ENVIRONMENTAL ASSESSMENT STATEMENT

102-51 Queens Boulevard Rezoning EAS

CEQR No. 24DCP107Q

Applicant:
QBM Properties LLC

Lead Agency:
New York City Department of City Planning

Prepared by:
Philip Habib & Associates

29 January 2023

102-51 Queens Boulevard Rezoning EAS

Environmental Assessment Statement (EAS)

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ENVIRONMENTAL ASSESSMENT STATEMENT SHORT FORM

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* 102-51 Queens Boulevard Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
24DCP107Q	
ULURP REFERENCE NUMBER (if applicable) 240250ZMQ N240251ZRQ	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY: New York City Department of City Planning			NAME OF APPLICANT: QBM Properties LLC		
NAME OF LEAD AGENCY CONTACT PERSON: Stephanie Shellooe, AICP, Director, Environmental Assessment and Review Division			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON: Michael Abramov		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 215-15 Northern Boulevard, Suite 301		
CITY New York	STATE NY	ZIP 10271	CITY Bayside	STATE NY	ZIP 11361
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 718-631-0800	EMAIL michael@rjcapny.com	

5. *Project Description*

The Applicant, QBM Properties LLC, is proposing to rezone the western-most portion of Block 2137 (the "Project Area") from R7-1/C1-2 to R8X/C2-4, remove the existing C1-2 overlay, and establish it as an MIH area (the "Proposed Actions"). The Rezoning Area encompasses the western portion of Block 2137, Lots 1, 6, 8, and 11 (Applicant-owned; the "Development Site") and portions of Lots 13 and 46. The Proposed Actions would facilitate the development of 17-story (175-feet-tall), approximately 247,096-gsf mixed-use building, consisting of approximately 184,118-gsf of residential uses (216 dwelling units [DUs], of which 54 units would be affordable pursuant to MIH Option 1), approximately 19,807-gsf of local retail uses, and approximately 87 parking spaces located on the ground and second floors of the building (the "Proposed Development").

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 6	STREET ADDRESS 102-51 Queens Boulevard
TAX BLOCK(S) AND LOT(S) Block 2137, Lots 1, 6, 8, 11, p/o 13 and 46		ZIP CODE 11375

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS 68th Avenue to the north, Yellowstone Boulevard to the east, 68th Road to the south, and Queens Boulevard to the west

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R7-1/C1-2	ZONING SECTIONAL MAP NUMBER 14a

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.): 31,642

Roads, buildings, and other paved surfaces (sq. ft.): 31,642

Waterbody area (sq. ft) and type: 0

Other, describe (sq. ft.): 0

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): 247,096

NUMBER OF BUILDINGS: 1

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 247,096

HEIGHT OF EACH BUILDING (ft.): 175

NUMBER OF STORIES OF EACH BUILDING: 17

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: approximately 25,590

The total square feet not owned or controlled by the applicant: approximately 6,052

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: ~14,750 sq. ft. (width x length)

VOLUME OF DISTURBANCE: 177,000 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: ~14,750 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.)	184,118 gsf	19,807 gsf	0	0
Type (*e.g.,* retail, office, school)	217 units	Local Retail	N/A	N/A

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

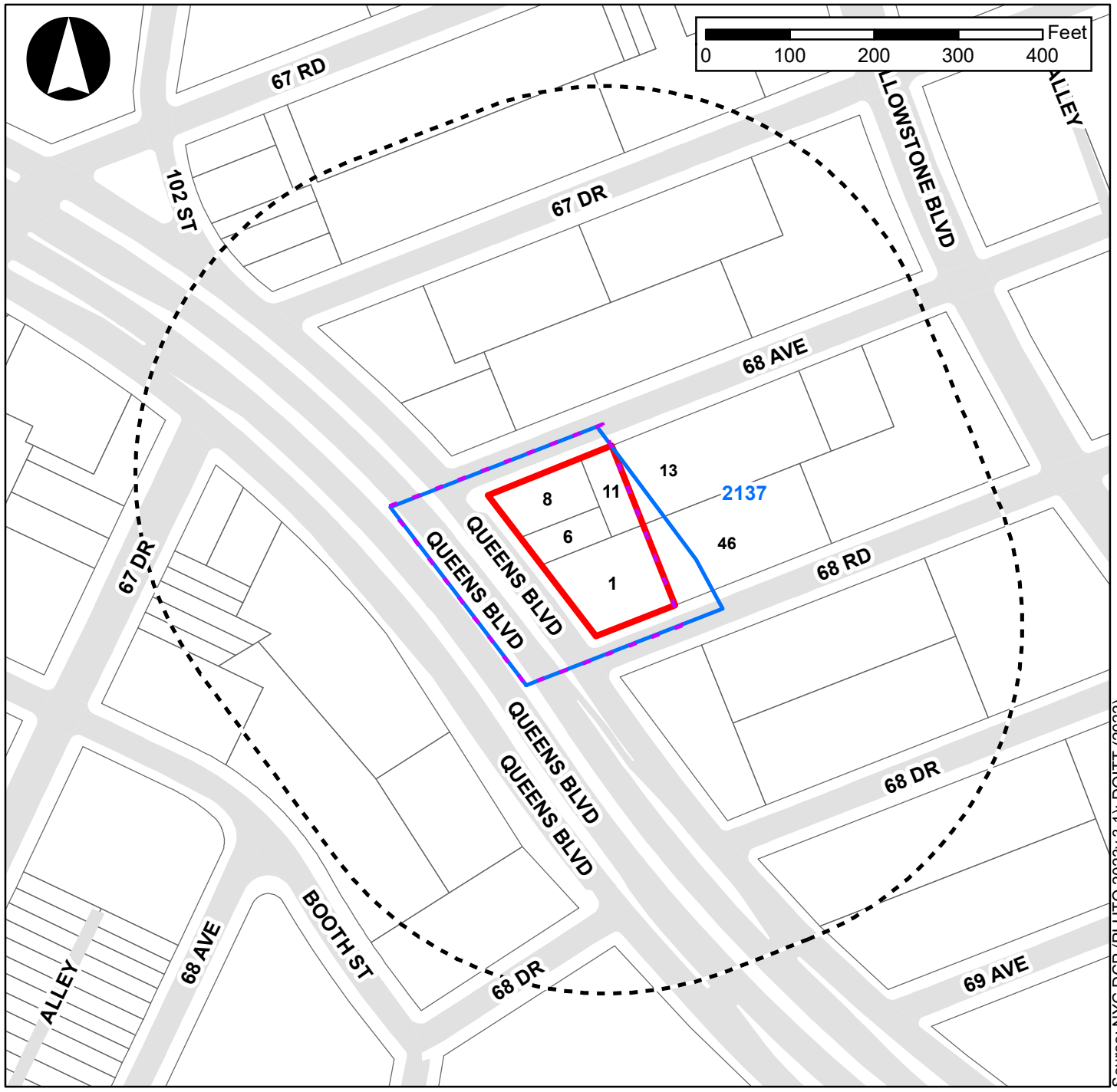
If "yes," please specify:

NUMBER OF ADDITIONAL RESIDENTS: 243

NUMBER OF ADDITIONAL WORKERS: 0 (no net incremental change from NA)

Provide a brief explanation of how these numbers were determined: Residential population based on the average household size in Queens Community District 6 (2.25 persons per household) per the 2020 Decennial Census. Estimate of workers based on standard rates of: 1 employee per 25 DU, 3 employees per 1,000 sf (commercial retail), and 1 employee per 50 spaces.

Figure 1
Project Location

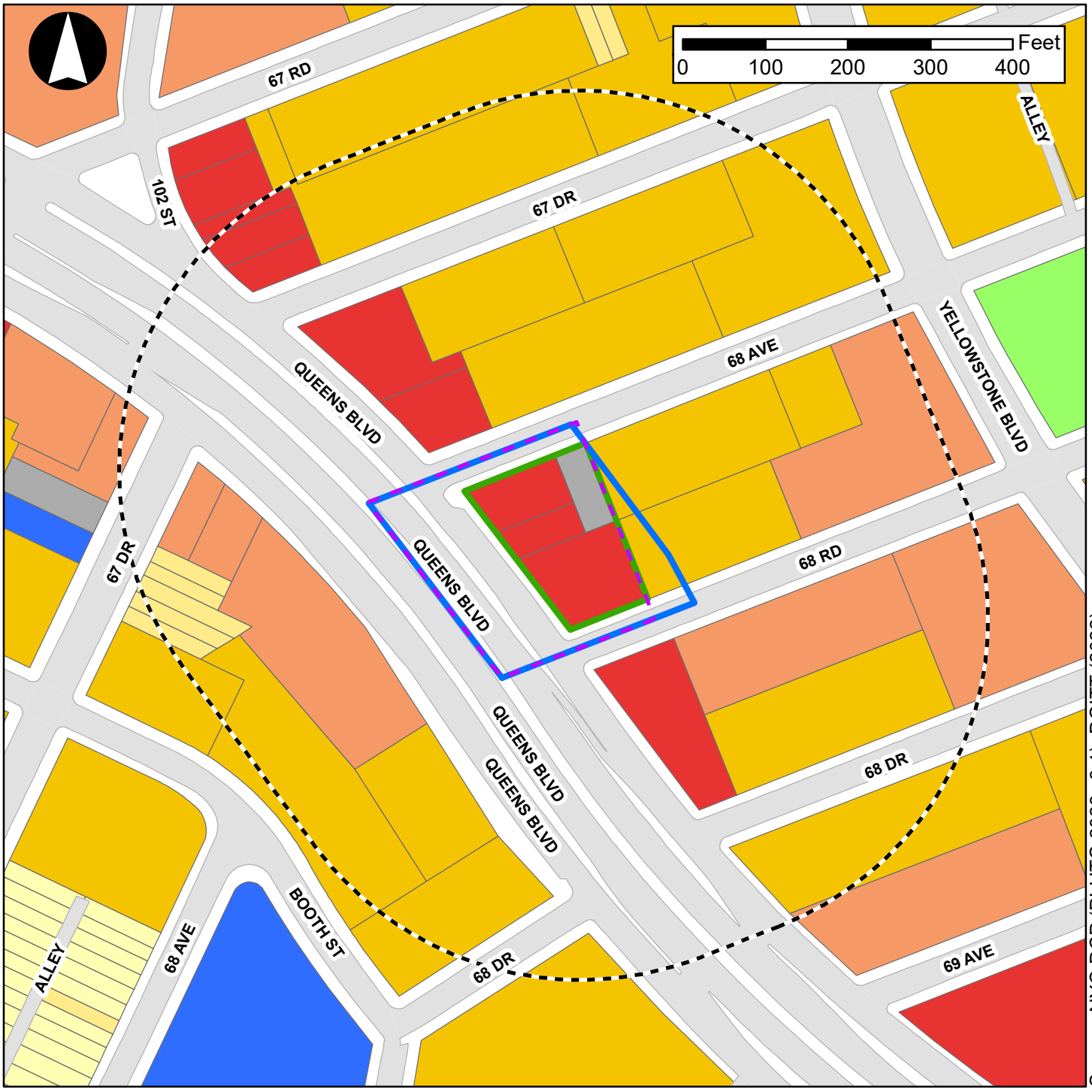


Legend

- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- 400-Foot Radius
- 2137 Blocks
- 1 Lots



Figure 2
Land Use



Source: NYC DCP (PLUTO 2023v.3.1); DOITT (2022)

