42-11 30TH AVENUE REZONING

Environmental Assessment Statement

CEQR No. 24DCP070Q

Prepared for:
CG Stone Realty, LLC

Environmental Studies Corp.

February 2025

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* 42-11 30th Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
24DCP070Q	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
240223ZMQ, N240224ZRQ, 240225ZSQ	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY NYC Department of City Planning			NAME OF APPLICANT CG Stone Realty, LLC		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, AICP, Director of Environmental Assessment and Review Division			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Hiram A. Rothkrug, Environmental Studies Corp.		
ADDRESS 120 Broadway, 31st floor			ADDRESS 55 Water Mill Lane		
CITY New York	STATE NY	ZIP 10271	CITY Great Neck	STATE NY	ZIP 11201
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 718-343-0026	EMAIL hrothkrug@environmentalstudiescorp.com	

Project Description

The Applicant, CG Stone Realty, LLC, seeks a zoning map amendment changing an R5/C1-2 zoning district to R6A/C2-4 (Block 698, Lots 1, 40, 41, 44, 45, 47, and 48) and changing R5/C1-2 to R5 (Block 698, Lots 2 and 39) in the Astoria neighborhood of Queens Community District 1 (the "Rezoning Area"); and a zoning text amendment to Zoning Resolution ("ZR") Appendix F to establish the R6A/C2-4-zoned portion of the Rezoning Area as a Mandatory Inclusionary Housing ("MIH") Area. These two actions are the Proposed Actions. The Proposed Actions would facilitate the enlargement of the existing one-story Key Food grocery store building at the Development Site into a five-story, 52,030 gross square feet ("gsf"), mixed-use residential/commercial building ("Proposed Development") at 42-11 30th Street on Block 698, Lots 41 and 44 (the "Project Development Site 1"). The Proposed Development would provide 32 residential unit, 20-30% (7 - 10 units) of which would be affordable pursuant to MIH at an average of 40-80 percent Average Median Income (AMI) depending on the option selected. As part of a conservative analysis, a 59-foot tall, six-story, 37,974 gsf building with 31 dwelling units at 42-07 30th Avenue (Block 698, Lots 1, 45) is also included in the analysis as Projected Development Site 2.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 1	STREET ADDRESS 42-11 30th Avenue
TAX BLOCK(S) AND LOT(S) Block 698, Lots 1, p/o 2 and 39, and 40, 41, 44, 45, 47, 48		ZIP CODE 11103
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The northside of 30th Avenue between 42nd and 43rd Streets		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R5/C1-2		ZONING SECTIONAL MAP NUMBER 9a

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO ☐ Cogeneration Facility ☐ Title V Permit

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

☐ LEGISLATION
☐ RULEMAKING
☐ CONSTRUCTION OF PUBLIC FACILITIES
☐ 384(b)(4) APPROVAL
☐ OTHER, explain:

☐ FUNDING OF CONSTRUCTION, specify:
☐ POLICY OR PLAN, specify:
☐ FUNDING OF PROGRAMS, specify:
☐ PERMITS, specify:

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 30,700
Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.): 30,700
Other, describe (sq. ft.):

8. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action) SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 87,640

NUMBER OF BUILDINGS: 2
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 52,030 and 37,974
HEIGHT OF EACH BUILDING (ft.): 59 and 59
NUMBER OF STORIES OF EACH BUILDING: 5 and 6

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: 10,248
The total square feet not owned or controlled by the applicant: 14,752

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 17,849 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 44,208 (9' depth) cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 4,912 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.)	29,893 and 23,414	19,062 and 4,594		
Type (*e.g.,* retail, office, school)	32 and 31 units	retail		

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify:
NUMBER OF ADDITIONAL RESIDENTS: 137
NUMBER OF ADDITIONAL WORKERS: 34
Provide a brief explanation of how these numbers were determined: Worker/employee calculations are as follows:Retail = 1/333 sf Residents: Average HH size 2.18 (popfactfinder).

Does the proposed project create new open space? ☐ YES ☒ NO If "yes," specify size of project-created open space: sq. ft.

Has a No-Action scenario been defined for this project that differs from the existing condition? ☐ YES ☒ NO

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2028

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: Applicant owned Site 1: 6 months approval, 18 months construction. Projected Site 2: additional 18 months of construction following completion and occupation of Applicant owned Site 1.

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

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

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Early Childhood Programs:** 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)	☐	☒
○ **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)	☐	☒
○ **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)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees?	☐	☒
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		

	YES	NO
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. see Historic and Cultural Resource section		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Protection Plan Project Tracking Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☐	☒
(b) Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure?	☐	☒
(c) 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?	☐	☒
(d) 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 the Hazardous Materials Appendix (including nonconforming uses)?	☐	☒
(e) 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?	☐	☒
(f) 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)?	☐	☒
(g) 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?	☐	☒
(h) 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?	☐	☒
(i) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☐	☒
(j) Based on the Phase I Assessment, is a Phase II Investigation needed?	☐	☒
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒

	YES	NO
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 5,730		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 9.18m		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☒	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☒
○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop, or Citywide Ferry Service landing?	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☒
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality;	☐	☒

	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?	☒	☐
(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. Construction of each of the two projected developments would take approximately 18 months, and it is anticipated that they would be built sequentially, with no overlap of the construction periods. Construction activities would occur in stages: demolition of the existing buildings, site preparation and excavation, foundation work, superstructure and exterior work, and, lastly, construction of the interior core and shell and finishes. Exterior construction activities would take no more than a year, with at least half a year devoted to interior fit-out activities. Air quality and noise impacts to sensitive receptors are anticipated to be minimal due to the limited duration of exterior construction activities. On Projected Development Site 1, the Applicant would make use of the Best Available Technology (BAT) to minimize impacts to sensitive receptors in the vicinity of the site. On Projected Development Site 2, which the Applicant does not control, construction work would be short-term and typical of construction projects in the city, and they would be regulated by the NYC Noise Control Code, the EPA's noise emission standards for construction equipment, and other pertinent codes and standards.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☒	☐
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☒	☐
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. Construction of each of the two projected developments would take approximately 18 months, and it is anticipated that they would be built sequentially, with no overlap of the construction periods. Construction activities would occur in stages: demolition of the existing buildings, site preparation and excavation, foundation work, superstructure and exterior work, and, lastly, construction of the interior core and shell and finishes. Exterior construction activities would take no more than a year, with at least half a year devoted to interior fit-out activities. Air quality and noise impacts to sensitive receptors are anticipated to be minimal due to the limited duration of exterior construction activities. On Projected Development Site 1, the Applicant would make use of the Best Available Technology (BAT) to minimize impacts to sensitive receptors in the vicinity of the site. On Projected Development Site 2, which the Applicant does not control, construction work would be short-term and typical of construction projects in the city, and they would be regulated by the NYC Noise Control Code, the EPA's noise emission standards for construction equipment, and other pertinent codes and standards.		

20. APPLICANT'S CERTIFICATION

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
Danielle Garenberg, Environmental Studies Corp.	02/13/25

SIGNATURE Danielle Garenberg

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

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

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

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

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

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

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

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

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

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

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

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

TITLE Director, Environmental Assessment and Review Division	LEAD AGENCY NYC Department of City Planning
NAME Stephanie Shellooe, AICP	DATE February 14, 2025
SIGNATURE	

NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The Applicant, CG Stone Realty, LLC, seeks a zoning map amendment to rezone an existing R5/C1-2 zoning district to R6A/C2-4 and an existing R5/C1-2 to R5 on Block 698, Lots 1, 2, 39, 40, 41, 44, 45, 47, and 49 (the "Rezoning Area") in the Astoria neighborhood of Queens Community District 1 , as well as a zoning text amendment to Zoning Resolution ("ZR") Appendix F to establish the R6A/C2-4-zoned portion of the Rezoning Area as a Mandatory Inclusionary Housing ("MIH") Area (together, the "Proposed Actions"). The Proposed Actions would facilitate the enlargement of the existing one-story Key Food grocery store building on Block 698, Lots 41 and 44 (the "Projected Development Site 1") into a five-story, 52,030 gross square feet ("gsf"), mixed-use residential and commercial building (the "Proposed Development"). The Proposed Development would include 32 dwelling units, 20-30% (7 - 10 units) of which would be permanently affordable pursuant to MIH. In order to present a conservative analysis, a 59-foot tall, six-story, 37,974 gsf building with 28 dwelling units at 42-07 30th Avenue (Block 698, Lots 1, 45) is also included in the analysis as Projected Development Site 2. The Proposed Actions would result in an R6A/C2-4 district, while the surrounding study area is mapped R5 with a C1-2 commercial overlay along 30th Avenue. R5 zoning districts, with a maximum permitted residential FAR of 1.50 (2.0 for qualifying residential sites), typically allow a variety of housing and typically result in three-and four-story attached houses and small apartment houses. The study area surrounding the Rezoning Area has a mix of residential, commercial and community facility uses and is characterized by residential and mixed-use buildings ranging from one- to five-stories in height, and commercial buildings range from one- to four-stories. The Proposed Actions would not result in any significant adverse impacts to zoning, as the proposed R6A district would permit a maximum residential FAR of 3.0 (3.90 for qualifying affordable housing) which typically results in six- to eight-story apartment buildings. When C2-4 commercial overlays are mapped in R6 zoning districts, the maximum commercial FAR is 2.0. Although the projected development sites are not subject to the Food Retail Expansion to Support Health ("FRESH") program, the expansion of the existing grocery store on Projected Development Site 1 would advance the City's goal of providing grocery stores in underserved communities. The Proposed Actions would also support policies and goals of *Housing New York: A Five-Borough, Ten-Year Plan* by establishing an MIH area encompassing the R6A/C2-4 portion of the Rezoning Area, which would require future residential development to include permanently income-restricted units. Therefore, the Proposed Actions would not result in significant adverse impacts to land use, zoning or public policy, and no further analysis is warranted.

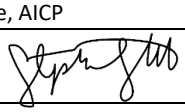
Transportation

A detailed analysis of transportation is included in the EAS. Based on the results of trip generation and trip assignment screening analyses, the Proposed Actions would not result in any intersection experiencing 50 or more peak hour vehicle trips-ends in the study area and would generate fewer subway trips than 200 peak hour subway trip-ends but would result in more than 200 or more peak hour pedestrian trip-ends. Therefore, a detailed level-of-service (LOS) assessment of pedestrian impacts is included in the EAS. The LOS analysis indicates the study area's pedestrian elements continue to operate at acceptable levels of services. As a result, the Proposed Actions would not result in significant adverse impacts related to transportation and no further analysis is warranted.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-804) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE 2/14/2025
SIGNATURE 	

Project Name: 42-11 30th Avenue Rezoning
CEQR # 24DCP070Q
SEQRA Classification: Unlisted

TITLE Chair, City Planning Commission	
NAME Daniel R. Garodnick	DATE 2/18/2025
SIGNATURE	

Project Name: 42-11 30th Avenue Rezoning
CEQR # 24DCP070Q
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Queens	Block 698, Lots 41 and 44
Projected Development Site 2	Queens	Block 698, Lots 1 and 45

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-804**) would be established as part of approval of the proposed actions on **Projected Development Site 1 and 2** as described below:

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

Hazardous Materials

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

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

Project Name: 42-11 30th Avenue Rezoning
CEQR # 24DCP070Q
SEQRA Classification: Unlisted

Air Quality

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

> ***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, and air conditioning (HVAC) system and hot water equipment, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 66 feet above grade, and at least 35 feet from the western lot line of Block 698, Lot 44 to avoid any potential significant adverse air quality impacts.*
>
> ***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, and air conditioning (HVAC) system and hot water equipment, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 65 feet above grade, and at least 25 feet from the western lot line of Block 698, Lot 44 to avoid any potential significant adverse air quality impacts.*

Noise

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

> ***Projected Development Site 1:*** *In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the eastern facade facing 43rd Street, the southern facade facing 30th Avenue within 50 feet of 43rd Street, and the northern facade facing 28th Avenue within 50 feet of 43rd Street to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office use. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

42-11 30th Avenue, Queens

Figure 1: Site Location



Data Source: MapPLUTO 2023v1

Urban Cartographics

42-11 30th Avenue, Queens

Figure 2: Tax Map



Data Source: MapPLUTO 2023v1, NYC DOF Digital Tax Map 3/1/23

Urban Cartographics

42-11 30th Avenue, Queens

Figure 3: Land Use Map

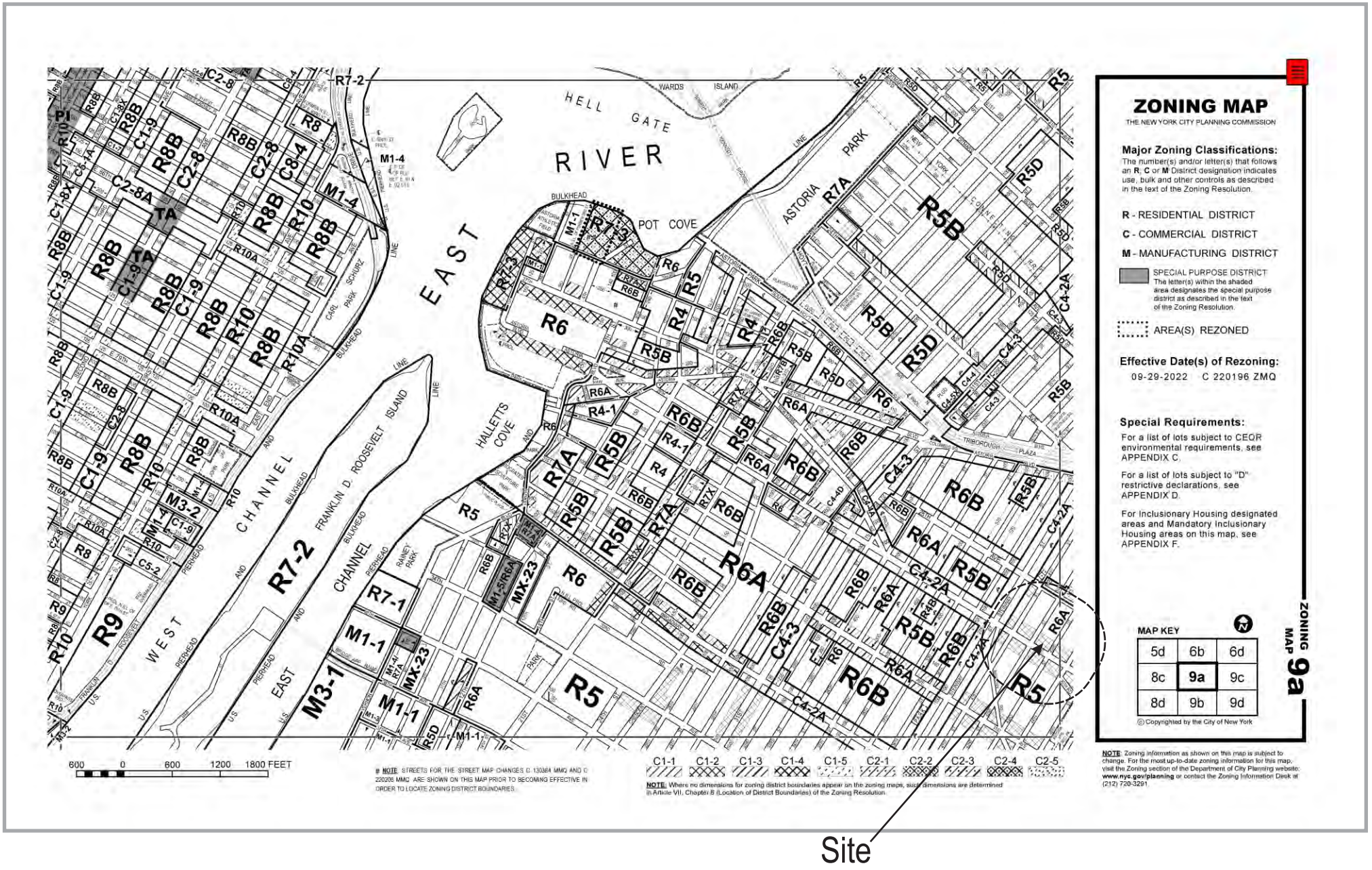


Data Source: MapPLUTO 2023v1, NYC DOF Digital Tax Map 3/1/23

Urban Cartographics

42-11 30th Avenue, Queens

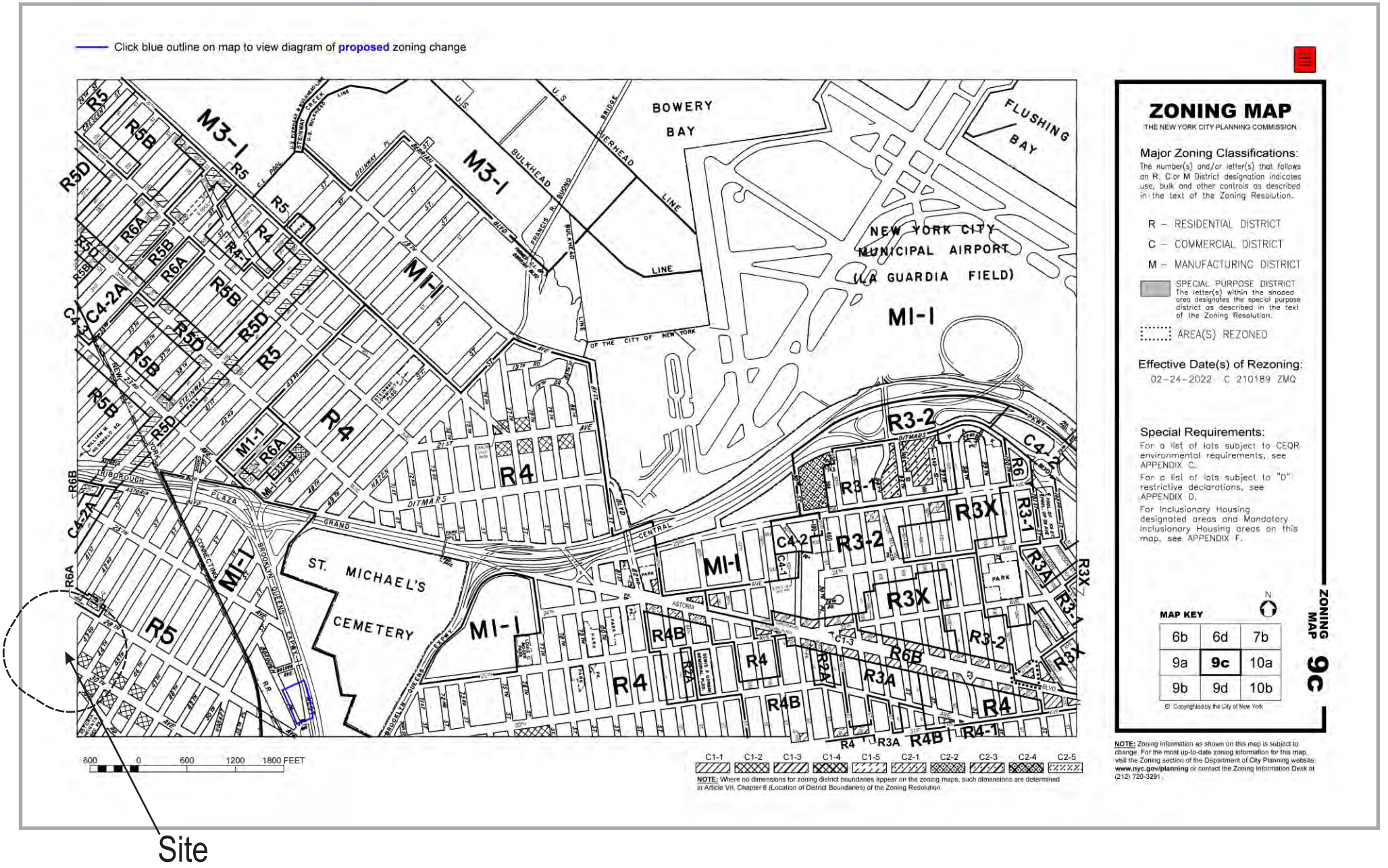
Figure 4: Zoning Map



Urban Cartographics

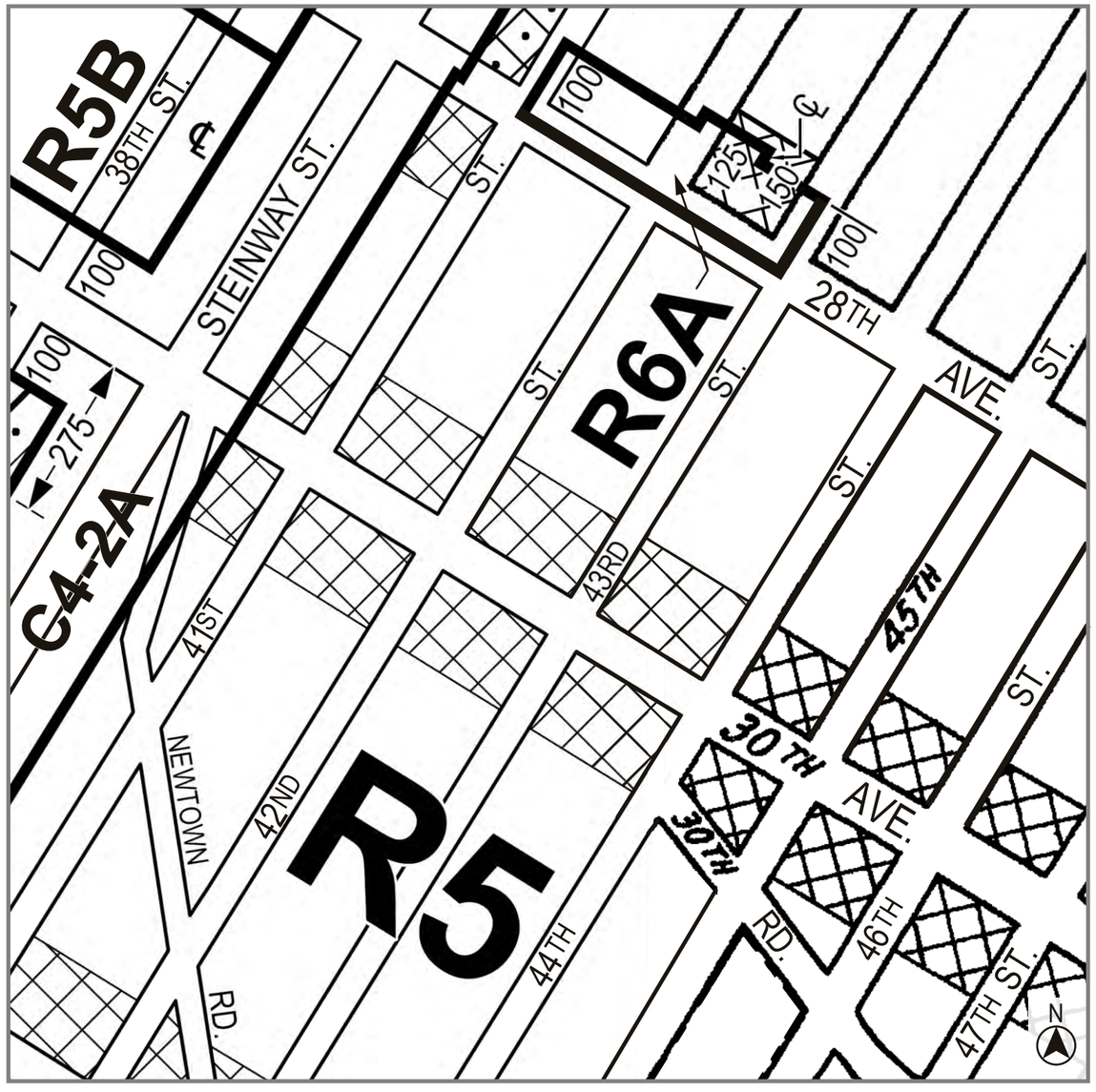
42-11 30th Avenue, Queens

Figure 5: Zoning Map

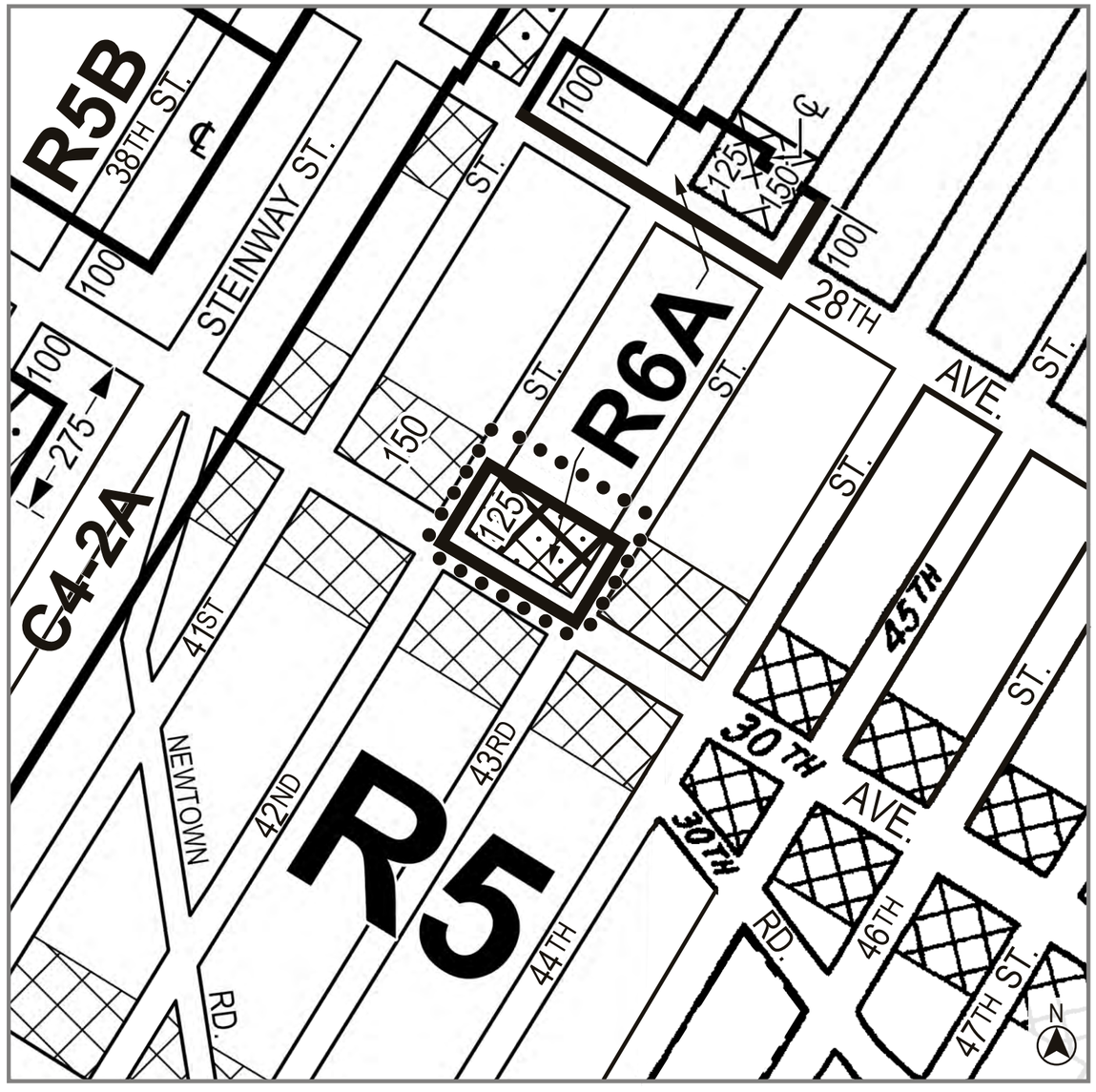


Urban Cartographics

Zoning Change Map



Current Zoning Map (9a & 9c)



Proposed Zoning Map (9a & 9c) - Area being rezoned is outlined with dotted lines

Rezoning from R5/C1-2 to R6A/C2-4
Rezoning from R5/C1-2 to R5

C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5

NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.

