Street	Cancelled: CA099778 PA189572, PA189672		Car wash, LB Electric (Electric contractor), Supermarket
	25	34-02 Steinway Street	No Record		Restaurant, Salvation Army, Retail
	40	34-44 Steinway Street	No Record		Warehouse, 99 Cent Store
	35	34-26 Steinway Street	Current: CA111398 Expired: CA086874		Beauty salon, Grocery; residential above
673	13	34-29 Steinway Street	No Record		Steinway Plaza (Retail & Office)
	1	34-49 Steinway Street	No Record		Metropolitan Lumber & Plumbing
	11	34-31 Steinway Street	No Record		Steinway Plaza (Retail & Office)
	14	34-21 Steinway Street	No Record		Restaurant
	16	34-01 Steinway Street	Cancelled: PA031582, CA247283		Small retail & restaurant
676	10	32-75 Steinway Street	Current: CA033787		Rite Aid (Pharmacy)

The record search results show that 16 facilities have or had permits from the NYCDEP. Combustion operational permits are treated as HVAC systems of existing land uses; hence no analysis is required. In addition to the NYCDEP CATs permit search, the land survey study explored whether there are any other facilities that are likely to emit toxic air operate in the 400 feet influence zone, but no other facility was identified. As such, the facility categorized as toxic air emitter in the land survey study was:

- Marzocco Dun-Rite Auto at 34-11 38 Street - PA034786

Marzocco Dun-Rite Auto is an autobody shop, operating an industrial spray booth. The activity at the facilities is discussed below.

Marzocco Dun-Rite Auto (PA034786)

Marzocco Dun-Rite Auto (Block 672, Lot 19) has a processing permit for a paint spray booth. Per certificate PA034786, the spray booth is located in the back of the building, and the stack is located above the roof and at a distance of at least 146 feet from the Project Area. Per certificate

PA034786, the spray booth is active 4 hours per day and 300 days per year. The maximum hourly spraying activity is 0.35 gallon per hour. The certificate lists the contaminants and their short-term and annual emission rates. In addition, the solids overspray is captured by a fiberglass filter with a 95 percent capture efficiency.

Conventional coatings – paints, varnishes, lacquers, sealers, stains, and water thinned paints – comprises compounds grouped into solids and volatile organic compounds (VOCs), which are mostly solvents. The coatings contain 30 to 85 percent solvents by volume and this amount is regulated by the EPA and NYSDEC. Per NYCDEP guidance and as outlined in the EPA AP-42, the analysis assumes that all VOCs are emitted. Each VOC contaminant is analyzed with the SGC/AGC guideline concentration. Particulates are fluid or solids particles grouped together. Per NYSDEC DAR-1, particulates are collectively analyzed with the more stringent concentration guideline. These two groups, VOC and particulates, are discussed here:

In accordance with NYCDEP, emissions of solids are analyzed as PM₁₀ and PM_{2.5}. The particle size distribution was obtained from the EPA AP-42, Appendix B1, Page B.1-12, *Particle Size Distribution Data and Sized Emission Factors for Selected Sources, Table 4.2.2.8 Automobile and Light-Duty Track Surface Coating Operations, Automobile Spray Booths*. The facility particulates emission rates are displayed in Table 17-7.

Table 17-7. PM₁₀/PM_{2.5} Emission Rate from the Spray Booth

Contaminant	Permitted Emission Rate		Fraction of Particle Size	Emission rate			
				Short-term		Annual	
	lb/hr	lb/yr	Percent	lb/hr	g/s	lb/yr	g/s
Marzocco Dun-Rite Auto							
PM ₁₀	0.004	4.8	46.7	1.87E-03	2.35E-04	2.24	3.22E-
PM _{2.5}			28.6	1.14E-03	1.44E-04	1.37	1.97E-

The mixture, identified collectively as solvents or VOC, comprises different compounds with varying toxicities. As stated above, the Marzocco Dun-Rite Auto certificate lists the contaminants and their short-term and annual emission rates. The contaminants, their short-term and annual emission rate, and their NYSDEC guideline criteria, SGC and AGC, are displayed in Table 17-8.

Table 17-8. The American Custom Design and Marzocco Dun-Rite Auto VOCs Spray Booth Emission Rates and the SGC and AGC Guideline Criteria

CAS Number	Pollutant Name	1-Hour Emission Rate		Annual Emission Rate		SGC	AGC
		lb/hr	g/s	lb/yr	g/s	ug/m3	ug/m3
108-88-3	Toluene	0.666	8.39E-02	79	1.14E-03	37000.0	5000.0
1330-20-7	Xylene	0.329	4.15E-02	395	5.68E-03	22000.0	100.0
67-64-1	Acetone	0.329	4.15E-02	395	5.68E-03	180000	30000.0
78-93-3	Butanone (Methyl	0.235	2.96E-02	282	4.06E-03	13000.0	5000.0
67-63-0	Isopropyl Alcohol	0.12	1.51E-02	144	2.07E-03	98000.0	7000.0
108-88-3	Toluene	0.666	8.39E-02	79	1.14E-03	37000.0	5000.0

Air Dispersion Analysis

As outlined in the *CEQR TM Air Pollutants and Applicable Standards/Guidelines* section, the predicted concentrations are compared with the maximum allowable concentration. As such, the predicted concentrations of the criteria pollutants were compared with the NAAQS or the *de minimis*. All other contaminants' concentrations were compared with the DAR-1 SGC and AGC guideline criteria.

For estimating potential impacts from a single industrial emission source of toxic air pollutants, the *CEQR TM* recommends using a screening procedure as a first step in the analysis. This procedure uses the *CEQR TM* Table 17-3, "Industrial Source Screen" pre-tabulated pollutant concentrations at different averaging times for a generic emission rate of 1 gram per second. This approach, which can be used to estimate maximum short-term and annual average concentration values at various distances (from 30 to 400 feet) from an emission source, was utilized.