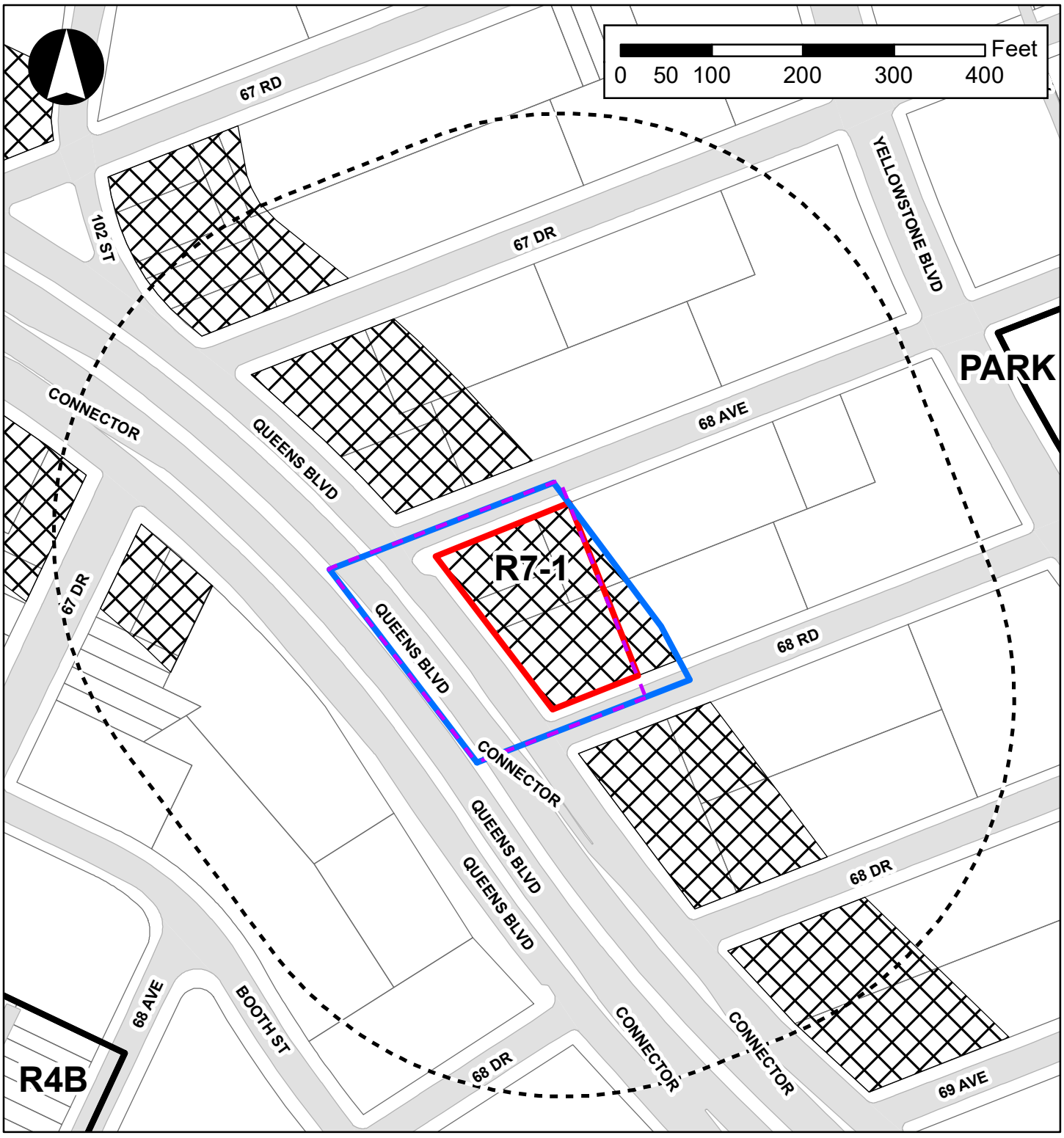
Legend

- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- 400-Foot Radius

Land Use

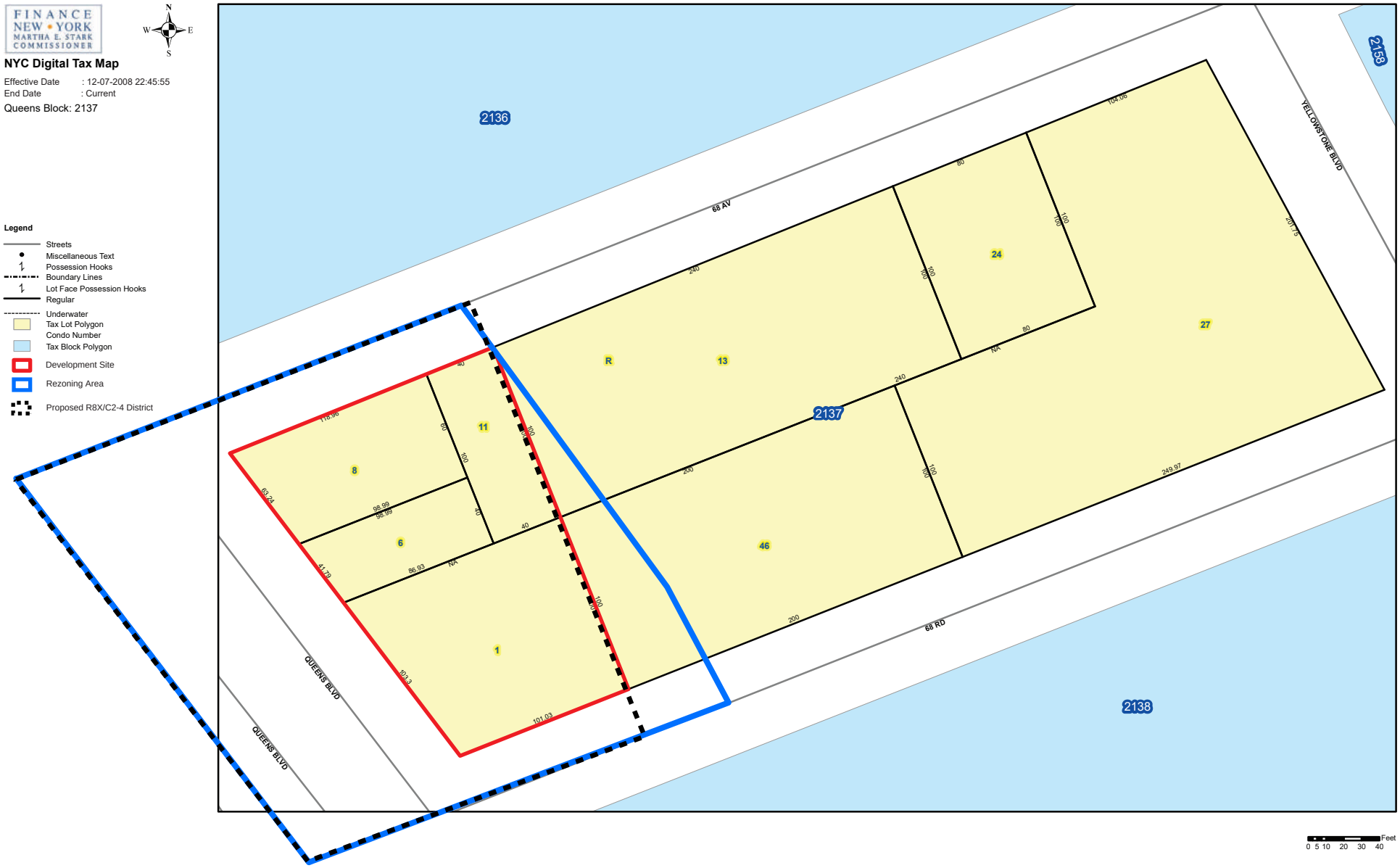
- One & Two Family Buildings
- Multi-family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

Figure 3
Zoning



Legend

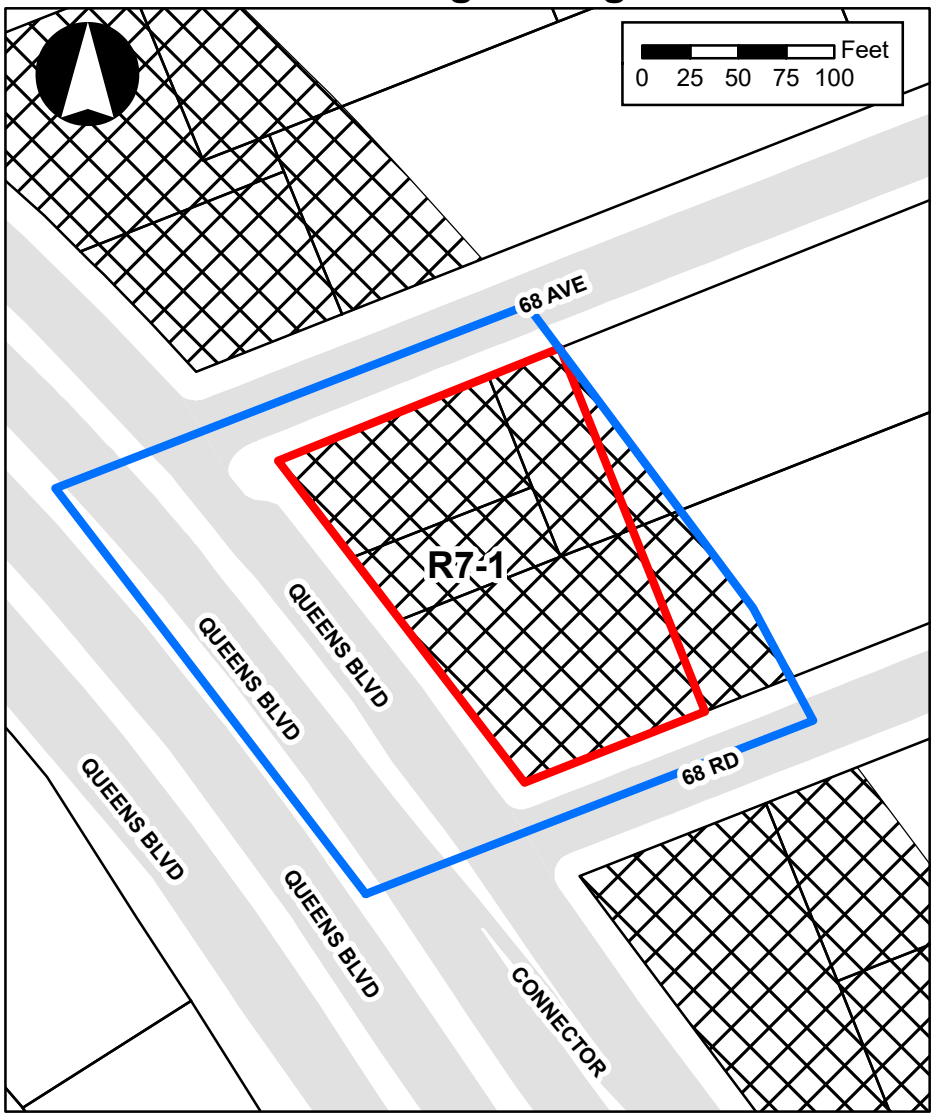
- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- 400-Foot Radius
- Existing Zoning Districts
- C1-2 Overlay



102-51 Queens Boulevard Rezoning EAS

Figure 4
Tax Map

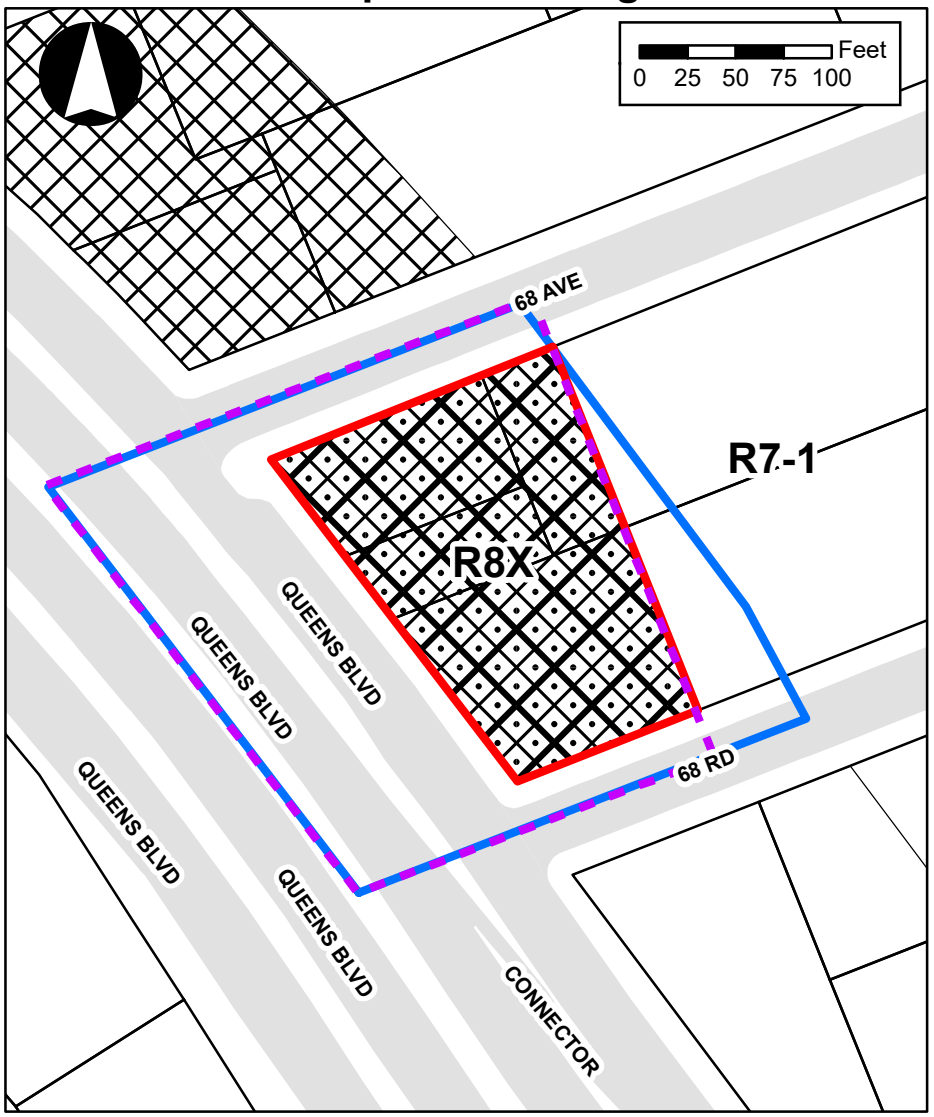
Existing Zoning



Legend

- Rezoning Area
- Development Site
- C1-2 Commercial Overlay

Proposed Zoning



Legend

- Rezoning Area
- Development Site
- Proposed C2-4 Commercial Overlay
- Proposed R8X C2-4 District

Figure 5
Existing and Proposed Zoning



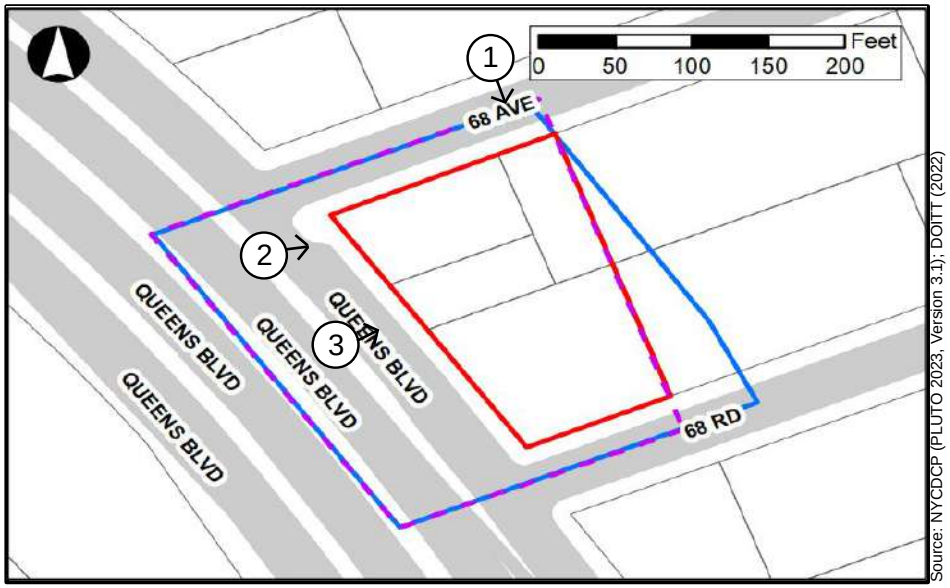
1. Looking southeast towards the Development Site from the midblock of 68th Avenue between Queens Boulevard and Yellowstone Boulevard.