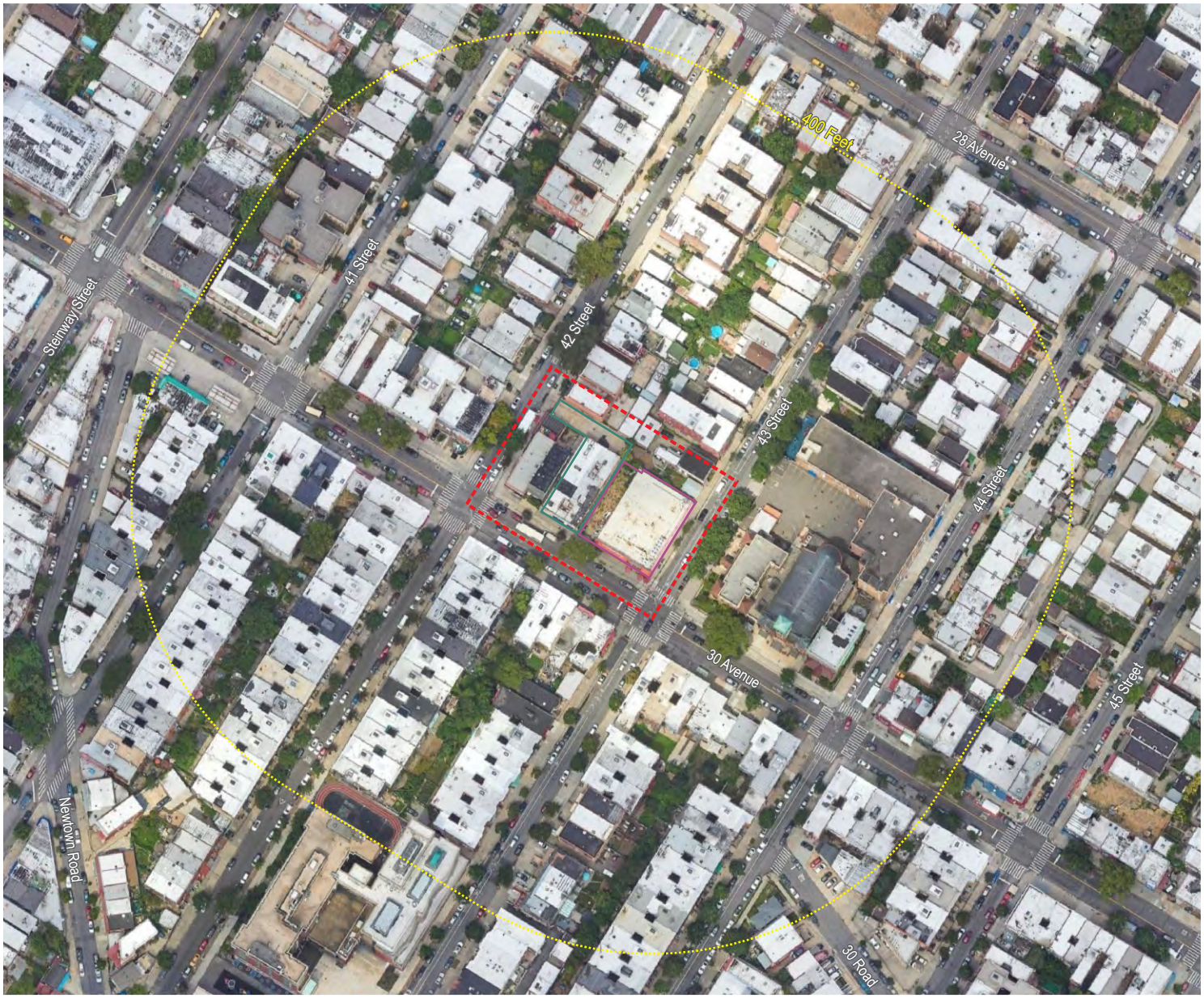
42-11 30th Avenue, Queens

Figure 6: Aerial Map

Projected Rezoning Area

Projected Development Site
(Applicant-Owned)

Projected Development Site
(Non-Applicant Owned)



Imagery Source: 2023 Google

Urban Cartographics



1. View of the Development Site facing east from 30th Avenue.



2. View of the Development Site facing northeast from 30th Avenue.



3. View of the Development Site facing northeast from 30th Avenue.





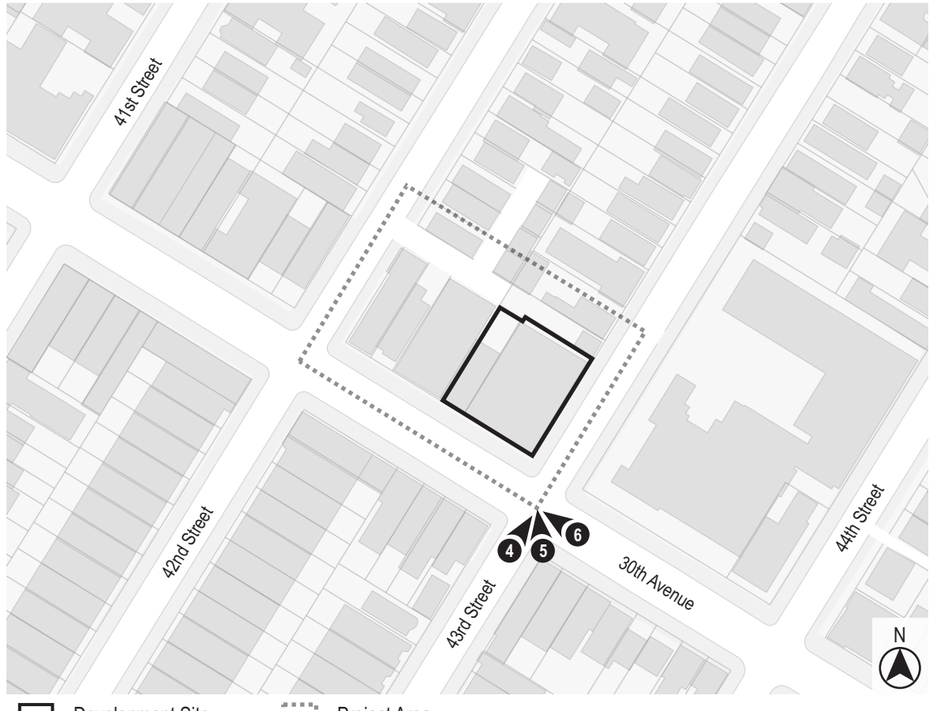
4. View of 43rd Street facing northeast from 30th Avenue (Development Site at left).



6. View of 30th Avenue facing northwest from 43rd Street (Development Site at right).



5. View of the Development Site facing north from the intersection of 30th Avenue and 43rd Street.





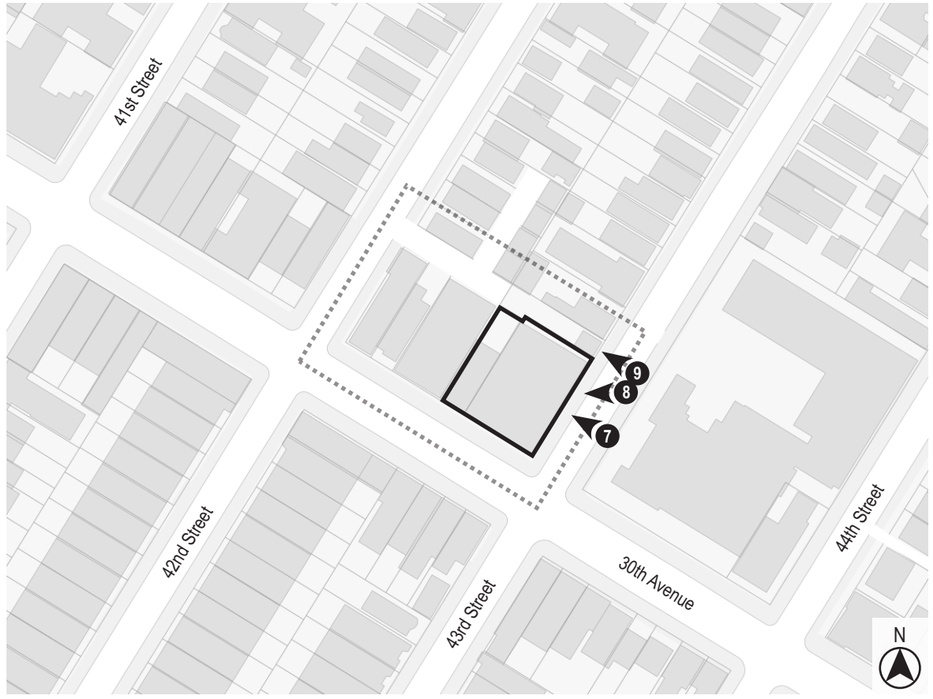
7. View of the Development Site facing northwest from 43rd Street.



8. View of the Development Site facing west from 43rd Street.



9. View of the Project Area facing northwest from 43rd Street.





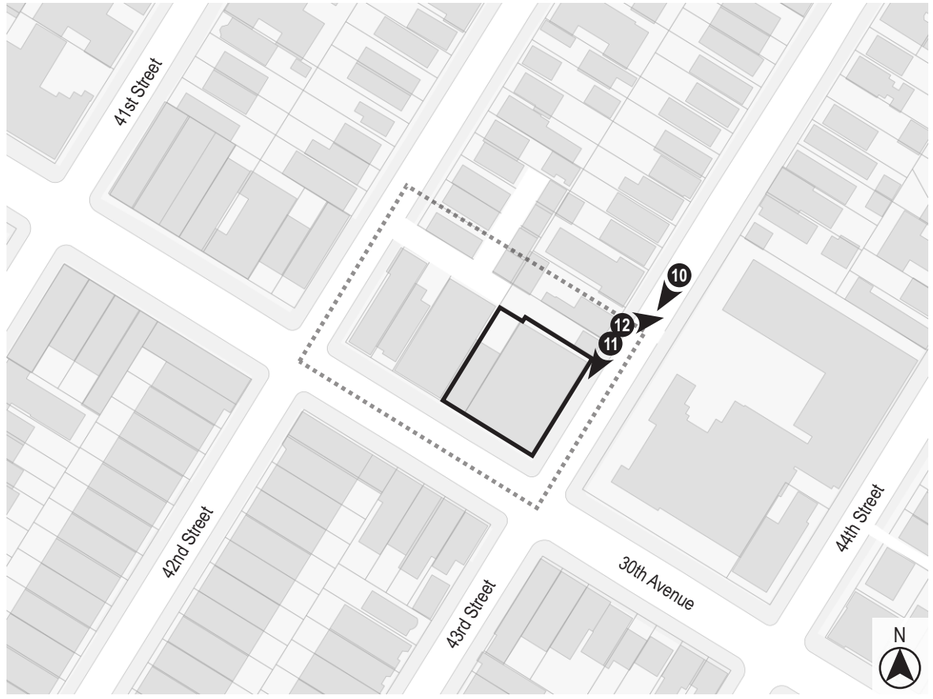
10. View of 43rd Street facing southwest (Project Area and Development Site at right).



11. View of the sidewalk along the west side of 43rd Street facing southwest (Project Area at right).



12. View of the southeast side of 43rd Street facing east from the Project Area.





13. View of the sidewalk along the northwest side of 43rd Street facing southwest (Development Site at right).



14. View of the sidewalk along the northwest side of 43rd Street facing northeast from 30th Avenue (Development Site at left).



15. View of the intersection of 30th Avenue and 43rd Street facing south from the Development Site.



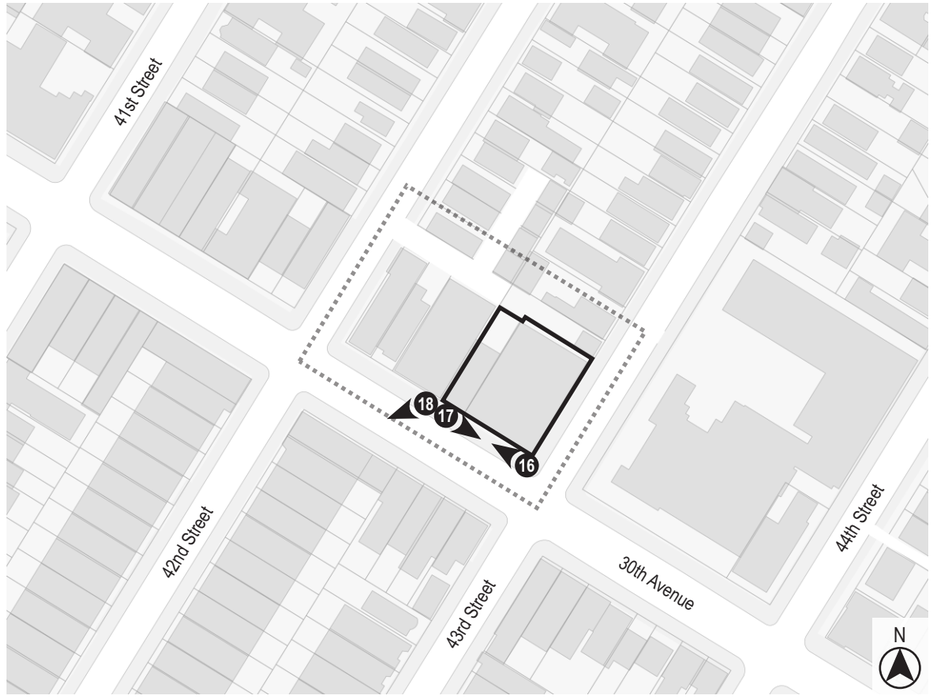
16. View of the sidewalk along the northeast side of 30th Avenue facing northwest from 43rd Street (Development Site at right).



17. View of the sidewalk along the northeast side of 30th Avenue facing southeast (Development Site at left).



18. View of the southwest side of 30th Avenue facing west from the Development Site.





19. View of the sidewalk along the northeast side of 30th Avenue facing northwest (Project Area at right).



20. View of the Project Area facing north from 30th Avenue.

21. View of the Project Area facing northeast from 30th Avenue.



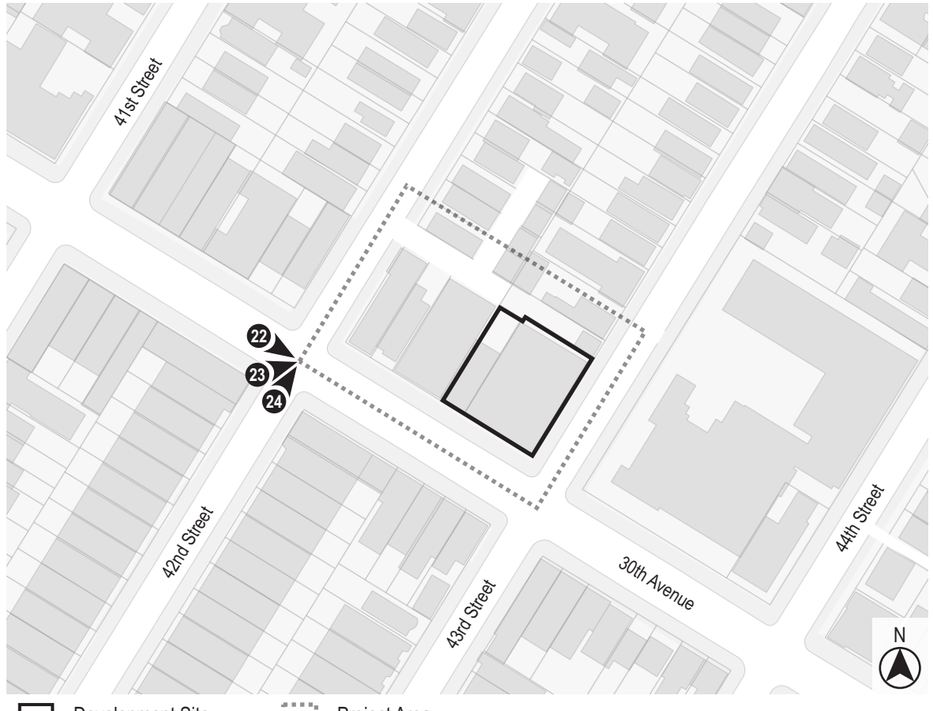
22. View of 30th Avenue facing southeast from 42nd Street (Project Area at left).



23. View of the Project Area facing east from the intersection of 30th Avenue and 42nd Street.



24. View of 42nd Street facing northeast from 30th Avenue (Project Area at right).





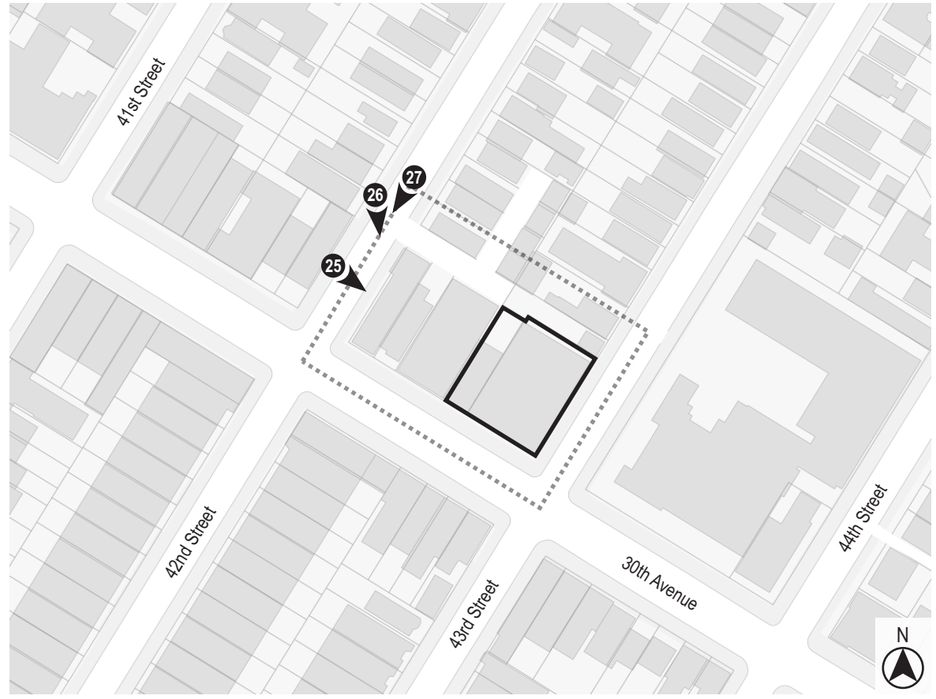
25. View of the Project Area facing southeast from 42nd Street.



26. View of the Project Area facing south from 42nd Street.



27. View of 42nd Street facing southwest (Project Area at left).





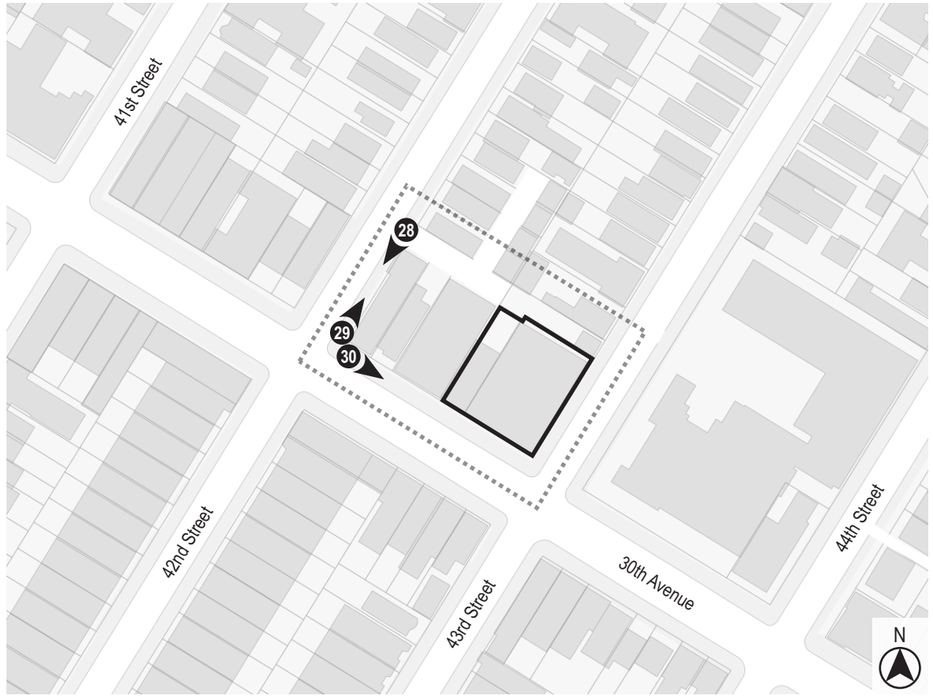
28. View of the sidewalk along the southeast side of 42nd Street facing southwest (Project Area at left).



29. View of the sidewalk along the southeast side of 42nd Street facing northeast (Project Area at right).



30. View of the sidewalk along the northeast side of 30th Avenue facing southeast from 42nd Street (Project Area at left).



Urban Cartographics

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PROJECT DESCRIPTION
42-11 30th AVENUE, QUEENS

Introduction

The Applicant, CG Stone Realty, LLC, seeks a zoning map amendment changing an R5/C1-2 zoning district to R6A/C2-4 (Block 698, Lots 1, 40, 41, 44, 45, 47, and 48) and changing R5/C1-2 to R5 (Block 698, Lots 2 and 39) in the Astoria neighborhood of Queens Community District 1 (the "Rezoning Area"); and a zoning text amendment to Zoning Resolution ("ZR") Appendix F to establish the R6A/C2-4-zoned portion of the Rezoning Area as a Mandatory Inclusionary Housing ("MIH") Area. These two actions are the Proposed Actions. The Proposed Actions would facilitate the enlargement of the existing one-story Key Food grocery store building at the Development Site into a five-story, 52,030 gross square feet ("gsf"), mixed-use residential/commercial building ("Proposed Development") at 42-11 30th Street on Block 698, Lots 41 and 44 (the "Project Development Site 1"). The Proposed Development would provide 32 residential unit, 20-30% (7 - 10 units) of which would be affordable pursuant to MIH at an average of 40-80 percent Average Median Income (AMI) depending on the option selected. As part of a conservative analysis, a 59-foot tall, six-story, 35,610 gsf building with 31 dwelling units at 42-07 30th Avenue (Block 698, Lots 1, 45) is also included in the analysis as Projected Development Site 2.

The proposed Rezoning Area is a corner property and assemblage of nine tax lots (Block 698, Lots 1, p/o 2, p/o 39, 40, 41, 44, 45, 47, and 48) with approximately 30,700 square feet of lot area. It has 200 feet of frontage along 30th Avenue (wide street), 150 feet of frontage along both 42nd Street and 43rd Street (both narrow streets). The Rezoning Area is wholly located within an R5/C1-2 zoning district.

Proposed Actions

The following land use actions are necessary to facilitate the Proposed Development, as well as provide for future affordable housing in the area.

- *Zoning Map amendment to rezone an R5/C1-2 zoning district to an R6A/C2-4 zoning district and an R5/C1-2 zoning district to an R5 zoning district.*
- *Zoning Text amendment (Appendix F) to make the Rezoning Area applicable as a Mandatory Inclusionary Housing (MIH) Area.*

Proposed Development

The Applicant seeks to develop the Projected Development Site 1 on Block 698, Lots 41 and 44 within the Rezoning Area.

The Proposed Actions would facilitate the enlargement of an existing one-story building to a new five-story residential and commercial building on Lot 41 and 44 that have a combined lot area of 10, 248 sf. The building would contain approximately 52,030 gross square foot (gsf) (36,550 zoning square feet (zsf), floor area ratio (FAR) 3.57) including 29,893 gsf (26,834 zsf, FAR 2.62) of residential space (31 DUs averaging 958 z sf) and 19,062 gsf (9,716 zsf, FAR 0.95) of commercial space. The proposed five-story (plus cellar) building would have a height of 59 feet.

The building would include permanently affordable units under MIH, though the MIH option has not yet been chosen. For CEQR analysis purposes, the EAS will assume 25-30 percent of overall residential floor area is set aside for affordable units (families/residents earing 80% of less of Area Median Income). Of the 31 units, of which between 7 and 8 units or 25-30% of total units, would be affordable pursuant to the requirement of the MIH program.

The NYC Department of City Planning proposed a citywide zoning text amendment, the City of Yes for Housing Opportunity "CHO" (CEQR No. 24DCP033Y) to expand opportunities for housing within all zoning districts, and across all 59 of the City's Community Districts. These changes to the City's Zoning Resolution would enable more housing and a wider variety of housing types in every neighborhood, from the lowest-density districts to the highest, to address the housing shortage and high cost of housing in New York City. This proposed zoning text amendment was adopted by the City Council on December 5, 2024.

It has been determined that this project is affected by the recently adopted zoning text amendment. As a result, the Proposed Development described above has been updated and a preliminary assessment of the effect of CHO on the Projected Development Site 1 and 2 is provided in Appendix A.

Purpose and Need

The proposed rezoning would permit the development of new mixed use commercial/residential use building, including income-restricted housing at an appropriate location on a wide street near mass transit. The proposed zoning change is consistent with City policy to position higher density developments near transit along wide streets that can support such development. 30th Avenue is 80 feet wide and considered a wide street as defined by the Zoning Resolution. Additionally, the Rezoning Area is within a Transit Zone.

In addition to the zoning map amendment, a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) would be required to make the proposed Rezoning Area applicable as a Mandatory Inclusionary Housing Area (MIH). The MIH program would require a set aside for permanently income-restricted units, which would add to the surrounding area

that has few current zoning provisions to promote the development of income-restricted housing.

Analysis Framework

Rezoning Area

The entire Rezoning Area consists of 30,700 square feet across nine adjacent tax and zoning lots in the Astoria section of Queens, Community District 1. It has 200 feet of frontage along 30th Avenue and 150 feet of frontage along both 42nd Street and 43rd Street.

Applicant-Owned Lots:

Block 698, Lot 41 is Applicant owned and has an area of approximately 7,809 sf. It Is currently occupied by a one-story 7,400 gsf commercial building (grocery store).

Block 698. Lot 44 is Applicant owned lot and has an area of 2,399 sf. It is currently vacant but has historically been a residential use.

Non-Applicant-Owned Lots:

The Rezoning Area also includes Block 698, Lots 1, 2, 39, 40, 45, 47 and 48 which are not in control of the applicant and are not part of the Proposed Development Site.

Block 698, Lot 1 has a total area of 2,513 sf and is currently used as a parking facility.

Block 698, Lot 2 has a total area of 2,499 sf and is currently improved with a three-story 2,700 gsf multi-family residential home originally built in 1920. It is not likely to be a projected development site due to the lot size and the lack of common ownership with any adjacent properties.

Block 698, Lot 39 has a total area of 3,464 sf and is currently improved with a two-story 2,058 gsf two-family residential home originally built in 1920. It is not likely to be a projected development site due to the lot size and the lack of common ownership with any adjacent properties.

Block 698, Lot 40 has a total area of 1,982 sf and is currently used as a parking facility. It is long and narrow and is considered too small to be redeveloped on its own and is not in common ownership with any adjacent properties.

Block 698, Lot 45 has a total area of 5,063 sf and is currently improved upon with a one-story 5,000 gsf commercial building (funeral home) originally constructed in 1955.

Block 698, Lot 47 has a total area of 2,499 sf and is improved upon with a two-story two-family 2,508 gsf residential building originally constructed in 1870. It is not likely to be a projected development site due to the lot size and the lack of common ownership with any adjacent properties.

Block 698, Lot 48 is a corner lot and has a total area of 2,499 sf. It is improved upon with a two-story mixed-use 4,218 gsf commercial/residential, including ground floor retail and six dwelling units. This building was originally built in 1930. It would be brought

into compliance as it is currently overbuilt with an FAR of 1.69 where only 1.25 is permitted under the existing R5/C1-2 zoning.

Surrounding land uses are predominately residential to the north and southeast, community facility uses to the northeast and south, and commercial uses to the west.

For purposes of a conservative analysis, a Reasonable Worst Case Development Scenario (RWCDS) has been established for the Applicant-owned Projected Development Site 1 (10,248 sf), which would include Block 698 Lots 41 and 44 and Non-Applicant owned Projected Development Site 2 (7,601 sf), which would include Block 698 adjacent Lots 1 and 45, both of which are underbuilt and have common ownership. The analysis would include a taller building (85' for urban design analysis) and a number of dwelling units based on a typical dwelling factor of 850 sf.

The balance of the Rezoning Area (Block 698, Lots 40, 47 and 48) are not Applicant owned. Lot 40 is long and narrow and is considered too small to be redeveloped on its own and is not in common ownership with any adjacent properties. Lot 47 is improved upon with a two-story two-family residential building. It is not likely to be a projected development site due to the lot size and the lack of common ownership with any adjacent properties. Lot 48 is improved upon with a two-story mixed-use commercial/residential building, including ground floor retail and six dwelling units. It would be brought into compliance as it is currently overbuilt with an FAR of 1.69 where only 1.25 is permitted under the existing R5/C1-2 zoning. Therefore, these lots are not considered part of the Projected Development Sites and not part of the analysis.

Rezoning Area	Block	Lot
Projected Development Site 1 (Applicant Owned Site)	698	41, 44
Projected Development Site 2 (Non-Applicant Owned Site)	698	1, 45
Balance of Rezoning (Non-Applicant Owned Site)	698	p/o 2, p/o 39, 40, 47, 48

Existing Conditions

Projected Development Site 1

Block 698 Lots 41and 44 is a corner property and an assemblage of two tax lots with approximately 10,248 square feet of lot area. It has 100 feet of frontage along 30th Avenue and 105 feet of frontage along 43rd Street. Lot 41 is currently occupied by a grocery store and Lot 44 is vacant.

Projected Development Site 2

Block 698 Lots 1 and 45 is an L-shaped property and an assemblage of two tax lots with approximately 7,601 sf. It has 50 feet of frontage along 30th Avenue and 25 feet of frontage along 42nd Street. Lot 1 is used as a parking facility and Lot 45 is occupied by a one-story funeral parlor. Although neither lot is Applicant-owned, these two adjoining lots have the same owner making combining these two a reasonable expectation.

Both Projected Development Sites are in an R5/C1-2 zoning district.

Future No-Action Scenario

Absent the Proposed Actions, the properties within the Rezoning Area would remain in their existing conditions.

Projected Development Site 1

Block 698, Lots 41 and 44 are assumed to remain in their existing conditions as a vacant and a grocery store. They are Applicant-owned and there are no plans to redevelop these sites absent the Proposed Actions.

Projected Development Site 2

Block 698, Lots 1 and 45 are assumed to remain in their existing conditions as a vacant and an underbuilt funeral home. They are non-Applicant-owned, and it is not expected that these sites would be redeveloped absent the Proposed Actions.