The location of the stack of the Marzocco Dun-Rite Auto spray booth, obtained from the DEP permit application PA034786, situate the stack 146 feet from the Project Area. The *CEQR* pre-tabulated concentrations corresponding to distance less than that distance (or equal) was utilized. The pre-tabulated concentrations are displayed in Table 17-9.

Table 17-9. CEQR TM Table 17-3 Industrial Source Screen Pre-Tabulated Concentrations

Facility Name	Distance from Source (ft) Actual/ CEQR Distance	1-Hour (µg/m³)	24-Hour (µg/m³)	Annual (µg/m³)
Marzocco Dun-Rite	146/ 130	7,345	2,511	367

Air Dispersion Results

The *CEQR TM* Table 17-3 Industrial Source Screen short-term and annual maximum predicted concentrations of the 1 gram per second dispersion analyses were multiplied by the calculated emission rates, and the predicted concentrations compared with the respective threshold criterions. The results of the air dispersion analysis for the criteria pollutants are displayed in Table 17-10.

Table 17-10. Criteria Pollutants Dispersion Analyses Results

Criteria Pollutant	Threshold Standard	Predicted Concentration (µg/m³)	Background Concentration (µg/m³)	Total Concentration (µg/m³)	Threshold Criteria (µg/m³)
Marzocco Dun-Rite Auto					
PM ₁₀ 24-Hour	NAAQS	0.6	35	35.6	150
PM _{2.5} 24-Hour	<i>de minimis</i>	0.36	N.A.	1.35	8.05
PM _{2.5} Annual	<i>de minimis</i>	0.0072	N.A.	0.007	0.3

As displayed in Table 17-10, the PM_{2.5} predicted concentrations do not exceed the *de minimis* threshold criterion, and the PM₁₀ predicted concentration with the background added is less than the NAAQS.

The VOC predicted concentrations were compared with the NYSDEC SGC/ AGC guidelines.

The results of the non-criteria pollutants air dispersion analysis are displayed in Table 17-11.

Table 17-11. Non-Criteria Pollutants Dispersion Analysis Results

Contaminant name	CAS No.	1-Hour	SGC	Annual	AGC
		µg/m ³	µg/m ³	µg/m ³	µg/m ³
Toluene	108-88-3	616.4	37000.0	0.4	5000.0
Xylene	1330-20-7	304.5	22000.0	2.1	100.0
Acetone	67-64-1	304.5	180000.0	2.1	30000.0
Butanone (Methyl Ethyl	78-93-3	217.5	13000.0	1.5	5000.0
Isopropyl Alcohol	67-63-0	111.1	98000.0	0.8	7000.0

As seen in Table 17-11, the predicted 1-hour and annual concentrations are less than the SGA/AGC guideline criterions.

As presented in Tables 17-10 and 17-11, the VOCs predicted concentrations are below the AGC/SGC standards, and the criteria pollutants concentrations are below the NAAQS and *de minimis* guidelines. Therefore, no significant adverse air quality impacts are expected from industrial source emissions to any of the Projected Development Sites in the Project Area.

Major and Large Sources

No existing large combustion sources, such as power plants, cogeneration facilities, etc., located within 1,000 feet of the Project Area were identified. In addition, no odor producing facility was identified within 1,000 feet of the Project Area. As such, no analysis was warranted.

Conclusion

Air quality analyses addressed mobile sources, stationary HVAC systems, and air toxics. The results of the analyses are summarized below.

- Emissions from project-related vehicle trips would not cause significant adverse air quality impacts to receptors at the local or neighborhood scale;
- Emissions from project-related heating, ventilation, and air conditioning systems (HVACs) would not cause significant adverse air quality impacts to receptors at the local scale with (E) - Designations in place.
- No significant adverse air quality impacts are anticipated to the proposed project from air toxics; and
- As no existing large or major sources are located within 1,000 feet of the Project Area, emissions from existing stationary sources would not cause a significant adverse air quality impact to the proposed project.

19. NOISE

Introduction

Two types of potential noise impacts are considered under *CEQR*. These are potential mobile source and stationary source noise impacts. Mobile source impacts are those which could result from a proposed project adding a substantial amount of traffic to an area, or if the Project Area is located near a heavily trafficked thoroughfare. Potential stationary source noise impacts are considered when a proposed action would cause a stationary noise source to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor, or if the project would include unenclosed mechanical equipment for building ventilation purposes.

Mobile Source

Relative to mobile source impacts, a noise analysis would only be required if a proposed project would at least double existing passenger car equivalent (PCE) traffic volumes along a street on which a sensitive noise receptor (such as a residence, a park, a school, etc.) was located. The 400-foot radius study area is predominantly developed with relatively small one- to four-story, one- and two-family and multiple dwellings to the north of the Project Area; considerably larger one- to five-story buildings housing warehouses, commercial uses, auto related facilities, and multi-family residences to the east; large one- to three-story buildings and parking facilities primarily associated with Kaufman Astoria Studios to the west; and a mixture of large one- to four-story commercial and educational related buildings to the south of the Project Area. Sensitive receptors primarily consisting of residences are located in the Project Area and along 37th Street and 34th Avenue across from the Project Area.

Much of the traffic generated by the Proposed Actions would access the Project Area along 38th Street in order to enter the proposed accessory parking garage in the new residential building on Projected Development Site 1. However, the traffic generated by the Proposed Actions would not be enough to double PCE volumes along 38th Street, or any other streets in the study area as the RWCDs is relatively small compared to the level of surrounding development. The project would also not cause any traffic to be rerouted.