2. Looking east towards the Development Site at the intersection of Queens Boulevard and 68th Avenue.



3. Looking east towards the Development Site from Queens Boulevard between 68th Avenue and 68th Street.



Rezoning Area Development Site Proposed R8X/C2-4 District

Photos taken on 8/17/23



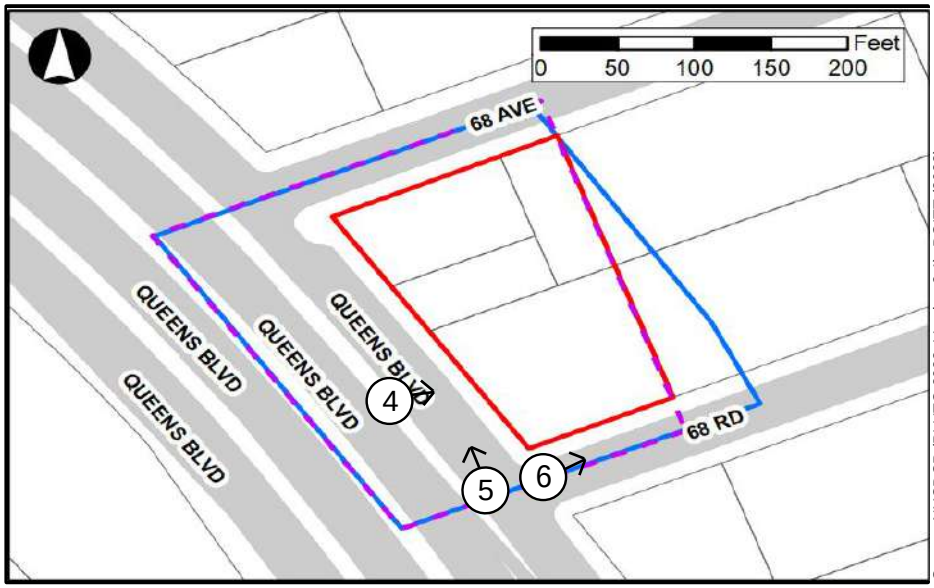
4. Looking northeast towards the Development Site at the intersection of 68th Road and Queens Boulevard.



5. Looking north along Queens Boulevard, with Development Site to the right, from the intersection of Queens Boulevard and 68th Road.



6. Looking east along 68th Road, with Development Site on the left, from the intersection of Queens Boulevard and 68th Road.



Photos taken on 8/17/23

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: Absent the Proposed Actions (the "No-Action condition"), the Applicant would develop the Development Site pursuant to the existing R7-1/C1-2 zoning district. The No-Action development would be an eight-story (85-foot-tall), approximately 158,298-gsf mixed commercial/residential building, comprising approximately 92,763-gsf of residential space (109 DUs) and approximately 20,961-gsf of commercial retail space. There would also be an approximately 44,574-gsf accessory parking garage with 128 spaces.
9. *Analysis Year* CEQR Technical Manual Chapter 2
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2026
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 23 months
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY?
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: Refer to Attachment B, "Supplemental Screening"
10. *Predominant Land Use in the Vicinity of the Project* (check all that apply) ☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☐ OTHER, specify:

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. **Attachment C, "Land Use, Zoning, and Public Policy"**		
(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. **Refer to Appendix I for LPC Determination.**		
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? **See Attachment B, "Supplemental Screening"**	☐	☒
(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: **Refer to Attachment B, "Supplemental Screening"**	☒	☐
(j) Based on the Phase I Assessment, is a Phase II Investigation needed? **Refer to Attachment B, "Supplemental Screening"**	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day? **(488 x 100 gpd/person [residential]) + (19,807 sf x 0.24 gpd/sf [retail domestic]) + (19,807 sf x 0.17 gpd/sf [retail A/C]) = 56,921 gpd**	☐	☒
(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?	☐	☒

	YES	NO
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): **(217 DUs x 41 pounds per week) + (66 retail employees x 79 pounds per week*) = 14,111 pounds per week**		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): **(184,118 gsf residential x 126.7 MBtu/sf [the source energy for the large residential building type]) + (19,807 gsf x 216.3 MBtu/sf [the source energy for commercial building type]) = 27,612,005 MBtu or 27,612,004,700 BTU**		
(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?	☒	☐

	YES	NO
(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; 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. **The Proposed Actions are not expected to result in any significant adverse impacts in any of the technical areas related to public health, including air quality, hazardous materials, or noise. Therefore, the Proposed Actions would not result in a significant adverse impact to public health, and further analysis is not warranted.**		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. **The Proposed Actions are not expected to result in any significant adverse impacts in any of the technical areas related to neighborhood character, including land use, zoning, and public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise. Therefore, the Proposed Actions would not result in a significant adverse impact to neighborhood character, and further analysis is not warranted.**		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☒	☐
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. **Refer to Attachment B, "Supplemental Screening"**		

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
Philip Habib, P.E	1/29/24
SIGNATURE	

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

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

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

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

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

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

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

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

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

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

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

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

TITLE	LEAD AGENCY
NAME	DATE
SIGNATURE	

NEGATIVE DECLARATION (Use of this form is optional)

Statement of No Significant Effect

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

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds that the proposed project:

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA).

TITLE	LEAD AGENCY
NAME	DATE
SIGNATURE	

ATTACHMENT A:
PROJECT DESCRIPTION

I. INTRODUCTION

The Applicant, QBM Properties LLC, is seeking zoning map and zoning text amendments (the "Proposed Actions") that would affect the western-most portion of Queens Block 2137, including Lots 1, 6, 8, 11, 13 (p/o), and 46 (p/o), coterminous with the existing R7-1/C1-2 zoning district mapped on the east side of Queens Boulevard between 68th Avenue and 68th Road (the "Rezoning Area"). The Proposed Actions would facilitate the development of a 17-story (175-feet tall, not including the mechanical bulkhead which will rise an additional 20 feet) approximately 247,096-gsf mixed-use residential and commercial building at 102-51 Queens Boulevard (Queens Block 2137, Lots 1, 6, 8, and 11; the "Development Site") in the Forest Hills neighborhood of Queens Community District (CD) 6. The proposed zoning district boundary would be perpendicular to 68th Road to a depth of 100 feet from the intersection of Queens Boulevard and 68th Road, which would be rezoned from R7-1/C1-2 to R8X/C2-4. The Proposed Actions would also establish a Mandatory Inclusionary Housing (MIH) area coterminous with the proposed R8X/C2-4 zoning district. Furthermore, the proposed zoning changes would also eliminate the existing C1-2 overlay mapped beyond the 100 feet from Queens Boulevard.

Approval of the Proposed Actions would allow the Applicant to build a new approximately 247,096-gsf (184,042-zoning-square-feet [zsf]) mixed-use residential and commercial building with a floor area ratio (FAR) of 7.2 on the Development Site. It would consist of approximately 184,118-gsf of residential uses (216 total dwelling units [DUs], including 54 income-restricted DUs pursuant to MIH Option 1, and 19,807-gsf of local retail uses (the "Proposed Development"). There would also be an accessory parking garage for residential uses, with approximately 87 spaces.

This attachment provides a summary and description of the Proposed Actions, including the Rezoning Area and Development Site, existing conditions, project's purpose and need, the analysis framework and Reasonable Worst Case Development Scenario (RWCDS), and the governmental approvals required. The attached supplemental studies examine the potential for the Proposed Actions to result in impacts in any City Environmental Quality Review (CEQR) technical areas, including separate attachments with analyses of land use, zoning, and public policy, open space, shadows, urban design and visual resources, hazardous materials, and noise, in **Attachments C** through **H**, respectively. All other warranted preliminary screening assessments are summarized in **Attachment B, "Supplemental Screening."**

II. BACKGROUND AND EXISTING CONDITIONS

Background

The Rezoning Area was zoned R7-1/C1-2 pursuant to the 1961 Zoning Resolution and has remained as an R7-1/C1-2 district ever since. Available historic certificate of occupancy ("C of O") records show that the Development Site (Block 2137, Lots 1, 6, 8, and 11) has always been occupied with commercial uses and Lots 13 and 46 have always been occupied with residential uses. Lot 1 was constructed as a commercial building in 1942 and was altered in 1997 and 2010. Lot 6 was constructed as a commercial building in 1941 and Lot 8 was constructed as a commercial building in 1949 and altered in 2002. No historic property

records are available for Lot 11; however, it may have always been a parking lot for the adjacent Lot 8. No other changes have occurred on these lots since at least 2010. Lot 13 and 46 were constructed as multi-family apartment buildings in 1949 and 1954, respectively.

There are no E-Designations or CEQR related restrictive declarations on the Project Area.

Existing Conditions

Rezoning Area

The directly affected area (or "Rezoning Area") is coterminous with the existing R7-1/C1-2 zoning district and comprises the western-most portion of a singular, irregular-shaped block in Central Queens located on the east side of Queens Boulevard between 68th Avenue and 68th Road (see **Figure 1** in the **Environmental Assessment Statement (EAS) Short Form**). It includes approximately 30,000 sf, consisting of portions of six privately-owned tax lots on Block 2137, including Lots 1, 6, 8, 11, 13 (p/o), and 46 (p/o), which comprise the block bound by 68th Avenue to the north, Yellowstone Boulevard to the east, 68th Road to the south, and Queens Boulevard to the west.

The Rezoning Area is currently mapped within an R7-1 residential zoning district with a C1-2 commercial overlay. R7-1 is a medium-density residential zoning district. Under the Quality Housing program, R7-1 zoning districts permit a base maximum FAR of 3.44 (4.0 along a wide street) for residential uses and a base maximum FAR of 4.8 for community facility uses. Under Height Factor regulations, the R7-1 district permits a maximum FAR of 3.44 for residential uses and a maximum FAR of 4.8 for community facility uses with no height limits. Off-street parking is generally required for 60 percent of a building's dwelling units but can be reduced to 15 percent if the building provides income-restricted housing units (IRHUs) or waived if 5 or fewer parking spaces are required.

The Rezoning Area is also mapped with a C1-2 commercial overlay. C1 commercial overlays are mapped within residential districts across the City, mainly in low- and medium-density neighborhoods. Typical uses in C1 commercial overlays include local retail uses such as grocery stores, dry cleaners, restaurants, and local clothing stores. When mapped over R7 zoning districts, the permitted commercial FAR is 2.0. The C1-2 commercial overlay is mapped at a depth of approximately 150 east from Queens Boulevard. The Rezoning Area is not mapped within any special purpose district.

The Rezoning Area has approximately 208 feet of frontage along Queens Boulevard, approximately 150 feet of frontage along 68th Road, and approximately 155 feet of frontage along 68th Avenue. Queens Boulevard is classified as a "wide" street with over 200 feet of width while 68th Avenue and 68th Road are "narrow" streets with 60 feet in width. Queens Boulevard is a principal arterial thoroughfare traveling east-west through Queens with six moving lanes, two service roads, two conventional bike lanes, and curbside parking on both curbs. 68th Avenue has one westbound moving lane with parking on both curbs and 68th Road has one eastbound moving lane with parking on both curbs.

The Development Site (Block 2137, Lots 1, 6, 8, and 11)

The Applicant's Development Site is an irregular-shaped parcel with a total lot area of approximately 25,590-sf. The Development Site is currently occupied by three single-story commercial buildings containing various local retail uses. Lot 1 is an 11,348-square-foot (sf) corner lot with approximately 103 feet of frontage along Queens Boulevard and approximately 101 feet of frontage along 68th Road. Lot 1 is

currently improved with a one-story, 19,100 gross-square-foot (gsf) commercial building containing five restaurants. Lot 6 is a 3,715-sf interior lot with approximately 42 feet of frontage along Queens Boulevard, and is currently improved with a one-story, 3,680-gsf commercial building containing a restaurant. Lot 8 is a 6,527-sf corner lot with approximately 63 feet of frontage along Queens Boulevard and approximately 119 feet of frontage along 68th Avenue. Lot 8 is improved with a one-story, 5,770-gsf commercial building containing a bank and an urgent care facility. Lot 11 is a 4,000-sf interior lot with approximately 40 feet of frontage along 68th Avenue. Lot 11 currently functions as an approximately 10-space parking lot for employees of the bank on adjacent Lot 8.

Remainder of the Rezoning Area

There are two remaining lots (Lots 13 and 46) at 103-26 68th Avenue and at 103-19 68th Road which are partially included in the Rezoning Area and are not under the control of the Applicant. Lot 13 includes 24,000 sf of lot area and contains a six-story, approximately 72,223 sf elevator apartment building with 86 DUs. Lot 46 includes 20,000 sf of lot area and is improved with a six-story, 71,000 gsf elevator apartment building with 81 DUs. Only small portions of these lots are included in the Rezoning Area, with approximately 1,220 sf of Lot 13 (five percent) and approximately 4,060 sf of Lot 46 (20 percent) mapped within the C1-2 commercial overlay along Queens Boulevard. These lots are not expected to materially change as a result of the Proposed Actions.

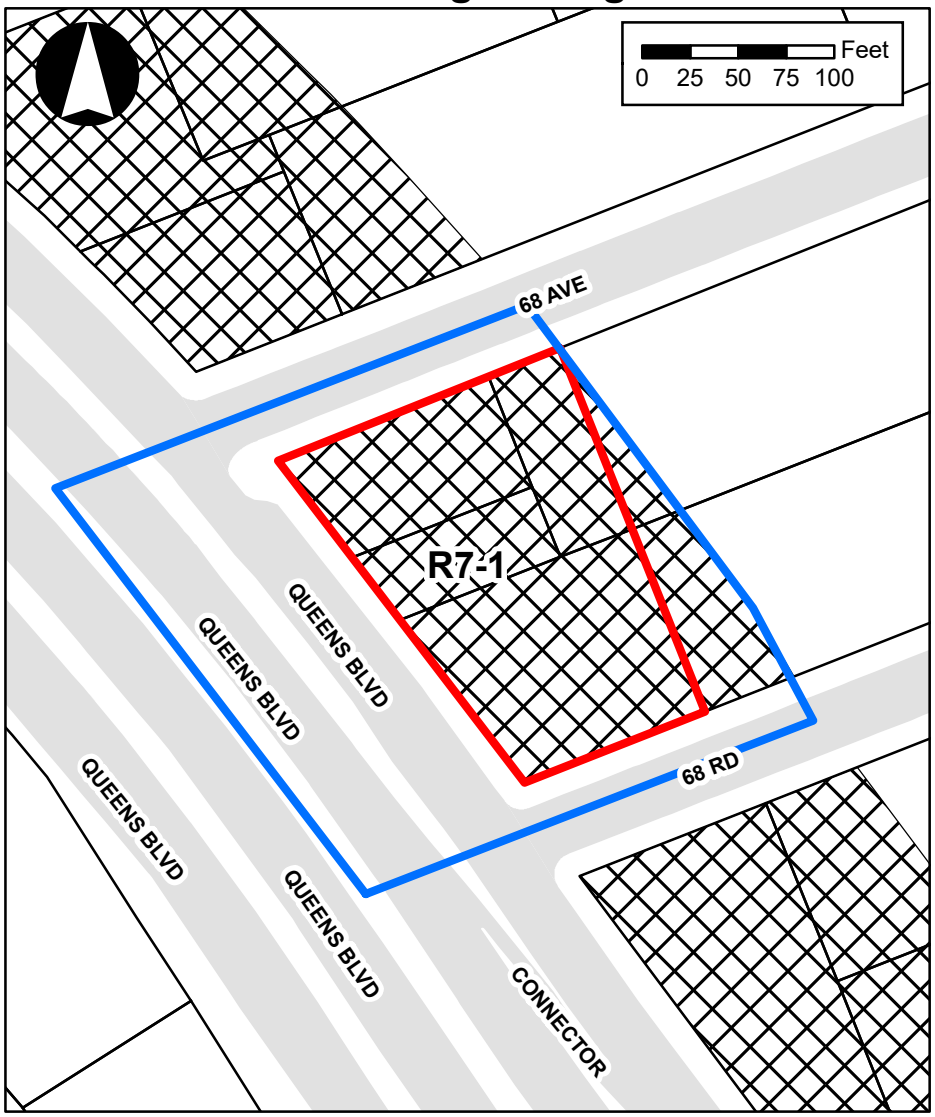
III. THE PROPOSED ACTIONS

The Applicant's Proposed Development for 102-51 Queens Boulevard requires the following discretionary land use actions:

- ***Zoning Map Amendment*:** The Applicant is proposing a zoning map amendment to rezone an approximately 30,000-sf portion of Queens Block 2137, which includes Lots 1, 6, 8, 11, 13 (p/o), and 46 (p/o), coterminous to the existing R7-1/C1-2 zoning district mapped on the east side of Queens Boulevard between 68th Avenue and 68th Road. The proposed zoning change would establish an R8X/C2-4 district that would extend along the western portion of Block 2137. As shown in **Figure A-1**, the proposed R8X/C2-4 district which would be perpendicular to 68th Road to a depth of 100 feet from the intersection of Queens Boulevard and 68th Road. The proposed zoning change would also eliminate the existing C1-2 overlay mapped beyond the 100 feet from Queens Boulevard (this area would continue to be zoned R7-1). **Table A-1** compares the use and bulk requirements under the existing and proposed zoning districts. The proposed R8X/C2-4 district permits a maximum building height of 175 feet with a qualifying ground floor and requires accessory parking.