Future With-Action Scenario

In the future with the Proposed Actions, both Projected Development Sites would be redeveloped. As noted above, the balance of the Rezoning Area would not be redeveloped by the project Build Year.

Projected Development Site 1

In the future with the Proposed Actions, Block 698, Lots 41 and 44 would be developed with a 52,030 gsf/36,550 zsf building on 10,248 sf lot including 29,893 gsf/26,834 zsf residential for 32 dwelling units based on 850 gsf/unit (includes 7 to 10 affordable units under MIH Options 1 or 2), 19,062 gsf/9,716 zsf supermarket, 0 parking spaces; 5 stories, 59' tall; 3.57 FAR; 100% lot coverage, no curb cuts; Ownership: CG Stone Realty, LLC.

Projected Development Site 2

In the future with the Proposed Actions, Block 698, Lots 1 and 45 would be developed with a 37,974 gsf/26,838 zsf building on 7,601 sf lot including 23,414 gsf/22,243 zsf residential for 31 dwelling units based on 850 gsf/unit (includes 7 to 8 affordable units under MIH Options 1 or 2), 4,595 gsf/zsf retail, 10-11 parking spaces within a 7,601 gsf cellar level accessory parking garage; 6 stories, 59' tall; 3.53 FAR; 94.9% lot coverage, one new curb cut on 42nd Street; Ownership: 42-07 30th Ave Corp.

Build Year

It is estimated that approval of the Proposed Actions would be completed in 24 months (two years) by the year 2025. Construction and occupancy of the proposed development on Projected Development Site 1 would take approximately 18 months following project approval. It is assumed that a new development on Projected Development Site 2 would take an additional 18 months following the completion and occupancy of Projected Development Site 1 for a Build Year of 2028.

Land Use	Existing	No-Action	With-Action	Increment
Projected Development Site 1				
Residential	--	--	32 du (29,893 gsf)	+32 du (+29,893 gsf)
Commercial	7,400 gsf	7,400 gsf	19,062 gsf	+11,662 gsf
Accessory Parking	0	0	0	0
Projected Development Site 2				
Residential	--	--	31 du (23,414 gsf)	+31 du
Commercial	5,000 gsf	5,000 gsf	4,594 gsf	-406 gsf
Accessory Parking	0	0	11	+11

1. LAND USE, ZONING AND PUBLIC POLICY

Introduction

The analysis of land use, zoning and public policy characterizes the existing conditions of the Proposed Rrezoning 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 Actions; and identifies and addresses any potential impacts related to land use, zoning and public policy resulting from the Proposed Actions. A comprehensive analysis of land use, zoning and public policy characteristics of the area has been prepared, including field surveys, studies of the neighborhood, census data, and land use and zoning maps.

Land Use Study Area

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 Rezoning Area, which is an area within which the Proposed Actions have the potential to affect land use or land use trends. The 400-foot radius

study area is generally bounded by 28th Avenue to the north; 45th Street to the east; 320 feet south of 30th Avenue to the south; and the intersection of Newton Road and 30th Avenue to the to the west.

Land Use

Existing Conditions

Projected Development Site 1

Block 698 Lots 41 and 44 is a corner property and an assemblage of two Applicant-owned tax lots with approximately 10,248 square feet of lot area.

Block 698, Lot 41 is Applicant owned and has an area of approximately 7,809 sf. It Is currently occupied by a one-story 7,400 gsf commercial building (grocery store).

Block 698. Lot 44 is Applicant owned lot and has an area of 2,399 sf. It is currently vacant but has historically been a residential use.

Projected Development Site 2

Block 698 Lots 1 and 45 is an L-shaped property and an assemblage of two tax lots with approximately 7,601 sf of lot area. Although neither lot is Applicant-owned, these two adjoining lots have the same owner making combining these two a reasonable expectation.

Block 698, Lot 1 has a total area of 2,513 sf and is currently used as a parking facility.

Block 698, Lot 45 has a total area of 5,063 sf and is currently improved upon with a one-story 5,000 gsf commercial building (funeral home) originally constructed in 1955.

Future No Action Scenario

Absent the proposed actions, the Projected Development Sites are expected to remain in their existing conditions.

Projected Development Site 1

Block 698, Lots 41 and 44 are assumed to remain in their existing conditions as a vacant and a grocery store. They are Applicant-owned and there are no plans to redevelop these sites absent the Proposed Actions.

Projected Development Site 2

Block 698, Lots 1 and 45 are assumed to remain in their existing conditions as a vacant and a funeral home. They are non-Applicant-owned, and it is not expected that these sites would be redeveloped absent the Proposed Actions.

Future With-Action Scenario

In the future with the Proposed Actions, Projected Development Site 1 and 2 would be redeveloped.

Projected Development Site 1

In the future and with the Proposed Actions, Block 698, Lots 41 and 44 would be developed with a 52,030 gsf/36,550 zsf building on 10,248 sf lot including 29,893 gsf/26,834 zsf residential for 32 dwelling units based on 850 gsf/unit (includes 7 to 10 affordable units under MIH Options 1 or 2), 19,062 gsf/9,716 zsf supermarket, 0 parking spaces; 5 stories, 59' tall; 3.57 FAR; 100% lot coverage, no curb cuts; Ownership: CG Stone Realty, LLC.

Projected Development Site 2

Block 698, Lots 1 and 45 would be developed with a 37,974 gsf/26,838 zsf building on 7,601 sf lot including 23,414 gsf/22,243 zsf residential for 31 dwelling units based on 850 gsf/ unit (includes 7 to 8 affordable units under MIH Options 1 or 2), 4,595 gsf/zsf retail, 10-11 parking spaces within a 7,601 gsf cellar level accessory parking garage; 6 stories, 59' tall; 3.53 FAR; 94.9% lot coverage, one new curb cut on 42nd Street; Ownership: 42-07 30th Ave Corp.

Existing, No-Action and With-Action Comparison

Land Use	Existing	No-Action	With-Action	Increment
Projected Development Site 1				
Residential	--	--	32 du (29,893 gsf)	+32 du (+29,893 gsf)
Commercial	7,400 gsf	7,400 gsf	19,062 gsf	+11,662 gsf
Accessory Parking	0	0	0	0
Projected Development Site 2				
Residential	--	--	31 du (23,414 gsf)	+31 du
Commercial	5,000 gsf	5,000 gsf	4,594 gsf	-406 gsf
Accessory Parking	0	0	11	+11

The study area surrounding the proposed Rezoning Area has a mix of residential, commercial and community facility uses. It is characterized by mixed-use and commercial buildings along 30th Avenue and Steinway Street with predominately residential use on the mid-blocks of the cross-streets. Existing land uses within the surrounding area primarily consist of one- and two-family and multi-family residences, mixed-use and commercial buildings. Residential and mixed-use buildings range from one- to five-stories in height, and commercial buildings range from one- to four-stories. Community facilities in the surrounding area include St. Joseph Roman Catholic Church (Block 699, Lot 1), a house of worship and school located on 30th Avenue between 43rd Street and 44th Street, and P.S. 70 at the midblock to the south (Block 696, Lot 14) of the RezoningArea.

The study area is well served by public transit. The 30th Avenue station serving the N/W lines is approximately a half-mile from the Rezoning Area. The 46 Street Station serving the M/R lines is an approximately 0.6-mile walk southeast of the Rezoning Area at Broadway. Additionally, the Q18 and Q101 bus lines serve the area. The Surrounding Area is within the Transit Zone, where reduced parking requirements apply to developments that provide income-restricted housing units.

Conclusion

The Proposed Actions would be similar to the existing mixed-use commercial/residential land use along 30th Avenue; therefore, there would be no new land uses that are significantly different from surrounding uses. The Proposed Actions would not be incompatible with the land uses in the surrounding area.

No potentially significant adverse impacts related to land use would occur because of the Proposed Actions. Therefore, further analysis of land use is not warranted.

Zoning

Existing Conditions

Projected Development Site 1

The Projected Development Site 1 is a corner property and an assemblage of two tax lots (Block 698 Lots 41 and 44) with approximately 10,248 square feet of lot area. It has been zoned R5/C1-2 since the inception of the Zoning Resolution in 1961.

Projected Development Site 2

The Projected Development Site is an L-shaped property and an assemblage of two tax lots (Block 698 Lots 1 and 45) with approximately 7,601 square feet of lot area. It has been zoned R5/C1-2 since the inception of the Zoning Resolution in 1961.

R5 zoning districts typically allow a variety of housing. The residential FAR of 1.50 typically produces three-and four-story attached houses and small apartment houses. With a height limit of 40 feet, R5 zoning districts provide a transition between lower- and higher-density neighborhoods. The maximum permitted community facility FAR is 2.0.

C1-2 is a commercial overlay mapped within residence districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts.

Typical retail uses include neighborhood grocery stores, restaurants, and beauty parlors. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use. When commercial overlays are mapped in R5 zoning districts, the maximum commercial FAR is 1.0. Commercial buildings are subject to commercial bulk rules.

Study Area

There are no zoning districts other than the R5/C1-2 within the Study Area.

Future No-Action (No-Build) Scenario

In the future and absent the Proposed Actions, the proposed Rezoning Area would continue to be governed by the provisions of the existing R5/C1-2 zoning district. Subsequently, both Projected Development Site 1 and Projected Development Site 2 are assumed to remain in their existing condition.

There are no changes to the zoning districts and zoning regulations relating to the proposed Rezoning Area or the surrounding study area by the project build year of 2028.

Future With-Action (Build) Scenario

In the future with the Proposed Actions, the Rezoning Area would be rezoned to R6A/C2-4.

R6A is a contextual district where the Quality Housing bulk regulations are mandatory. These regulations produce high lot coverage, six- to eight-story apartment buildings set at or near the street line. Designed to be compatible with older buildings found in medium-density neighborhoods.

R6A districts have a maximum residential FAR of 3.0 (3.90 for MIH housing) and a maximum community facility FAR of 3.0. Above a minimum base height of 40 feet, the building must set back by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 75 feet, or 95 feet for qualifying affordable/senior housing. R6A buildings must have interior amenities for the residents pursuant to the Quality Housing Program. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

C2-4 districts are commercial overlays mapped within residence districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants, and beauty parlors. C2 districts permit a slightly wider range of uses, such as funeral homes and repair services. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use.

When commercial overlays are mapped in R6 zoning districts, the maximum commercial FAR is 2.0. Commercial buildings are subject to commercial bulk rules.

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

In the future, the Proposed Actions would facilitate the development Projected Development 1 and 2.

Projected Development Site 1

In the future and with the Proposed Actions, Block 698, Lots 41 and 44 would be developed with a five-story 52,030 gsf (36,550 zsf with and FAR of 3.57) mixed-use commercial/ residential building on 10,248 sf lot measuring 59 feet. It would include 29,893 gsf (26,834 zsf with an FAR of 2.62) of residential floor area with 32 dwelling units based on 850 gsf/unit (includes 7 to 10 affordable units under MIH Options 1 or 2), 19,062 gsf (9,716 zsf with an FAR of 0.95) commercial supermarket, no parking spaces.

Projected Development Site 2

In the future and with the Proposed Actions, Block 698, Lots 1 and 45 would be developed with a six-story 37,974 gsf (26,838 zsf with an FAR of 3.53) mixed use commercial/residential

building on 7,601 sf lot measuring 59 feet. It would include 23,414 gsf (22,243 zsf with an FAR of 2.93) of residential floor area for 31 dwelling units based on 850 gsf/unit (includes 7 to 8 affordable units under MIH Options 1 or 2), 4,595 gsf (4,595 zsf with an FAR of 0.60) commercial retail, 10-11 parking spaces (fifty percent of the 20-21 market-rate apartments) within a 7,601 gsf cellar level accessory parking garage and one new curb cut on 42nd Street.

In addition to the zoning map amendment, a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) would be required to make the Rezoning Area applicable as a Mandatory Inclusionary Housing Area (MIH). MIH would require any future residential development on these sites to include permanent affordable dwelling units, a demonstrated city-wide need.

Conclusion

There would be no significant impacts to zoning patterns in the area. The Proposed Actions would result in a zoning map amendment that creates a new R6A/C2-4 zoning district, facilitating the redevelopment of the proposed Rezoning Area.

In addition to the rezoning, the Proposed Actions also include a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) which would require the Rezoning Area to be applicable as a Mandatory Inclusionary Housing Area (MIH).

The Proposed Actions would not have a significant impact on the extent of conformity with the current zoning in the surrounding area, and it would not adversely affect the viability of conforming uses on nearby properties.

Potentially significant adverse impacts related to zoning would not occur because of the Proposed Actions, and further assessment of zoning is not warranted.

Public Policy

Existing Conditions

The proposed Rezoning Area is within the Astoria neighborhood of Queens, Community District 1.

The Premises is located within a FRESH Zone which permits financial incentives for the establishment and expansion of neighborhood grocery stores in underserved communities. The expansion of the existing grocery store on Projected Development Site 1 would advance the City's goal of providing grocery stores in underserved communities. The existing grocery story and the proposed expansion on Projected Development Site 1 is not pursuant to the FRESH program.

The 400-foot study area is in a transit zone which are generally areas of the city beyond the Manhattan Core within one-half mile of a subway station where auto ownership rates are among the lowest in the city.

The Development Site is not located within the City's Coastal Zone Boundary and is therefore not subject to the New York City Waterfront Revitalization Program (WRP). Neither is it within the *Jamaica Bay Watershed Protection Plan*.

No other public policies relate to the proposed Rezoning Area or to the surrounding 400-foot radius study area. Neither the Rezoning Area nor the 400-foot study area are located within an Historic District and are therefore not subject to any historic regulations. Neither the proposed Rezoning Area nor the study area located within a Federal Empowerment Zone, nor are they covered by any 197-a Community Development Plans and are not located within a critical environmental area.

Future No-Action (No-Build) Scenario
There would be no new public policy initiatives or changes to existing initiatives that would affect the proposed Rezoning Area or the surrounding 400-foot study area by the analysis year of 2028.

Future With-Action (Build) Scenario
The future with the Proposed Actions would result in a zoning map amendment to the existing R5/C1-2 zoning, creating a new R6A/C2-4 zoning district. It would also result in a zoning text amendment to Appendix F to include MIH.

The Proposed Actions would facilitate the enlargement of the existing grocery store building at the Proposed Development Site 1 into a five-story mixed-use residential/commercial building. The Proposed Actions would meet The City's public policy goals by encouraging new residential use and local retail (grocery) expansion in underserved area.

In addition, the zoning text amendment to Appendix F required to make the Rezoning Area applicable as a Mandatory Inclusionary Housing Area (MIH) would ensure future development of affordable housing in an amenity rich neighborhood. Permanent affordable housing is a demonstrated city-wide need. In terms of housing policy, the goals of *Housing New York: A Five-Borough, Ten-Year Plan* is the current plan to build or preserve 200,000 units of affordable housing in New York City.

No adverse impact to public policies would occur because of the Proposed Actions.

Conclusion
The Proposed Actions, which would facilitate new mixed-use commercial/residential use buildings within the proposed Rezoning Area, would not be inconsistent with the goals of the existing public policies for the area, as discussed above.

No potentially significant adverse impacts related to public policy would occur because of the Proposed Actions, and further assessment of public policy is not warranted.

Conclusion
Overall, the Proposed Actions would not result in any significant adverse impacts to land use, zoning or public policy and further assessment is not warranted.

2. SHADOW ANALYSIS

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 Development 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 Development. Finally, the determination of whether the impact of new shadows on an open space or a natural or historic resource would be significant is dependent on their extent and duration. In general, shadows on City streets and sidewalks or on other buildings are not considered significant under CEQR. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under CEQR.

According to the 2021 *CEQR Technical Manual*, a shadows assessment is not required unless the project would include a structure at least 50 feet tall or if it would contain shorter structures that might cast substantial new shadows on an adjacent park, historic resource, or an important natural resource. A shadows analysis is required for this project since the proposed building exceeds 50 feet in height.

The Proposed Actions would result in the development of five to six-story story buildings. Shadows are measured from where the structure meets the ground, while zoning height is measured from the base flood elevation. The maximum building height permitted by the Proposed Actions would be approximately 85 feet which would reach a maximum rooftop height above the bulkheads of 110 feet. Based on *CEQR Technical Manual* guidelines, the longest shadow that any building would cast during the year (except within an hour and a half of sunrise or sunset which is not deemed to be of concern) is 4.3 times its height. Applying the 4.3 factor to the proposed maximum rooftop height would result in a maximum shadow distance of approximately 473 feet.

Preliminary Screening Assessment

Tier 1 Screening Assessment

There are no historic resources or shadow sensitive open space resources in the vicinity of the Proposed Development site, as shown on the attached **Figure 8-1: Tier 1 Screening Assessment diagram**.

The longest shadows radius is calculated as 4.3 times the maximum proposed building height including rooftop bulkheads. The longest shadow cast by the Proposed Development is as follows:

Elevator bulkhead roof: 110 x 4.3 = 473’

The longest shadow of feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum proposed building height of 85 feet plus the elevator bulkheads on the roof of the Proposed Development.

As shown in the Figure 1: Tier 1 Screening Assessment, there are no sunlight sensitive resources in the vicinity of the Proposed Development site., therefore, further screening is not necessary.

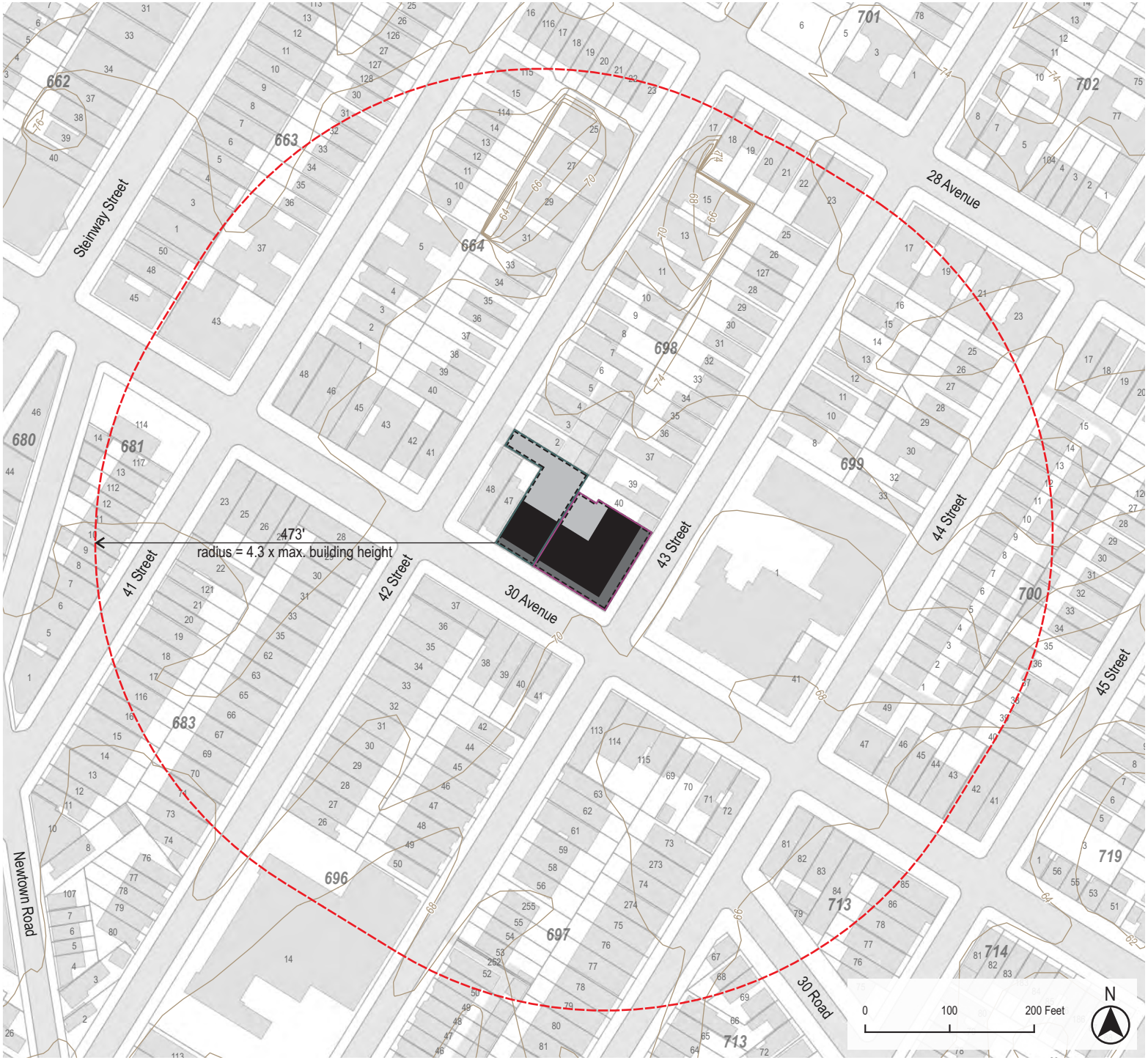
Conclusion

The Proposed Development would not cast any significant adverse new shadows on shadow sensitive open space or historic resources. Therefore, the Proposed Actions would not result in any significant shadows impacts, and no further assessment is warranted.

42-11 30th Avenue, Queens

Figure 1: Tier 1 Screening Assessment

- Applicant-Owned Projected Development Site
- Non-Applicant-Owned Projected Development Site
- Projected Building Footprint
- Roof Above Base Height (65')
- Roof Above Bulkheads (110')
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource (n/a)
- Potentially Affected Open Space Resource (n/a)



Urban Cartographics

3. HISTORIC AND CULTURAL RESOURCES

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

To assess the potential for impacts to historic and cultural resources, the study area has been defined as the area located within a 400-foot radius of the Rezoning Area., within which the Proposed Actions have the potential to affect historic and cultural resources. The 400-foot radius study area is generally bounded by 28th Avenue to the north; 45th Street to the east; 320 feet south of 30th Avenue to the south; and the intersection of Newton Road and 30th Avenue to the to the west.

The proposed Rezoning Area is a corner property and assemblage of nine tax lots (Block 698, Lots 1, 2, 39, 40, 41, 44, 45, 47, and 48) with approximately 30,700 square feet of lot area. It has 200 feet of frontage along 30th Avenue (wide street), 150 feet of frontage along both 42nd Street and 43rd Street (both narrow streets). The Rezoning Area is wholly located within an R5/C1-2 zoning district in the Astoria neighborhood of Queens Community District 1.

The Applicant-owned Projected Development Site 1 combines two lots (Block 698, Lots 41, 44). Lot 44 is not currently improved, and the proposed in-ground disturbance crosses the shared lot line, there is the potential for in-ground disturbance in an area that may not have been previously excavated.

Research into the history of the Projected Development Site 1 site shows that the existing grocery building on Lot 41 was constructed in 1949 as a supermarket and has been continuously occupied by a supermarket since its construction. Prior to the construction of the building this lot was occupied by a two-story dwelling with a detached shed and garage from at least 1898 to 1948.

Lot 44 is currently used as a parking area. Historically, it was occupied by a two-story, mixed-use building (i.e., residential with ground floor retail), and a one-story commercial building, from at least 1898 to 2022. The identified former commercial uses on this lot are a carpenter, a plumber, grocery stores, delicatessens, and beauty salon.

The non-Applicant-owned Projected Development Site 2 combines two lots (Block 698, Lots 1, 45) have the same owner. Lot 1 is not currently improved, and the proposed in-ground disturbance crosses the shared lot line, there is the potential for in-ground disturbance in an area that may not have been previously excavated.

Research into the history of the Projected Development Site 2 site, including review of Sanborn historical maps and New York City Department of Buildings records, show that the parcel located on Block 698, Lot 1 has remained an undeveloped lot from at least 1898 to the present time. There are not any buildings or other structures identified on the lot on Sanborn historical

maps from 1898 to 2006. There are no Certificates of Occupancy, New Building permits, Alteration permits, or Demolition permits on file for this lot in the New York City Department of Buildings records reviewed. The lot has been used for parking since at least 1941.

The parcel on Block 698, Lot 45 contains a one-story commercial building that was constructed sometime between 1936 and 1941. This building was occupied by grocery stores from the time of its construction until the early 1980s. In 1982, the use of the building was changed to bank offices. By 1994, the use of the building was changed to medical offices, and the building has been continuously occupied by medical offices and a funeral home since that time. Prior to the construction of the existing building, this lot contained a small, one-car garage in 1936, and was vacant and undeveloped in 1898 and 1915.

Based on the project site(s) history and current occupancy, the sites have undergone substantial excavation and ground disturbance, and therefore, the proposed project would not have any significant archaeological impacts, and further analysis would not be warranted.

In a letter dated April 24, 2024, the New York City Landmark Preservation Commission reviewed the agreed with this conclusion. See **Appendix B**.

According to the Cultural Resource Information System (CRIS), neither the Rezoning Area nor study area contain any historic or cultural resource. The Proposed Actions would not have any significant adverse impacts to any historical resource.

Conclusion
Based on the above, there is no potential for impacts related to architectural historic resources or archaeological historic resources because of the Proposed Actions and further analysis is not required.

4. URBAN DESIGN AND 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.

According to the *2021 CEQR Technical Manual*, the study area for urban design is the area where the project may influence land use patterns, the built environment and pedestrian's experiences in the public realm surrounding the Rezoning Area. It is generally consistent with the use for the land use analysis which include at least the project site and the area within 400 feet of the site's boundaries.

The Proposed Actions would rezone the Area from R5/C1-2 to R6A/C2-4 for the Projected Development Sites 1 and 2. Since commercial overlay bulk is governed by the underlying residential zoning district, the overlays are not discussed in this section.

Rezoning the Rezoning Area from R5 to R6A would result in a change of zoning different from zoning in the study area, therefore a preliminary urban design assessment is required.

The permissible residential and community facility FAR would increase from 1.25 and 2.0, respectively, under the existing R5 zoning district to 3.6 and 3.0, respectively, under the proposed R6A district with the inclusion of MIH. The maximum permissible building height would increase from 40 feet under the existing R5 zoning district to 85 feet under the proposed R6A zoning district.

Projected Development Site 1

Block 698, Lots 41 and 44 would be developed with a five-story 52,030 gsf (36,550 zsf with and FAR of 3.57) mixed-use commercial/residential building on 10,248 sf lot measuring 59 feet (but analyzing maximum allowable of 85 feet). It would include 29,893 gsf (26,834 zsf with an FAR of 2.62) of residential floor area and 19,062 gsf (9,716 zsf with an FAR of 0.95) commercial supermarket.

Projected Development Site 2

Block 698, Lots 1 and 45 would be developed with a six-story 37,974 gsf (26,838 zsf with an FAR of 3.53) mixed use commercial/residential building on 7,601 sf lot measuring 59 feet (but analyzing maximum allowable of 85 feet). It would include 23,414 gsf (22,243 zsf with an FAR of 2.93) of residential floor area and 4,595 gsf (4,595 zsf with an FAR of 0.60) commercial retail.

Preliminary Assessment

Existing Conditions

The proposed Rezoning Area encompasses the following properties totaling 17,849 sf in area.

Projected Development Site 1

The Projected Development Site 1 is a corner property and an assemblage of two tax lots (Block 698 Lots 41 and 44) with approximately 10,248 square feet of lot area. It has been zoned R5/C1-2 since the inception of the Zoning Resolution in 1961.

> **Block 698, Lot 41** is Applicant owned and has an area of approximately 7,809 sf. It Is currently occupied by a one-story 7,400 gsf (7,400 zsf) commercial building (grocery store) with an FAR of 0.95.
>
> **Block 698. Lot 44** is Applicant owned lot and has an area of 2,399 sf. It is currently vacant but has historically been a residential use.

Projected Development Site 2

The Projected Development Site is an L-shaped property and an assemblage of two tax lots (Block 698 Lots 1 and 45) with approximately 7,601 square feet of lot area. It has been zoned R5/C1-2 since the inception of the Zoning Resolution in 1961.

> **Block 698, Lot 1** has a total area of 2,513 sf and is currently used as a parking facility.
>
> **Block 698, Lot 45** has a total area of 5,063 sf and is currently improved upon with a one-story 5,000 gsf (5,000 zsf) commercial building (funeral home) with an FAR of 0.99.

The Rezoning Area is located on the northside of 30th Avenue between 42nd Street and 43rd Street, measuring 125 feet deep. The study area surrounding the proposed Rezoning Area is a primarily residential, with mixed-use commercial/residential along 30th Avenue and Steinway Avenue. There are two community facility uses within the study area. To the west along 30th Avenue (Block 699, Lot 1) is a church and religious school and to the south (Block 696, Lot 14) is a public school.

The Surrounding Area has a mix of residential, commercial and community facility uses. The Surrounding Area is characterized by mixed-use and commercial buildings along 30th Avenue and Steinway Street with predominately residential use on the mid-blocks. Existing land uses within the surrounding area primarily consist of one- and two-family and multi-family residences, mixed-use and commercial buildings. Residential and mixed-use buildings range from one- to five-stories in height, and commercial buildings range from one- to four-stories. Community facilities in the surrounding area include St. Joseph Roman Catholic Church, a house of worship and school located on 30th Avenue between 43rd Street and 44th Street, and P.S. 70 at the midblock to the south. The prevailing built form in the Surrounding Area is generally consistent with the underlying zoning districts.