Stationary Source

Potential Impacts of Project on Surrounding Uses

The RWCDs project would not include any unenclosed mechanical equipment for building ventilation purposes that could result in stationary source noise impacts to the surrounding area. All mechanical equipment would be located either in the cellar area of the proposed building or in an enclosed penthouse on the roof of the structure. Additionally, the project would not locate a receptor within 1,500 feet of a substantial stationary source noise generator, and there are no substantial stationary source noise generators located in close proximity to the Project Area. The project would therefore not result in a stationary source noise impact.

Potential Ambient Noise Impacts on Proposed Project

As the proposed and potential residential uses would be considered to be sensitive receptors and due to the fact that the Proposed Actions would introduce new sensitive receptors in an area that has historically been designated for industrial uses, it is necessary to determine whether ambient noise levels in the surrounding area could potentially have an adverse effect on future occupants of the residences. An analysis was conducted in order to quantify

background noise levels in the area and the potential for noise impacts on the future residents of the Projected Development Sites under the RWCDs. The goal of the measurements was to quantify the noise generated by vehicular traffic in the area, in addition to any industrial uses, and to establish acoustical requirements for the exterior wall assembly and windows as defined by the CEQR. A noise study was conducted for the Project Area in November 2017 and is provided below.

Project Area

Noise monitoring was conducted to support the proposed zoning map amendment affecting property on the block bounded by 38th Street, 37th Street, 34th Avenue, and 35th Avenue in the Astoria section of Queens, NY. The requested zoning map amendment would allow for new residential development in an area currently located in an M1-1 zoning district. The surrounding area contains a mix of uses including residential, commercial, and industrial. Vehicular traffic, specifically heavy trucks and buses, are the predominant source of noise. Therefore, the proposed rezoning warrants an assessment of the potential adverse effects on project occupants from ambient noise. The proposed rezoning of the northern approximately two-thirds of Block 645 would not create a significant noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. This noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the proposed residential development.

The Project Area is located in Block 645 in Astoria, Queens NY. The block is bounded by 37th Street, 38th Street, 35th Avenue, and 34th Avenue. 37th Street is a one-way single lane south bound street with intersections controlled by traffic lights. 38th Street is a one-way single lane north bound street with intersections controlled by traffic lights. 35th Avenue is a two-way single lane east and west bound street controlled by traffic lights. 34th Avenue is a two-way single lane north and south bound street controlled by traffic lights. The area in which the Project Area is located is primarily characterized by multi-story residential, commercial and industrial buildings.

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. The following Table Noise-1 lists some noise levels for typical daily activities.

1: Noise Levels of Common Sources

Table 19-1 Noise Levels of Common Sources

Sound Source	SPL (dB(A))
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
<i>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.</i>	
<i>Source: 2014 CEQR Technical Manual</i>	

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

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

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

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

below.

- L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity, level. High noise levels during a measurement period will have a greater effect on the L_{eq} than low noise levels. L_{eq} has an advantage over other descriptors because L_{eq} values from various noise sources can be added and subtracted to determine cumulative noise levels.
- $L_{eq(24)}$ is the continuous equivalent sound level over a 24-hour time period.

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

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

Measurement Location and Equipment

Because the predominant noise source in the area of the proposed project is vehicular traffic, noise monitoring was conducted during peak vehicular travel periods, 07:30 am-09:00 am, 12:00 pm-1:30 pm, and 4:30 pm-6:00 pm. Pursuant to *CEQR Technical Manual* methodology, readings in front of the Project Area (Locations 1- 4) were conducted for 20-minute periods during each peak vehicular traffic period. **Figure 1** below displays the Noise Monitoring Locations in front of the Project Area. Noise monitoring was conducted using two Type 1 Casella CEL633C1 sound meters, with a wind screen. The monitor was placed on a tripod at a height of approximately three feet above the ground, away from any other surfaces. The monitor was calibrated prior to each monitoring session.

Location 1

Image1: Project Area (mid-point facing 37th St.)



Location 2

Image 4: Project Area (mid-point facing 38th St.)



Location 3

Image 5: Project Area (corner of 34th Av. and 38th St.)



Location 4

Image 6: Project Area (corner of 34th Av. and 37th St.)



Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Wednesday, November 8, 2017. The weather was dry and wind speeds were low throughout the day. Moderate vehicular and pedestrian traffic were sources of moderate ambient noise. Traffic volumes and vehicle classifications were documented during the noise monitoring. The sound meter was calibrated before each monitoring session.

Existing Conditions

Based on the noise measurements taken at the Project Area, the predominant source of noise at the site is commercial vehicular traffic, specifically heavy trucks and buses. The volume of traffic, and its corresponding level of noise, is moderate at Locations 2 and 3 and light at Locations 1 and 4.

Table Noise-2 below contains the results for the measurements taken at the Project Area.

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

Table Noise-2: Noise Levels (dB)

Location 1: Noise Levels midblock on 37th Street

	Wednesday November 8th, 2017		
	7:54 am – 8:14 am	12:23 pm – 12:43 pm	4:52 pm – 5:12 pm
L_{max}	87.2	86.3	82.1
L_{10}	68.0	66.5	66.5
L_{eq}	66.5	64.5	64.3
L_{50}	65.5	61.0	62.5
L_{90}	57.0	58.5	60.0
L_{min}	53.9	64.5	57.1

Table Noise-2: Noise Levels (dB)

Location 2: Noise Levels midblock on 38th Street

	Wednesday November 8th, 2017		
	8:07 am – 8:27 am	12:27 pm – 12:47 pm	4:56 pm – 5:16 pm
L_{max}	96.6	85.4	87.3
L_{10}	68.0	67.5	66.0
L_{eq}	66.4	65.5	63.9
L_{50}	59.0	64.5	57.5
L_{90}	54.5	54.5	53.0
L_{min}	51.0	51.0	50.6

Table Noise-2: Noise Levels (dB)