- ***Zoning Text Amendment:*** The Applicant is proposing a zoning text amendment to Appendix F of the *Zoning Resolution of the City of New York* (ZR) to establish the Rezoning Area as an MIH designated area. The establishment of the MIH designated area would require a share of new housing to be permanently affordable where significant new housing capacity would be created. The MIH program includes two primary options for set-aside percentages with different affordability levels. Option 1 requires that 25 percent of residential floor area be affordable for residents with incomes averaging 60 percent AMI (with 10 percent of the floor area affordable at 40 percent AMI), and Option 2 requires that 30 percent of residential floor area be affordable for residents with incomes averaging 80 percent of the income index. In combination with these

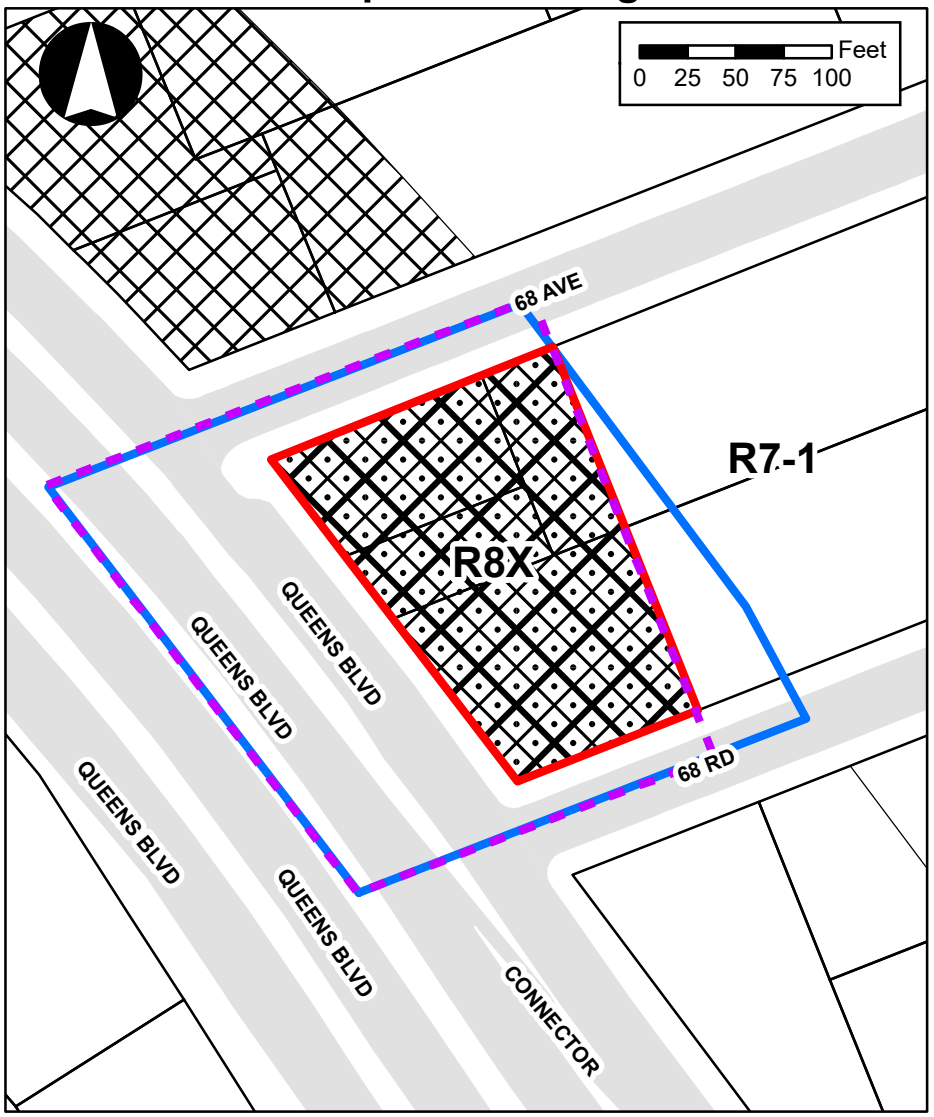
Existing Zoning



Legend

- Rezoning Area
- Development Site
- C1-2 Commercial Overlay

Proposed Zoning



Legend

- Rezoning Area
- Development Site
- Proposed C2-4 Commercial Overlay
- Proposed R8X C2-4 District

Figure A-1
Existing and Proposed Zoning

options, two other options may be made available. A "Deep Affordability Option" may be utilized under which 20 percent of residential floor area must be affordable housing units affordable to households with incomes at a weighted average of 40 percent of the income index. Also, a "Workforce Option" may be utilized provided that 30 percent of residential floor area contains housing units affordable to households with incomes at a weighted average of 115 percent, with five percent of residential floor area comprising units affordable to households at incomes of 70 percent of the income index and another five percent of residential floor area affordable to households at an income band of 90 percent of the income index. At this time, the Applicant is seeking to designate the Rezoning Area as an MIH designated area with MIH Option 1.

Table A-1: Comparison of Allowable Uses and Maximum FAR for the Existing and Proposed Zoning

	Existing Zoning	Proposed Zoning
Zoning District	**R7-1/C1-2**	**R8X/C2-4**
Use Groups	UG 1 to 6	UG 1 to 9, 14
Maximum FAR		
Residential	3.44 (HF/QH along narrow streets), 4.0 (QH along wide streets), 4.6 (QH with MIH)	7.2 with MIH
Community Facility	4.8	6.0
Commercial	2.0	2.0
Manufacturing	N/A	N/A

Source: *Zoning Resolution of the City of New York.*
Notes: HF = Height Factor; QH = Quality Housing.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The Proposed Actions are necessary to facilitate the development of new housing, including affordable housing, in an area where there is a strong demand and need for additional housing. The Development Site is currently underdeveloped with one-story commercial buildings and a parking lot. The current R7-1/C1-2 zoning has a maximum FAR of 4.0 (along wide streets), however the existing total FAR of the Development Site is well below the permitted maximum bulk with a range from 0.0 to 0.99. In addition, the current zoning permits a limited range of commercial uses (Use Groups 5 and 6) with a high accessory parking requirement, given immediate access to transit. Moreover, the current R7-1/C1-2 zoning district has no maximum height limit and does not require any income-restricted dwelling units. As such, the existing zoning does not encourage new mixed-use developments to facilitate the most productive use of the Development Site. Given the above, a new zoning district is sought under MIH.

The proposed R8X/C2-4 zoning would permit a wider range of commercial uses (Use Groups 5 to 9), given the mixed-use arterial nature of Queens Boulevard. Furthermore, the parking requirements for mixed-use developments would be reduced to reflect immediate transit access. Currently, accessory parking is required for 60% of DUs under Height Factor regulations and 50% under Quality Housing regulations. For commercial uses, 1 space is required per 300-sf for commercial use, for an area that is well served by public transit and located within the Transit Zone. The Rezoning Area and Development Site are located approximately 400 feet southeast of the 67th Avenue Station, which serves the E/F/M/R subway lines. The Development Site is also served by the local Q60 (connecting Queens Boulevard to East Midtown), express QM11 (connecting Forest Hills to Downtown Manhattan), and express QM18 (connecting South Ozone

Park and Midtown Express). To the northwest of the Rezoning Area, over 20 local and express bus lines converge at the Queens Center Mall, located near Queens Boulevard and Woodhaven Boulevard.

The current zoning district does not require income-restricted dwelling units. The proposed zoning text amendment would establish an MIH designated area, which would require residential development in the future with the Proposed Actions to include permanently affordable housing units. The proposed zoning text amendment to map an MIH designated area would ensure affordability on the Development Site in perpetuity. The Development Site is expected to introduce approximately 216 total DUs, including approximately 54 income-restricted DUs pursuant to MIH Option 1 (25% of DUs at 60% AMI), as well as approximately 19,807-gsf of local retail uses. The proposed zoning map and text changes would be aligned with one of Community Board 6's statements of need for more affordable housing.

The current R7-1 zoning district permits Height Factor buildings, with no maximum building height pursuant to the Sky Exposure Plane. The proposed R8X zoning district would cap buildings at a maximum of 17-stories and a maximum building height of 170-feet (or 175-feet with Quality Housing), which would be consistent with surrounding larger developments that rise to over 160 feet. The increased density is also appropriate for the Development Site as it fronts Queens Boulevard, a major arterial. The Proposed Actions would serve to update a zoning district that has remained unchanged since the inception of the 1961 Zoning Resolution, allowing the Development Site to utilize contextual zoning provisions, reduced accessory parking requirements, and the mandatory provision of affordable housing units. The Proposed Actions would create the opportunity for new development of housing, including affordable housing, in a transit-accessible area near commercial corridors.

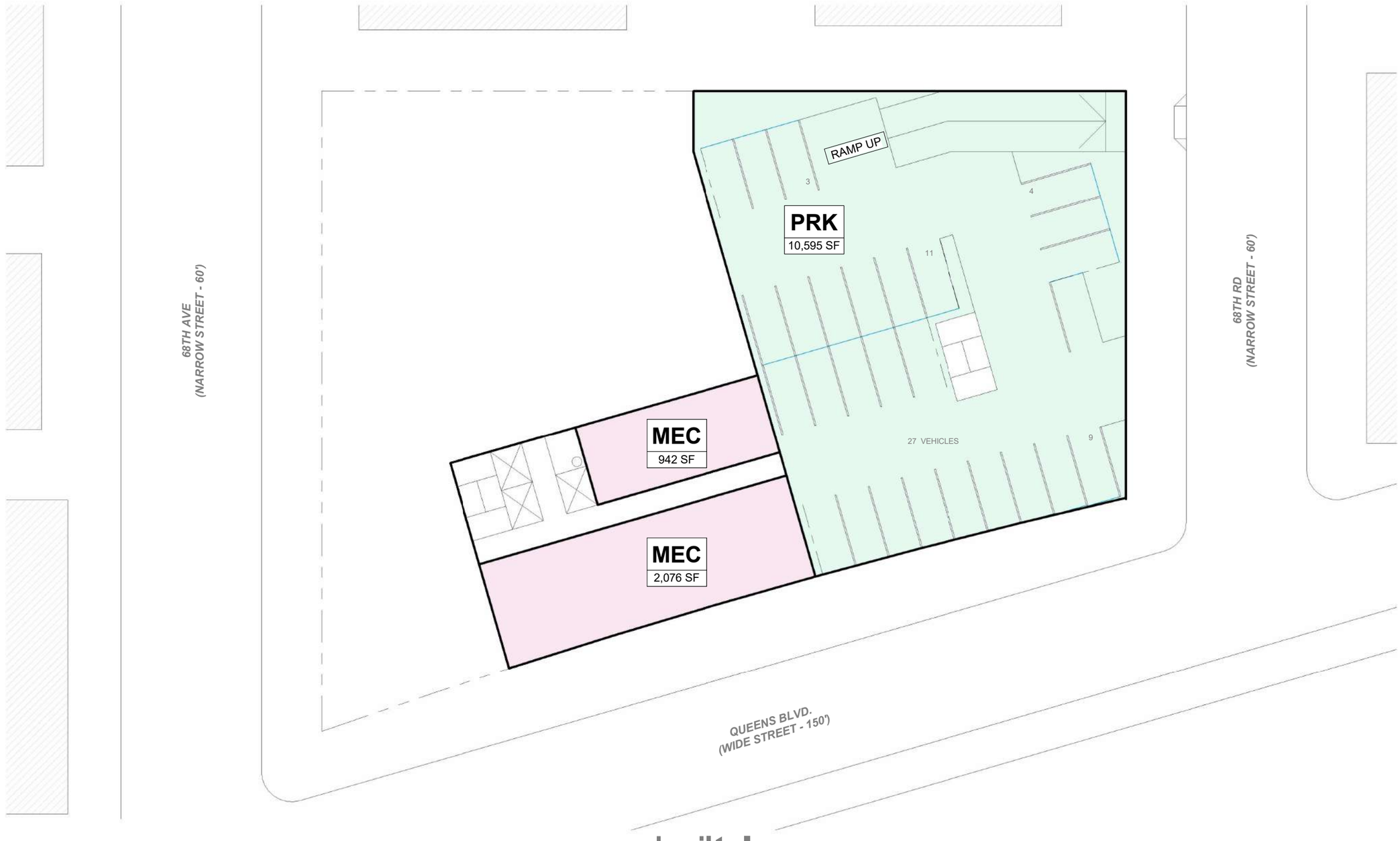
V. APPLICANT'S PROPOSED DEVELOPMENT

As described above, the Applicant is seeking to develop the Development Site (Block 2137, Lots 1, 6, 8, and 11) located at 102-51 Queens Boulevard with a new 17-story (175-foot-tall), approximately 247,096-gsf mixed-use residential and commercial building. The Proposed Development would have a FAR of 7.2, which would be the maximum permitted FAR in the proposed R8X/C2-4 district. The Proposed Development would consist of approximately 184,118-gsf of residential uses, totaling 216 DUs, including approximately 54 income-restricted DUs pursuant to MIH Option 1 (25% of DUs at 60% AMI), and approximately 19,807-gsf of local retail uses. There would also be an accessory parking garage for residential uses, with approximately 87 spaces, located within the basement and on the second floor (refer to **Figures A-2a** and **A-2c**). As shown in **Figure A-2b**, the development would have a main lobby for residential and commercial uses located along Queens Boulevard. Though commercial uses would occupy most of the ground floor, there would be an approximately 3,550-sf parking garage ramp, which would lead to the second floor parking garage, occupying a small portion of the ground floor. **Figures A-2d** and **A-2e** represent the typical floor configuration of the base and tower portions of the building, respectively.