Several roadways connect the Surrounding Area to other areas with Astoria and the greater Queens area. 30th Avenue is an east/west corridor through Astoria and into eastern Queens. It is an 80-foot-wide street with two-way traffic. Steinway Street is major north/south corridor through Astoria. It is an 80-foot-wide street with two-way traffic. 42nd Street is a 60-foot-wide narrow one-way street running south. 43rd Street is a 60-foot-wide narrow one-way street running north.

The Rezoning Area and the surrounding 400-foot radius project study area do not contain or offer views to public parks, public art/statues/sculpture, or landmark structures or districts. No development plans are known to exist within the 400-foot radius project study area by the project build year of 2028.

Zoning calculations of the existing conditions on the Projected Development Site 1 and 2, including floor area calculations, lot coverage, and building heights, are shown in **Table 3-1** below.

No-Action Scenario

The No-Action Scenario under the existing R5 zoning district mapped on the Rezoning Area would be the same as the existing conditions described above. No new development would occur on Projected Development Sites within the Rezoning Area. All existing uses in the Rezoning Area would remain.

The future No-Action Development Scenario in the Rezoning Area would not result in any changes to the existing urban design and visual character of the Area. The No-Action Development Scenario in the Rezoning Area would not result in any impacts to visual resources as no such resources exist.

Zoning calculations of the No-Action conditions on Projected Development Site 1, including floor area calculations, lot coverage, and building heights would be the same as the existing conditions, are shown in **Table 3-1** below.

There would be no changes to the zoning districts and zoning regulations relating to the proposed Rezoning Area or the surrounding study area by the project build year of 2028.

Future With-Action Scenario

The future With-Action Development Scenario in the Rezoning Area would result in a denser development as compared to the existing/future No-Action Development Scenario. For the purposes of the urban design and visual resources analysis, the With-Action Development Scenario evaluates the maximum allowable development envelope with respect to bulk and height under the proposed R6A zoning as the zoning approvals sought do not lock in a specific building design. Part of the existing vacant land on both Projected Development Sites would be eliminated.

The development on Projected Development Site 1 would have an overall FAR of 3.6 which is the maximum permitted. It would result in the construction of an 85' tall building, also the maximum permitted.

The development on Projected Development Site 2 would have an overall FAR of 3.6 which is the maximum permitted. It would result in the construction of an 85' tall building, also the maximum permitted.

As detailed above, new development would have an FAR and building height significantly greater than the 2.0 maximum FAR and two-story, 40-foot maximum building height permitted under the existing underlying R5 zoning district. In general, buildings are two-three stories in the surrounding neighborhood.

There would be no changes to the zoning districts and zoning regulations relating to the proposed Rezoning Area or the surrounding study area by the project build year of 2028.

Zoning calculations of future With-Action conditions on Projected Development Sites 1 and 2, including floor area calculations, lot coverage, and building heights, are shown in **Table 3-**1 below. See **Urban Design Diagrams** for representative street level simulations of the Existing/No-Action and With-Action Condition Development Scenarios in the context of the surrounding built environment.

Table 3-1
Zoning Calculations Relevant to Urban Design Analysis

Item	**Existing**		**No-Action**		**With-Action**	
Projected Development Site	**1 Lot 41, 44 (10,248 sf)**	**2 Lot 1, 45 (7,801 sf)**	**1 Lot 41, 44 (10,248 sf)**	**2 Lot 1, 45 (7,801 sf)**	**1 Lot 41, 44 (10,248 sf)**	**2 Lot 1, 45 (7,801 sf)**
Scenario	Commercial/ vacant	Commercial/ vacant	Commercial/ vacant	Commercial/ vacant	Mix-use Commercial and Residential	Mix-use Commercial and Residential
Floor Area	7,400 gsf	5,000 gsf	7,400 gsf	5,000 gsf	52,030 gsf	28,008 gsf
Lot Coverage	72%	64%	72%	64%	100%	100%
Heights	1-story 14 ft	1-story 14 ft	1-story 14 ft	1-story 14 ft	5-story 85 ft	6-story 85 ft

Conclusion

The Proposed Actions would result in the development of a mixed-use commercial/residential building on both Projected Development Site 1 and Projected Development Site 2. The increased development potential (including maximum height, area, and bulk) at the Projected Development Sites under the Proposed Actions would differ from the permitted development potential found within the 400-foot radius project study area.

The development scenario considered under the Proposed Actions would redevelop two underutilized and underbuilt properties to new commercial/residential use, the design of which would be required to be consistent with the existing built context of the surrounding

neighborhood. It would provide additional housing and expanded grocery space to the neighborhood, an overall benefit.

Based on the foregoing, the Proposed Actions would not result in any significant adverse impacts to urban design or visual resources within the study area and a detailed urban design assessment would not be required.

42-11 30th Avenue, Queens

Figure 1: Urban Design Diagram

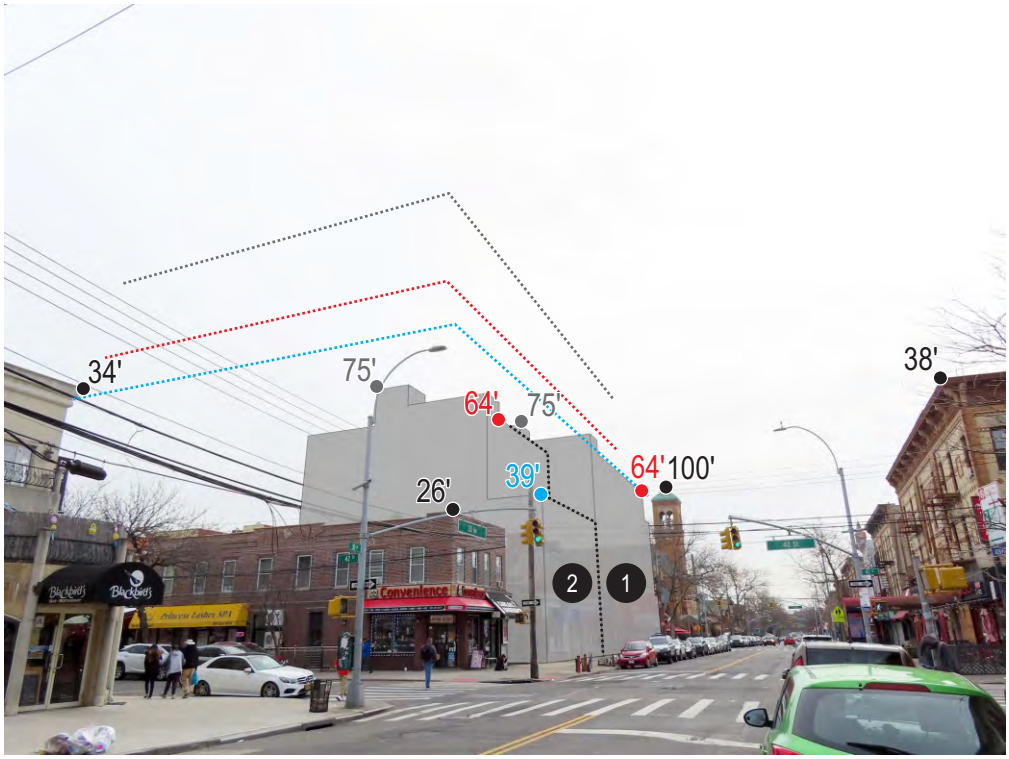
No-Action Scenario

30th Avenue facing east (Site at left)



With-Action Scenario

30th Avenue facing east (Site at left)



Maximum Permitted Base Height (65')
Maximum Permitted Building Height (85')
Maximum Permitted Building Height (110')
Proposed Base Height
Proposed Building Height
Proposed Building Height

Urban Cartographics

42-11 30th Avenue, Queens

Figure 2: Urban Design Diagram

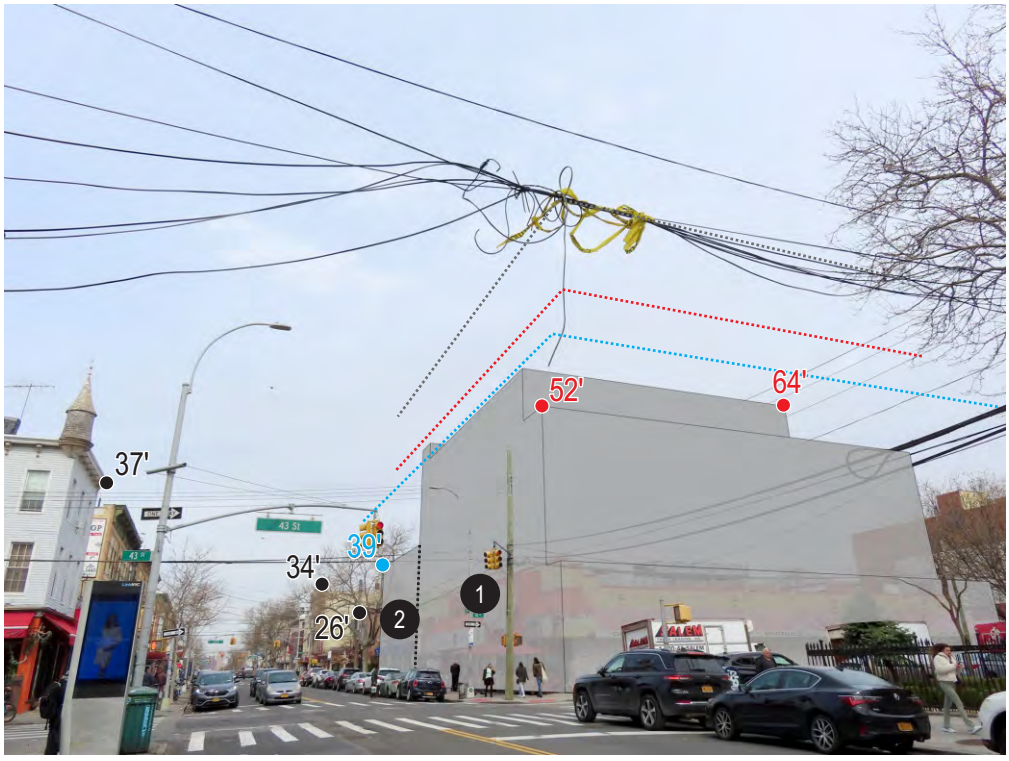
No-Action Scenario

30th Avenue facing northwest (Site at right)



With-Action Scenario

30th Avenue facing northwest (Site at right)



Maximum Permitted Base Height (65')
Maximum Permitted Building Height (85')
Maximum Permitted Building Height (110')
Proposed Base Height
Proposed Building Height
Proposed Building Height

Urban Cartographics

5. HAZARDOUS MATERIALS

Introduction

Environmental Studies Corp. has performed a Phase I Environmental Site Assessment (ESA) of the property located at 42-11 and 42-15 30th Avenue, in the Borough of Queens, New York City, New York. This Phase I ESA was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-13).

The Standard Practice E 1527-13 defines good commercial and customary practice for conducting an ESA of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. As such, the Practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability (referred to as landowner liability protections or LLPs); that is, the practice that constitutes all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary practice.

Site Description

The subject property at 42-11 and 42-15 30th Avenue, Queens, New York consists of two adjoining lots with a total area of approximately 10,245 square feet. Lot 41 (42-15 30th Avenue) is approximately 7,808 square feet and is fully occupied by a 1-story (plus basement), masonry and steel frame commercial building, and is occupied by a Key Food supermarket. Heat for this building is provided by rooftop, gas-fired heating, ventilation, and air conditioning units (HVAC). Hot water is provided by individual electric hot water heaters. Lot 44 is a 2,437+/- square foot, vacant lot that was last occupied by a 2-story mixed-use building (i.e. residential with ground floor retail).

Current Operations/Hazardous Substances

There were not any operations involving the storage or use of hazardous substances or petroleum products observed at the property during the site visit.

Site History

Research into the history of the project site shows that the building was constructed in 1949 as a supermarket and has been continuously occupied by a supermarket since its construction. Prior to the construction of the building this lot was occupied by a 2-story dwelling with a detached shed and garage from at least 1898 to 1948.

Lot 44 was occupied by a 2-story, mixed-use building (i.e., residential with ground floor retail), and a 1-story commercial building, from at least 1898 to 2022. The identified former commercial uses on this lot are a carpenter, a plumber, grocery stores, delicatessens, and beauty salons.

The identified former uses of the subject property are not types of businesses or operations that typically involve the storage or use of hazardous substances or petroleum products in their operations. Given the identified former uses of the site, it is considered unlikely that these uses would have impacted the property.

Site Drainage

Typical lavatory drainage structures such as sinks and toilets are located in the building. There are also several floor drains located in the basement of the building. The drainage destination of these structures is not known; however, it is likely that they discharge to the municipal sewer system. No staining or other indications of past discharges of hazardous substances or petroleum products were observed around any of the drainage structures in the building. No drainage structures were observed on Lot 44 of the project site.

Petroleum Storage Tanks

No aboveground storage tanks (ASTs), or indications of the presence of underground storage tanks (USTs) such as tank fill ports, vent lines, or associated mechanical equipment, were observed at the property during the site visit. The project site does not appear in the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage database, which lists all registered facilities with a total combined petroleum storage capacity more than 1,100 gallons. There were not any Oil Burner applications found on file for the subject property in the New York City Department of Buildings records reviewed.

Asbestos/Lead-Based Paints/PCBs

Given the age of the building (constructed in 1949), it is possible that it contains asbestos building materials and lead-based paints in underlying layers. However, the building has undergone numerous renovations since its construction, and no suspected asbestos-containing thermal insulation materials were observed in the building during the site visit. Potential asbestos-containing materials in the building include flooring materials and roofing materials. Painted surfaces in the building were observed to be in good condition, with no areas of chipped or peeling paint noted. No transformers or other large electrical equipment suspected of containing PCBs were observed at the property.

Regulatory Agency Database Records

The subject property does not appear in the Federal or State environmental databases reviewed including the United States Environmental Protection Agency (USEPA's) Superfund, SEMS or ERNS databases, the RCRA Hazardous Waste Handler database or the Hazardous Waste Treatment/Storage/Disposal Facilities list, or the NYSDEC Spill Logs or Petroleum Bulk Storage (PBS) database, Solid Waste Facilities database, Voluntary Cleanup Program database, Brownfield Cleanup Program database, Registered Dry Cleaner database, or the Registry of Inactive Hazardous Waste Disposal Sites.

Surrounding Land Uses

The property is adjoined to the north by residential uses. Adjacent and to the south of the site is 30th Avenue, beyond which are retail and residential uses. Adjacent and to the east is 43rd Street, beyond which is a church and a school. The property is adjoined by a medical office building. Land uses in the in the immediate vicinity of the subject property (i.e., within approximately 500 feet of the site) are predominantly residential and commercial/retail. There are not any manufacturing uses identified in the immediate vicinity of the site. There is an active gasoline filling station at 40-08 30th Avenue, which is located approximately 490 feet northwest of the project site. There are not any active NYSDEC-reported spill incidents at this filling station. Given this information, and the distance of this site from the subject property, it is considered unlikely that this filling station would have impacted the subject property.

A review of Sanborn historical maps shows that land uses in the immediate vicinity of the subject property have historically contained a mix of residential and commercial/ retail uses since at least the 1930s. There are not any industrial uses shown in the immediate vicinity of the subject property on any of the Sanborn maps reviewed. There were not any off-site, potential sources of contamination which are considered likely to have impacted the subject property identified in the information reviewed for this report.

Conclusions

The June 2023 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential and commercial uses including a supermarket, dry cleaning, a mixed-use building, a carpenter, a plumber, grocery stores, delicatessens, beauty salons, retail uses, residential buildings, a church, schools, a machine shop, a post office, a filling station, an undertaker, iron works, etc. Regulatory databases identified 14 spills, 1 dry cleaner, 2 historical auto sites, 6 historical cleaner sites, 8 underground storage tank sites, 48 aboveground storage tank sites, and 35 leaking storage tank sites within 1 mile of the subject property. Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, an E-designation is warranted for both projected development sites.

The hazardous materials text of E-804 would be as follows:

Projected Development Site 1: Block 698, Lots 41 and 44 (Site under the control or ownership of the applicant) and Projected Development Site 2: Block 698, Lots 1 and 45 (Site not under the control or ownership of the applicant).

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER. If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed. A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

Conclusion

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

6. TRANSPORTATION

INTRODUCTION

Pursuant to the guidance of the *2021 City Environmental Quality Review (CEQR) Technical Manual*, this chapter examines the potential effects of the Proposed Actions on the Project Area's transportation systems. Specifically, a reasonable worst-case development scenario (RWCDS) for future with the Proposed Actions (the With-Action scenario) and future without the Proposed Actions (the No-Action scenario) are analyzed to determine the potential for significant adverse transportation impacts of the Proposed Actions. If transportation impacts are warranted, this chapter would also identify improvement measures that are appropriate to address those impacts.

PROJECT AREA

The zoning lots that comprise the Rezoning Area (Block 698, Lots 1, 40, 41, 44, 45, 47, and 48) are located within the block bounded by 28th Avenue, a two-way eastbound/westbound roadway on the north; 42nd Street, a one-way southbound roadway on the west; 30th Avenue, a two-way eastbound/ westbound roadway on the south; and 43rd Street, a one-way northbound roadway on the east. The Rezoning Area is in the Astoria neighborhood of Queens, Community District 1.

PROJECTED DEVELOPMENT SITES

The transportation analysis is based on two (2) Projected Development Sites (total of 4 lots), as described below**,** and on the proposed Site Plan. No development is anticipated for the other three lots, as described below.
Projected Development Site 1: Identified as Block 698, Lots 41, and 44 totaling 10,248 sf in land area (applicant owned).
Projected Development Site 2: Identified as Block 698, Lots 1, and 45, totaling 7,576 sf in land area.

EXISTING CONDITIONS

The Rezoning Area currently contains a total of 7,400 gsf of supermarket and 5,000 gsf of professional medical office, as summarized in **Table 6-1.**

NO-ACTION SCENARIO

Absent the Proposed Actions, it is assumed that the developments in the Rezoning Area would remain the same as the existing condition, as summarized in **Table 6-1**.

WITH-ACTION SCENARIO

The Proposed Actions would result in a development comprised of 63 residential dwelling units (53,307 gsf), 19,062 gsf of commercial retail (supermarket) space, and 4,595 gsf of commercial retail (local), as summarized in **Table 6-1**. The Proposed Actions would also provide an on-site accessory parking garage with 11 spaces. The proposed garage would be accessed via 42nd Street.

Table 6-1 – Existing, No-Action Scenario, With-Action Scenario, and Increment Rezoning Area

Land Use	Existing/No-Action	With-Action	Increment
Residential d.u.	**0**	**63 d.u. (53,307 gsf)**	**63 d.u. (53,307 gsf)**
Supermarket (gsf)	**7,400 gsf**	**19,062 gsf**	**11,662 gsf**
Local Retail (gsf)	**0**	**4,595 gsf**	**4,595 gsf**
Medical Office	**5,000 gsf**	**0**	**-5,000 gsf**
Accessory Parking	**0**	**11**	**11**

Source: Approved RWCDS.

ANALYSIS FRAMEWORK

The transportation analyses are based on the net difference between the With-Actions and No-Action scenarios or build increment.

INCREMENT

The Proposed Actions would result in a net increase of 63 net new residential dwelling units (53,307 gsf), 11,662 gsf of commercial retail (supermarket) space, 4,595 gsf of commercial retail (local) space, and a net decrease of 5,000 gsf of medical office space, as summarized in **Table 6-1**. The Proposed Actions would also provide an on-site accessory parking garage with 11 spaces.

PRINCIPAL CONCLUSIONS

The following detailed trip generation (Level-One Screening) and trip assignment (Level-Two Screening) analyses have been conducted for the project increment scenario, as are summarized in **Table 6-1.**

Based on the *2021 CEQR Technical Manual thresholds,* the results of trip generation analysis (Level one screening), as shown in **Tables 6-2 through 6-4** for Weekday and Saturday peak hours, are summarized in a summary table below and included in **Appendix D**.

Peak Hour	Person Trips	Vehicle Trips	Subway Trips	Bus Trips	Walk/Other Trips	Pedestrian Trips
AM peak hr.	181	21	41	-2	110	149
MD peak hr.	282	31	41	-2	193	232
PM peak hr.	452	54	66	8	293	367
Sat.MD peak hr.	494	24	57	16	379	452

Source: Trip generation Tables 3 and 4.

Revised April 13, 2024.

Traffic and Parking

Based on the results of trip generation and trip assignment screening analyses, it is concluded that in the future with the Proposed Actions, none of the intersections in the study area would experience 50 or more peak hour vehicle trip-ends, as summarized in **Table 6-4,** Level One screening and shown in **Figure 1** (**Appendix D**) for the weekday PM peak hours. Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-ends threshold, the vehicular trip-ends generated by the Proposed Actions would not result in any conditions that would require a detailed assessment of traffic and parking impacts.

Parking

The Proposed Actions would provide an on-site accessory parking garage for a total of 11 parking spaces. The proposed garage would include an ingress/egress access point via 42nd Street. The Proposed Actions would screen for vehicular traffic as detailed below, and per the *CEQR Technical Manual,* no detailed parking assessment would be required.

Transit

Subway

Based on the results of the trip generation screening analysis, the Proposed Actions would generate fewer subway trips than 200 peak hour subway trip-ends, as summarized in **Table 3** for the AM and PM peak hour periods, respectively. Therefore, in accordance with the *CEQR Technical Manual* 200 subway trip-ends threshold, the subway trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of subway impacts.

Bus

Based on the results of the trip generation screening analysis, the Proposed Actions would generate fewer bus trips than 50 peak hour bus trip-ends during any peak hour, as summarized in **Table 6-3** for the AM and PM peak hour periods, respectively. Therefore, in accordance with the *CEQR Technical Manual* 200 bus trip-ends threshold/50 or more peak hour bus trip-ends in one direction along a bus route during any peak hour, the bus trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of bus impacts.

Pedestrian

Based on the results of the trip generation **Table 6-3,** and trip assignment **Figures 2 through 4** (**Appendix D**) analyses, in the future with the Proposed Actions, three (3) pedestrian elements during the Saturday Midday peak hour periods would experience 200 or more peak hour pedestrian trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold per pedestrian elements, a detailed level-of-service (LOS) assessment of pedestrian impacts will be conducted as detailed below.

BUILD YEAR

It is estimated that approval of the Proposed Actions will be completed in 24 months (two years) by the year 2025. Construction and occupancy of the proposed development on Projected

Development Site 1 (Applicant's site) would take approximately 18 months following project approval. It is assumed that a new development on Projected Development Site 2 would take an additional 18 months following the completion and occupancy of Projected Development Site 1 for a Project Build Year of 2028.

TRANSPORTATION PLANNING ASSUMPTIONS

Trip generation factors for the Proposed Actions were determined based on information from the *2021 City Environmental Quality Review (CEQR) Technical Manual*, U.S. Census Data, trip generation and modal split data provided by the NYCDOT, and other approved EASs and EISs. The travel demand assumptions and trip generation sources are summarized in **Table 6-2** and detailed below.

Residential Development

The *2021 CEQR Technical Manual Table 16-2* was utilized for trip generation rates, including truck trips, and daily temporal distribution (peak hours). The *2015-2019 American Community Survey (ACS) Journey-to Work (JTW) data for Census Tract #'s 65.02, 143, 145, 147, 149, 151, and 297* in the Queens, NY was used for modal split information and auto occupancy rate, as is estimated in **Exhibits 1 and 2,** and summarized in **Table 2**.

The estimated modal split data for residential use found that approximately 18% would travel by car, 0.5% would travel by taxi, 5.1% would travel by bus, 64.8% would travel by subway, and 11.6% would travel by foot and other mode of travel, such as bicycle and motorcycle, as shown and summarized in **Exhibit 1**. The auto occupancy rate is 1.19, based on the *2015-2019 ACS JTW data for Census Tract #'s 65.02, 143, 145, 147, 149, 151, and 297* in Queens NY, and the taxi occupancy rate is based on the *Innovation Queens Rezoning FEIS, Table 13-7*, as summarized in **Exhibit 2**.

Local Commercial Retail Development

The *2021 CEQR Technical Manual Table 16-2* was utilized for trip generation rates, including daily temporal distribution (peak hours), truck trip rates. Modal split information is based on NYCDOT Trip Generation Surveys. Vehicle occupancy rates are provided by NYCDOT, based on the survey results for a similar local retail space, located within a ½ mile radius of a subway station, 46th Street Subway Station in Queens (Queens Transit Zone), as is summarized in **Table 6-2.**

Weekday

The estimated modal split results for local commercial retail use found that approximately 11% would travel by car, 0% would travel by taxi, 3% would travel by bus, 4% would travel by subway, and 82% would travel by foot.

Saturday

The estimated modal split results for local commercial retail use found that approximately 8% would travel by car, 0% would travel by taxi, 4% would travel by bus, 7% would travel by subway, and 81% would travel by foot.

Commercial Retail Development-Supermarket Space

The *2021 CEQR Technical Manual Table 16-2* was utilized for trip generation rates and daily temporal distribution (peak hours). Modal split information is based on NYCDOT Trip Generation Surveys. Vehicle occupancy rates and truck trip rates are based on the *Innovation Queens Rezoning FEIS, Table 13-7*, as is summarized in **Table 6-2.**

Weekday

The estimated modal split results for commercial retail use (supermarket) found that approximately 22% would travel by car, 1% would travel by taxi, 3% would travel by bus, 12% would travel by subway, and 62% would travel by foot.

Saturday

The estimated modal split results for commercial retail use (supermarket) found that approximately 8% would travel by car, 1% would travel by taxi, 5% would travel by bus, 6% would travel by subway, and 80% would travel by foot.

Professional Medical Office

The *2021 CEQR Technical Manual Table 16-2* was utilized for trip generation rates and daily temporal distribution (peak hours). Modal split information and vehicle occupancy rates are based on NYCDOT Trip Generation Surveys. Truck trip rates are based on the *Jamaica Plan FEIS, 2007*, as is summarized in **Table 6-2**.

The estimated modal split results for professional medical office found that approximately 23% would travel by car, 7% would travel by taxi, 26% would travel by bus, 14% would travel by subway, and 30% would travel by foot.

PRELIMINARY ANALYSIS METHODOLOGY AND SCREENING ASSESSMENTS

The *CEQR Technical Manual* recommends a two-tier screening procedure for the preparation of a "preliminary analysis" to determine if quantified analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation analysis (Tier 1) to estimate the volume of person and vehicle trip-ends attributable to the Proposed Actions. If the Proposed Actions are expected to result in fewer than 50 peak hour vehicle trip-ends and fewer than 200 peak hour transit or pedestrian trip-ends, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Tier 2) are performed to estimate the incremental trip-ends at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the Proposed Actions would result in 50 or more peak hour vehicle trip-ends at an intersection, 200 or more peak hour subway trip-ends at a station, 50 or more peak hour bus trip-ends in one direction along a bus route, or 200 or more peak hour pedestrian trip-ends traversing a pedestrian element, then further quantified analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, and parking.

LEVEL 1 SCREENING ASSESSMENTS

A Level 1 trip generation screening assessment was conducted for the project increment, as summarized in **Table 6-1,** to estimate the numbers of person and vehicle trip-ends by mode generated by the Proposed Actions during the Weekday AM, Midday, PM, and Saturday peak hours, as summarized in **Tables 6-2, 6-3 and 6-4**. These trip estimates were then compared to

the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or quantified operational analyses would be warranted.

The Proposed Actions would generate a total of 181, 282, 452, and 494 net person trip-ends, 21 (8 inbound and 13 outbound), 31 (15 inbound and 16 outbound), 54 (28 inbound and 26 outbound), and 24 (12 inbound and 12 outbound) net vehicle trip-ends; 41, 41, 66, and 57 net subway trip-ends; -2, -2, 8, and 16 net bus trip-ends; and 149, 232, 367, and 452 net pedestrian trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. Based on the results of trips generated by the Proposed Actions, as summarized in **Tables 6-3 and 6-4**, a Level 2 vehicle assessment would be required for Weekday PM peak hour; and a Level 2 pedestrian assessment would be required for Weekday Midday, PM, and Saturday Midday peak hours, as described below.

LEVEL 2 SCREENING ASSESSMENTS

A Level 2 screening assessment involves the distribution and assignment of projected trips to the transportation network and the determination of whether specific locations are expected to experience incremental trips exceeding *CEQR Technical Manual* thresholds. Typically, if the results of this analysis show that the Proposed Actions would result in 50 or more peak hour vehicle trip-ends through an intersection, 50 or more peak hour bus trip-ends on a bus route in a single direction, 200 or more peak hour subway trip-ends per station, or 200 or more peak hour pedestrian trip-ends per pedestrian element, further quantified analyses may be warranted to evaluate the potential for significant adverse traffic, transit, pedestrian, and parking impacts.

VEHICLE TRIPS

Vehicular Trip-Ends

The Proposed Actions would generate a total of 21 (8 inbound and 13 outbound), 31 (15 inbound and 16 outbound), 54 (28 inbound and 26 outbound), and 24 (12 inbound and 12 outbound) net vehicle trip-ends, during the weekday AM, Midday, PM, and Saturday Midday Peak hour periods, respectively. Vehicular trips are assigned conservatively to the Projected Development Sites and the proposed on-site parking garage on 42nd Street. Based on trip assignments, and as shown in **Figure 1** for Weekday PM peak hour**,** none of the intersections in the study area would experience 50 or more vehicle trip-ends. **Figure 1** shows the highest vehicle trip-ends of 26 at both the intersection of 30th Avenue and 42nd Street, as well as the intersection of 28th Avenue and 42nd Street, during the Weekday PM peak hour. Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-end threshold, the vehicular trip-ends generated by the Proposed Actions would not result in any conditions that would require a detailed assessment of traffic and parking impacts.