Location 3: Noise Levels corner of 38th Street and 34th Avenue

	Wednesday November 8th, 2017		
	8:31 am – 8:51 am	12:50 pm – 1:10 pm	5:18 pm – 5:38 pm
L_{max}	89.0	91.1	85.6
L_{10}	69.0	68.0	67.0
L_{eq}	68.5	66.0	64.9
L_{50}	63.0	62.5	61.5

L ₉₀	58.5	58.0	57.0
L _{min}	53.7	53.9	52.9

Table Noise-2: Noise Levels (dB)

Location 4: Noise Levels Corner of 37th Street and 34th Avenue

	Wednesday November 8th, 2017		
	8:15 am – 8:35 am	12:44 pm – 1:04 pm	5:14 pm – 5:34 pm
L _{max}	88.1	86.7	89.0
L ₁₀	69.0	70.0	69.5
L _{eq}	67.5	66.7	67.3
L ₅₀	62.0	62.5	62.0
L ₉₀	57.5	59.0	55.5
L _{min}	53.9	55.6	51.5

Table Noise-3 below contains the traffic volumes (vehicle counts) and vehicle classifications for the morning, midday, and evening monitor sessions:

Morning				
	Location 1	Location 2	Location 3	Location 4
Car/ Taxi	32	31	56	58
Van/ Light Truck/SUV	37	31	82	93
Heavy Truck	3	1	8	8
Bus	1	2	3	10
Motorcycle	0	1	0	0

Mid-Day				
	Location 1	Location 2	Location 3	Location 4
Car/ Taxi	19	19	86	70
Van/ Light Truck/SUV	25	27	97	97
Heavy Truck	3	2	10	7
Bus	1	1	1	3
Motorcycle	2	0	2	3

Afternoon				
	Location 1	Location 2	Location 3	Location 4
Car/ Taxi	21	22	62	63
Van/ Light Truck/SUV	30	36	98	111
Heavy Truck	1	3	5	10
Bus	3	0	1	1
Motorcycle	0	0	1	1

Conclusions

The 2014 *CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the Proposed Actions, an L₁₀ of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. The highest recorded L₁₀ at each of the monitoring locations is identified below.

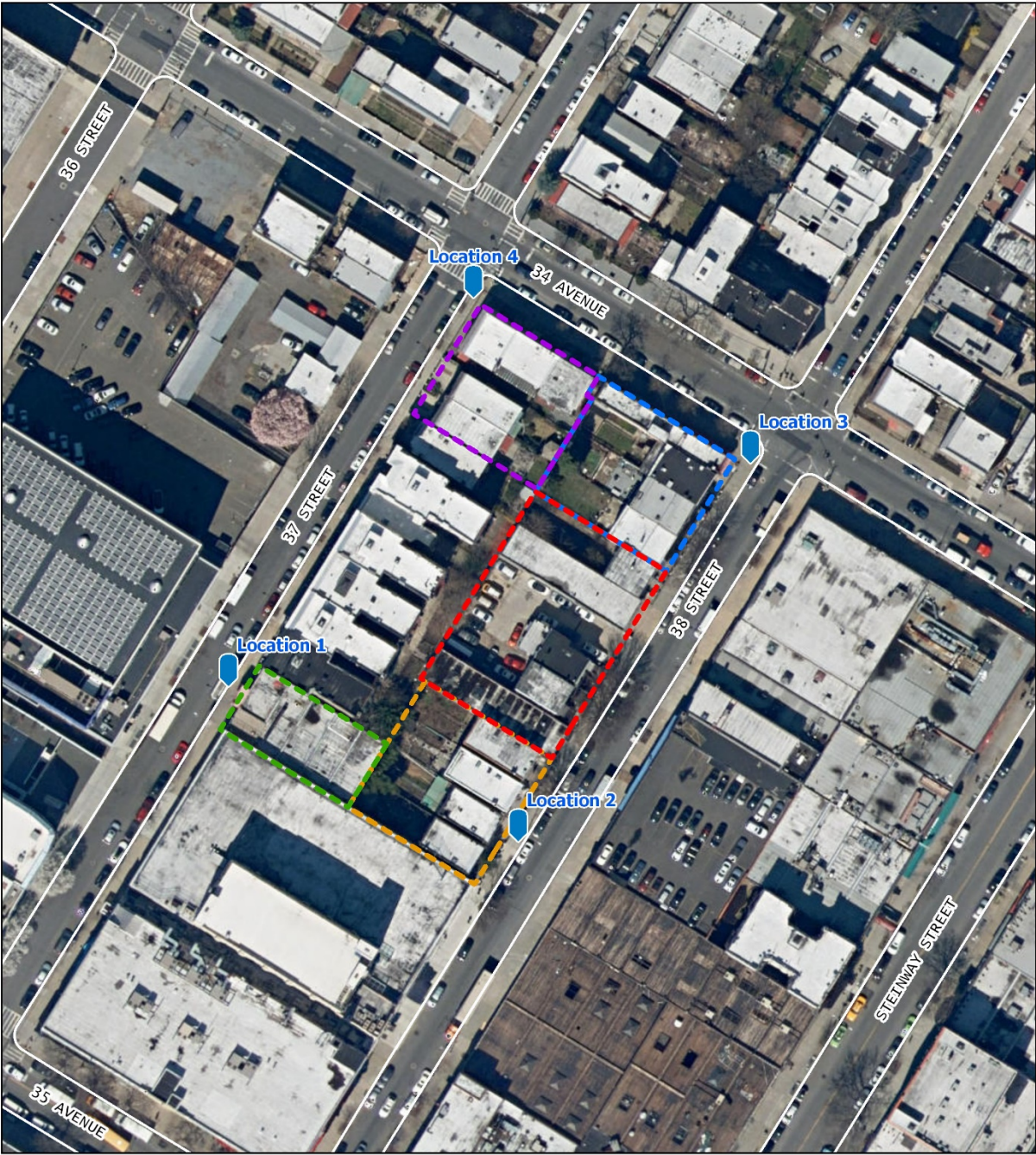
<u>Location</u>	<u>Maximum L₁₀</u>	<u>Period</u>
1 (midblock 37 th St)	68.0	AM
2 (midblock 38 th St)	68.0	AM
3 (38 th St and 34 th Av)	69.0	AM
4 (37 th St and 34 th Av)	70.0	MD

Although maximum L10 noise level for Monitoring Location 4 is 70.0 dBA, the future With-Action L10 noise level is projected to exceed the exterior noise level threshold of 70 dBA due to project-induced vehicle trips and annual background traffic growth rate. Therefore, an E-Designation (E-533) for 28 dBA of attenuation is required on the western and northern facades of Projected Development Site 4 as shown below:







The text of the E-Designation (E-533) would be as follows.