VI. ANALYSIS FRAMEWORK

Analysis Year

It is anticipated that the Proposed Actions would be approved in late 2024. Assuming completion of the ULURP process by late 2024, and a period of approximately 23 months of construction, completion and

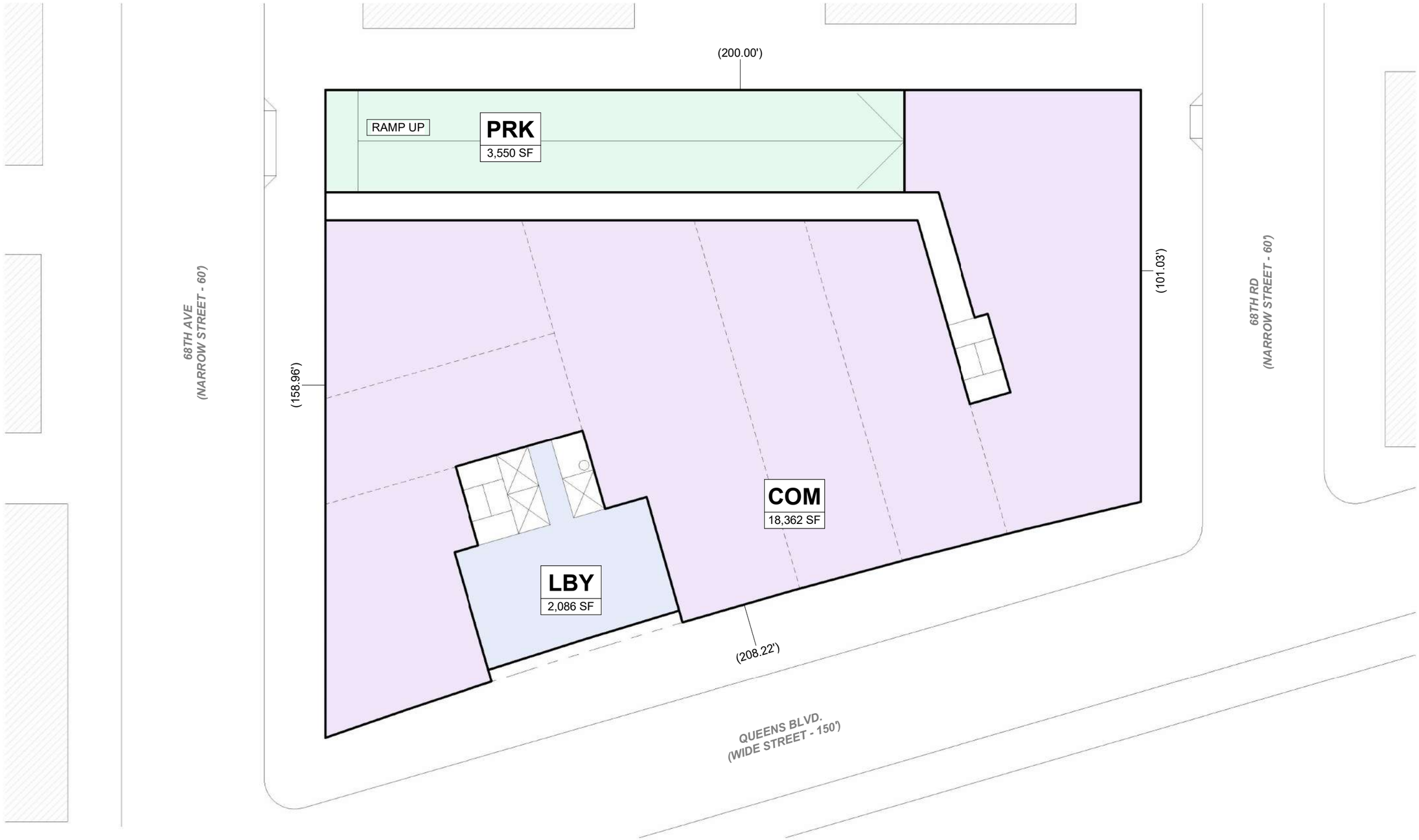


1 Basement Level Plan

builtd
Tahir Demircioglu Architect PLLC
builtd.com

9
06/01/2023
Version 6

Note: All figures are preliminary and approximate. Lot areas and existing floor areas are subject to survey confirmation. Preliminary: Subject to review and approval by the NYC Department of Buildings.



1 First Floor Plan

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builtd.com

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06/01/2023
Version 6

Note: All figures are preliminary and approximate. Lot areas and existing floor areas are subject to survey confirmation. Preliminary: Subject to review and approval by the NYC Department of Buildings.



1 Second Floor Plan

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Version 6

Note: All figures are preliminary and approximate. Lot areas and existing floor areas are subject to survey confirmation. Preliminary: Subject to review and approval by the NYC Department of Buildings.



1 Typical Base Portion Plan

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Note: All figures are preliminary and approximate. Lot areas and existing floor areas are subject to survey confirmation. Preliminary; Subject to review and approval by the NYC Department of Buildings.



1 Typical Tower Portion Plan

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06/01/2023
Version 6

Note: All figures are preliminary and approximate. Lot areas and existing floor areas are subject to survey confirmation. Preliminary: Subject to review and approval by the NYC Department of Buildings.

occupancy of the Proposed Development is expected to occur by late 2026. Accordingly, the environmental documents will use 2026 as the analysis year, or Build Year, for assessing future conditions pursuant to *CEQR Technical Manual* guidance.

Reasonable Worst Case Development Scenario (RWCDS)

In order to assess the possible effects of the Proposed Actions, a RWCDS was established for both the future without the Proposed Actions (No-Action condition) and the future with the Proposed Actions (With-Action condition) for an analysis year, or Build Year, of 2026. The incremental difference between the No-Action and With-Action conditions will serve as the basis of the impact category analyses.

Future without the Proposed Actions (No-Action Condition)

Absent the Proposed Actions (the "No-Action condition"), the Applicant would develop the Development Site pursuant to the existing R7-1/C1-2 zoning district. The No-Action development would be an eight-story (85-foot-tall; or 97-foot-tall including the mechanical bulkhead), approximately 158,298-gsf mixed commercial/residential building, comprising approximately 92,763-gsf of residential space (109 DUs) and approximately 20,961-gsf of commercial retail space (4.0 FAR). There would also be an approximately 44,574-gsf accessory parking garage with 128 spaces located on the first and second floors of the building. The No-Action development would comprise of market-rate units only, as no affordable units would be required under existing zoning.

The No-Action scenario is the maximum allowable development permissible under the existing R7-1/C1-2 zoning district. It represents what the Applicant would develop on the Development Site on an as-of-right basis under Quality Housing regulations should the Proposed Actions not be approved.

Future with the Proposed Actions (With-Action Condition)

In the future with the Proposed Actions (the "With-Action condition"), the proposed zoning map and text changes would be approved, and the Development Site would be redeveloped with a 17-story (175-foot-tall; or 195-foot-tall including the mechanical bulkhead), approximately 247,096-gsf mixed commercial and residential building (7.2 FAR). The Applicant's Proposed Development is the same as the RWCDS With-Action Scenario for the Development Site as it maximizes the allowable FAR under the proposed R8X/C2-4 zoning district. The Development Site would contain approximately 184,118 gsf of residential space and 19,807 gsf of local retail space. The residential component is assumed to comprise a total of 216 DUs, of which approximately 54 DUs would be income-restricted pursuant to MIH Option 1 (25% of DUs at 60% AMI). The Proposed Development would also include 87 parking spaces located within the basement and on the second floor of the building.

The Applicant is proposing a development with 216 total DUs (approximately 852-gsf). As such, the RWCDS will analyze a more conservative scenario in which the average DU size is 850-gsf. This would result in one additional DU (217 total DUs) over the Applicant's proposed total of 216 DUs.

Possible Effects of the Proposed Actions

Table A-2 below provides a comparison of the No-Action and With-Action conditions identified for CEQR analysis purposes. As shown, the incremental (net) change that would result from the Proposed Actions

is the addition of a total of 91,355-gsf of residential uses (108 total DUs), including approximately 54 market rate DUs and 54 income-restricted DUs (pursuant to MIH Option 1 [25% of DUs at 60% AMI]). Additionally, the Proposed Actions would result in a (net) decrease of approximately 1,154-gsf of commercial retail uses and 41 enclosed parking spaces. In terms of population, the Proposed Actions are expected to generate an estimated 243 incremental residents as compared to the 2026 No-Action condition. There would be no net incremental employees as compared to the 2026 No-Action condition.

Table A-2: Comparison of No-Action and With-Action Development Scenarios

Use	No-Action	With-Action	Increment
Residential (GSF)	92,763 gsf	184,118 gsf	+91,355 gsf
Total units	109 DUs	217 DUs	+108 DUs
Affordable units	*0 DUs*	*54 DUs*	*+54 DUs*
Market Rate units	*109 DUs*	*163 DUs*	*+54 DUs*
Commercial Retail (GSF)	20,961 gsf	19,807 gsf	-1,154 gsf
Parking	128	87	-41
Population/Employment[1]	**No-Action**	**With-Action**	**Increment**
Residents	245	488	+243
Workers	77	77	+0

Notes:
[1] Average household size of 2.25 residents per household in Queens CD 6 (based on 2020 US Census); 3 employees per 1,000-sf of retail space; 1 employee per 25 DUs; and 1 garage employee per 50 spaces.

VII. REQUIRED APPROVALS

The Applicant requires one zoning text amendment and one zoning map amendment to facilitate the Proposed Development at 102-51 Queens Boulevard. The proposed one zoning text amendment and one zoning map amendment are discretionary public actions that are subject to both the Uniform Land Use Review Procedure (ULURP) and CEQR.

The City's ULURP process, mandated by Sections 197-c and 197-d of the New York City Charter, is designed to allow public review of ULURP applications at four levels: the Community Board; the Borough President; the CPC, and the City Council. The procedure has mandated time limits for review at each stage to ensure a maximum review period of approximately seven months. The process begins with certification by CPC that the ULURP application is complete. The application is then referred to the relevant Community Board (in this case Queens Community Board 6). The Community Board has up to 60 days to review and discuss the proposal, hold a public hearing, and adopt an advisory resolution on the ULURP application. The Queens Borough President then has up to 30 days to review the application. The CPC then has up to 60 days, during which time a public hearing is held on the ULURP application. If CPC approved, the application is then forwarded to the City Council, which has 50 days to review the ULURP application.

CEQR is a process by which agencies review discretionary actions to identify the effects those actions may have on the environment. The City of New York established CEQR regulations in accordance with the New York State Environmental Quality Review Act (SEQRA). In addition, the City has published a guidance manual for environmental review, the *CEQR Technical Manual*.

ATTACHMENT B:
SUPPLEMENTAL SCREENING

I. INTRODUCTION

This Environmental Assessment Statement ("EAS") has been prepared in accordance with the guidance and methodologies presented in the 2021 *City Environmental Quality Review* ("CEQR") *Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a detailed technical analysis be undertaken. Using this guidance, preliminary screening assessments were conducted for the Proposed Actions and resultant reasonable worst-case development scenario (RWCDS) to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Short Form identifies those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the EAS Short Form, supplemental screening assessments are provided in this attachment. The remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial CEQR thresholds.

The supplemental screenings contained herein identified that additional analyses are required in the areas of Land Use, Zoning, and Public Policy; Open Space; Shadows; Urban Design and Visual Resources; Hazardous Materials; and Noise. These analyses are provided in **Attachments C through H**, respectively. **Table B-1** presents a summary of screening analysis information for the Proposed Actions.

Table B-1: Summary of CEQR Technical Areas Screening

***CEQR* TECHNICAL AREA**	**SCREENED OUT PER EAS FORM**	**SCREENED OUT PER SUPPLEMENTAL SCREENING**	**ANALYSIS REQUIRED**
Land Use, Zoning, & Public Policy			X
Socioeconomic Conditions	X		
Community Facilities and Services	X		
Open Space			X
Shadows			X
Historic & Cultural Resources	X		
Urban Design & Visual Resources			X
Natural Resources	X		
Hazardous Materials			X
Water and Sewer Infrastructure	X		
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation - Traffic & Parking - Transit - Pedestrians	 X X X		
Air Quality - Mobile Sources - Stationary Sources		 X X	
Greenhouse Gas Emissions	X		
Noise			X
Public Health	X		
Neighborhood Character	X		
Construction		X	

As described in **Attachment A, "Project Description,"** compared to the No-Action condition, the Proposed Actions and resultant RWCDS would result in the net increase of approximately 91,355-gross-square-foot (gsf) of residential uses (108 DUs; of which 54 units would be income-restricted under MIH Option 1). The Proposed Actions would also result in a net decrease of approximately 1,154-gsf of commercial retail uses and 41 enclosed parking spaces.

II. SUPPLEMENTAL SCREENING AND SUMMARY OF DETAILED ANALYSES

Land Use, Zoning, and Public Policy

Refer to **Attachment C, "Land Use, Zoning, and Public Policy."**

Open Space

Refer to **Attachment D, "Open Space."**

Shadows

Refer to **Attachment E, "Shadows."**

Urban Design and Visual Resources

Refer to **Attachment F, "Urban Design and Visual Resources."**

Hazardous Materials

Refer to **Attachment G, "Hazardous Materials."**

Air Quality

Mobile Sources

CO and $PM_{2.5}$ Emissions

As stated in the 2021 *CEQR Technical Manual*, projects—whether site-specific or generic—may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic, create any other mobile sources of pollutants (e.g., diesel trains, helicopters, boats), or add new uses near mobile sources (e.g., roadways, garages, parking lots). According to the 2021 *CEQR Technical Manual* screening thresholds, if 170 or more project-generated vehicles pass through an intersection in any peak hour (for CO impact), or if a project would result in greater than 12 to 23 heavy duty diesel vehicle ("HDDV") trips or its equivalent vehicle emissions based on the type of road (for PM2.5 impact), there is the potential for mobile source air quality impacts and a detailed analysis is required.