Parking

The Proposed Actions would provide an on-site accessory parking garage for a total of 11 parking spaces. The proposed garage would include an ingress/egress access point via 42nd Street. The Proposed Actions would screen for vehicular traffic detailed analysis, and per the *CEQR Technical Manual,* no detailed parking assessment would be required.

TRANSIT TRIPS

Bus Trip-Ends

The Proposed Actions would generate a total of -2 and 8 net bus trip-ends during the Weekday AM and PM peak hour time periods, respectively, as summarized in **Table 6-3**. Currently two bus lines serve the Rezoning Area, including bus line Q18, which runs along 30th Avenue; bus line Q 101 which runs along Steinway Street in the study area. The Proposed Actions would generate less than 50 or more peak hour bus trip-ends in one direction along a bus route during any 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 Trip-Ends

The Proposed Actions would generate a total of 41 and 66 net subway trip-ends during the AM and PM peak hour time periods, respectively, as summarized in **Table 6-3**. Currently there is one subway station in the study area. The 30th Avenue subway station for the Lines N and W trains is located within a 1/2-mile radius of the Rezoning Area (Queens Transit Zone). The Proposed Actions would generate less than 200 subway trip-ends per subway station during any peak hour time periods, and in accordance with *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 Actions would generate a total of 149, 232, 367, and 452 net pedestrian trip-ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour periods, respectively. Based on the results of the trip generation **Table 6-3** and trip assignment **Figures 2, 3, and 4** analyses, for the Weekday Midday, PM, and Saturday midday peak hours, respectively, it is concluded that in the future with the Proposed Action, the following pedestrian elements in the study area would experience 200 or more peak hour pedestrian trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold per pedestrian element, a detailed assessment of pedestrian impacts for the following pedestrian elements will be conducted.

Saturday Midday Peak Hour (3 pedestrian elements)

Sidewalks (1)

- North sidewalk of 30th Avenue between 42nd Street and 43rd Street

Corners (2)

- Northeast corner of 30th Avenue and 42nd Street Intersection
- Northwest corner of 30th Avenue and 43rd Street Intersection

The analysis methodology peak 15-minute pedestrian flow conditions during the Weekday Midday, PM, and Saturday Midday peak hours are analyzed using the Highway Capacity Manual 2010 methodology and procedures outlined in the *CEQR Technical Manual*. Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volumes, measuring the sidewalk or crosswalk width, determining the available

pedestrian capacity, and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared with Levels of Service (LOS) standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street crosswalks and corners is more complicated as these spaces cannot be treated as corridors due to the time incurred for traffic lights. To effectively evaluate these facilities, a "time-space" analysis methodology is employed, which takes into consideration the traffic light cycle at intersections. LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. The LOS criteria are shown below in **Table 24** for pedestrian crosswalk/corner area and sidewalk conditions, as based on the Highway Capacity Manual methodology. The analysis of sidewalk conditions includes a "platoon" factor in the calculation of pedestrian flow to estimate the dynamics of walking more accurately. "Platooning" is the tendency of pedestrians to move in bunched groups or "platoons" once they cross a street where cross traffic required them to wait. Platooning generally results in an LOS one level poorer than that determined for average flow rates.

Table 5 - Level of Service Criteria for Pedestrian Elements

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

Notes:
SEP: square feet per pedestrian.
Source: *CEQR Technical Manual*

2024 EXISTING CONDITIONS

Pedestrian counts were collected on May 11, 2024 for the Saturday Midday peak period. These pedestrian counts were used to develop balanced pedestrian networks for the Saturday Midday peak hour, which are defined as 12:45 to 1:45 PM.

Inventories of roadway geometry, traffic controls, bus stops, and subway locations were recorded to provide appropriate inputs for the operational analyses. Official signal timings were measured in the field and obtained from NYCDOT for use in the analysis of the study area signalized intersections**. Figure 5 (a,b,c)** (Transportation Appendix) shows measurements for

roadway pedestrian elements. **Figure 6** (Transportation Appendix) shows the 2024 existing traffic volumes, for the Saturday Midday peak hour.

Levels of Service (LOS)

Saturday Midday Peak Hour

A summary of the 2024 existing conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), and LOS adjusted for platoon are presented in **Tables 6 and 7**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A or LOS B for the Saturday Midday analysis peak hour.

2024 Existing Saturday Midday Peak:

Table 6- 2024 Existing Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	Platoon ADJ LOS
30th Ave between 42nd Street and 43rd Street (north sidewalk west segment)	12.5	368	445.0	B
30th Ave between 42nd Street and 43rd Street (north sidewalk east segment)	10	395	335.3	B

Table 7 – 2024 Existing Pedestrian Levels of Service – Corners

Intersection	Corner	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
30th Ave and 42nd Street	Northeast	457	416.4	A
30th Ave and 43rd Street	Northwest	431	447.1	A

2028 NO-BUILD CONDITIONS

The 2028 no-build pedestrian volumes are constructed by increasing the 2024 existing pedestrian volumes by 1.02 (0.50 percent per year for first 5 years and 0.25 per year beyond, per *CEQR Technical Manual* guidelines - Table 16-4, Pages 16-32), as described below.

Figure 7 (Transportation Appendix) shows the 2028 no-build pedestrian volumes for the Saturday Midday peak hour.

Levels of Service (LOS)

Saturday Midday Peak Hour

A summary of the 2028 no-build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), and LOS adjusted for platoon are presented in **Tables 8 and 9**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A or LOS B for the Saturday Midday analysis peak hour.

2028 No Build Saturday Midday Peak:

Table 8 - 2028 No Build Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	Platoon ADJ LOS
30th Ave between 42nd Street and 43rd Street (north sidewalk west segment)	12.5	376	435.5	B
30th Ave between 42nd Street and 43rd Street (north sidewalk east segment)	10	403	328.6	B

Table 9 - 2028 No Build Pedestrian Levels of Service – Corners

Intersection	Corner	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
30th Ave and 42nd Street	Northeast	467	407.1	A
30th Ave and 43rd Street	Northwest	440	437.5	A

2028 BUILD CONDITIONS

The 2028 build pedestrian volumes are prepared by adding the project generated incremental pedestrian trips **Figure 4** (Transportation Appendix) to the no-build pedestrian volume **Figures 7** (Transportation Appendix), as shown in **Figure 8** (Transportation Appendix)**.** The 2028 build pedestrian volumes are shown for the Saturday Midday peak hours, in **Figure 8 (**Transportation Appendix).

Levels of Service (LOS)

Saturday Midday Peak Hour

A summary of the 2028 build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), and LOS adjusted for platoon are presented in **Tables 10 and 11**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A or LOS B for the Saturday Midday analysis peak hour.

2028 Build Saturday Midday Peak:

Table 10 - 2028 Build Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	Platoon ADJ LOS
30th Ave between 42nd Street and 43rd Street (north sidewalk west segment)	12.5	603	271.5	B
30th Ave between 42nd Street and 43rd Street (north sidewalk east segment)	10	629	210.4	B

Table 11 - 2028 Build Pedestrian Levels of Service – Corners

Intersection	Corner	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
30th Ave and 42nd Street	Northeast	694	267.8	A
30th Ave and 43rd Street	Northwest	666	281.7	A

Overall, the LOS analysis indicates that all the study area's pedestrian elements would operate at LOS A or LOS B for the Saturday Midday analysis peak hour periods.

CONCLUSION

In accordance with the threshold guidelines as detailed in the *2021 CEQR Technical Manual*, the Proposed Actions would not result in significant adverse impacts related to transportation. Specifically, the Proposed Actions are unlikely to have a significant adverse impact on the neighborhood traffic, parking, transit, and pedestrian movements.

7. AIR QUALITY

Ambient air quality, defined as pollutant levels in the surrounding environment to which the public has access, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. Under the City Environmental Review (CEQR), an air quality assessment determines a proposed project's effects on ambient air quality and the quality of the ambient air at the project. This analysis was conducted following the *2021 CEQR Technical Manual* methodology.

Project Description

The Rezoning Area consists of Lots 1, 40, 41, 44, 45, 47, and 48 on Block 698 in the Astoria section of Queens Community District 1. The Rezoning Area is within the block bounded by 28th Avenue to the north, 43rd Street to the east, 30th Avenue to the south, and 42nd Street to the west. The Proposed Actions would result in an increase of development potential (including height, bulk, and total FAR) on the Applicant-controlled Projected Development Site 1 (Block 698, Lots 41 and 44) and the non-Applicant-owned Projected Development Site 2 (Block 698, Lots 1 and 45).

Projected Development Site 1 is improved with a one-story grocery building containing 7,400 gross square feet (gsf) on Lot 41, while Lot 44 is vacant. Projected Development Site 2 is improved with a one-story building occupied by a funeral parlor on Lot 45, while Lot 1 is used as a parking facility. Absent the Proposed Actions, it is assumed that Projected Development Sites 1 and 2 within the Rezoning Area would remain the same as the existing condition. New development within the remainder of the Rezoning Area is unlikely, and the No-Actions condition is conservatively assumed to be the same as existing conditions.

Under Future With-Action conditions, the Applicant-controlled Projected Development Site 1 would be developed with a mixed-use, predominantly residential building. The Proposed Development would be a five-story, 59-foot-tall building containing 29,893 residential gsf and 19,062 supermarket gsf. No (0) parking spaces will be provided. Projected Development Site 1 Reasonable Worst Case Development Scenario (RWCDS) is the same as the Proposed Development.

Projected Development Site 2 RWCDS would facilitate a six-story, 59-foot-tall, mixed-use building containing 23,414 gsf of residential space, 4,595 gsf of commercial retail space, and 10-11 parking spaces within a 7,601 gsf cellar-level accessory parking garage.

Air Quality Regulations and Standards

Criteria Pollutants

National and state regulations identify several air pollutants of concern nationwide and statewide. These include six key pollutants of general concern and numerous other pollutants of concern primarily due to industrial activities. The six key pollutants are known as “criteria” pollutants. The other pollutants are known as “noncriteria” pollutants. As required by the Clean Air Act (CAA), National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants. Determination of significant impact related to criteria pollutants accounts for pollutant concentrations in the ambient air, which include

background concentrations. Background concentrations of the pollutants that a detailed analysis was conducted for were obtained for the nearest NYSDEC federally mandated monitoring station.[1]

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply particulate with aerodynamic less than or equal to 2.5 microns ($PM_{2.5}$) and carbon monoxide (CO) significant impact criteria (based on concentration increments). The *CEQR Technical Manual de minimis* criteria set allowable incremental increases in CO and $PM_{2.5}$ concentrations that would result as a consequence of a proposed project. The *de minimis* for CO is:

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

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

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

- Predicted 24-hour maximum PM2.5 concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or

- Predicted annual average PM2.5 concentration increments greater than 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources; or for mobile sources, at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations).

- Predicted annual average PM2.5 concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

Non-Criteria Pollutants

Noncriteria pollutants include hundreds of toxic pollutants, ranging from high to low toxicities. High-toxicity contaminants also include potential human carcinogens. Moderate-toxicity contaminants may consist of animal carcinogens and other substances that may pose a health risk to humans. Low-toxicity contaminants generally include contaminants that are of primary concern as irritants. The NYSDEC has established guidelines for the maximum allowable concentration of noncriteria air contaminants. The maximum permissible guidelines set maximum 1-hour and annual averaging time concentrations published (February 12, 2021 publication) in the DAR-1 Annual and Short-term Guideline Concentration (AGC/SGC Table). In addition, DAR-1 also includes standards for pollutants cumulative risk assessment.

Mobile Source

[1] NYSDEC. 2019 and 2020. New York State Ambient Air Quality Report for 2019 and 2020. Accessed June 21, 2023. dec.ny.gov/chemical/8406.html#Quality.

According to the *CEQR Technical Manual,* projects may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic, create any other mobile sources of pollutants (e.g., diesel trains, helicopters, boats), or add new uses near mobile sources (e.g., roadways, garages, parking lots). Certain types of projects may require further analysis, including microscale analyses.

Screening Assessment

Based on the projected traffic volumes (see Chapter "Transportation"), the maximum projected hourly incremental traffic volumes generated by the Proposed Actions would be 21, 31, 54, and 24 vehicle trips during the AM, midday, PM, and Saturday midday peak hours, respectively. Therefore, the projected traffic volumes would not exceed the carbon monoxide (CO) screening threshold defined in the 2021 *CEQR Technical Manual* (170 peak-hour vehicle trips at an intersection in the study area). However, the Proposed Actions would generate peak hour heavy-duty diesel vehicle (HDDV) traffic or its equivalent in vehicular emissions exceeding the 12 or more HDDV threshold for local roads with average daily traffic of fewer than 5,000 vehicles. Therefore, a detailed $PM_{2.5}$ analysis is required.

Heavy-duty diesel vehicles (HDDVs) screens were conducted for the project generated midday, PM, and Saturday midday peak hour traffic increments (the peak hours that required a detailed transportation trip assignment (Level 2) analysis) at the most affected intersections. For the AM peak hour period, considering the low levels of project-generated traffic, emissions of particulate matter (PM) would not exceed the *de minimis* thresholds referenced in the *CEQR Technical Manual*. Using the New York City Department of Environmental Protection's ("DEP's") Equivalent Truck Calculation Matrix, the $PM_{2.5}$ vehicular emission screening threshold ranges from 12 to 23 HDDVs depending on the type of roadway. For analysis purposes, all autos were assumed to be LDGT1 class vehicles based on guidance from the DCP for similar projects. To account for both roadways in an intersection (HDDV screening assessment applies to a single roadway), based on DCP methodology for similar projects under CEQR, the ratios of the equivalent truck calculation to the HDDV threshold for each roadway were summed. If the aggregate ratio at an intersection (for all peak-hour periods) is less than 1, the intersection passes the HDDV screen. **Table 7-1** shows the midday, PM, and Saturday midday peak hours action-generated incremental traffic volumes by vehicle type at the most affected intersections and the CEQR Technical Manual Equivalent Truck Calculation Matrix results.

Table 7-1: Peak Period Incremental Vehicle Traffic by Vehicle Type and HDDVs Truck Calculation Matrix

Peak Hour	HDDV Threshold	Auto Per Hour	E-Truck	HDDV Threshold	Auto Per Hour	E-Truck	Combined E-Truck Ratio
	Intersection of 42nd Street and 30th Avenue						
	42nd Street			30th Avenue			
AM [1]	Total project increment 21 cars						
Midday	12	21	10.12	23	4	0.18	0.82
PM	12	32	15.43	23	6	0.26	1.25
Sat Midday	12	33	15.91	23	6	0.26	1.29
	Intersection of 42nd Street and 28th Avenue						
	42nd Street			28th Avenue			
AM [1]	Total project increment 21 cars						
Midday	12	4	1.93	12	16	7.71	0.77
PM	12	6	2.89	12	28	13.50	1.32
Sat Midday	12	6	2.89	12	27	13.02	1.28

Note:
1. The total project increment is shown as a transportation Level 2 analysis was not required.

Table 7-1 shows that the intersections of 42nd Street with 28th Avenue and with 30th Avenue exceed the HDDV screen or its equivalent in $PM_{2.5}$ emission. Therefore, a detailed analysis is required.

Projected Development Site 2 RWCDS includes 10-13 parking spaces. Based on parking analyses for much larger parking facilities (under CEQR), a significant adverse air quality impact is unlikely. In addition, the Proposed Actions would not result in operable windows or air intakes within 200 feet of an atypical roadway, create a covered road or be affected by a covered road, or create a new sensitive receptor adjacent to an existing large parking facility or significantly increase the vehicle miles traveled in a large area. As such, no detailed analysis is required for these criteria.

Mobile Source Detailed Analysis

As mentioned above, the intersection of 42nd Street and 28th Avenue exceeds the HDDV screen or its equivalent in $PM_{2.5}$ emission, and as such, a detailed analysis is required. A Tier 1 approach, applying the PM peak hour period traffic, was used in the analysis. Traffic volume and vehicle classification datasets from the New York State Department of Transportation (NYSDOT) were used to derive the existing traffic. For 28th Avenue, vehicle count on 30th Avenue (NYSDOT Station 052034) and vehicle classification on 31st Avenue (NYSDOT Station 052000) were used to derive the existing conditions. For 42nd Street, vehicle count on 36th Street (NYSDOT Station 055328), a one-way southbound roadway, and vehicle classification on 31st Avenue (NYSDOT Station 052000) were used to derive the existing conditions.

The annual background growth rate, obtained from the *CEQR Technical Manual,* was used to project the No-Action traffic from the existing traffic. The action-generated incremental volumes by vehicle type were added to the No-Action scenario traffic volumes to project the With-Action scenario traffic volumes.

The EPA's Mobile Vehicle Emission Simulator (MOVES3 version) was utilized to predict vehicular emissions. MOVES inputs of inspection/maintenance, fuel data, age distribution, and meteorology were obtained from NYSDEC. Queens County projected vehicle population database, part of the MOVES3 database was used to classify vehicle types (e.g., intercity bus, transit bus, and school bus). The MOVES3 model was run for July (a summer month) as similar mobile source analyses show that $PM_{2.5}$ emission

peaks in the summer. In addition, $PM_{2.5}$ emissions of dust generated by vehicles traveling on paved roadways were added to estimate total particulate matter emissions for the short-term analysis (annual fugitive dust emission is negligible, based on similar types of analysis under CEQR). Fugitive dust emissions were calculated using the EPA's AP-42 manual methodology,[2] where a conservative assumption of "dry" road conditions was used (precipitation reduced silt loading). A silt loading factor of 0.4 g/m^2 for local roadways was applied in the analysis based on values in the *CEQR Technical Manual*.

AERMOD was used to predict $PM_{2.5}$ concentration. The AERMOD modeling platform and its meteorology data are discussed in the Detailed HVAC (heating, hot water, ventilation, and air conditioning) Analysis section. Receptors were placed in spaced intervals in the middle of the sidewalk for the short-term analysis and 15 feet from the curbside for the annual analysis. Lakes Environmental, Inc.'s commercial application of AERMOD (AERMOD View) was used to spatially locate sources and receptors. A vehicle height of 1.53 meters for cars and 4.0 meters for heavy-duty vehicles and the methodology outlined in the EPA's manual[3] were used to calculate the sources' dispersion parameters. Predicted concentrations were evaluated with the *de minimis*. **Table 7-2** shows the dispersion analysis results.

Table 7-2: $PM_{2.5}$ Dispersion Analysis Results at the Intersection of 28th Avenue and 42nd Street

Pollutant	No-Action Concentration ($\mu g/m^3$)	With-Action Concentration ($\mu g/m^3$)	Increment Concentration ($\mu g/m^3$)	*de minimis* ($\mu g/m^3$)
24-Hour		5.35		8.27 (1)
Annual	0.0972	0.1334	0.036	0.1

Note:

1. Background concentration of 18.47 $\mu g/m^3$, the average of 98th percentile 24-hour value during the past three years average of 3 years average, used to calculate the 24-hour *de minimis*.

Table 7-3 shows that the Proposed Actions' incremental $PM_{2.5}$ concentration would not exceed the *CEQR Technical Manual de minimis* criteria. Therefore, the Proposed Actions mobile source predicts no significant adverse air quality impact.

Stationary Source

According to the *CEQR Technical Manual* guidelines, air quality analyses of stationary sources may be warranted if a project would (i) create new stationary sources of pollutants – such as emission stacks of industrial plants, hospitals, other large institutional uses, or even a building's boilers – that may affect surrounding uses; (ii) introduce certain new uses near existing or planned emissions stacks that may affect the use, or (iii) introduce structures near such stacks so that changes in the dispersion of emissions from the stacks may affect surrounding uses.

The Projected Development Sites' heating/hot water, ventilation, and air conditioning (HVAC) systems could be fueled by fossil fuel and, therefore, have the potential to significantly adversely impact nearby sensitive land uses.

[2] EPA. Compilation of Air Pollutant Emission Factors AP-42 Fifth Edition, Vol. 1: Paved Roads Chapter 13: Miscellaneous Sources https://www3.epa.gov/ttn/chief/ap42. January 2011.

[3] Transportation Conformity Guidance for Quantative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas – Appendix J. EPA-420-B-10-040, Transportation and Regional Programs Division, Office of Transportation and Air Quality, U. S. Environmental Protection Agency, December 2010.

The Proposed Actions would not introduce a new use within 400 feet of existing manufacturing processing facilities, nor the Proposed Actions would introduce new uses near "major" sources, "large" sources, or odor-producing facilities.

Heating and Hot Water Systems – Screening Assessment

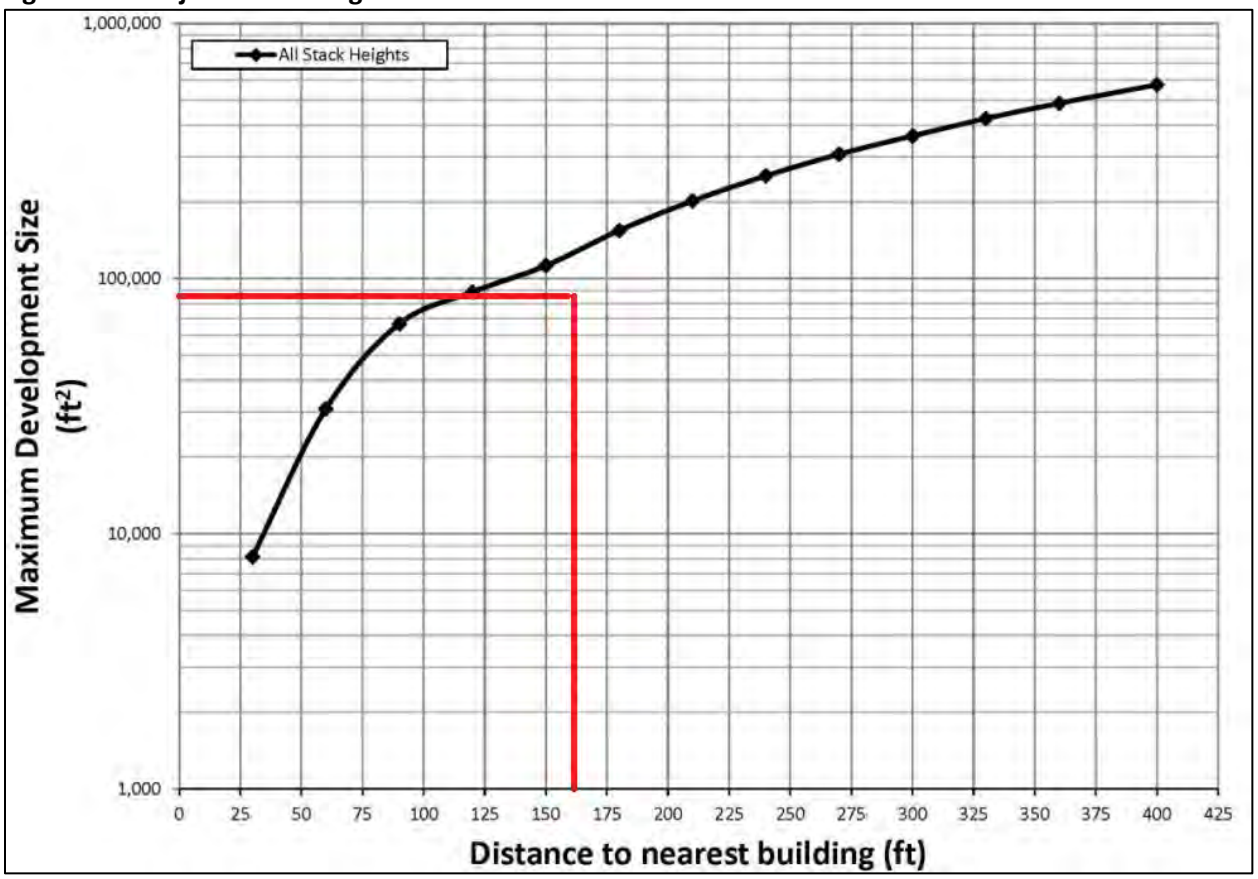
The heating/hot water, ventilation, and air conditioning (HVAC) systems analysis considers the potential for emissions from the HVAC system(s) of a proposed action(s) to result in a development that may pose a significant adverse impact on existing land uses in the area (project-on-existing), or the potential of a proposed action(s) to pose a significant adverse impact on each other (project-on-project). Based on the *CEQR Technical Manual*, a preliminary screening assessment could be conducted as a first step to predict whether the potential impacts of the heat and hot water system(s) boiler emissions can be significant. A detailed analysis is required if the screening assessment fails.

The *2021 CEQR Technical Manual* Figure 17-3 nomograph was used for the screening assessment. The nomograph depicts the size of the development versus the distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. In addition, as the *CEQR Technical Manual* Figure 17-3 nomograph only applies to a single smokestack, for a cumulative screening analysis, emissions from multiple stacks were combined in a single stack located as close as possible to the receiving building. The following screening assessments were conducted:

HVAC Screening - Project-on-Project

Projected Development Sites 1 and 2 were analyzed as a single 84,565 gsf building, and the floor area of Projected Development Site 1 and Projected Development Site 2 combined gsf. A height of 59 feet was assumed, which is the Projected Development Sites 1 and 2 building heights. The nearest building of similar or greater height is the church building at 43-01 30 Avenue (Block 699, Lot 1). The portion of the church building that is similar or greater in height than the Projected Development Site(s) is at least 162 feet away. **Figure 7-1** shows the project-on-existing screening analysis.

Figure 7-1: Project on Existing – HVAC Screen



As shown in the screening analysis (see **Figure 7-1**), using the nomograph provided in the *CEQR Technical Manual*, the Projected Development Sites 1 and 2 combined gsf fall below the curve for a fossil fuel-fired HVAC system. Therefore, the Proposed Actions pass the HVAC screening analysis on existing land uses.

HVAC Screening - Project-on-Project

Projected Development Site 1 abuts Projected Development Site 2. Therefore, the screening analysis is not applicable, and a detailed analysis is required for the project-on-project scenario.

Detailed HVAC Analysis

A detailed analysis was conducted to evaluate the Projected Development Sites 1 and 2 potentials for significant impact on each other. Natural gas would be the type of fossil fuel, if any, used in the Projected Development Sites 1 and 2 HVAC systems. The pollutants of concern for natural gas-fueled boilers are nitrogen dioxide (NO_2) and particulate matter with aerodynamic diameters less than or equal to 2.5 microns ($PM_{2.5}$), based on the *CEQR Technical Manual*.

Lakes Environmental, Inc. MPI version 22112 executable was used in the AERMOD detailed analysis. The MPI executable takes advantage of computers with multiple processors, reducing run time significantly. Lakes Environmental, Inc. adjusted the US EPA AERMOD source code and recompiled the model to parallelize the processing of receptors. The latest MPI executable (used in the analysis) modified US

Environmental Protection Agency's (EPA) AERMOD executable model version 22112. The AERMOD model incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources and simple and complex terrain. The model was run with the regulatory default option, where applicable, and for both with and without downwash effects options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses were conducted using five consecutive years of meteorological data (2017-2021) processed by the NYSDEC. Surface data used in the analysis is from LaGuardia Airport, and upper air data is from Brookhaven station, New York. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the five years of data. Population in Queens County, obtained from DCP 2020 annual report, was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

Natural gas would be the type of fossil fuel, if any, used in the Projected Development Sites HVAC systems. The pollutants of concern for natural gas-fueled boilers are nitrogen dioxide (NO_2) and particulate matter with aerodynamic diameters less than or equal to 2.5 micrometers (μm) ($PM_{2.5}$). The HVAC systems' total energy capacity was calculated based on the Projected Development Sites RWCDS gsf and an energy consumption rate of 60.3 thousand Btu per gsf.[4] Emission factors were obtained from the EPA AP-42 manual for external combustion sources. All fuel was assumed to be consumed during the 100-day (or 2,400 hours) heating season. **Table 7-3** shows the $PM_{2.5}$ and nitrogen oxides (NOx) emission rates emitted from the Projected Development Sites 1 and 2 HVAC systems.

Table 7-3: HVAC System(s) Short-term and Annual Emission Rates

Site ID	Floor Area; Roof Height	Stack Height Above Grade (ft)	Fuel Used	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
Projected Development Site 1	52,030 gsf; 59 ft	66	Natural gas	NO_2	1.52E-02	4.16E-03
				$PM_{2.5}$	1.15E-03	3.16E-04
Projected Development Site 2	37,974 gsf; 59 ft	65	Natural gas	NO_2	1.11E-02	3.03E-03
				$PM_{2.5}$	8.40E-04	2.30E-04

The boiler stack's exit temperature was estimated based on values obtained from the New York City Department of Environmental Protection (DEP) "CA Permit" database.[5] Initially, the Projected Development Sites 1 and 2 boiler stacks were placed 3 feet above the roofline and as close as possible to the receiving building. If a significant adverse impact was predicted, the stack(s) was set back from the receiving building or raised.

The Projected Development Sites were modeled as buildings that cover their entire lot area (wall façade located on the outer lot lines). Buildings in the surrounding area were accounted for in the downwash effect on plum dispersion (BPIP). Receptors on the receiving building were placed on all wall façade from the ground floor to rooftop height and in spaced intervals. Lakes Environmental, Inc.'s commercial application of AERMOD (AERMOD View) was used to locate buildings spatially. The U.S. Geological Service (USGS) National Elevation Dataset (NED) 1/3 arc-second resolution (GeoTIFF dataset) was used to process.