Block 645, Lots 25, 28, 30, 31, 126, and 127 (Projected Development Site 4): In order to ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on façades facing 34th Avenue and 37th Street in order to maintain an interior noise level of 45 dB(A). To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning.

Figure 1: Noise Monitoring Locations Map



Legend

- | | |
|--|--|
|  Noise Monitoring Locations |  Site 3 |
|  Site 1 |  Site 4 |
|  Site 2 |  Site 5 |

0 20 40 80 120 160
US Feet



20. CONSTRUCTION

Introduction

A preliminary construction analysis may be required because the proposed development would result in the construction of multiple buildings where there is the potential for on-site receptors on buildings completed before the final build out.

Proposed Construction Schedule

Construction would occur on 5 development sites located on the same block including one Applicant Owned site and 4 Non-Applicant owned parcels as further described below.

Construction on Projected Development Site 1 would occur over an 18-month period. Construction is anticipated to begin in 2019 and be completed by 2021. See attached Construction Schedule.

It is not known when construction on the 4 Non-Applicant owned sites would occur but it is assumed that it would occur following the completion of construction on the Applicant owned parcel. It would take approximately 5 years to construct these developments, and they would be completed in 2026 following an expected gap of approximately 6 months following the completion of the development on Projected Development Site 1. See attached Construction Schedule.

Proposed Construction Activities

Applicant Owned Site

Exterior construction activities would include the following in sequence: site clearing, excavation, pile driving, construction of the foundation, construction of the steel structure, construction of the façade, roofing, and exterior site work. Exterior work would take approximately 12 months to complete and interior construction work would take approximately 6 months to complete.

Non-Applicant Owned Sites

Construction activities on the 4 Non-Applicant Owned Sites are anticipated to be similar to those on the Applicant controlled site. It is assumed that the new buildings on the 4 Non-Applicant Owned Sites would be built sequentially, although it is not known in what sequence the development on these parcels would occur. The buildings on Projected Development Sites 2 through 5 would each take on average about 12 months to complete as they are all considerable smaller than the building on Projected Development Site 1.

Project construction activities are expected to be typical for larger building construction projects in New York City. Construction activities would predominantly occur Monday through Friday, although limited delivery of certain critical pieces of equipment (e.g., cranes) may be necessary on weekend days if required in order to minimize traffic disruptions. Any weekend work would be contingent upon any conditions that may be imposed by City agencies that approve and monitor construction activities such as the NYC Department of Buildings (DOB) and the NYC Department of Transportation (DOT). DOB also regulates the permitted hours of construction. In accordance with those regulations, typical construction activities in New York City begin no earlier than 7 AM during the week, and workers typically arrive and begin to

prepare work areas between 6 and 7 AM. The standard weekday construction work day ends by 3:30 PM with an occasional extended shift until 6 PM.

Potential Construction Impacts

In accordance with the 2014 *CEQR Technical Manual*, the proposed project was reviewed to determine whether further analysis of the proposed construction activities is needed for any technical area, as follows.

Transportation

According to the *CEQR Technical Manual*, a number of factors should be considered before determining whether a preliminary assessment of the effect of construction on transportation is needed including:

- *Whether the project's construction would be located in a Central Business District (CBD) or along an arterial or major thoroughfare;*
- *Whether the project's construction activities would require closing, narrowing, or otherwise impeding moving lanes, roadways, key pedestrian facilities, parking lanes and/or parking spaces, bicycle routes and facilities, bus lanes or routes, or access points to transit; and*
- *Whether the project would involve construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap, and last for more than two years overall.*

The project's construction would not be located in a Central Business District (CBD) or along an arterial or major thoroughfare. 34th Avenue which adjoins the Project Area is a two-lane, two-way roadway serving the Astoria neighborhood for a length of approximately 1.5 miles between Northern Boulevard and the East River. It does not carry heavy traffic volumes. 37th and 38th Streets which also adjoin the Project Area are one-lane, one-way local streets.

The construction of the proposed development may require the temporary closing of the sidewalks adjacent to all the Projected Development Sites 1 through 5 along 34th Avenue and 37th and 38th Streets. The sidewalks adjacent to these sites are likely to be reconstructed, which may temporarily impact pedestrian flow and the availability of parking spaces along these streets. However, changes to moving traffic lanes are not likely. The affected locations would not be particularly sensitive to such a closure as they are not areas with high pedestrian activity, and the sidewalks and roadways affected by the proposed construction would not be considered to be near capacity. In addition, there are no schools or other sensitive uses adjoining the Project Area that would be affected by sidewalk closures. Any potential closure of the sidewalks adjacent to the Project Area would be considered a routine closure that would be addressed by a permit and pedestrian access plan issued by NYC DOT Office of Construction Mitigation and Coordination at the time of closure.