As presented in **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum,"** the Proposed Actions' RWCDS would not introduce 170 or more project-generated vehicles through an intersection in any peak hour. As such, a detailed mobile source air quality analysis for CO emissions is not warranted.

The PM2.5 equivalent truck calculation in vehicular emission screen ranges from 12 to 23 HDDVs depending on the type of roadway. The net incremental change in peak hour vehicle trips presented in **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum,"** were used for the PM2.5 equivalent truck calculations. All autos were assumed to be Light Duty Gasoline Truck 1 ("LDGT1") class vehicles, and all trucks were assumed to be Heavy-Duty Diesel Vehicle 7 ("HDDV7"), based on guidance from the New York City Department of City Planning ("DCP"). **Table B-2** shows the incremental peak hour traffic volumes generated by the Proposed Actions' RWCDS (by vehicle type) and the 2021 *CEQR Technical Manual* Equivalent Truck Calculations.

Table B-2: Incremental Peak Hour Traffic Volumes Generated by the Proposed Actions' RWCDS

Roadway	Roadway Classification (threshold HDDVs screen)[1]	Peak-Hour Period	Trucks Per Hour	Vehicles Per Hour	Equivalent Truck	Equivalent Truck Threshold	Pass/Fail
68th Avenue	Paved Road <5,000 vehicles/day	AM	2	18	10	13	Pass
		MD	2	12	7	13	Pass
		PM	0	17	8	13	Pass
		Saturday MD	0	17	8	13	Pass
Queens Boulevard	Principal Arterial Other (14)	AM	2	18	2	23	Pass
		MD	2	12	2	23	Pass
		PM	0	17	1	23	Pass
		Saturday MD	0	17	1	23	Pass
68th Road	Paved Road <5,000 vehicles/day	AM	2	18	10	13	Pass
		MD	2	12	7	13	Pass
		PM	0	17	8	13	Pass
		Saturday MD	0	17	8	13	Pass

[1] Roadway classification obtained from the New York State Department of Transportation ("NYSDOT") Functional Class Maps <https://www.dot.ny.gov/gisapps/functional-class-maps> (May 2023).

As shown in **Table B-2**, the Proposed Actions' RWCDS PM2.5 equivalent truck calculations in vehicular emissions do not exceed the HDDVs screening threshold criterion(s) for any peak hour. As such, a detailed mobile source air quality analysis for PM2.5 emissions is not warranted.

Therefore, the Proposed Actions would not exceed the 2021 *CEQR Technical Manual* screening thresholds for CO and PM2.5 emissions, and a detailed mobile source air quality analysis is not warranted.

Stationary Sources

Projects may result in stationary source air quality impacts when they (a) create new stationary sources of pollutants – such as emission stacks from industrial plants, hospitals, other large institutional uses, or even a building's boilers – that may affect surrounding uses; (b) introduce certain new uses near existing or planned emissions stacks that may affect the use; or (c) introduce structures near such stacks so that changes in the dispersion of emissions from the stacks may affect surrounding uses.

HVAC

Emissions from a project's heating/hot water, ventilation, and air conditioning ("HVAC") system(s) may affect surrounding uses. As discussed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of a new 17-story mixed-use building. The new 17-story building

(approximately 175-foot-tall; 195-foot-tall including a 20-foot-tall mechanical bulkhead) containing approximately 247,096-gsf of total space would be located entirely within the Development Site (Block 2137, Lots 1, 6, 8, and 11).

Within a 400-foot-radius of the Proposed Development, there is one existing building of similar or greater height to the Proposed Development. The 20-story building is located approximately 370 feet to the south of the Proposed Development at 104-20 Queens Boulevard (Block 3175, Lot 1). A screening analysis was conducted using Figure 17-3 of the 2021 *CEQR Technical Manual*. As shown in **Figure B-1**, using Figure 17-3 and the 247,096-gsf future building size, it was determined that the HVAC emissions from the 17-story building located on the Development Site would not be significant on the 20-story building located on Lot 1 of Block 3175. Therefore, no further analysis of the impacts of the Proposed Development's HVAC systems would be warranted.

Air Toxics

In accordance with 2021 *CEQR Technical Manual* methodology, projects that would result in new uses (particularly schools, hospitals, parks, and residences) (a) within 1,000 feet of a major or large emission source; (b) near medical, chemical, or research labs; (c) within 400 feet of manufacturing or processing facilities; (d) near an odor-producing facility; and/or (e) near "non-point" sources (e.g., unpaved surfaces and storage piles that could result in fugitive dust) may result in stationary source air quality impacts.

The Proposed Development would not be located within 1,000 feet of a major or large emission source, near medical, chemical, or research labs, within 400 feet of manufacturing or processing facilities, near an odor-producing facility, or near "non-point" sources. Therefore, the Proposed Actions would not result in any significant adverse air quality impacts.

Noise

Refer to **Attachment H, "Noise."**

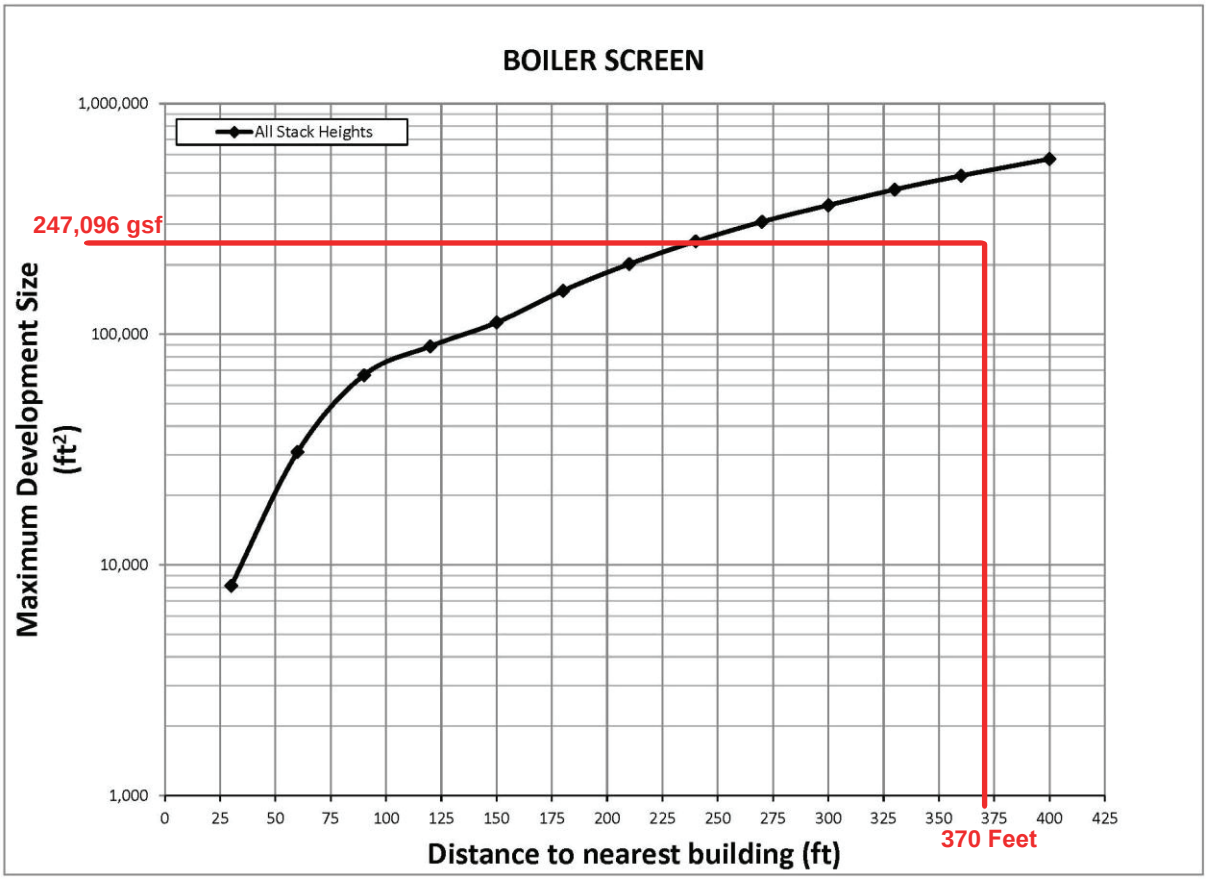
Construction

Construction activities, although temporary in nature, can sometimes result in significant adverse impacts. A proposed project's construction activities may affect a number of technical areas analyzed for the operational period, such as air quality, noise, and traffic; therefore, a construction assessment relies to a significant extent on the methodologies and resulting information gathered in the analyses of these technical areas.

Anticipated Construction Schedule

The Proposed Development is expected to be constructed over an approximately 23 month period and implemented in a single phase. Therefore, the construction schedule is considered to be short-term. Demolition, excavation, and foundation activities on the Development Site would commence first, occurring simultaneously over a period of approximately four months. Following construction of the Proposed Development's foundation, the superstructure- and exterior envelope-related construction activities would commence, occurring over a period of approximately 10 months. Interior-related construction activities, including core and shell fit-out, would commence approximately two months after construction of the Proposed Development's superstructure and exterior envelope begins, as interior-

Figure 17-3
Stationary Source Screen- Heat and Hot Water System



related construction activities would commence on the Proposed Development's completed lower floors while the Proposed Development's upper floors are constructed. Interior-related construction activities would conclude approximately three months following the completion of the Proposed Development's superstructure and exterior envelope.

Most construction activities would occur Monday through Friday, although the delivery and installation of certain equipment could occur on weekend days. Hours of construction are regulated by DOB and apply in all areas of New York City. In accordance with DOB regulations, nearly all work would occur between the hours of 7:00 AM and 6:00 PM on weekdays, although some workers would arrive and begin to prepare work areas before 7:00 AM. Occasionally, Saturday or overtime hours may be required to complete time-sensitive tasks. Weekend work requires a permit from DOB and, in certain instances, approval of a noise mitigation plan from the New York City Department of Environmental Protection ("NYCDEP") pursuant to the New York City Noise Code.

Transportation Conditions

Traffic and Pedestrians

Given the size of the Development Site, it is anticipated that all staging could be accommodated on-site, and no closures adjacent public sidewalks or roadway lanes are expected. The initial staging areas would be strategically located to allow for the first stages of construction—temporary site access, installation of chosen Best Management Practices ("BMPs"), clearing, demolition, and excavation. Appropriate BMPs would be placed at all locations prior to any staging activity. Upon establishing the BMPs and staging areas, temporary access roads within the site would be constructed to allow for the flow of construction materials and equipment required for construction of the Proposed Development. Construction activities may result in short-term disruption of traffic and pedestrian movements in the vicinity of the Development Site. The construction site would be surrounded by construction fencing and Jersey barriers, as required by DOB. If required during construction of the Proposed Development, detailed Maintenance and Protection of Traffic ("MPT") plans for the construction site would need to be submitted for approval to the New York City Department of Transportation ("NYCDOT") Office of Construction Mitigation and Coordination ("OCMC"), the entity that ensures critical arteries are not interrupted, especially in peak travel periods. To ensure the safety of pedestrians immediately surrounding the Development Site, sidewalk sheds and Jersey barriers would be erected along the Development Site's street frontages. Therefore, pedestrian movement and safety adjacent to the Development Site would be ensured and maintained in the future with the Proposed Actions. Given the limited duration of these temporary obstructions, these conditions would not result in significant adverse impacts on traffic and pedestrian transportation conditions.

Public Transportation

Construction activities would not result in the disruption of public transportation services in the vicinity of the Development Site. Several bus routes run along the mainline and service lanes of the Development Site's Queens Boulevard frontage, which are separated by medians. Although 15 express bus routes (X63, X64, X68, QM11, QM18, QM1, QM21, QM31, QM35, QM36, QM44, QM4, QM5, QM6, QM7, and QM8) run along the mainline lanes, only the Q60 local bus route runs along the service road adjacent to the Development Site. In addition, there are no bus stops located immediately adjacent to the Development Site. There is also a protected bicycle lane located adjacent to the Development Site's Queens Boulevard frontage. There are no bus routes nor bicycle lanes located adjacent to the Development Site's 68th

Avenue and 68th Road frontages. In addition, there are no subway station entrances and exits located immediately adjacent to the Development Site. Therefore, construction activities would not result in significant adverse impacts on public transportation conditions.

Construction Noise

Potential impacts on community noise levels during construction could result from the operation of construction equipment and from construction and delivery vehicles traveling to and from construction sites. Noise levels at a given location are dependent on the type and quantity of construction equipment being operated, the acoustical utilization factor of the equipment (i.e., the percentage of time the equipment is operating at full power), the distance from the construction site, and any shielding effects (e.g., from structures such as walls or barriers). Because the location of the construction activities relative to noise sensitive receptor locations would vary over the course of the construction period, as would the amount and type of construction equipment, the level of noise experienced at each noise sensitive receptor would also vary during this period. The most noise intensive construction activities would not occur every day or every hour on those days that they would occur. During hours when the loudest pieces of construction equipment are not in use, noise sensitive receptors would experience lower construction noise levels. Construction noise levels would fluctuate during the construction period at each noise sensitive receptor, with the greatest levels of construction noise occurring for limited periods.

Noise Reduction Measures

Construction noise is regulated by the requirements of the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) and DEP's Notice of Adoption of Rules for Citywide Construction Noise Mitigation (also known as Chapter 28). These requirements mandate that specific construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. For weekend and after hour work, permits would be required, as specified in the New York City Noise Control Code. As required under the New York City Noise Control Code, a site-specific noise mitigation plan for construction under the Proposed Actions would be developed and implemented that may include source and path controls. This noise control plan is expected to include such measures as avoiding unnecessary evening construction and truck idling. A copy of the noise mitigation plan would also be kept at the construction site for compliance review by DOB and DEP.

Noise control measures would typically include a variety of source and path controls. In terms of source controls (i.e., reducing noise levels at the source or during the most sensitive time periods), the following measures would be implemented in accordance with NY regulations:

- Equipment that meets the sound level standards specified in Subchapter 5 of the New York City Noise Control Code would be used from the start of construction.
- As early in the construction period as logistics would allow diesel- or gas-powered equipment would be replaced with electrical-powered equipment such as pumps, compressors, and hoists (i.e., early electrification) to the extent feasible and practicable.
- Where feasible and practical, construction sites would be configured to minimize back-up alarm noise. In addition, all trucks would not be allowed to idle more than three (3) minutes at the construction site based upon New York City Local Law.