[4] Energy Information Administration. "Table US1. Total Energy Consumption, Expenditures, and Intensities, 2005 Part 1: Housing Unit Characteristics and Energy Usage Indicators." *2005 Residential Energy Consumption Survey: Energy Consumption and Expenditures Tables.*

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

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

One-hour NO_2 was predicted using a Tier 1 approach, which assumes the complete conversion of NOx to NO_2 and is the most conservative. The model was run twice, with the building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The NO_2 modeled concentrations were added to the background concentrations, and the result was evaluated with the NAAQS. $PM_{2.5}$ modeled concentrations were assessed with the *CEQR Technical Manual de minimis* for stationary sources. The HVAC dispersions analysis results are shown in **Table 7-4**.

Table 7-4: Project-on-Project - HVAC Dispersion Analysis Results

Pollutant	Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
Projected Development Site 1-on-Projected Development Site 2					
1-hour NO_2	73.10	110.54 [1]	183.6	188	NAAQS
Annual NO_2	1.12	31.8 [1]	33	100	NAAQS
24-hour $PM_{2.5}$	1.77	18.47 [2]	1.8	8.27	*de minimis*
Annual $PM_{2.5}$	0.09	7.4 [2]	0.09	0.3	*de minimis*
Projected Development Site 2-on-Projected Development Site 1					
1-hour NO_2	75.72	110.54 [1]	186.3	188	NAAQS
Annual NO_2	0.54	31.8 [1]	32	100	NAAQS
24-hour $PM_{2.5}$	0.67	18.47 [2]	0.7	8.27	*de minimis*
Annual $PM_{2.5}$	0.04	7.4 [2]	0.04	0.3	*de minimis*

Note:
1. NYSDEC (2019). New York State Ambient Air Quality Report for 2019. dec.ny.gov/chemical/8406.html#Quality.
2. NYSDEC (2020). New York State Ambient Air Quality Report for 2020. dec.ny.gov/chemical/8406.html#Quality. 24-hour $PM_{2.5}$ is the 3-year average.
3. $\mu g/m^3$ – microgram per meter cube.

Table 7-4 shows that the NO_2 predicted concentrations are within the NAAQS, and $PM_{2.5}$ concentrations do not exceed the *de minimis*. These results were predicted with certain requirements to ensure that no significant adverse impact(s) would occur. The environmental requirement(s) (E-Designations) related to air quality placed on the property is specified in the Conclusion section of this chapter.

Existing Stationary Sources

Industrial Sources

Per the *CEQR Technical Manual*, projects that would result in new uses (particularly schools, hospitals, parks, and residences) within 400 feet of manufacturing processing facilities may result in potentially significant adverse impact(s). The analysis first determines if there are any existing manufacturing uses within the 400-foot study area containing exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project. If warranted, an air dispersion analysis is conducted for any existing industrial source(s) in the study area.

Existing manufacturing uses with exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project were identified by reviewing the New York City Department of Environmental Protection (DEP) online Clean Air Tracking System (CATS) database, the NYSDEC online database (DECinfo Locator[6]), and through a fieldwork study. The fieldwork study was conducted on May 4th, 2023.

The study area encompasses all or part of Blocks 663, 664, 681, 683, 696, 697, 698, 699, 700, and 713 and includes properties along 30th Avenue, 41st Street, 42nd Street, 43rd Street, 44th Street, 28th Avenue, and 30th Road. Land uses in the study area consist of residential and commercial/retail uses. There were no industrial or manufacturing uses identified in the study area. The results of the study are presented below:

One facility with a DEP Processing permit was identified in the study area. Current Processing permit PB004216 was issued to the New York City Department of Education for an engine/generator at Public School 70, 30-44 43rd Street (Block 696, Lot 14). This permit expires on 2/19/2025. This facility also has an Air Facility Registration Certificate (Registration ID: 2-6301-00316/00001) for combustion (2 boilers). Small combustion installations are exempt, and therefore no analysis is required. In addition, the school building on the property is located more than 400 feet (402 feet) from Projected Development Site 1 or Projected Development Site 2. As such, the facility was screened out.

The property at 40-08 30th Avenue (Block 681, Lot 114), a transportation and utility land use, was observed as a gas station and auto mechanic facility in the fieldwork observation study. Facilities licensed by the NYS Department of Motor Vehicles (DMV) associated with the property include Astoria Auto Care, Inc. (Facility # 7117893, expiration date 5/31/2018, for a public inspection station) and Astoria Auto Center, Inc. (Facility # 7122787, expiration date 8/31/2025, for a public inspection station and a repair shop). In addition, the inspection station and/or auto repair garage building is located more than 400 feet from Projected Development Site 1 or Projected Development Site 2. As such, the facility was screened out.

A second facility within 400 feet of Projected Development Site 1 or Projected Development Site 2 was identified on the NYSDEC DECinfo Locator database (online map application). The icon on the DECinfo Locator map places St. Michael's Cemetery Crematoria at 2843 44th Street. A residential dwelling occupies the property at 2843 44th Street. St. Michael's Cemetery Crematoria is located at 72-02 Astoria Boulevard, more than ½ mile from the study area. Therefore, no analysis of this facility is required.

During the field survey, no potential sources of toxic air emissions were observed in the study area.

Major and Large Source

Per the *CEQR Technical Manual*, projects introducing new uses near "major" sources, "large" sources, or odor-producing facilities may result in potentially significant adverse air quality impacts. The study area considers "major" sources, "large" sources, and odor-producing facilities within 1,000 feet of the Projected Development Sites 1 and 2. "Major" emission sources are identified as those located at Title V facilities; "large" emission sources are identified as sources located at facilities requiring an Air State Facility permit. Solid waste or medical waste incinerators, asphalt and concrete plants, power generating plants, large public facilities boilers, and large industrial facilities are typical sources requiring these permits. Odor-producing facilities are operations that have the potential to cause discomforts, such as

[6] New York State Department of Environmental Conservation (2023). DECinfo Locator. February 28, 2023, gisservices.dec.ny.gov/gis/dil/

solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

"Major" and "large" sources and other facilities of interest, such as odor-producing facilities, were identified by searching the NYSDEC DECinfo Locator map application. The nearest "major" or "large" source to a Project Development Site is the Title V facility Steinway & Sons - Queens Facility 1 (facility DEC ID: 2630100005), located at 1 Steinway Place, Long Island City and approximately 7,000 feet from the Rezoning Area. In addition, no odor-producing facility or another emission source that requires an analysis was identified within 1,000 feet of Projected Development Sites 1 and 2 in the database search. Therefore, no analysis is warranted.

Conclusion

As indicated above, there are no permitted industrial sources of toxic air emissions within the 400-foot study area, and no "large" or "major" industrial emission source or odor-producing facility is identified within the 1,000-foot study area. Additionally, there is no evidence to conclude that an illegal, unpermitted manufacturing processing facility operates in the study area. Therefore, the potential for significant adverse air quality from such emission sources is unlikely, and further analysis is not warranted. Further, conditions associated with the Proposed Actions mobile emission source will not result in significant adverse air quality impact.

A detailed analysis was required for the project-increment buildings' HVAC system(s). No significant adverse air quality impact was predicted in the HVAC analysis, with natural gas being the type of fossil fuel used in the Projected Development Sites HVAC equipment, and the location of the HVAC stacks is adhered to. Accordingly, based on the results of the analysis described above, the following (E) Designation related to HVAC system(s) would be required:

(E) Designation

Block 698, Lots 41 and 44 (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, and air conditioning (HVAC) system and hot water equipment, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 66 feet above grade, and at least 35 feet from the western lot line of Block 698, Lot 44 to avoid any potential significant adverse air quality impacts.

Block 698, Lots 1 and 45 (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, and air conditioning (HVAC) system and hot water equipment, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 65 feet above grade, and at least 25 feet from the western lot line of Block 698, Lot 44 to avoid any potential significant adverse air quality impacts.

8. NOISE

This Noise Analysis was conducted to assess the potential for adverse noise impacts related to the proposed rezoning of the Project Site – 42-11 30th Avenue, Queens, New York (Block 698 / Lots 1, 41, 44, 45). The Project Site is located within Queens Community District 1 is an irregular shaped assemblage of lots located at the end of the block on the corner of 30th Avenue and 43rd Street.

This noise analysis is limited to an assessment of ambient noise that could adversely affect building occupants of the proposed development.

Framework of Noise Analysis

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

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

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

Table 1-1 : Noise Levels of Common Sources[1]

Sound Source	SPL (dB(A))
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Notes: A change in 3dB(A) is a just noticeable change in SPL. A change in 10 dB(A)Is perceived as a doubling or halving in SPL.	

The following are typical human perceptions of dB(A) relative to changes in noise level:

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

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

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

[1] Source: *2021 CEQR Technical Manual*

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.
- Lmax is the highest SPL measured during a given period of time. It is useful in evaluating Leqs for time periods that have an especially wide range of noise levels.
- L_{dn} is the day-night equivalent sound level, defined as a 24-hour continuous Leq with a 10 dB adjustment added to all hourly noise levels recorded between the hours of 10 PM and 7 AM. This 10 dB addition accounts for the extra sensitivity people have to noise during typical sleeping hours.
- DNL is the annual average day-night average sound level. Aircraft noise around airports is usually mapped out in terms of DNL, which are normally depicted as noise contours on a map.

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.

Noise Standards and Guidelines

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the CEQR noise exposure guidelines for exterior noise levels. As shown in **Table 1-2** below, noise standards classify noise exposure into four categories based on noise level limits and land use, for vehicular traffic, rail, and aircraft noise sources: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable, Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior L_{10} noise levels of 45 dB(A) or below or interior Ldn noise levels of 40 dB(A) or below depending on the noise source, as shown below in **Table 1-3**.

Table 1-1: Noise Exposure Guidelines for Use in City Environmental Impact Review

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

Notes:

(i) In addition, any new activity shall comply with Impact Thresholds detailed in Section 410.

[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.

[2] Tracts of land where serenity and quiet are extraordinarily important and serve as important public need, and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes.

[3] One may use the FAA-approved DNL contours supplied by the Port Authority of New York and New Jersey (PANYNJ), or the noise contours may be computed from the federally approved Aviation Environmental Design Tool (AEDT) Computer Model using flight data supplied by the PANYNJ.

[4] External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are listed by octave bands).

Sources: New York City Department of Environmental Protection (adopted policy 1983).

Table 1-3: Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Vehicular Traffic	70 < L10 ≤ 73	73 < L10 ≤ 76	76 < L10 ≤ 78	78 < L10 ≤ 80	80 < L10
Aircraft[A]	65 < DNL ≤ 68	68 < DNL ≤ 71	71 < DNL ≤ 73	73 < DNL ≤ 75	75 < DNL
Train	65 < Ldn ≤ 68	68 < Ldn ≤ 71	71 < Ldn ≤ 73	73 < Ldn ≤ 75	75 < Ldn
Attenuation[B]	(i) 28 dB(A)	(ii) 31 dB(A)	(iii) 33 dB(A)	(iv) 35 dB(A)	See Note C

Note:

A. DNL descriptor based on average values of Ldn over a year period.
B. The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All of the above categories require a closed window situation and hence an alternate means of ventilation.
C. The required attenuation value is the difference between Lbuild and Linterior, using the appropriate noise descriptor Where:
Lbuild is the projected noise level under the build condition rounded up to the whole number
Linterior is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise)

1.1 Initial Impact Screening

Stationary Sources

The *CEQR Technical Manual* states that based upon previous studies, unless existing ambient noise levels are very low and/or stationary source levels are very high (and there are no structures that provide shielding), it is unusual for stationary sources to have significant impacts at distances beyond 1,500 feet. A detailed analysis may be appropriate if the Proposed Project would: cause a substantial stationary source (i.e., unenclosed mechanical equipment for manufacturing or building ventilation purposes, playground, etc.) to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses. Machinery, mechanical equipment, heating, ventilating and air-conditioning units, loudspeakers, new loading docks, and other noise associated with building structures may also be considered

in a stationary source noise analysis. Impacts may occur when a stationary noise source is near a sensitive receptor and is unenclosed.

No unenclosed stationary noise sources of concern were observed during field inspections. As the Projected Development Sites are not subject to high ambient noise levels from any nearby stationary source, no stationary source noise impacts from surrounding uses are anticipated. Additionally, it is assumed that the building mechanical systems (i.e., HVAC systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building mechanical equipment.

Mobile Sources

Pursuant to Section 111 of the *2021 CEQR Technical Manual*, mobile sources are those noise sources that move in relation to a noise-sensitive receptor—principally automobiles, buses, trucks, aircraft, and trains. Each has its own distinctive noise character, and, consequently, an associated set of noise assessment descriptors.

For Mobile Sources, an initial noise assessment may be appropriate if a proposed action would generate additional project-generated vehicular traffic in an area where roadways currently carry no or very low traffic volumes, or where a nearby receptor would potentially be impacted by high ambient noise levels.

Vehicular traffic is the predominant source of noise in the area. Therefore, the noise analysis presented in this report focuses on the operational noise effects of the Proposed Action to determine the level of building attenuation necessary to ensure that interior noise levels satisfy CEQR requirements. The Proposed Action is not expected to increase existing noise passenger car equivalents (PCEs) by greater than 100% and would therefore not result in significant adverse noise impacts associated with project-generated vehicles.

1.2 Noise Monitoring Results

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 weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day for 20-minute periods. Noise Monitoring Location One (1) was located at the project frontage along 42nd Street, Noise Monitoring Location Two (2) was located at the project frontage along 30th Avenue, and Noise Monitoring Location Three (3) was located at the project frontage along 43rd Street. Noise monitoring locations are shown in **Figure 1-1** to **Figure 1-4** below.

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

Figure 1-1: Noise Monitoring Locations



Figure 1-2: Location 1 – Noise Monitor Location Photo



Figure 1-3: Location 2 – Noise Monitor Location Photo



Figure 1-4: Location 3 – Noise Monitor Location Photo



Existing Conditions

Monitoring was conducted during typical midweek conditions, on Wednesday, June 26, 2024. The weather was dry and wind speeds were moderate during all monitoring periods. **Table 1-4** through **Table 1-5** below contain the results for the measurements taken at Location 1 through Location 3.

Table 1-4: Noise Levels in dBA at Location 1

Wednesday, June 26, 2024			
Time	**7:30 am – 7:50 am**	**12:00 pm – 12:20 pm**	**4:32 pm – 4:52 pm**
L_{max}	84.9	95.6	79.2
L_{10}	63.0	64.5	62.5
L_{eq}	61.3	69.8	60.1
L_{50}	59.0	60.5	58.5
L_{90}	56.5	58.5	57.5
L_{min}	54.7	57.1	56.4

Table 1-5: Noise Levels in dBA at Location 2

Wednesday, June 26, 2024			
Time	**7:51 am – 8:11 am**	**12:21 pm – 12:41 pm**	**4:53 pm – 5:13 pm**
L_{max}	95.0	100.9	79.0
L_{10}	69.0	69.5	66.5
L_{eq}	67.5	75.3	63.7
L_{50}	61.0	62.0	61.0
L_{90}	57.0	57.5	59.0
L_{min}	52.2	54.9	56.9

Table 1-6: Noise Levels in dBA at Location 3

Wednesday, June 26, 2024			
Time	**8:12 am – 8:32 am**	**12:43 pm – 1:03 pm**	**5:14 pm – 5:34 pm**
L_{max}	93.9	91.7	88.9
L_{10}	71.0	69.5	67.0
L_{eq}	69.9	67.3	65.6
L_{50}	66.0	63.0	62.0
L_{90}	56.5	60.5	60.0
L_{min}	54.5	54.7	58.2

The traffic volumes (vehicle counts) and vehicle classifications collected during peak vehicular travel periods [morning (AM), noon (MD), and evening (PM)] concurrent with noise monitoring at Location 1 through Location 3 are shown below in **Table 1-7** through **Table 1-9.**

Table 1-7: Traffic Volumes and Vehicle Classifications Noise Location 1

	7:30 am – 7:50 am	12:00 pm – 12:20 pm	4:32 pm – 4:52 pm
Car/ Taxi	6	11	6
Van/Light Truck/SUV	7	15	13
Medium Truck	2	1	2
Heavy Truck	0	0	0
Bus	0	0	0

Table 1-8: Traffic Volumes and Vehicle Classifications Noise Location 2

	7:51 am – 8:11 am	12:21 pm – 12:41 pm	4:53 pm – 5:13 pm
Car/ Taxi	14	17	23
Van/Light Truck/SUV	16	14	13
Medium Truck	2	2	1
Heavy Truck	0	0	0
Bus	3	2	0

Table 1-9: Traffic Volumes and Vehicle Classifications Noise Location 3

	8:12 am – 8:32 am	12:43 pm – 1:03 pm	5:14 pm – 5:34 pm
Car/ Taxi	4	15	21
Van/Light Truck/SUV	9	27	27
Medium Truck	6	5	1
Heavy Truck	0	0	0
Bus	0	0	0

1.3 Conclusion

The *2021 CEQR Technical Manual* sets external noise exposure standards, which are classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dB(A) or lower where vehicular traffic is the noise source. For a mixed residential/commercial use such as what would occur under the proposed action, an L_{10} of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An L_{10} of between 70 and 80 dB(A) is identified as marginally unacceptable general external exposure.

The highest recorded L_{10} at Location 1 was 64.5 dB(A) during the midday period and the highest L_{eq} was 69.8 dB(A) during the midday period. The highest recorded L_{10} at Location 2 was 69.5 dB(A) during the midday period and the highest L_{eq} was 75.3 dB(A) during the midday period. Field notes show that there was a loud, extended horn noise near the monitor near the beginning of the monitoring session. Therefore, the L_{10} will be used as representative of normal ambient conditions at this location. The highest recorded L_{10} at Location 3 was 71.0 dB(A) during the morning period.

Based on the noise readings, a window wall attenuation of 28 dB(A) would be required on the eastern façade (43rd Street) and on the northern and southern (30th Avenue) façades for 50 feet from the eastern façade. No other façades would require attenuation. With this level of attenuation, there would be no significant adverse impacts related to noise. **Figure 1-5** below shows the attenuation requirements.

To ensure that there would be no significant adverse noise impacts associated with the Proposed Actions, an E designation (E-804) will be placed on the Development Site as follows:

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the eastern facade facing 43rd Street, the southern facade facing 30th Avenue within 50 feet of 43rd Street, and the northern facade facing 28th Avenue within 50 feet of 43rd Street to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office use. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Figure 1-5: Attenuation Requirements



*Attenuation Requirements are for residential and community facility. Commercial would receive a 5 dB(A) reduction.

Appendix A

The City of Yes For Housing Opportunity (CHO)

TECHNICAL MEMORANDUM
CITY OF YES FOR HOUSING OPPORTUNITY
42-11 30th Avenue Rezoning

INTRODUCTION

Introduction

The Applicant, CG Stone Realty, LLC, seeks a zoning map amendment changing an R5/C1-2 zoning district to R6A/C2-4 (Block 698, Lots 1, 40, 41, 44, 45, 47, and 48) and changing R5/C1-2 to R5 (Block 698, Lots 2 and 39) in the Astoria neighborhood of Queens Community District 1 (the "Rezoning Area"); and a zoning text amendment to Zoning Resolution ("ZR") Appendix F to establish the R6A/C2-4-zoned portion of the Rezoning Area as a Mandatory Inclusionary Housing ("MIH") Area. These two actions are the Proposed Actions. The Proposed Actions would facilitate the enlargement of the existing one-story Key Food grocery store building at the Development Site into a five-story, 52,030 gross square feet ("gsf"), mixed-use residential/commercial building ("Proposed Development") at 42-11 30th Street on Block 698, Lots 41 and 44 (the "Project Development Site 1"). The Proposed Development would provide 32 residential unit, 20-30% (7 - 10 units) of which would be affordable pursuant to MIH at an average of 40-80 percent Average Median Income (AMI) depending on the option selected. As part of a conservative analysis, a 59-foot tall, six-story, 37,974 gsf building with 31 dwelling units at 42-07 30th Avenue (Block 698, Lots 1, 45) is also included in the analysis as Projected Development Site 2.

The NYC Department of City Planning proposed a citywide zoning text amendment, the City of Yes for Housing Opportunity "CHO" (CEQR No. 24DCP033Y) to expand opportunities for housing within all zoning districts, and across all 59 of the City's Community Districts. These changes to the City's Zoning Resolution would enable more housing and a wider variety of housing types in every neighborhood, from the lowest-density districts to the highest, to address the housing shortage and high cost of housing in New York City. This proposed zoning text amendment was adopted by the City Council on December 5, 2024.

IIt has been determined that this project is affected by the recently adopted zoning text amendment. Therefore, a preliminary assessment of the effect of CHO on the Projected Development Site 1 and 2 is provided.

Rezoning Area	Block	Lot
Projected Site 1 (Applicant Owned Site)	698	41 + 44
Projected Development Site 2 (Non-Applicant Owned Site)	698	1 + 45
Balance of Rezoning Area (Non-Applicant Owned Site)	698	p/o 2+ p/o 39+ 40 + 47 + 48

Existing Conditions

Projected Development Site 1

Block 698 Lots 41and 44 is a corner property and an assemblage of two tax lots with approximately 10,248 square feet of lot area. It has 100 feet of frontage along 30th Avenue and 105 feet of frontage along 43rd Street. Lot 41 is currently occupied by a grocery store and Lot 44 is vacant.

Projected Development Site 2

Block 698 Lots 1 and 45 is an L-shaped property and an assemblage of two tax lots with approximately 7,601 sf. It has 50 feet of frontage along 30th Avenue and 25 feet of frontage along 42nd Street. Lot 1 is used as a parking facility and Lot 45 is occupied by a one-story funeral parlor. Although neither lot is Applicant-owned, these two adjoining lots have the same owner making combining these two a reasonable expectation.

Both Projected Development Sites are in an R5/C1-2 zoning district.

Future No-Action Condition

Absent the Proposed Actions, the properties within the rezoning area would remain in their existing conditions.

Proposed Development

The Proposed Actions coupled the proposed zoning text amendment (CHO) would change the Proposed Development. The R6A district would allow for an additional 0.30 FAR increase for inclusionary housing and allows a 10 foot maximum height increase **(Table 1).**

Table 1: Additional FAR with City of Yes for Housing Opportunity

Zoning	Max FAR	Permitted FAR	+CHO FAR	Max Height	+CHO Height
R6A	3.6	2.62/2.93	2.92/3.23	85’	95’

This change would increase the total maximum square footage permitted in the R6A district by additional 3,075 sf, bringing the total residential floor area for **Projected Development 1** to 32,968 gsf (29,924 zsf with CHO and FAR of 2.92), increasing the number of dwelling units to a total of 39, 8-12 of which would be affordable housing. The number of new residents because of the Proposed Actions plus CHO would be 85, an increase of 9 new residents.

This change would increase the total maximum square footage permitted in the R6A district by additional 2,280 sf, bringing the total residential floor area for **Projected Development 2** to 25,779 gsf (24,551 zsf with and FAR of 3.23), increasing the number of dwelling units to a total of 31, 6-9 of which would be affordable housing. The number of new residents because of the Proposed Actions plus CHO would be 67, an increase of 6 new residents. Per ZR 25-211, no accessory off-street parking spaces shall be required. Parking is not required in Projected Development Site 2, but to be conservative, some parking spaces for the site have been analyzed.

See **(Table 2).**

Table 2: Existing, No-Action, With Action Comparison

Land Use	Existing	No-Action	With-Action	With-Action With CHO	No-Action to With Action With CHO Increment	Combined No-Action to With Action With CHO Increment
Projected Development Site 1						
Residential	--	--	32 du (29,893 gsf) (11 MIH)	39 du total (32,968 gsf) (12 MIH)	+39 du total +(32,968 gsf) +(12 MIH)	
Commercial	7,400 gsf	7,400 gsf	19,062 gsf	19,062 gsf	+11,662 gsf	+70 du Total +58,747 sf residential +23 du MIH +11,256 sf commercial +152 residents
Accessory Parking	0	0	0		0	
Projected Development Site 2						
Residential	--	--	31 du (23,414 gsf) (8 MIH)	31 du total (25,779 gsf) (11 MIH)	+31 du total (+25,779) +11 MIH	
Commercial	5,000 gsf	5,000 gsf	4,594 gsf	4,594 gsf	-406 gsf	
Accessory Parking	0	0	11		0	

LAND USE, ZONING, AND PUBLIC POLICY

Land Use

The proposed Rezoning Area is a corner property and assemblage of nine tax lots (Block 698, Lots 1, p/o 2, p/o 39, 40, 41, 44, 45, 47, and 48) with approximately 30,700 square feet of lot area. It has 200 feet of frontage along 30th Avenue (wide street), 150 feet of frontage along both 42nd Street and 43rd Street (both narrow streets). The Rezoning Area is wholly located within an R5/C1-2 zoning district.

The Applicant-owned Projected Development Site 1 (10,248 sf) includes Block 698 Lots 41 and 44. It is a corner property and an assemblage of two tax lots with approximately 10,248 square feet of lot area. It has 100 feet of frontage along 30th Avenue and 105 feet of frontage along 43rd Street. Lot 41 is currently occupied by a grocery store and Lot 44 is vacant.

The non-Applicant owned Projected Development Site 2 (7,601 sf) includes Block 698 Lots 1 and 45, both of which are underbuilt and have common ownership. It is an L-shaped property and an assemblage of two tax lots with approximately 7,601 sf. It has 50 feet of frontage along 30th Avenue and 25 feet of frontage along 42nd Street. Lot 1 is used as a parking facility and Lot 45 is occupied by a one-story funeral parlor. Although neither lot is Applicant-owned, these two adjoining lots have the same owner making combining these two a reasonable expectation.

Absent the Proposed Actions, the properties within the Rezoning Area would remain in their existing conditions.

In the future with the Proposed Actions, the land use would not change and the application of the CHO guidelines to this scenario would not change the land use. The increase in square footage and height because of CHO would not result in a change in land use. The increase in square footage and building height would not alter the conclusion that no potentially significant adverse impacts related to land use would not occur, because of the Proposed Actions. Therefore, further analysis of land use is not warranted.

Zoning

The Proposed Actions coupled the proposed zoning text amendment (CHO) would change the Proposed Development. The R6A district allows for an additional 0.30 FAR increase for inclusionary housing and allows a 10 foot maximum height increase.

In the future with the Proposed Actions, no significant impacts to zoning patterns in the area would be expected. The application of the CHO guidelines would not have a significant impact on the extent of conformity with the current zoning in the surrounding area, and it would not adversely affect the viability of conforming uses on nearby properties. Potentially significant adverse impacts related to zoning would not occur because of the Proposed Actions, and therefore further assessment of zoning is not warranted.

Public Policy

The Proposed Actions would meet the City's public policy goals by providing new housing and encouraging appropriate associated development. In addition, the zoning text amendment to Appendix F required to make the Rezone Area applicable as a Mandatory Inclusionary Housing Area (MIH) would ensure future residential development in the Rezoning Area would include permanent affordable housing, a demonstrated city-wide need.

The application of the CHO guidelines would provide additional housing, including affordable housing. No potentially significant adverse impacts related to public policy would occur because of the Proposed Actions, and further assessment of public policy is not warranted.

SOCIOECONEMIC CONDITIONS

As discussed in the EAS, there would be no potential significant adverse impacts to socioeconomic conditions due to the Proposed Actions. The proposed project would not lead to direct or indirect residential or business displacement more than the CEQR Technical Manual thresholds. The application of the CHO guidelines would add 14 new resident and neither add nor reduce commercial use. As such, there would not be an introduction of a substantial new population with incomes higher than the area average nor would there be any changes that would adversely impact a specific industry. Therefore, no further assessment of socioeconomic conditions is required.

COMMUNITY FACILITIES AND SERVICES

As noted in the EAS, the With-Action Scenario would not physically displace or alter a community facility or cause a change that could affect the service delivery of a community facility. As such, there would be no direct effects on community facilities and services.

A preliminary analysis of the indirect effects of the With-Action Scenario found that the applicable thresholds described in the *CEQR Technical Manual* for libraries, schools, childcare, police/fire services, and health care centers were not exceeded.

The application of the CHO guidelines would add 14 new residents, below the CEQR threshold of 139 students. Therefore, there would be no significant adverse impact to school facilities in the With-Action Scenario.

OPEN SPACE

As noted in the EAS, the Proposed Actions do not encroach on, cause a loss of, open or limit access to open space with the Rezoning Area to have a direct impact on open space. It also does not generate a substantial population as to affect the existing open space. Therefore, it would not have an adverse impact on open space and further analysis is not warranted.

The application of the CHO guidelines would not have a direct impact on any open space resources. It would add 152 additional residents which is less than the 200 project generated residents' threshold generally accepted baseline guidance for considering when new population generated by a proposed project in the City may start to affect the use and enjoyment of open space in an identified study area.

Therefore, the Proposed Actions with the application of the CHO guidelines would not have any potentially significant adverse open space impacts and further assessment is not warranted.

SHADOWS

As discussed in the EAS, the Proposed Action would not cast any significant adverse new shadows on shadow sensitive open space or historic resources. Therefore, the Proposed Actions would not result in any significant shadows impacts, and no further assessment is warranted.