Although the project would involve construction on multiple development sites on the same block there would be little overlap in construction activities under the assumption that buildings would be constructed sequentially. In addition, construction of the 5 Projected Development Sites would each occur over a relatively short time period of approximately 18 months or less. Construction on the non-Applicant owned sites would occur following the completion of construction on the Applicant owned site. It is not known when construction

would begin on the non-Applicant owned sites but it is likely that there would be a gap of approximately 6 months before construction would occur on these parcels and there would also be a gap of approximately 6 months between the completion of construction on each site before construction would begin on another parcel.

On the basis of the above, construction of the proposed project would not be expected to result in significant adverse impacts on transportation.

Air Quality and Noise

According to the *CEQR Technical Manual*, an assessment of air quality and noise for construction activities is likely not warranted if the project's construction activities:

- *Are considered short-term (less than two years);*
- *Are not located near sensitive receptors; and*
- *Do not involve construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final built-out.*

Projected Development Sites 1, 2, and 5 are located near sensitive receptors as they would each adjoin existing residential development anticipated to remain. The proposed development would result in the construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final build-out. However, construction activities on all 5 Projected Development Sites would be considered short term as they would all take less than 18 months to complete. Exterior construction activities would take approximately 8 months on Projected Development Sites 2 through 5 and 12 months on Projected Development Site 1.

The *CEQR Technical Manual* states that if a project meets one or more of the criteria above, a preliminary air quality or noise assessment is not automatically required. Instead, various factors should be considered, such as the types of construction equipment (e.g., gas, diesel, electric), the nature and extent of any commitment to use the Best Available Technology (BAT) for construction equipment, the physical relationship of the Project Area to nearby sensitive receptors, the type of construction activity, and the duration of any heavy construction activity. These measures are discussed below.

Demolition, excavation, and foundation activities, which often generate the highest levels of air emissions, would be temporary and limited in duration and would take approximately 2 to 3 months to complete for Projected Development Sites 1 and 3 through 5 as these would involve relatively small structures. These activities would be spread out over 5 separate locations on the block and would not overlap with each other. In addition, any heavy equipment associated with the construction of the buildings (such as a crane) would operate from at least 5 different locations during construction.

Air Quality

The project would make use of the Best Available Technology to minimize impacts to the residential uses in the vicinity of the Projected Development Sites as further discussed below. The Applicant would implement the following measures that would minimize air quality and noise impacts on the surrounding community.

- *Diesel Equipment Reduction.* Construction of the proposed project would minimize the use of diesel engines and use electric engines, to the extent practicable. This would reduce the need for on-site generators, and require the use of electric engines in lieu of diesel where practicable.
- *Clean Fuel.* To the extent practicable, ultra-low sulfur diesel (ULSD) would be used for diesel engines on the Projected Development Sites.
- *Best Available Tailpipe Reduction Technologies.* To the extent practicable, non-road diesel engines with a power rating of 50 horsepower (hp) or greater would utilize the best available tailpipe (BAT) technology for reducing diesel particulate matter (DPM) emissions. Diesel particle filters (DPF) have been identified as being the tailpipe technology currently proven to have the highest PM reduction capability.

To the extent practicable, construction contracts would specify that all diesel non-road engines rated at 50 hp or greater would utilize DPFs, either installed on the engine by the original equipment manufacturer (OEM) or retrofit with a DPF verified by EPA or the California Air Resources Board, and may include active DPFs if necessary; or other technology proven to reduce DPM by at least 90 percent.

- *Utilization of Newer Equipment.* EPA's Tier 1 through 4 standards for non-road engines regulate the emission of criteria pollutants from new engines, including PM, CO, NO_x, and hydrocarbons (HC). To the extent practicable, all non-road construction equipment in the project would meet at least the Tier 2 emissions standard, and construction equipment meeting Tier 3 and/or Tier 4 emissions standards would be used where conforming equipment is widely available, and the use of such equipment is practicable.
- *Dust Control.* Fugitive dust control plans will be implemented as part of the construction process. For example, stabilized truck exit areas would be established for washing off the wheels of all trucks that exit the construction sites. Truck routes within the sites would be watered as needed to avoid the re-suspension of dust. All trucks hauling loose material will be equipped with tight fitting tailgates and their loads securely covered prior to leaving the sites. In addition to regular cleaning by the City, streets adjacent to the site would be cleaned as frequently as needed by the construction contractor. Water sprays will be used for all transfer of spoils to ensure that materials are dampened as necessary to avoid the suspension of dust into the air.
- *Restrictions on Vehicle Idling.* In addition to adhering to local laws restricting unnecessary idling on roadways, on-site vehicle idle time will also be restricted to three minutes, to the extent practicable, for all equipment and vehicles that are not using their engines to operate a loading, unloading, or a processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine.

Overall, these air emission control commitments would significantly reduce DPM emissions to a level otherwise achieved by applying the currently defined best available control technologies under NYC Local Law 77, which are required only for publicly funded City capital projects. In addition, as stated in the *CEQR Technical Manual*, all the necessary measures would be implemented to ensure compliance with the NYC Air Pollution Control Code regulating construction-related dust emissions. Based on the project size and the construction work involved, construction activities for the proposed project would not be considered out of the

ordinary or exceptional in terms of intensity and would be of a relatively short duration. Therefore, based on above and with the implementation of an emissions control program, the proposed project would not result in any significant adverse impacts on air quality.

Noise

While increases in ambient noise levels due to construction exceeding the CEQR impact criteria for two years or less may be noisy and intrusive, they are not considered to be significant adverse noise impacts. As described above, construction of the proposed development on Projected Development Site 1 would occur over a relatively short time period of approximately 18 months and only approximately 3 months would involve the noisiest exterior construction activities. These activities would not overlap with construction to occur on Projected Development Sites 2 through 5.

As described above, construction of Projected Development Sites 2 through 5 would take no more than 12 months to complete with a shorter period involving exterior construction activities. Construction activities on these sites are expected to occur sequentially with six month gaps and following the completion of all construction on Projected Development Site 1. These activities would be located on 4 separate locations on the block.