- Contractors and subcontractors would be required to properly maintain their equipment and mufflers.

In terms of path controls (e.g., placement of equipment, implementation of barriers or enclosures between equipment and noise sensitive receptors), the following measures for construction would be implemented in accordance with NY regulations:

- Where logistics allow, noisy equipment, such as cranes, concrete mixing trucks, concrete pumps, and delivery trucks, would be located away from and shielded from noise sensitive receptor locations.
- Noise barriers would be utilized to provide shielding (i.e., the construction sites would have perimeter barriers of at least eight (8) feet in height).
- Path noise control measures (i.e., portable noise barriers, panels, enclosures, and acoustical tents, where feasible) would be required for certain dominant noise equipment (i.e., generators, jack hammers, pile drivers, and pumps) to the extent feasible and practical, where this analysis indicates there may be a potential for a significant adverse impact. The details to construct portable noise barriers, enclosures, tents, etc., are provided in DEP's Rules for Citywide Construction Noise Mitigation.

Overall, construction of the Proposed Development would result in temporary disruption in the surrounding area, including noise, dust, and traffic associated with the delivery of materials and arrival of workers on the Development Site. However, given the magnitude and duration (under 24 months) of construction effects, no significant adverse impacts from construction would occur as a result of the Proposed Actions, and further analysis is not warranted.

ATTACHMENT C:
LAND USE, ZONING, AND PUBLIC POLICY

I. INTRODUCTION

Under 2021 *CEQR Technical Manual* guidance, a land use analysis evaluates the uses and development trends in the area that may be affected by a proposed action(s) and determines whether the action(s) would be compatible with those conditions or potentially adversely affect them. Similarly, the analysis considers the proposed action's compliance with, and effect on, the area's zoning and other applicable public policies.

As discussed in **Attachment A, "Project Description,"** the Proposed Actions include zoning map and zoning text amendments that would affect the western-most portion of a single block (Queens Block 2137) bound by 68th Avenue, Yellowstone Boulevard, 68th Road, and Queens Boulevard in the Forest Hills neighborhood of Queens Community District (CD) 6. Under the Reasonable Worst Case Development Scenario (RWCDS) in the future with the Proposed Actions, the Applicant-owned Development Site (Block 2137, Lots 1, 6, 8, and 11) would be developed with a new 17-story (175-foot tall; 195-foot-tall including mechanical bulkhead), approximately 247,096-gsf mixed-use residential and commercial building with a floor area ratio (FAR) of 7.2 (the "Proposed Development"). The Proposed Development would consist of approximately 184,118-gsf of residential space for a total of 217 dwelling units (DUs), including approximately 54 income-restricted DUs pursuant to MIH Option 1 (25% of DUs at 60% of the area median income [AMI]) and approximately 19,807-gsf of local retail space that would occupy a portion of the ground floor.

According to the *CEQR Technical Manual*, a land use and zoning analysis is warranted for actions facilitating a change in land use or zoning. As the Proposed Actions involve zoning changes that would result in an increase in the allowable density, an analysis of land use and zoning is warranted.

II. METHODOLOGY

The purpose of this attachment is to examine the effects of the Proposed Actions and determine whether they would result in any significant adverse impacts on land use, zoning, or public policy. The analysis methodology is based on the guidance of the *CEQR Technical Manual* and examines the Proposed Actions' consistency with land use patterns and development trends, zoning regulations, and other applicable public policies. As described in **Attachment A, "Project Description,"** in order to assess the possible effects of the Proposed Actions, a RWCDS was established for the future without the Proposed Actions (the No-Action condition) and future with the Proposed Actions (the With-Action condition) for the 2026 analysis year.

According to the *CEQR Technical Manual*, a detailed assessment of land use, zoning, and public policy may be appropriate when a change in land use and zoning would occur and a preliminary assessment cannot succinctly describe land use conditions in the study area. The Proposed Actions do seek to make changes in zoning, therefore requiring a detailed assessment to provide a sufficient description and assessment of the effects on land use conditions. In addition, a detailed assessment is needed to sufficiently inform other technical reviews and determine whether zoning changes could affect conditions analyzed in those

technical areas. Therefore, this attachment includes a detailed analysis that involves a thorough description of existing land uses and zoning within the directly affected area and the surrounding study area. Following the guidance of the *CEQR Technical Manual*, the detailed analysis describes existing and anticipated future conditions to a level necessary to understand the relationship of the Proposed Actions to such conditions, assesses the nature of any changes on these conditions that would be created by the Proposed Actions, and identifies those changes, if any, that could be significant or adverse.

Analysis Year

As discussed in **Attachment A, "Project Description,"** construction of the Proposed Development is expected to begin in late 2024, following the completion of the ULURP process, and is expected to be completed in 23 months. Therefore, for the purposes of determining potential impacts, this analysis assesses current conditions and forecasts those conditions to 2026. Future No-Action conditions account for planned development projects, initiatives, and proposals that are anticipated to be completed by 2026.

Study Area Definition

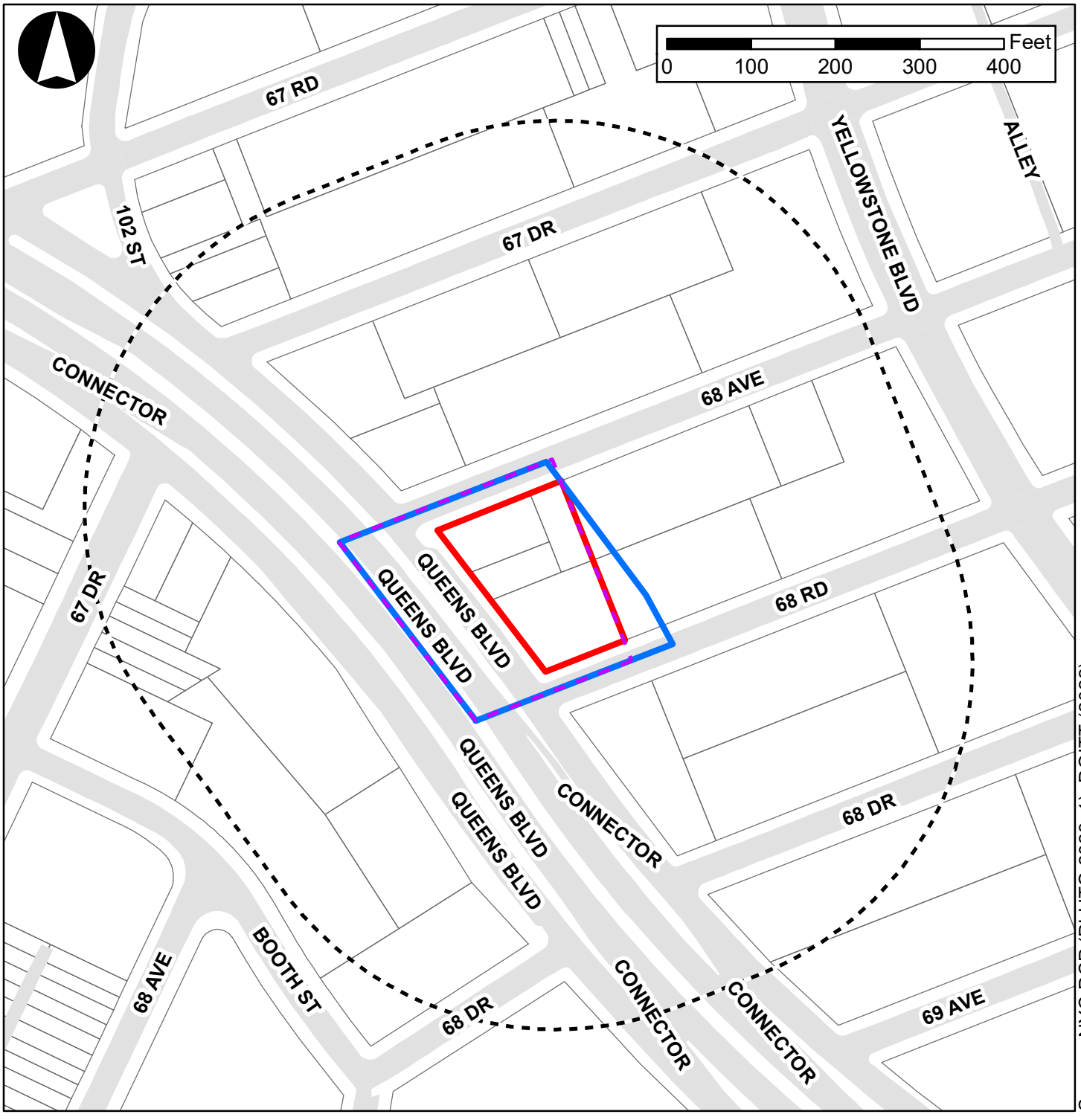
According to the *CEQR Technical Manual*, the appropriate study area for land use, zoning, and public policy is related to the type and size of an action, as well as the location and context of the area that could be affected. Study area boundaries vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a very large project. The study areas for the Proposed Actions have been established in accordance with *CEQR Technical Manual* guidance and are shown in **Figure C-1**.

As shown in **Figure C-1**, land use, zoning, and public policy are addressed and analyzed for two geographical areas for the Proposed Actions. The study areas include: (1) the primary study area, which comprises the Development Site (the western-most portion of Block 2137, including the entirety of Lots 1, 6, 8, and 11); and (2) a secondary study area that encompasses an area that has the potential to experience indirect effects as a result of the Proposed Actions. Given the limited geographic scope of the Proposed Actions and the small scale of the Applicant's Proposed Development relative to the density of the surrounding area, a 400-foot radius from the boundary of the Development Site has been selected as the secondary study area. Although the Proposed Actions will remove the existing commercial overlay mapped on Lots 13 and 46, this change is not expected to materially affect the lots as only a small portion of these lots are within the existing overlay and the lots are occupied by medium-sized multi-family apartment buildings of a purely residential character. Since it is not expected that land use will fundamentally change on these lots, the Development Site, rather than the Rezoning Area, was selected as the basis for both the primary and secondary study areas. As shown in **Figure C-1**, the secondary study area is generally bound by Yellowstone Boulevard to the east, 100 feet south of 68th Driver to the south, Booth Street and 67th Drive to the west and 100 feet north of 67th Drive to the north.

Data Sources

Existing land uses in the study area were identified through review of a combination of sources including field surveys and the City's Primary Land Use Tax Lot Output (PLUTO™) data files for 2023 and websites, such as NYC Open Accessible Space Information System (OASIS, www.oasisnyc.net) and NYCityMap (http://gis.nyc.gov/doitt/nycitymap/). New York City Zoning Maps and the *Zoning Resolution of the City of New York* (ZR) were consulted to describe existing zoning districts in the study areas and provided the

Figure C-1
Land Use Study Area



Legend

- Rezoning Area (Primary Study Area)
- Development Site
- Proposed R8X/C2-4 District
- 400-Foot Radius

basis for the zoning evaluation of the future No-Action and future With-Action conditions. Relevant public policy documents, recognized by the New York City Department of City Planning (DCP) and other City agencies were utilized to describe existing public policies pertaining to the study areas.

III. EXISTING CONDITIONS

Land Use

Development Site (Primary Study Area)

As shown in **Figure C-2**, the primary study area is bound by 68th Avenue to the north, 68th Road to the south, and Queens Boulevard to the west. The primary study area is located on the western-most portion of Queens Block 2137. The primary study area consists of four Applicant-owned tax lots in their entirety (Lots 1, 6, 8, and 11) and totals approximately 25,590-sf. Queens Boulevard is classified as a "wide" street with over 200 feet of width while 68th Avenue and 68th Road are "narrow" streets with 60 feet in width. Queens Boulevard is a principal arterial thoroughfare traveling east-west through Queens with six moving lanes, two service roads, two conventional bike lanes, and curbside parking on both curbs. 68th Avenue has one westbound moving lane with parking on both curbs and 68th Road has one eastbound moving lane with parking on both curbs.

The Applicant-controlled Development Site is a 25,590-sf area with approximately 208 feet of frontage along Queens Boulevard, approximately 100 feet of frontage along 68th Road, and approximately 158 feet of frontage along 68th Avenue. The Development Site is currently comprised of one, 11-space parking lot (Lot 11) and three single-story commercial buildings (Lots 1, 6, and 8) consisting of restaurants, a bank, and urgent care facility. The commercial buildings were constructed in the 1940s.