The application of the CHO guidelines would increase the building height by ten feet to 95 feet. As shown in Figure 1.

HISTORIC AND CULTURAL RESOURCES

The EAS concluded that the Rezoning Area and the 400-foot radius project study area are not a Federal, State, or New York City designated Historic District and do not contain any individually designated historic resources. As such, a historic architectural analysis is not warranted for the Proposed Actions. In a letter dated May 2, 2023, the NYC Landmarks Preservation Commission affirms that the proposed Rezoning Area has no architectural or archaeological significance and further analysis is not warranted.

The application of the CHO guidelines would not have any effect on the historic or cultural resources on the Project Site or in the Study Area, therefore, no further analysis is warranted.

URBAN DESIGN AND VISUAL RESOURCES

According to the EAS, there are no visual resource located in proximity to the Rezoning 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 or considered a defining feature of the neighborhood. According to CTM guidelines the development that would be facilitated by the rezoning would represent a visual improvement to the area and would result in new development on the underdeveloped Projected Development Site that is believed to be compatible with the urban design and visual character of recent new developments in the surrounding area.

The application of the CHO guidelines would allow a ten foot increase in building height and a slightly larger FAR. See Figures 2 and 3. The conclusions reached in the EAS scenario that larger building would be a visual improvement and compatible with the surrounding area would hold true. Therefore, a detailed urban design analysis would not be required.

HAZARDOUS MATERIALS

The application of the CHO guidelines would add residents and additional height but would not require any additional ground disturbance. The proposed (E) designation for Hazardous Materials presented in the EAS, which requires remediation before development on potentially contaminated sites and enforces compliance with environmental standards, would prevent any significant adverse impacts related to hazardous materials. The potential changes to the With-Action Condition facilitated by CHO would not alter the conclusions of the EAS related to Hazardous Materials, therefore, no further analysis is warranted.

TRANSPORTATION

Adding 7 more residential DUs under the CHO scenario will result in a maximum of five pedestrian trips during the peak hour, which will not impact the pedestrian LOS analysis results. Additionally, the 7 additional DUs for CHO will not affect the vehicle trip number analyzed in the transportation chapter. Therefore, there would not be any significant adverse impacts to transportation.

AIR QUALITY

As presented in the EAS, there is no industrial source nor “major,” “large, or odor-producing facility in the study areas (400 feet radius for an industrial source and 1,000 feet for “major,” “large, or odor-producing facility). As such, the application of the CHO guidelines for the Proposed Actions is not expected to result in significant adverse air quality impacts related to existing air emission sources.

As presented in the EAS, a detailed analysis was required for the Proposed Actions’ incremental $PM_{2.5}$ concentration associated with heavy-duty diesel vehicles (HDDVs). No significant adverse air quality impact was predicted in the analysis, and the increment concentrations, presented in "**Table 7-2:**

$PM_{2.5}$ Dispersion Analysis Results at the Intersection of 28th Avenue and 42nd Street," 24-hour and annual concentrations of With-Action 5.35 µg/m^3 and 0.036 µg/m^3, respectively, were less than the *de minimis* threshold criteria (8.27 *µg/m^3* for 24-hour $PM_{2.5}$ and 0.1 µ*g/m^3* for the annual $PM_{2.5}$). While the application of the CHO guidelines for the Proposed Actions will increase the project-generated traffic, the traffic increment is not likely to result in a $PM_{2.5}$ increment concentration that would change the EAS conclusion. In addition, under the application of the CHO guidelines, the accessory parking for both Projected Development Sites 1 and 2 would not be required.

The CHO requirement application affects the Projected Development Sites 1 and 2 reasonable worst case development scenarios (RWCDSs) (see the **Technical Memorandum "Table 2: Existing, No-Action, With Action Comparison**). Therefore, a reassessment of the heating/hot water, ventilation, and air conditioning (HVAC) system(s) analyzed under the Environmental Assessment Statement (EAS) is required.

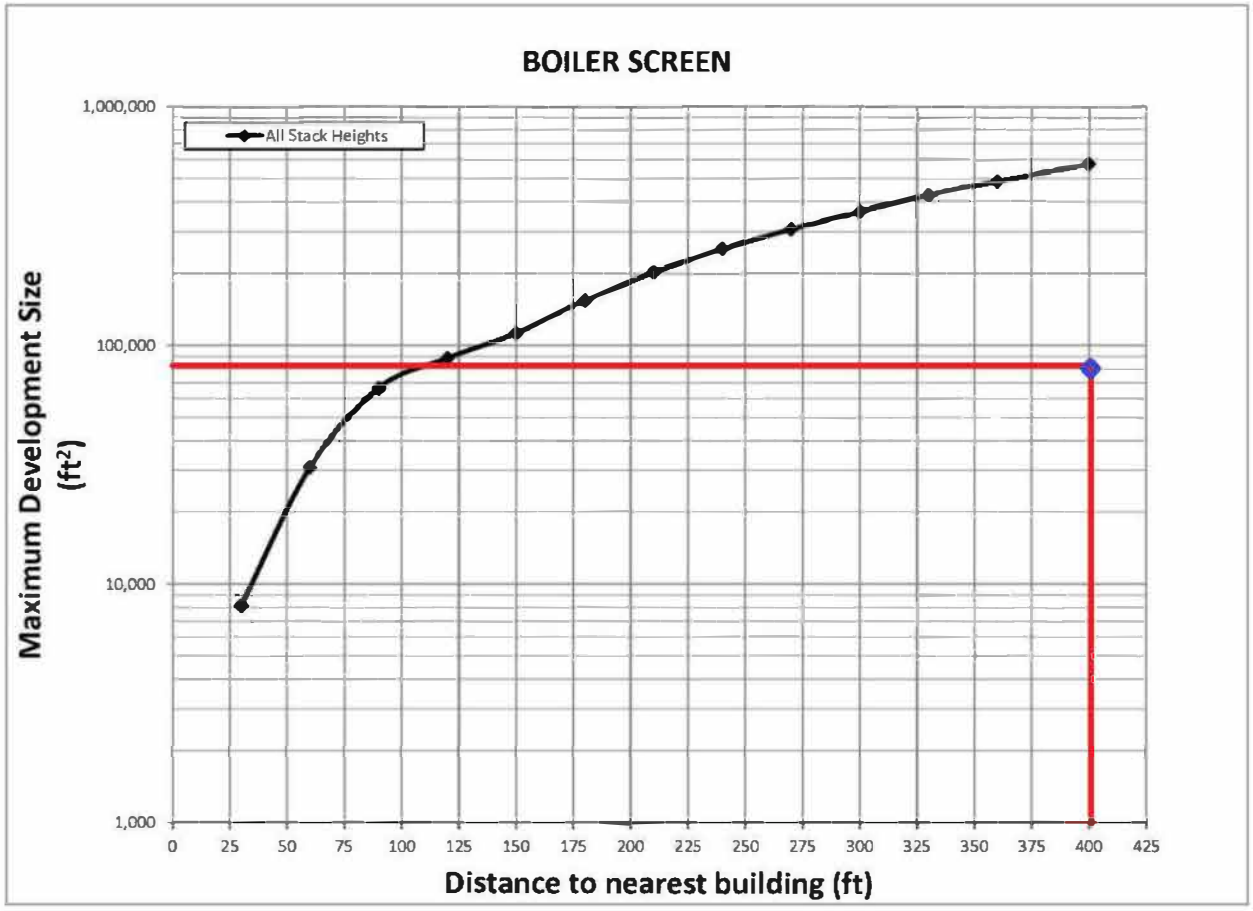
HVAC Analysis

The With-Action With CHO HVAC analysis considered both the project-on-existing and project-on-project scenarios. Projected Development Site 1 CHO requirement application RWCDS will facilitate a 95-foot-tall mixed residential/commercial building containing a total of 52,030 gsf (32,968 residential gsf and 19,062 commercial gsf). The Projected Development Site 2 RWCDS with CHO will facilitate a 95-foot-tall mixed residential/commercial building containing a total of 30,373 gsf (25,779 residential gsf and 4,594 commercial gsf).

HVAC Screening Assessment

Project-on-Existing: Based on the methodology above, Projected Development Sites 1 and 2 RWCDSs With CHO were analyzed as a single 82,403 gsf building (Projected Development Sites 1 and 2 combined RWCDSs With CHO gsf). A height of 95 feet was assumed, which is the Projected Development Sites 1 and 2 RWCDSs With CHO heights. A distance of 400 feet was assumed as no other similar or greater height buildings are located within that distance. **Figure 4** (based on Figure 17-3 of the 2021 *CEQR Technical Manual*) shows the RWCDS With CHO project-on-existing screening analysis. As shown in **Figure 4**, the Projected Development Sites 1 and 2 RWCDS under the CHO application combined gsf intersect the 400-foot distance below the curve for the fossil fuel-fired HVAC system. Therefore, Proposed Actions With CHO passes the HVAC screening analysis on other land uses.

Figure 4: Project-on-Existing With- Action With CHO HVAC Screen



Project-on-Project: Projected Development Site 1 abuts Projected Development Site 2. Therefore, the HVAC screening analysis is not applicable, and a detailed analysis is required.

HVAC With-Action With CHO Detailed Analysis

The methodology used in the EAS was used for the With-Action With CHO project-on-project HVAC detailed analysis, except the use of AERMOD MPI version 23132 executable and the With-Action With CHO RWCDSs. According to the New York State Department of Environmental Conservation (NYSDEC), due to nationwide helium shortage, a fair amount of 2022 upper air data was missing (also affecting 2023 data), and therefore, 2017-2021 meteorology data (used in the EAS) should be used. Natural gas was assumed to be the type of fossil fuel, if any, used in the RWCDS With CHO Projected Development Sites 1 and 2 HVAC systems. The methodology used in the EAS was used to calculate the HVAC systems' pollutant emission rates and stack parameters. **Table 3** shows the Projected Development Sites 1 and 2 RWCDS With CHO HVAC systems pollutant emission rates.

Table 3: Projected Development Sites 1 and 2 RWCDS With CHO HVAC Systems Emission Rates

Site ID	RWCDS With CHO Floor Arae & Building Height	HVAC System	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
Projected Development Site 1	52030 (gsf); 95 (ft)	Natural Gas	NO_2	1.61E-02	4.42E-03
			$PM_{2.5}$	1.23E-03	3.36E-04
Projected Development Site 2	30373 (gsf); 95 (ft)	Natural Gas	NO_2	9.43E-03	2.58E-03
			$PM_{2.5}$	7.16E-04	1.96E-04

One-hour NO_2 was predicted using a Tier 1 approach, which is the most conservative approach. The model was run twice; with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The NO_2 modeled concentrations were added to the background concentrations and the result was evaluated with the National Ambient Air Quality Standard (NAAQS). Background concentrations from the NYSDEC Queen College monitoring station were used in the analysis. $PM_{2.5}$ modeled concentrations were evaluated with the *de minimis* for stationary source. The HVAC dispersion analysis results under the CHO guidelines are shown in **Table 4**.

Table 4: Project-on-Projected RWCDS With CHO - HVAC Dispersion Analysis Results

Pollutant	Concentration (µg/m3)				Threshold Standard
	Increment (Modeled) Concentration	Background	Evaluated	Standard Design Value	
1-Hour NO_2	70.31	110.54	**180.9**	**188**	NAAQS
Annual NO_2	0.32	31.8	**32.2**	**100**	NAAQS
24-Hour $PM_{2.5}$	0.71	18.5	**0.71**	**8.27**	*de minimis*
Annual $PM_{2.5}$	0.02	7.4	**0.02**	**0.3**	*de minimis*
1-Hour NO_2	75.70	110.54	**186.2**	**188**	NAAQS
Annual NO_2	1.02	31.8	**32.8**	**100**	NAAQS
24-Hour $PM_{2.5}$	1.66	18.5	**1.66**	**8.27**	*de minimis*
Annual $PM_{2.5}$	0.08	7.4	**0.08**	**0.3**	*de minimis*

As seen in **Table 4**, the NO_2 predicted concentrations are within the NAAQS and $PM_{2.5}$ concentrations do not exceed the *de minimis*. These results were predicted with certain requirements to ensure that no impact(s) would occur. The environmental requirements (E-Designations) related to the With-Action With CHO air quality that are placed on the properties are specified here:

(E) Designation – With-Action With CHO

Block 698, Lots 41 and 44 (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, and air conditioning (HVAC) system and hot water equipment, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 102 feet above grade, and at least 35 feet from the western lot line of Block 698, Lot 44 to avoid any potential significant adverse air quality impacts.

<u>Block 698, Lots 1 and 45 (Projected Development Site 2):</u> Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and hot water equipment, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 101 feet above grade, and at least 25 feet from the western lot line of Block 698, Lot 44 to avoid any potential significant adverse air quality impacts.

NOISE

Changes to the EAS facilitated by CHO would not alter the findings of the EAS as the proposal with CHO would only be altered slightly in terms of height and bulk and would not adversely impact the EAS's existing noise readings. The E-designation in the EAS would ensure acceptable interior noise environment and therefore there would not be any significant adverse impacts related to noise.

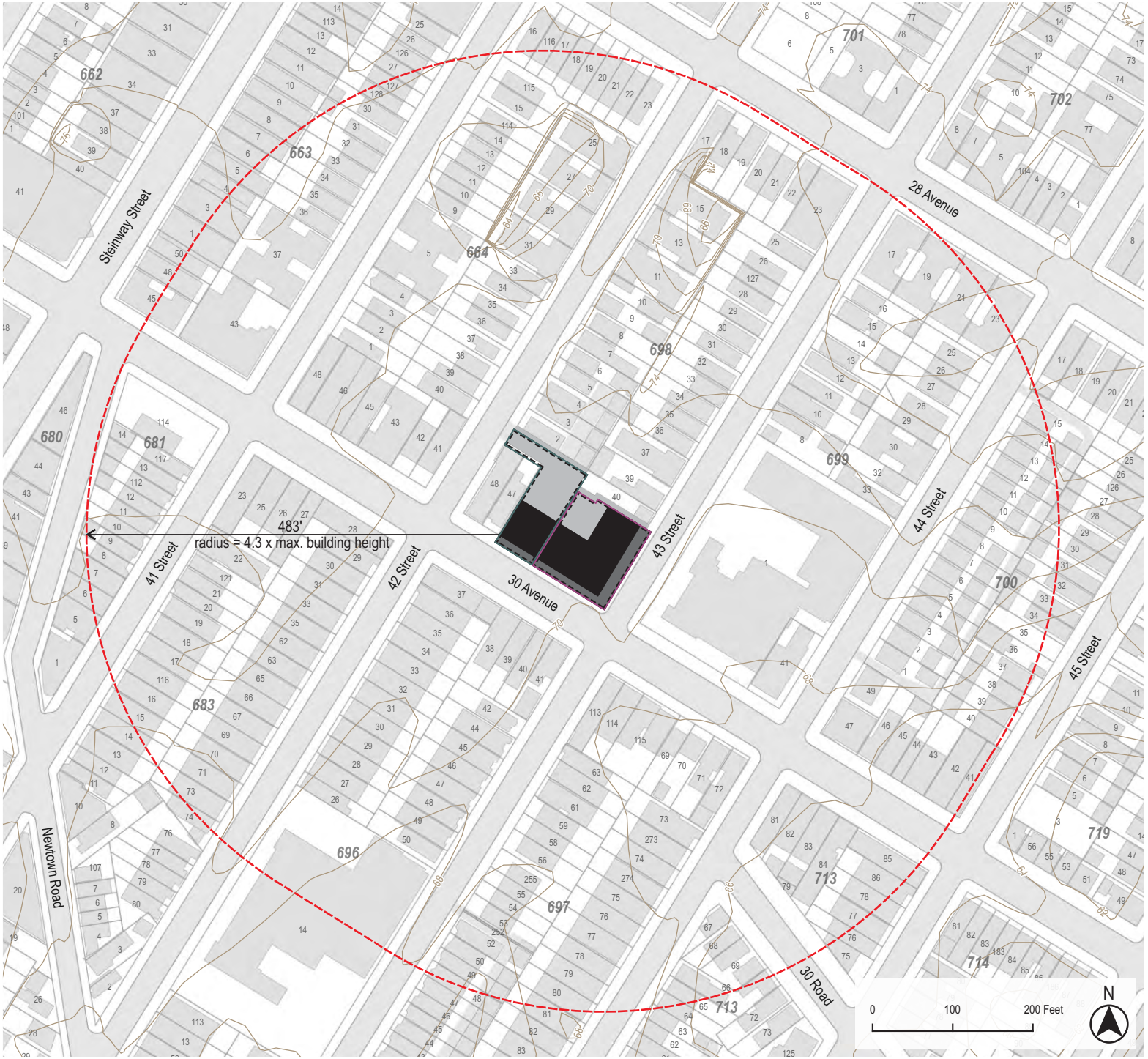
CONCLUSION

This technical memorandum concludes that the implementation of CHO does not alter the findings of this EAS and does not require additional analysis.

42-11 30th Avenue, Queens

Figure 1: Tier 1 Screening Assessment

- Applicant-Owned Projected Development Site
- Non-Applicant-Owned Projected Development Site
- Projected Building Footprint
- Roof Above Base Height (65')
- Roof Above Bulkheads (120')
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource (n/a)
- Potentially Affected Open Space Resource (n/a)



Urban Cartographics

42-11 30th Avenue, Queens

Figure 2: Urban Design Diagram

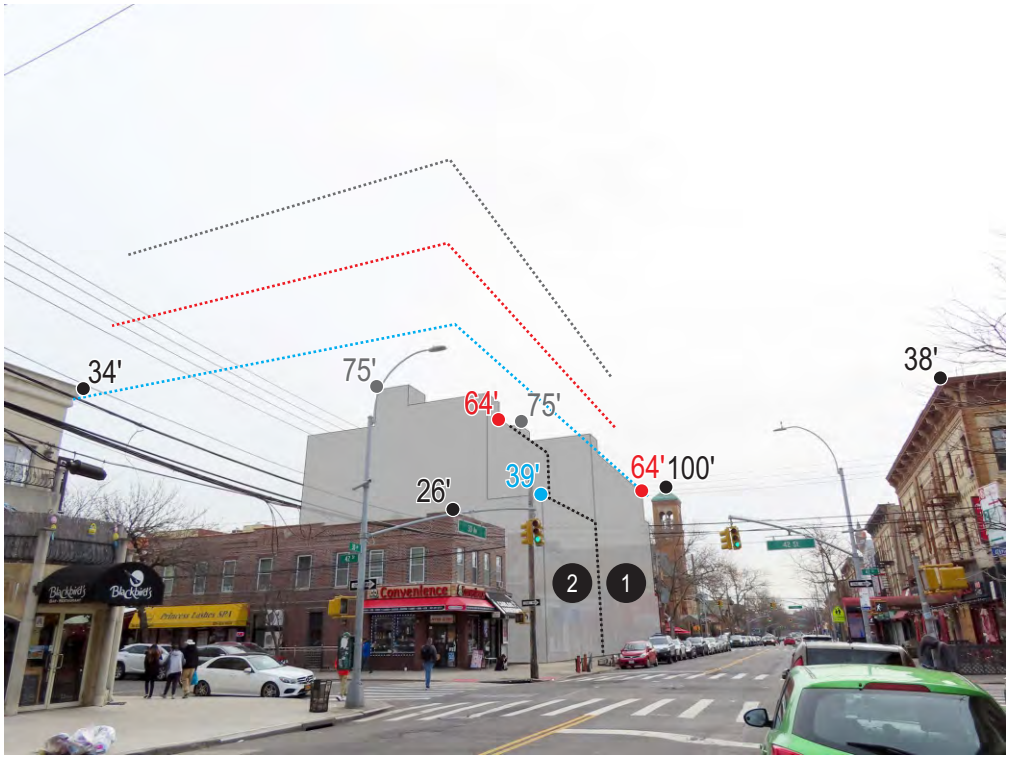
No-Action Scenario

30th Avenue facing east (Site at left)



With-Action Scenario

30th Avenue facing east (Site at left)



Maximum Permitted Base Height (65')
Maximum Permitted Building Height (95')
Maximum Permitted Building Height (120')
Proposed Base Height
Proposed Building Height
Proposed Building Height

42-11 30th Avenue, Queens

Figure 3: Urban Design Diagram

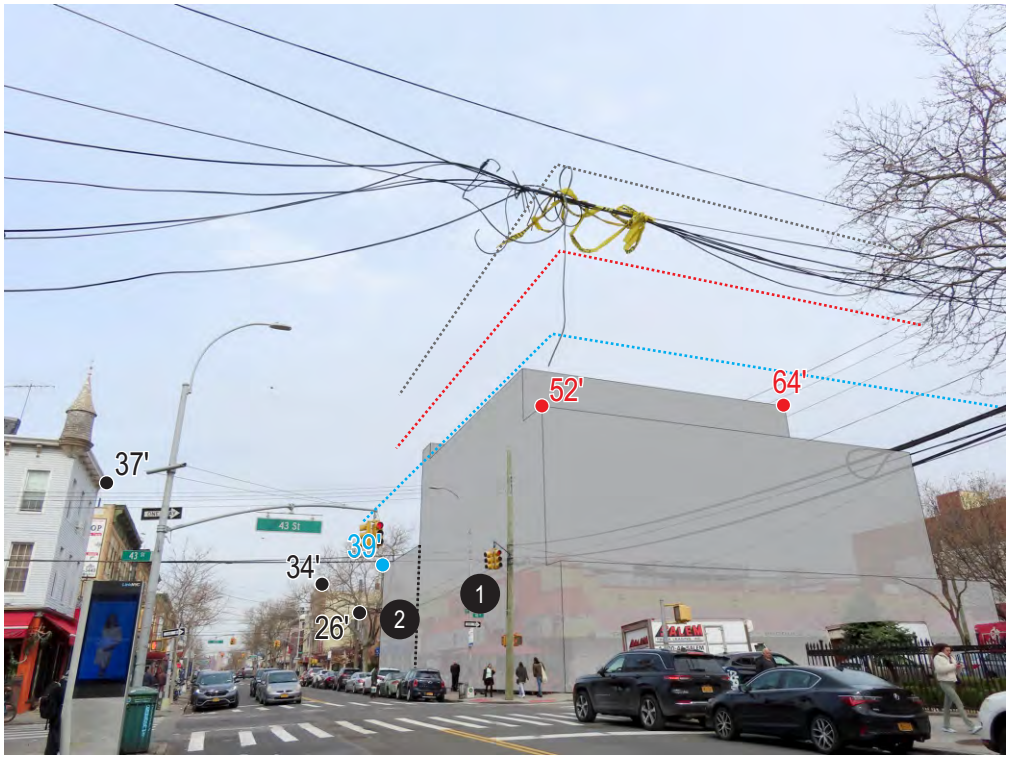
No-Action Scenario

30th Avenue facing northwest (Site at right)



With-Action Scenario

30th Avenue facing northwest (Site at right)



Maximum Permitted Base Height (65')
Maximum Permitted Building Height (95')
Maximum Permitted Building Height (120')
Proposed Base Height
Proposed Building Height
Proposed Building Height

Urban Cartographics

Appendix B

Landmarks Preservation Commission

NYC Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-Q
Project: 42-11 30 AVENUE
Date Received: 4/24/2024

Properties with no Architectural or Archaeological significance:

1) 42 STREET, BBL: 4006980001
2) 42-15 30 AVENUE, BBL: 4006980041
3) 42-11 30 AVENUE, BBL: 4006980044
4) 42-07 30 AVENUE, BBL: 4006980045

Gina Santucci 4/24/2024

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 37299_FSO_GS_04242024.docx

Appendix C

Phase I Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT

A. INTRODUCTION

Environmental Studies Corp. has performed a Phase I Environmental Site Assessment (ESA) of the property located at 42-11 and 42-15 30th Avenue, in the Borough of Queens, New York City, New York. This Phase I ESA was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-13).

The Standard Practice E 1527-13 defines good commercial and customary practice for conducting an ESA of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. As such, the Practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability (referred to as landowner liability protections or LLPs); that is, the practice that constitutes all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary practice.

The goal of an ESA is to identify, to the extent feasible in accordance with ASTM E 1527-13, *Recognized Environmental Conditions (RECs)* in connection with the property. The term *Recognized Environmental Condition* means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not *Recognized Environmental Conditions*. The term *de minimis* condition means a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. The presence or likely presence of hazardous substances or petroleum products at a site includes any form, such as solid or liquid at the surface or subsurface, and vapor in the subsurface.

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

The term *Historical Recognized Environmental Condition* means a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been address to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Recognized Environmental Conditions are identified through a review of pertinent records for the project site and nearby properties, a site reconnaissance and interviews. The records review includes a review of *Standard Historical Sources* of information to determine the history of the property. Such sources include historical aerial photographs, fire insurance maps such as those published by the Sanborn Map Company, reverse telephone directories, building department records such as Certificates of Occupancy, building and demolition permits, etc., property tax records, recorded land title records, previous environmental reports and others. The records review also includes regulatory agency lists and databases of documented hazardous waste sites, spill incidents, registered storage tanks and others.

The non-invasive site reconnaissance is performed to identify potential sources of contamination at the project site and in the immediate vicinity of the site. Such potential sources of contamination include operations involving the storage or use of hazardous substances or petroleum products, the presence of petroleum storage tanks, drainage structures, chemical/oil staining, dead or dying vegetation and others.

Interviews are conducted, whenever possible, with site owners, operators, tenants, local government officials, and others with knowledge of the site and information regarding potential RECs at a property. Finally, several ASTM "Non-Scope" items including asbestos-containing materials, lead-based paints, and radon are also discussed. A detailed scope of work is included in Section D of this report.

Sanborn atlases and other pertinent figures are included in Attachment A. Photographs are located in Attachment B. The Radius Map report from Environmental Data Resources, Inc. (EDR) is included in Attachment C, which contains regulatory agency environmental database information. The City Directory Abstract report from EDR is included in Attachment D, and User provided information is included in Attachment E, including the User Questionnaire.

B. EXECUTIVE SUMMARY

Site Description

The subject property at 42-11 and 42-15 30th Avenue, Queens, New York consists of two adjoining lots with a total area of approximately 10,245 square feet. Lot 41 (42-15 30th Avenue) is approximately 7,808 square feet, and is fully occupied by a 1-story (plus basement), masonry and steel frame commercial building, and is occupied by a Key Food supermarket. Heat for this building is provided by rooftop, gas-fired heating, ventilation, and air conditioning units (HVAC). Hot water is provided by individual electric hot water heaters. Lot 44 is a 2,437+/- square foot, vacant lot that was last occupied by a 2-story mixed-use building (i.e. residential with ground floor retail).

Current Operations/Hazardous Substances

There were not any operations involving the storage or use of hazardous substances or petroleum products observed at the property during the site visit.

Site History

Research into the history of the project site shows that the building was constructed in 1949 as a supermarket, and has been continuously occupied by a supermarket since its construction. Prior to the construction of the building this lot was occupied by a 2-story dwelling with a detached shed and garage from at least 1898 to 1948.

Lot 44 was occupied by a 2-story, mixed-use building (i.e., residential with ground floor retail), and a 1-story commercial building, from at least 1898 to 2022. The identified former commercial uses on this lot are a carpenter, a plumber, grocery stores, delicatessens, and beauty salons.

The identified former uses of the subject property are not types of businesses or operations that typically involve the storage or use of hazardous substances or petroleum products in their operations. Given the identified former uses of the site, it is considered unlikely that these uses would have impacted the property.

Site Drainage

Typical lavatory drainage structures such as sinks and toilets are located in the building. There are also several floor drains located in the basement of the building. The drainage destination of these structures is not known; however, it is likely that they discharge to the municipal sewer system. No staining or other indications of past discharges of hazardous substances or petroleum products were observed around any of the drainage structures in the building. No drainage structures were observed on Lot 44 of the project site.

Petroleum Storage Tanks

No aboveground storage tanks (ASTs), or indications of the presence of underground storage tanks (USTs) such as tank fillports, vent lines, or associated mechanical equipment, were observed at the property during the site visit. The project site does not appear in the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage database, which lists all registered

facilities with a total combined petroleum storage capacity in excess of 1,100 gallons. There were not any Oil Burner applications found on file for the subject property in the New York City Department of Buildings records reviewed.

Asbestos/Lead-Based Paints/PCBs

Given the age of the building (constructed in 1949), it is possible that it contains asbestos building materials and lead-based paints in underlying layers. However, the building has undergone numerous renovations since its construction, and no suspected asbestos-containing thermal insulation materials were observed in the building during the site visit. Potential asbestos-containing materials in the building include flooring materials and roofing materials. Painted surfaces in the building were observed to be in good condition, with no areas of chipped or peeling paint noted. No transformers or other large electrical equipment suspected of containing PCBs were observed at the property.

Regulatory Agency Database Records

The subject property does not appear in the Federal or State environmental databases reviewed including the United States Environmental Protection Agency (USEPA's) Superfund, SEMS or ERNS databases, the RCRA Hazardous Waste Handler database or the Hazardous Waste Treatment/Storage/Disposal Facilities list, or the NYSDEC Spill Logs or Petroleum Bulk Storage (PBS) database, Solid Waste Facilities database, Voluntary Cleanup Program database, Brownfield Cleanup Program database, Registered Dry Cleaner database, or the Registry of Inactive Hazardous Waste Disposal Sites.