Construction noise is regulated by the NYC Noise Control Code and by EPA's noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. If weekend or after hour work is necessary, permits would be required to be obtained, as specified in the NYC Noise Control Code. In addition, the Applicant would commit to preparing a noise control plan that would be implemented during project construction. The measures to be contained in the plan would avoid noise impacts on the community. The plan would be prepared to be compliant with the NYC Noise Control Code (which requires a "Construction Noise Mitigation Plan") and would include such measures as construction noise source controls, path controls, and receiver controls. With these measures in place, no significant noise impacts are expected to occur as a result of the project construction.

Historic and Cultural Resources

There are no historic or cultural resources on the Applicant's Projected Development Site 1 or elsewhere in the Project Area as confirmed in LPC letter dated 11/28/17 (see Historic and Cultural Resources section above). There is one individually designated resource located within 400 feet of the Project Area, that being the Paramount Studios Building No. 1 at 34-12 36th Street which occupies the entirety of Block 643 bounded by 35th and 36th Streets from 34th to 35th Avenues. No Historic Districts or other individually designated historic resources are located within the surrounding 400-foot radius study area.

LPC-approved construction procedures would be followed to protect the historic Paramount Studios Building from damage from vibration, subsidence, dewatering, or falling objects. Construction procedures would comply with the NYC Department of Buildings memorandum Technical Policy and Procedure Notice # 10/88 (TPPN # 10/88) and with the site safety requirements of the 2008 NYC Building Code, as amended, which stipulate that certain procedures be followed for the avoidance of damage to historic and other structures resulting

from construction. TPPN # 10/88 pertains to any structure which is a designated NYC Landmark or located within a historic district, or listed on the National Register of Historic Places and is contiguous to or within a lateral distance of 90 feet from a lot under development or alteration. No adverse construction impacts would occur to any historic resources within 400 feet of the Project Area.

Hazardous Materials

As explained in the Hazardous Materials section above, an "E" designation (**E-533**) for hazardous materials will be placed on the Applicant's Projected Development Site 1 as well as the non-Applicant controlled Projected Development Sites 2 through 5. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on these parcels.

It is not feasible to conduct subsurface testing at the present time on Projected Development Site 1 as this Site is currently in active use. It is also not possible to conduct subsurface testing at the present time on Projected Development Sites 2 through 5 as these Sites are not controlled by the Applicant. It is therefore recommended that an (E) designation be placed on these Sites to ensure that testing for and mitigation and/or remediation of any hazardous materials contamination be completed prior to, or as part of, future development of these properties.

With the implementation of the above noted (E) designation and the preparation of the above noted Phase II reports, no significant adverse impacts related to hazardous materials during construction of the project would occur.

Natural Resources

According to the *CEQR Technical Manual*, a construction assessment is not needed for natural resources unless the construction activities would disturb a site or be located adjacent to a site containing natural resources. The Projected Development Sites and the adjacent properties are fully developed and do not contain any natural resources. Therefore, there is no potential for significant adverse construction impacts on natural resources.

Open Space, Socioeconomic Conditions, Community Facilities, Land Use and Public Policy, Neighborhood Character, and Infrastructure

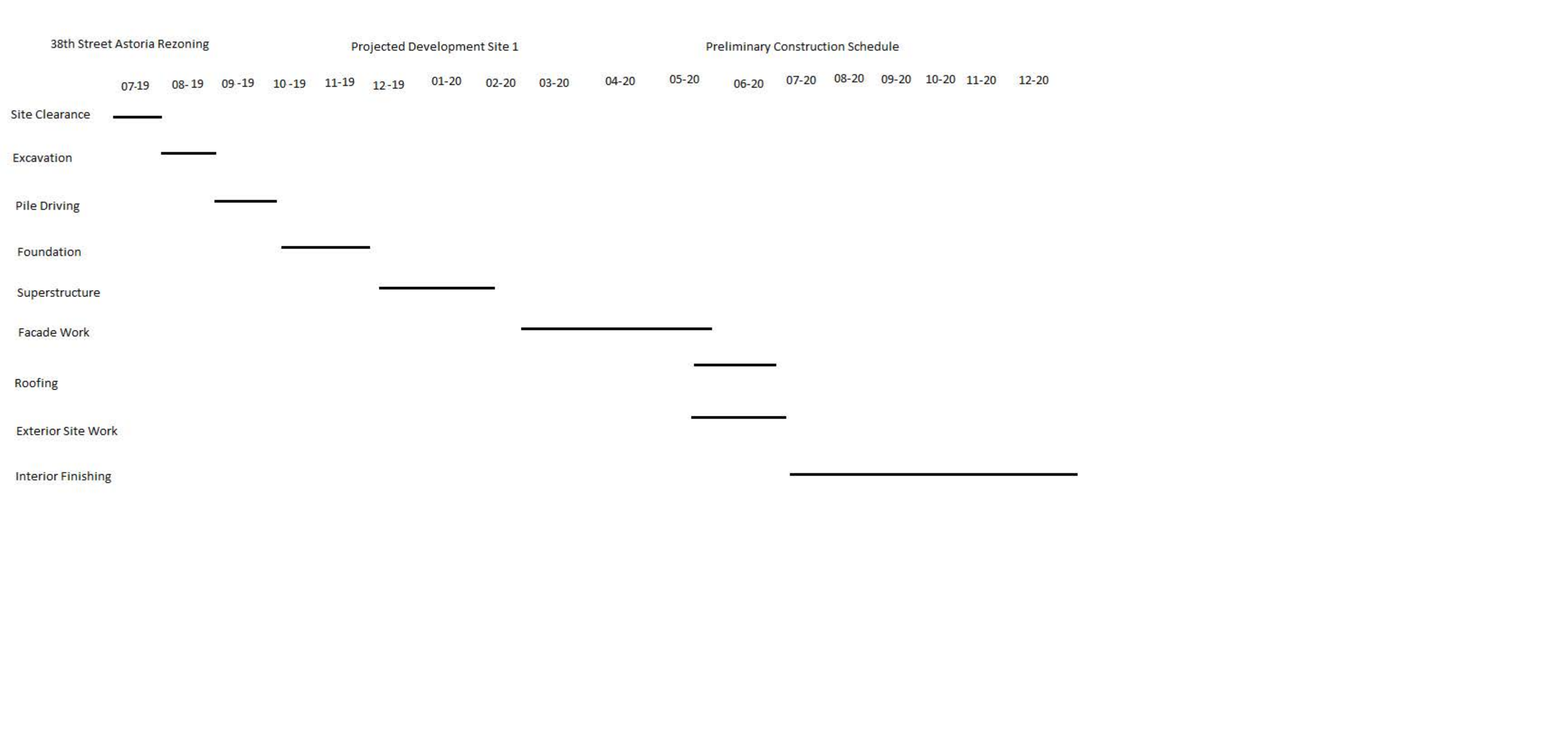
According to the *CEQR Technical Manual*, a preliminary construction assessment is generally not needed for these technical areas unless the following are true:

- *The construction activities are considered "long-term" (more than 2 years);*
- *Short-term construction activities would not directly affect a technical area, such as impeding the operation of a community facility.*

As discussed above, construction activities on Projected Development Sites 1 through 5 would be considered short term (less than two years) as they would each occur over a period of 18 months or less. Construction of the proposed project would not have any significant direct effects on open space areas, socioeconomic conditions, community facilities, or infrastructure conditions, and would not have cumulative impacts on land use or neighborhood character. Therefore, construction of the proposed project would not be expected to result in any significant adverse construction impacts on these technical areas.

Conclusion

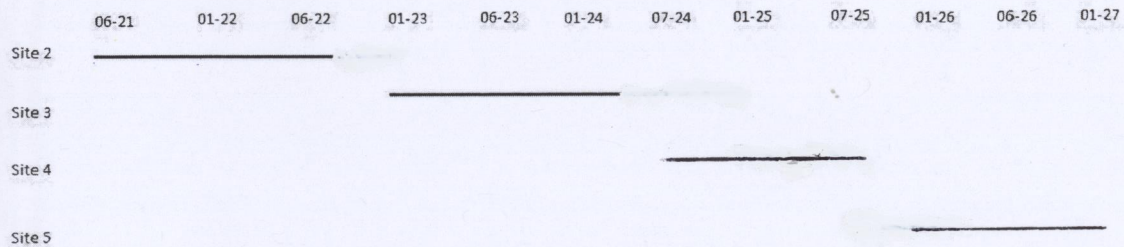
On the basis of the above analysis, the Proposed Actions would not have any potentially significant adverse construction impacts, and further analysis would not be warranted.



38th Street Astoria Rezoning

Projected Development Sites 2 through 5

Preliminary Construction Schedule



APPENDIX

HISTORIC AND CULTURAL RESOURCES APPENDIX

ENVIRONMENTAL REVIEW

Final Sign-Off (Multiple Sites)

Project number: DEPARTMENT OF CITY PLANNING / PRE-CEQR-Q
Project: 34-20 38th Street
Date received: 11/21/2017

Properties with no Architectural or Archaeological significance:

- 1) ADDRESS: 3711 35 Avenue, BBL: 4006450001
- 2) ADDRESS: 3429 37 Street, BBL: 4006450015
- 3) ADDRESS: 3427 37 Street, BBL: 4006450017
- 4) ADDRESS: 3425 37 Street, BBL: 4006450019
- 5) ADDRESS: 3421 37 Street, BBL: 4006450020
- 6) ADDRESS: 3417 37 Street, BBL: 4006450022
- 7) ADDRESS: 3415 37 Street, BBL: 4006450023
- 8) ADDRESS: 3411 37 Street, BBL: 4006450024
- 9) ADDRESS: 3409 37 Street, BBL: 4006450025
- 10) ADDRESS: 3702 34 Avenue, BBL: 4006450028
- 11) ADDRESS: 3706 34 Avenue, BBL: 4006450030
- 12) ADDRESS: 3710 34 Avenue, BBL: 4006450031
- 13) ADDRESS: 3418 34 Avenue, BBL: 4006450032
- 14) ADDRESS: 3404 38 Street, BBL: 4006450033
- 15) ADDRESS: 3406 38 Street, BBL: 4006450034
- 16) ADDRESS: 3408 38 Street, BBL: 4006450035
- 17) ADDRESS: 3410 38 Street, BBL: 4006450036
- 18) ADDRESS: 3412 38 Street, BBL: 4006450037
- 19) ADDRESS: 3420 38 Street, BBL: 4006450038
- 20) ADDRESS: 3422 38 Street, BBL: 4006450040
- 21) ADDRESS: 3424 38 Street, BBL: 4006450042
- 22) ADDRESS: 3426 38 Street, BBL: 4006450044
- 23) ADDRESS: 3428 38 Street, BBL: 4006450045
- 24) ADDRESS: 3432 38 Street, BBL: 4006450046
- 25) ADDRESS: 3434 38 Street, BBL: 4006450047
- 26) ADDRESS: 3407 37 Street, BBL: 4006450126
- 27) ADDRESS: 3405 37 Street, BBL: 4006450127
- 28) ADDRESS: 3437 37 Street, BBL: 4006450010

Comments:

Within the radius: Paramount Studios Complex is listed on the National Register (90NR01612). PARAMOUNT STUDIOS, BUILDING NO.1 (MAIN BUILDING), 35-11 35th Avenue, Astoria, Borough of Queens is LPC Individual Landmark.

Gina Santucci

11/28/2017

SIGNATURE

Gina Santucci, Environmental Review Coordinator

DATE

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