Surrounding Land Uses

The property is adjoined to the north by residential uses. Adjacent and to the south of the site is 30th Avenue, beyond which are retail and residential uses. Adjacent and to the east is 43rd Street, beyond which is a church and a school. The property is adjoined by a medical office building. Land uses in the immediate vicinity of the property (i.e., within approximately 500 feet of the site) are comprised of a mix of residential and commercial/retail uses. No gasoline filling stations or heavy industrial uses are located in the immediate vicinity of the project site.

A review of Sanborn historical maps shows that land uses in the immediate vicinity of the subject property have historically contained a mix of residential and commercial/retail uses since at least the 1930s. There are not any gasoline filling stations or heavy industrial uses shown in the immediate vicinity of the subject property on any of the Sanborn maps reviewed.

There were not any off-site, potential sources of contamination which are considered likely to have impacted the subject property identified in the information reviewed for this report.

Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the subject property located at 42-11 and 42-15 30th Avenue, Queens, New York, the property. Any exceptions to or deletions from this standard are described in section A of this report. This assessment has revealed no evidence of *Recognized Environmental Conditions*, *Historical Recognized Environmental Conditions* or *Controlled Recognized Environmental Conditions* in connection with the property.

Environmental Professional Statement

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.1 of 40 CFR 312 and we have the specified qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Respectfully Submitted,

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Hiram A. Rothkrug, Director
Environmental Studies Corp.

C. REPORT OF FINDINGS

The subject property was visited on May 4th, 2023 by Environmental Studies Corp. Project Manager Todd McArthur. Mr. Edwardo Valero, the manager of the subject property, was present to provide access to the property, and information regarding past and present uses of the site.

Property Description

Property Address and Location

Subject Property:

42-11 and 42-15 30th Avenue
Queens, New York 11103
Block 698, Lots 41 & 44

The subject property is located on the north side of 30th Avenue, between 42nd Street and 43rd Street, in the Borough of Queens, New York City, New York. The property appears on the USGS 7.5 Minute Series Topographic Map Central Park, New York Quadrangle (see Attachment A). The subject property is located in the following Zoning Districts: R5 & C1-2, which is a residential zone with a commercial overlay. The subject property is not in a manufacturing zone.

Site Description

The property consists of two adjoining lots with a total area of approximately 10,245 square feet. Lot 41 (42-15 30th Avenue) is approximately 7,808 square feet, and is fully occupied by a 1-story (plus basement), masonry and steel frame commercial building occupied by a Key Food supermarket. Heat for this building is provided by rooftop, gas-fired heating, ventilation, and air conditioning units (HVAC). Hot water is provided by individual electric hot water heaters. Lot 44 is a 2,437+/- square foot, undeveloped lot that was last occupied by a 2-story, mixed-use building (i.e., residential with ground floor retail). At the time of the site visit this lot was being used for overflow storage for the supermarket, with steel shelving, shopping carts, and plastic barrels for recycled bottles and cans present on the lot.

Site History

Information regarding site history was obtained from a variety of standard historical sources including historical aerial photographs, historical land use/fire insurance atlases such as those produced by Sanborn, Bromley and/or Belcher Hyde, New York City Buildings Department information including Certificates of Occupancy (CO), Building Permits, Alteration Permits, etc., and interviews with site owners, occupants or local residents. Additionally, a city directories abstract search was obtained from EDR, Inc.

Historical Maps

The 1898, 1915, 1936, 1948, 1950, 1967, 1977, 1979, 1981, 1985, 1986, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1999, 2001, 2002, 2003, 2004, 2005, and 2006 Sanborn fire insurance/real estate maps were reviewed (see Attachment A). These maps provide information on the history of structures at the site, and may show property use including operations involving the storage or use of hazardous substances, and the presence of buried gasoline tanks.

Lot 41 (42-15 30th Avenue)

A 2-story dwelling and a detached shed appear on this lot on the 1898, 1915, and 1936 Sanborn maps. A 2-story dwelling, detached shed, and a detached garage appear on the lot on the 1948 Sanborn map. The existing building appears on this lot on the remaining Sanborn maps reviewed. The use in the building is shown as a store on these maps. There are not any gasoline tanks or indications of the storage or use of hazardous substances or petroleum products shown on this lot on any of the Sanborn maps reviewed.

Lot 44 (42-11 30th Avenue)

A 2-story dwelling and a 1-story commercial building appear on this lot on all Sanborn maps reviewed. The use in the 1-story commercial building is shown as carpentry on the 1898, 1915, and 1936 Sanborn maps. The use in the building is shown as plumbing on the remaining Sanborn maps reviewed. There are not any gasoline tanks or indications of the storage or use of hazardous substances or petroleum products shown on this lot on any of the Sanborn maps reviewed.

Historical Aerial Photographs

Historical aerial photographs of the site for the years 1924, 1941, 1951, 1954, 1961, 1966, 1974, 1976, 1980, 1984, 1991, 2006, 2011, 2015, and 2019, provided by EDR, Inc, were reviewed (see Attachment A). Historical aerial photographs are another source for site history, and may show on-site development, excavations, debris piles, pits, lagoons, etc.

The resolution of the 1924 and 1941 aerial photographs is not sufficient to positively identify structures or objects at the project site. The existing building is visible on Lot 41, and two buildings are visible on Lot 44, on all remaining historical aerial photographs reviewed. There are not any soil or debris piles, excavations, pits, ponds, or lagoons visible at the property on any of the historical aerial photographs reviewed.

N.Y.C. Department of Buildings

The New York City Department of Buildings (NYCDOB) on-line Building Information System (BIS) records were reviewed for Certificates of Occupancy (CO), New Building permits, Demolition permits, Oil Burner Applications, and other pertinent information regarding the history of the site.

Lot 41 (42-15 30th Avenue)

There is one CO on file for this lot. CO Q58928 was issued on 10/17/1949, for a new 1-story and cellar supermarket. New Building permit NB 3128-49 was issued for the construction of the building. There are not any Demolition permits or Oil Burner applications on file for this lot.

The Department of Finance Building Classification for this lot is K1 – Store Building. The DOB records show that the lot does not contain an E-Designation, which is a NYC Zoning Map designation that indicates the presence of an environmental requirement pertaining to potential hazardous substances, noise or air quality impacts on a particular tax lot.

Lot 44 (42-11 30th Avenue)

There is one CO on file for this lot. CO Q188763 was issued on 5/1/1975. The permissible uses listed on the CO are storage and boiler in the cellar, dwelling and store on the first floor, and a dwelling on the second floor. On 10/14/2015, and application was received for the full demolition of an existing 2-story and cellar building on the lot (Job Number 421225356). This job was signed off on 1/6/2022.

There are not any New Building permits, Demolition permits, or Oil Burner applications on file for this lot.

The Department of Finance Building Classification for this lot is V0 – Vacant Land. The DOB records show that the lot does not contain an E-Designation.

N.Y.C. Department of Finance

The New York City Department of Finance Automated City Register Information System (ACRIS) database was reviewed for historical deed information for the project site. Historical deed information can help identify former property owners whose operations may have potentially involved the storage or use of hazardous materials or petroleum products. In addition, it can aid in identifying Environmental Liens or Activity and Use Limitations (AULs) at a property. An Environmental Lien is a charge, security or encumbrance upon title to a property to secure the payment of a cost, damage, debt or obligation arising out of response actions, cleanup or other remediation of hazardous substances or petroleum products upon a property. AULs are legal or physical restrictions or limitations on the use of, or access to, a site.

The following tables summarize the deed information for the project site from the NYC Department of Finance records reviewed.

Lot 41 (42-15 30th Avenue)

Date	Party 1	Party 2
6/21/2012	Judy Weiss, Executrix for Henry Goldhirsch	CG Stone Realty, LLC

Lot 44 (42-11 30th Avenue)

Date	Party 1	Party 2
4/10/1967	Dimisa, Mario	Peter N. Forgione
7/13/1972	Peter N. Forgione	Antonio Piazza
3/16/1979	Antonio Piazza	Stefano Caruso
12/1/2011	Caruso, Maria	Caruso Family, LLC
7/17/2012	Caruso Family, LLC	CG Stone Realty, LLC

There were not any indications of the presence of Environmental Liens or Activity and Use Limitations (AULs) found on file for the project site in the Department of Finance records reviewed.

Interviews

Mr. Edwardo Valero, the store manager of the Key Food Supermarket at the project site for the past 20 years, was interviewed regarding past and present uses of the property. According to Mr. Valero, and to the best of his knowledge, Lot 41 of the project site has always been occupied by a supermarket. Lot 44 formerly contained a 2-story and basement building with a beauty salon on the first floor and an apartment on the second floor. This building was demolished circa 2022. Mr. Valero has no knowledge of any past businesses or occupants at the subject property that stored or used hazardous materials or petroleum products in their operations.

City Directory Abstract

A city directory abstract for the range of addresses of the subject property was reviewed. A city directory abstract is a review of city directories, cross reference and telephone directories which list occupants at a corresponding address. These directories are reviewed at approximately five-year intervals from the 1920s to 2020. The following table summarizes the findings of the City Directory Abstract review.

42-11 30th Avenue

Year	Listing/Occupant
1934, 1939	Residential
1962	DiMisa Pork Store Residential
1967	DiMisa Pork Store
1970	Pete's Pork Store
1976	Residential
1983	John's Delite Deli Residential
1991	Residential
1992	Celestino Rea Italian Deli Residential
1995	Nora's Hair Design
2000	Residential
2005, 2010	Nora's Hair Design Residential
2014, 2017, 2020	Residential

42-15 30th Avenue

Year	Listing/Occupant
1934, 1939, 1945	Residential
1983, 1991, 1992, 1995, 2000	Key Food Store
2005	Key Food Supermarket 4215 Food Corp.
2010, 2014, 2017	Key Food Supermarket
2020	Key Food Supermarket Coinstar Western Union Agent Location

User Provided Information

Previous Environmental Reports

No previous environmental reports for the project site were provided to Environmental Studies Corp. for review.

User Questionnaire

As required by 40CFR, Part 312, the User of the ESA was provided with the following questionnaire designed to help the environmental professional identify Recognized Environmental Conditions at the project site (see Attachment E). As of the time of this writing, the responses to the User questionnaire have not been received.

Question	(Yes/No)	Detail
1. Environmental liens that are filed or recorded against the property (40CFR 312.25). Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?		

Question	(Yes/No)	Detail
2. Activity and use limitations (AULs) that are in place on the property or that have been filed or recorded against the property (40CFR 312.26(a)(1)(v) and (vi)). Did a search of recorded land title records (or judicial records where appropriate) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?		
3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28). Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?		
4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40CFR 312.29). Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?		
5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.29). Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example: Do you know the past uses of the property? Do you know of specific chemicals that are present or once were present at the property? Do you know of spill or other chemical releases that have taken place at the property? Do you know of any environmental cleanups that have taken place at the property?		
6. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40CFR 312.31). Based on your knowledge and experience related to the property are there any obvious indicator that point to the presence or likely presence of releases at the property?		
7. Reason why the Phase I is being performed?		

Data Gaps

The ASTM Standard Practice E 1527-13 requires a discussion of any identified data gaps as defined by the Practice. The responses to the User questionnaire have not been received to date. However, the history and uses of the project site have been well established from other Standard sources of historical information. Therefore, this data gap is not considered significant because it is unlikely to change the findings or conclusions of this report.

Site Inspection

The property was inspected in order to identify potential recognized environmental conditions which may exist at the site. Such conditions include the on-site storage/use of hazardous substances, petroleum storage tanks, asbestos-containing materials, lead-based paints, as well as any visible indications of the past on-site storage/use/disposal of hazardous substances or petroleum products.

Current Operations/Hazardous Substances

The property consists of a supermarket and an undeveloped lot. There were not any operations involving the storage or use of hazardous substances or petroleum products observed at the property during the site.

Drainage Structures

Typical lavatory drainage structures such as sinks and toilets are located in the building. There are also several floor drains located in the basement of the building. The drainage destination of these structures is not known; however, it is likely that they discharge to the municipal sewer system. No staining or other indications of past discharges of hazardous substances or petroleum products were observed around any of the drainage structures in the building. No drainage structures were observed on Lot 44 of the project site.

Petroleum Storage Tanks

No aboveground storage tanks (ASTs), or indications of the presence of underground storage tanks (USTs) such as tank fillports, vent lines, or associated mechanical equipment, were observed at the property during the site visit.

Polychlorinated Biphenyls (PCBs)

Prior to 1979, PCBs were widely used in electrical equipment such as transformers, capacitors, fluorescent light ballasts, etc., for their cooling and insulating properties. The manufacture, processing and commercial distribution of PCBs was banned in 1979, under the Toxic Substances Control Act (40 CFR Part 761). No transformers or other large electrical equipment suspected of containing PCBs were observed in the building.

Asbestos-Containing Materials

Asbestos is a natural mineral fiber which was widely used in the manufacture of building and insulating materials prior to the late 1970s, primarily due to its good insulation and mechanical resistance properties. Materials made with asbestos include thermal system insulation (TSI), such as aircell pipe wrap, boiler insulation and breaching, hot water/expansion tank insulation, castable elbow packing, magnesia block insulation, etc., surfacing materials, such as spray-on fire proofing and sound proofing, and miscellaneous materials such as floor tiles and roofing materials.

Given the age of the building (constructed in 1949), it is possible that it contains asbestos building materials. However, the building has undergone numerous renovations since its construction, and no suspected asbestos-containing thermal insulation materials were observed in the building during the site visit. Potential asbestos-containing materials in the building include flooring materials and roofing materials.

Lead-Based Paint

Lead-based paint is hazardous when in a deteriorating condition (i.e., chipped, broken, crumbling, pulverized); and lead-based paint debris removed during construction/renovation work may be required to be disposed of as hazardous waste.

Given the age of the building, it is possible that it contains lead-based paints in underlying layers. However, the building has undergone numerous renovations since its construction. Painted surfaces in the building were observed to be in good condition, with no areas of chipped or peeling paint noted.

Potable Water Supply

Potable water is supplied to the area of the subject site through the New York City Municipal water supply system, which obtains water from upstate reservoirs. The local groundwater is not used as a potable water source.

Surrounding Land Use

The property is adjoined to the north by residential uses. Adjacent and to the south of the site is 30th Avenue, beyond which are retail and residential uses. Adjacent and to the east is 43rd Street, beyond which is a church and a school. The property is adjoined by a medical office building. Land uses in the immediate vicinity of the property (i.e., within approximately 500 feet of the site) are comprised of a mix of residential and commercial/retail uses. No gasoline filling stations or heavy industrial uses are located in the immediate vicinity of the project site.

A review of Sanborn historical maps shows that land uses in the immediate vicinity of the property have historically contained a mix of residential and commercial/retail uses since at least the 1930s. There are not any gasoline filling stations or heavy industrial uses shown in the immediate vicinity of the property on any of the Sanborn maps reviewed.

Site Topography, Geology and Hydrology

The subject property is mapped on the USGS 7.5 Minute Series Topographic Map, Central Park, N.Y. Quadrangle (2019). The general elevation for the site is depicted as approximately 70 feet above mean sea-level. The topography in the area of the property generally slopes downward to the west. The East River, a tidal water body, is located approximately 1.25 miles west/northwest of the subject property. The geology in the area of the site typically consists of unconsolidated glacial deposits of sand, gravel, silt, and clay, often with historical urban fill materials near the surface. Bedrock is likely located more than 50 feet below the surface.

Given the topography in the area, and the location of the East River, it is considered likely that the direction of groundwater flow in the vicinity of the project site is to the west/northwest, towards the East River. However, the subject property is located in an area of complex geology and urban infrastructure, and precise geology and hydrology, including groundwater depths and flow directions, can only be determined through the installation and survey of soil borings and groundwater monitoring wells. Actual local groundwater depths and flow directions can be influenced by such factors as topography, underground structures and utilities, seasonal and tidal fluctuations, soil and bedrock geology, production wells, and de-watering operations, and others. The local groundwater is not utilized for the public water supply.

Regulatory Agency Information and Databases

Regulatory agency environmental database information regarding known or suspected hazardous waste storage or disposal sites, reported spill incidents, registered petroleum storage tanks, solid waste facilities and landfills, etc. for the subject properties and surrounding area is obtained from Environmental Data Resources, Inc. (EDR) of Milford, Ct. These documented sites and incidents are listed in the following section for descriptive purposes. Their inclusion does not necessarily suggest

any potential impacts to the subject property, but provides an indication of the potential for general groundwater and soil contamination in the larger area.

Federal Databases

Superfund Sites

The U.S. Environmental Protection Agency's (USEPA) National Priorities List (NPL) identifies confirmed hazardous waste sites, that are ranked for clean-up under the federal Superfund program (also known as Superfund sites). This program was authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

The property is not on the USEPA National Priorities List. There are not any USEPA Superfund sites identified within an approximate one-mile radius of the property. There are not any De-listed Superfund sites located within ½ mile of the project site.

SEMS Sites

A check was made of the USEPA's Superfund Enterprise Management System (SEMS) database. This database, formerly known as the CERCLA Information System database (CERCLIS), was re-named by the USEPA in 2015. The SEMS database is a comprehensive database and management system that inventories and tracks sites addressed or needing to be addressed by the Superfund program. Sites that the USEPA decide do not warrant further evaluation under the Superfund program are delisted and given a No Further Remedial Action Planned (NFRAP) designation.

The subject property and adjoining properties are not listed in the USEPA's SEMS database. There are not any SEMS sites identified within ½ mile of the project site.

RCRA Treatment/Storage/Disposal Facilities

The USEPA's RCRA hazardous waste Treatment/Storage/Disposal (TSD) Facilities database includes facilities that transport, treat, store and/or dispose of hazardous wastes, or have engaged in these activities in the past. TSDF operators, as with hazardous waste transporters or generators, are regulated under the Resource Conservation and Recovery Act (RCRA).

The property is not on the USEPA's RCRA hazardous waste TSD Facilities database list. There are not any RCRA TSD facilities listed within ½ mile of the project site.

RCRA CORRACTS

CORRACTS is a list of hazardous waste handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

The property is not on the list. There are not any RCRA CORRACTS facilities identified within one mile of the project site.

RCRA Hazardous Waste Generators

RCRA Hazardous Waste Generators are regulated by the federal government under the Resource Conservation and Recovery Act (RCRA). An inventory of hazardous waste generators is useful to assess the kinds of hazardous substances/wastes that are handled, stored, and/or transported in the vicinity of the site, as well as on the subject property.

The subject property and adjoining properties are not identified in the RCRA Hazardous Waste Generators database.

Emergency Response Notification System

USEPA's Emergency Response Notification System (ERNS) database contains information from federal agencies on CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity.

There are no reported ERNS releases or spills listed at the site.

U.S. Institutional/Engineering Controls Lists

The U.S. Institutional Controls List is a database of sites with institutional controls in place, typically administrative controls such as groundwater use restrictions, construction restrictions, property use restrictions and post remediation care requirements intended to prevent exposure to contaminants remaining at a site. The U.S. Engineering Controls List is a database of site with engineering controls in place such as various forms of caps, building foundations, liners and/or treatment methods to prevent contaminants from entering environmental media or affect human health.

The subject property and adjoining properties are not listed in the U.S. Institutional Controls or the U.S. Engineering Controls databases. There are not any facilities identified in the U.S. Institutional Controls or the U.S. Engineering Controls databases within ½ mile of the site.

State Databases

Inactive Hazardous Waste Disposal Sites

A NYSDEC's Inactive Hazardous Waste Disposal Sites Registry contains information on potentially hazardous waste sites in New York State.

The property is not included in the Registry. There are eight Inactive Hazardous Waste Disposal sites identified within one-mile of the property, all of which are located more than six-tenths of a mile from the project site (see Attachment C). Given the distance of these sites from the property, it is considered unlikely that they would have impacted the project site.

State Institutional/Engineering Controls Lists

The State Institutional Controls List is a database of sites with institutional controls in place, typically administrative controls such as groundwater use restrictions, construction restrictions, property use restrictions and post remediation care requirements intended to prevent exposure to contaminants remaining at a site. The State Engineering Controls List is a database of site with engineering controls in place such as various forms of caps, building foundations, liners and/or treatment methods to prevent contaminants from entering environmental media or affect human health.

The subject property and adjoining properties are not listed in the State Institutional Controls/State Engineering Controls Lists. There are not any State Institutional Controls/Engineering Controls sites identified within ½ mile of the property.

Spill Logs

The NYSDEC Spill Logs database was checked for reported spills of toxic or hazardous substances (including petroleum products) within ½ mile of the subject property. Spill incidents listed as "Active" indicate that the spill is either still undergoing remediation, or awaiting completion of paperwork for closure. Spill incidents listed as "Closed" indicate that the NYSDEC required no additional remedial measures at the time of spill closure. Spills listed as tank failures or tank test failures indicate the possibility of oil or gasoline seepage to the surrounding soils or groundwater. Other spills (i.e., accidents, sloppy housekeeping, equipment failures, etc.) may only affect surface soils.

The project site is not identified in the NYSDEC Spill Logs database. There are 37 Leaking Tank spill incidents identified within ½ mile of the property, all of which have been closed by the NYSDEC (see Attachment C). In addition to the Leaking Tank spill incidents, there are 18 spill incidents from other causes identified within 1/8 mile of the site, all of which have been closed by the NYSDEC. Based on a review of the information regarding these spill incidents in the Radius Map report, none are considered likely to have impacted the subject property, based on the nature of the spill incident, the distance and/or direction from the property, or the current regulatory status.

Petroleum Bulk Storage Facilities

A check was made of the most recent NYSDEC Petroleum Bulk Storage (PBS) database. Petroleum bulk storage facilities have petroleum storage capacities in excess of eleven hundred (1,100) gallons, and less than four hundred thousand (400,000) gallons.

The property is not identified in the PBS database. There eight PBS facilities with USTs, and 48 PBS facilities with ASTs identified within ¼ mile of the property (see Attachment C).

Major Oil Storage Facilities

The NYSDEC Major Oil Storage Facilities (MOSF) database, which lists all facilities (onshore facilities or vessels) with petroleum storage capacities of 400,000 gallons or greater, was reviewed.

The property is not identified in this database. There are not any NYSDEC MOSF sites identified within an approximate ½ -mile radius of the property.

Chemical Bulk Storage Facilities

The NYSDEC Chemical Bulk Storage (CBS) database was reviewed. Chemical bulk storage facilities store regulated hazardous substances in aboveground tanks with capacities of one hundred eighty-five (185) gallons or greater, and/or in underground tanks of any size.

The property does not appear in the CBS database. There are not any CBS sites identified within ¼ mile of the property.

Solid Waste Facilities

A check was made of the NYSDEC database of solid waste facilities, including, but not limited to, landfills, incinerators, transfer stations, recycling centers.

The project site is not identified in this database. There is one Solid Waste Facility site identified within ½ mile of the property (see Attachment C). This site is New York Transmission and Used Auto Sales at 49-08 25th Avenue, which is located approximately ½ mile east of the property. Given the distance of this site from the subject property, it is considered unlikely that it would have impacted the project site.

Voluntary Cleanup Program Sites

The New York State database of sites with Voluntary Cleanup Agreements was reviewed. The Voluntary Cleanup Program (VCP) was established to address the environmental, legal and financial barriers that often hinder the re-development and re-use of contaminated properties. The VCP enhances private sector cleanup of contaminated sites by enabling parties to remediate sites using private rather than public funds.

The property is not identified on the VCP database. There are not any VCP sites identified within ½ mile of the subject property.

Brownfield Site List

The New York State list of Brownfield sites was reviewed. A Brownfield is any real property where re-development or re-use may be complicated by the presence of potential presence of a hazardous waste, petroleum, pollutant or contaminant.

The subject property is not on the list. There are not any Brownfield sites identified within ½ mile of the subject property.

Registered/Historical Dry Cleaners

The New York State list of Registered Dry Cleaners was reviewed for dry cleaners within ¼ mile of the project site. EDR's list of Historical Dry Cleaners were reviewed for dry cleaners within 1/8 mile of the project site. The subject property is not identified in either of these databases. There is one Registered Dry Cleaner identified within ¼ mile of the property, and six Historical Dry Cleaners identified within 1/8 mile of the project site (see Attachment C). There are not any NYSDEC-reported spill incidents at any of these locations.

New York City Databases

New York City Department of City Planning

The New York City Department of City Planning's E-Designation Site Listing was reviewed (see Attachment C). An E-Designation is a NYC Zoning Map designation that indicates the presence of an environmental requirement pertaining to potential hazardous substances, noise or air quality impacts on a particular tax lot. An E-Designation may require special activities coordinated through the New York City Office of Environmental Remediation to be performed on a particular lot, including subsurface investigations, preparation of remedial action work plans, health and safety plans and others.

The subject property is not identified in the E-Designation Site Listing. There is one E-Designation sites identified within 1/8 mile of the subject property (see Attachment C). There are not any NYSDEC-reported spill incidents at this location.

Radon

Radon, a naturally occurring radioactive gas, is the product of the decay of radium. It is found most frequently in relatively high concentrations in rock formations containing uranium, granite, shale, phosphate, and pitchblende. Radon may also be found in soils contaminated with industrial waste from uranium and phosphate mining. Radon as a gas can move through the soil and water, and into the atmosphere, and is a potential health concern if confined in sufficiently high concentrations in indoor environments.

The U.S. Environmental Protection Agency (USEPA) has set an "action level" of 4.0 picocuries per liter for continuous long-term exposure to radon gas. If radon gas is measured above this level, USEPA suggests follow-up testing and remediation measures.

According to data compiled by the Bureau of Radiation Protection, New York State Department of Health, Queens County has an average basement radon concentration of 1.24 picocuries per liter. Based on these low average levels for Queens County, it is unlikely that radon gas levels at the subject property exceed the USEPA action level of 4.0 picocuries per liter, and therefore radon testing is typically not recommended.

D. SCOPE OF WORK

Historical site research is important in the assessment of the likelihood of past releases of hazardous substances (which include petroleum products). Sources of historical information for the subject property include:

- Local library documents (historical, maps, atlases, address directories).
- Interviews with site contacts, current site operators, and site owners.
- USGS topographic maps, land use and zoning maps, flood plain maps.
- New York City Buildings Department for building history including construction, demolition, and alteration permits.

The following regulatory agency lists and databases of documented hazardous waste sites, waste handlers, and spills are checked for the vicinity of the subject property:

- U.S. Environmental Protection Agency for Superfund and SEMS sites, ERNS database, CORRACTS facilities, RCRA Hazardous Waste Generators and Treatment/Storage/ Disposal Facilities (TSDF), and others.

- New York State Department of Environmental Conservation for spill logs, Inactive Hazardous Waste Disposal Sites, Brownfield Cleanup Program Sites, Voluntary Cleanup Program sites, registered tank lists, Solid Waste Facilities, and others.

The site visit involves a review of current operations, interviews with knowledgeable on-site occupants or building managers, and inspection of accessible areas of the building and inspection of the property for visible indications of any significant contamination by toxic or hazardous substances. The investigation includes the following objectives:

- To identify sources of potential on-site contamination, such as underground storage tanks, dry wells, interior floor drains, transformers (which may contain PCBs), suspected asbestos-containing materials, and suspected lead-based paints, etc.
- To examine the property for signs of potential contamination: stained soils, unusual odors, stressed or dead vegetation, improperly stored drums, oil slicks, on-site waste disposal/dumping, etc.
- To identify the quantity and type of toxic or hazardous substances (if any) used in the on-site operations.
- To determine if any on-site toxic and hazardous substances are stored, handled and disposed of in accordance with good practice, minimizing the potential for contamination.
- To identify potential off-site sources of contamination. Adjacent uses are noted, particularly auto-related and industrial sites.
- To identify on-site or adjacent off-site sensitive receptors, such as wetlands, surface waters, drinking water wells.

Not all of the objectives described above are applied to every site; investigations are tailored to the particular nature of the site. It should be noted that information requested from regulatory agencies may be incomplete or unavailable within a reasonable time period.

E. QUALIFICATIONS

Environmental Studies Corp. is an environmental consulting firm that has undertaken environmental site assessment studies since 1987. These site evaluation studies have been prepared for major lenders, public corporations, businesses, and governmental agencies.

Individual qualifications of personnel, including specific credentials of persons involved in the preparation of this report, can be provided upon request.

F. DISCLAIMER

This report is for use by the CG Stone Realty, LLC, and is only to be used as a guide in determining the potential for contamination by toxic or hazardous substances on the subject property at the time of the site visit. This Phase I Environmental (ESA) is based principally on the review of historic and regulatory records (made available within a reasonable time period), relating to past occupants and usage of the subject property, as well as activities at nearby sites, and upon a visual assessment of the subject property, and makes no determinations with respect to portions of the subject property and its structures which were not inspected.

This Phase I ESA does not involve any sampling, testing, or laboratory analysis of subsurface soils, groundwater or building materials or other substances on-site, but constitutes only the professional opinion of our staff based on established procedures and protocols. This Phase I ESA is not, and should not be construed as, a guaranty, warranty, or certification of the presence or absence of toxic or hazardous substances, which can be made only with testing, and contains no formal plans or recommendations to rectify or remediate the presence of any toxic or hazardous substances, which may be subject to regulatory approval.

Any and all liability shall be limited solely to the cost of this Environmental Site Assessment report. Environmental Studies Corp., shall have no liability for any other damages, whether consequential, compensatory, punitive, or special, arising out of incidental to, or as a result of, this assessment. We assume no liability for the use of this report by any person or entity other than the institution and/or entities or persons for whom it has been prepared.