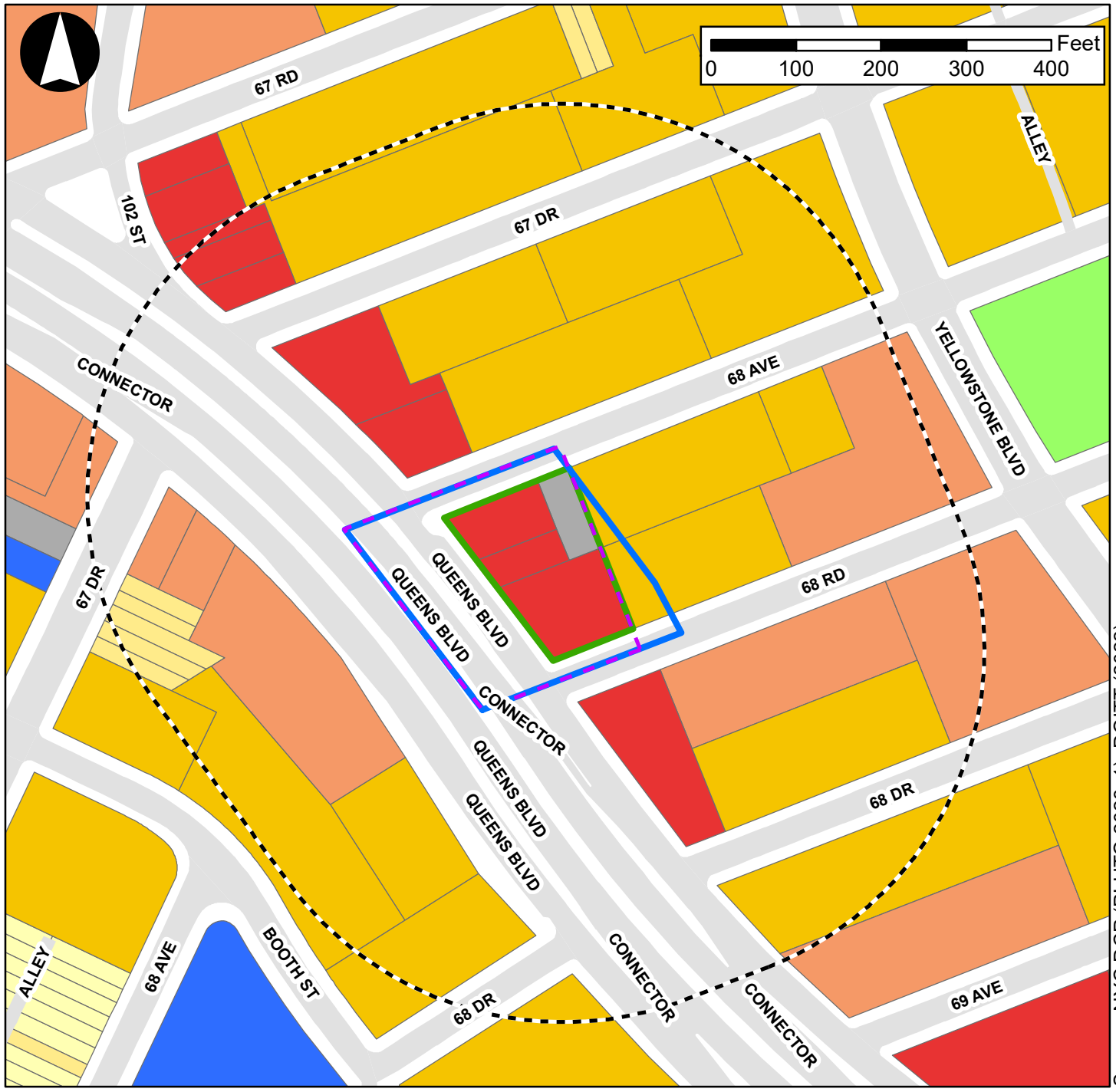
Secondary Study Area (400-foot Radius)

As shown in **Figure C-2**, the secondary study area is generally bound by Yellowstone Boulevard to the east, to a depth of 100 feet south of 68th Drive to the south, Booth Street and 67th Drive to the west, and to a depth of 100 feet north of 67th Drive to the north. Land uses within the secondary study area are comprised of residential uses (multi-family walkups and multi-family elevator buildings), mixed-use commercial/residential uses, and commercial uses.

Residential uses are located throughout the secondary study area along all streets within a 400-foot radius. The five multi-family walkup buildings are located on the side street east of 67th Drive. These buildings occupy lots of smaller size and smaller, 20-feet-wide street frontages. Large multi-family elevator buildings are located on larger lots with larger, 80- to 360-feet-wide street frontages along the side streets throughout the secondary study area. The largest residential building in the secondary study area, 102-25 67th Drive (Block 2135, Lot 59), is located directly to the north of the Rezoning Area and was constructed in 1960. The six-story building totals approximately 138,700-gsf and contains 135 total DUs.

Mixed-use commercial and residential uses are generally clustered along 68th Road and to the west of Queens Boulevard, which is a major corridor. They generally occupy large, irregular-shaped lots that contain local retail uses such as medical offices, restaurants, and salons. The largest mixed-use commercial and residential building, 68-12 Yellowstone Boulevard (Block 2137, Lot 27), was constructed in 1941 and is located within the eastern-most boundary of the secondary study area. Stand-alone commercial uses

Figure C-2
Land Use



Legend

- Rezoning Area (Primary Study Area)
- Development Site
- 400-Foot Radius
- Proposed R8X/C2-4 District

Land Use

- One & Two Family Buildings
- Multi-family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

are located to the east of Queens Boulevard and contain local retail uses. Compared to the multi-family elevator and mixed-use commercial and residential buildings, the standalone commercial uses typically occupy irregular-shaped lots of smaller size and smaller, 20- to 100-feet-wide street frontages.

Table C-1 provides a description of existing land use within the secondary study area. As shown in **Table C-1**, residential uses are the most prevalent throughout the study area and constitute the highest percentage of tax lots, lot area, and building area (approximately 59.5, 74.6, and 80.7 percent, respectively). Of the residential uses, multi-family elevator buildings comprise the highest percentage of total lots (approximately 45.9 percent), lot area (approximately 73.3 percent), and building area (approximately 80.2 percent). Mixed-use commercial and residential buildings has the second largest percentage of total lots (approximately 21.6 percent), lot area (approximately 19.6 percent), and building area (approximately 18.1 percent). Commercial uses comprise the smallest percentage of total lots, lot area, and building area at 18.9 percent, 5.8 percent and 1.2 percent, respectively. As shown in **Table C-1** and **Figure C-2**, there are no industrial/manufacturing, transportation/utility, public facilities and institutions, open space, parking facilities, and vacant land uses within the secondary study area.

Table C-1: Existing Land Uses in the Secondary Study Area

Land Use	Number of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential						
One- & Two-Family Buildings	22	59.5%	687,281	74.6%	3,194,463	80.7%
Multi-Family Walkup Buildings	*0*	*0.0%*	*0*	*0.0%*	*0*	*0.0%*
Multi-Family Elevator Buildings	*5*	*13.5%*	*11,829*	*1.3%*	*17,840*	*0.5%*
	17	*45.9%*	*675,452*	*73.3%*	*3,176,623*	*80.2%*
Mixed Commercial/Residential Buildings	8	21.6%	180,177	19.6%	718,616	18.1%
Commercial/Office Buildings	7	18.9%	53,499	5.8%	42,368	1.2%
Industrial/Manufacturing	0	0.0%	0	0.0%	0	0.0%
Transportation/Utility	0	0.0%	0	0.0%	0	0.0%
Public Facilities & Institutions	0	0.0%	0	0.0%	0	0.0%
Open Space	0	0.0%	0	0.0%	0	0.0%
Parking Facilities	0	0.0%	0	0.0%	0	0.0%
Vacant Land	0	0.0%	0	0.0%	0	0.0%
All Others/No Data	0	0.0%	0	0.0%	0	0.0%
Total	**37**	**100.0%**	**920,957**	**100.0%**	**3,959,447**	**100.0%**

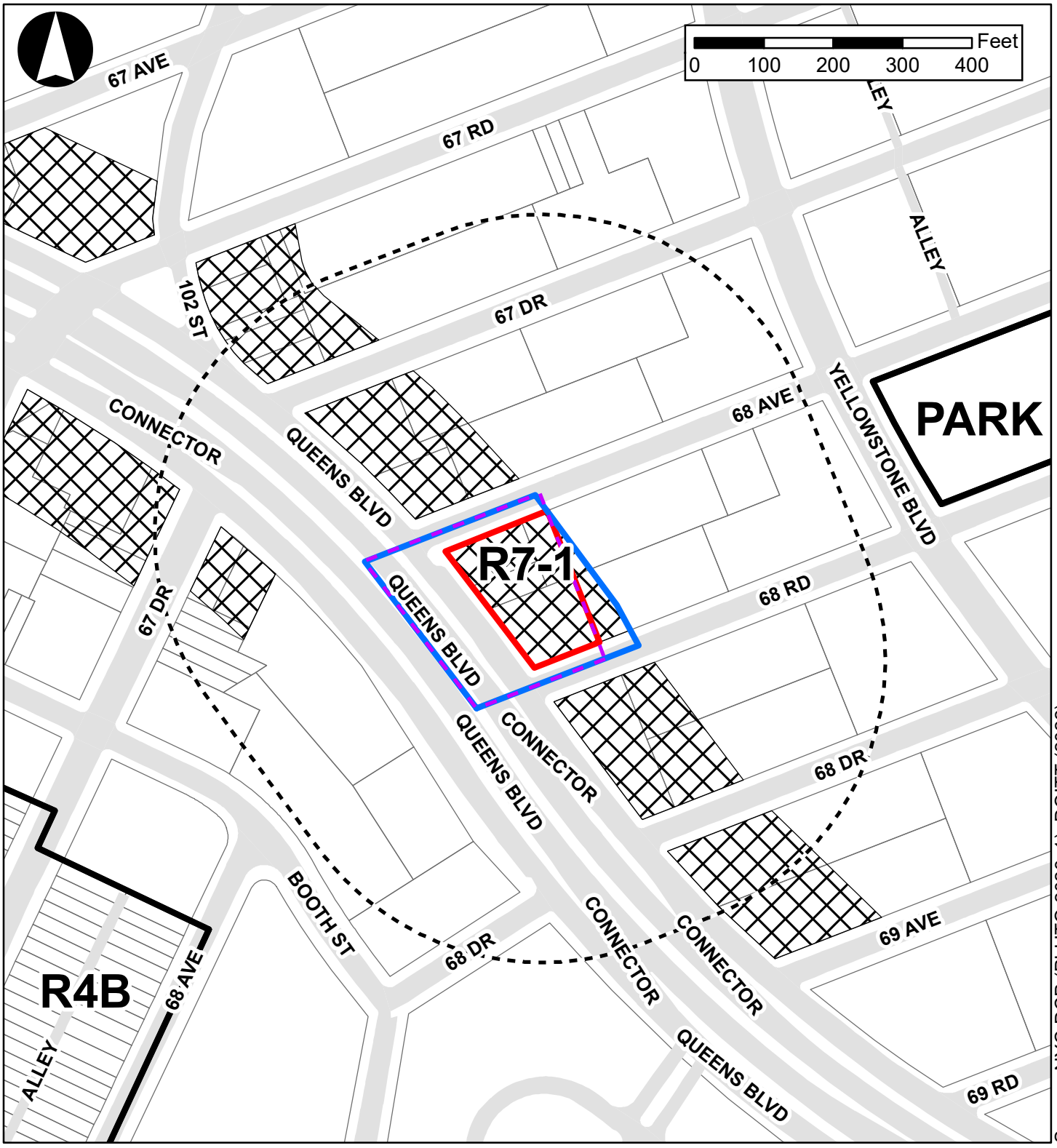
Source: NYC Department of City Planning (PLUTO 2023 v1).

Zoning

Primary Study Area

As shown in **Figure C-3**, the primary study area is currently zoned R7-1 with a C1-2 commercial overlay mapped along all three bounding streets. R7-1 districts are medium-density residential zoning districts, which permit residential and community facility uses (Use Groups 1 to 4). R7 districts has varied bulk, density, and parking regulations under the Height Factor and Quality Housing programs. Under Height Factor regulations, there is no height limit and is set within the sky exposure plane. Under Quality Housing regulations, there is a base maximum base height of 65 feet and base maximum building height of 75 feet. Off-street parking requirements varies and can be modified. Residential uses are permitted up to 3.44 FAR (4.0 FAR along a wide street) under Quality Housing regulations and permitted up to 3.44 FAR under

Figure C-3
Zoning



Legend

- Rezoning Area (Primary Study Area)
- Development Site
- 400-Foot Radius
- Proposed R8X/C2-4 District
- Existing Zoning Boundaries
- C1-2 Commercial Overlay

Height Factor regulations. Community facility uses are permitted up to 4.8 FAR. Commercial and manufacturing uses are not permitted in R7-1 districts.

C1 commercial overlays are mapped within residential districts along streets that serve local retail needs, as well as meet broader shopping and service needs. In mixed-use buildings, commercial uses are limited to one or two floors and must always be located below the residential uses. C1 commercial overlay districts permit a fewer range of uses than C2 districts. C1-2 commercial overlays allow retail uses up to 1.0 FAR when mapped over R1 to R5 districts, or 2.0 FAR when mapped in R6 to R10 districts. C1-2 overlays are mapped at a depth of 150 feet and require 1 accessory parking space per 300-sf of commercial uses.

The primary study area is not mapped within any of the City's special purpose districts or special purpose sub-districts.

Secondary Study Area

Zoning classifications within the secondary study area are also shown in **Figure C-3**. As shown in **Figure C-3**, the R7-1 residential zoning district mapped on the primary study area is also mapped throughout the secondary study area. The C1-2 commercial overlay mapped on the primary study area is also mapped along the eastside of Queens Boulevard and a small portion along the westside of Queens Boulevard to a depth of 100 feet from 67th Drive. Outside of the secondary study area, an R4B zoning district is mapped to the south of Booth Street. To the north of the secondary study area, C1-2 commercial overlays are mapped alongside both sides of Queens Boulevard.

Public Policy

According to the *CEQR Technical Manual*, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports, which pertain to the study area. If a proposed project could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary.

While there are no specific initiatives and goals in the City's *Housing Our Neighbors: A Blueprint for Housing and Homelessness* plan that relate specifically to the primary or secondary study areas, it is a citywide policy initiative that would be applicable to the study areas and is, therefore, included in this analysis. Other citywide policy initiatives applicable to the study areas include the *Where We Live NYC Plan* and *Transit Zone*, which are also discussed below. The study areas are not part of, or subject to, an Urban Renewal Plan, adopted community 197-a Plan, Business Improvement District (BID), Industrial Business Zone (IBZ), the Waterfront Revitalization Program (WRP), or the Food Retail Expansion to Support Health Program (FRESH) zoning and discretionary tax incentive area. The Proposed Actions also do not include a large publicly sponsored project, and as such consistency with the City's OneNYC for sustainability is not warranted.

Housing Our Neighbors: A Blueprint for Housing and Homelessness

On June 14, 2022, the Mayor Adams administration released the *Housing Our Neighbors: A Blueprint for Housing and Homelessness*, a comprehensive plan intended to cover the entire spectrum of New Yorkers' housing needs and options, including City-subsidized affordable housing, public housing, private market-rate, and greater supports homelessness. The plan is the result of an extensive stakeholder industry, and community engagement process, which included direct engagement with New Yorkers who are experiencing or having experienced homelessness and outlines major steps the Adams administration will take up:

• Significantly expand affordable homeownership opportunities and help communities build and maintain wealth;
• Accelerate the creation of supportive housing by completing the 15,000 supportive homes promised by 2030 two years ahead of schedule;
• Transform the New York City Housing Authority (NYCHA) by both delivering much-needed resources for repairs and improving and streamlining the services NYCHA provides residents and the processes by which they do so;
• Break down government siloes to bolster transparency and address the full scope of the homelessness crisis, adding to the city's homeless count while creating a more even playing field to give more New Yorkers in all the city's shelter systems access to critical services and resources; and
• Get New Yorkers into safe, high-quality, affordable homes faster and without forcing them to relive past trauma by eliminating unnecessary paperwork and obstacles to obtaining housing.

Where We Live NYC Plan

Through the *Where We Live NYC Plan*, the city has developed a plan to take bold, transformative action to break down barriers to opportunity and build more integrated, equitable, and inclusive neighborhoods throughout New York City. The plan recognizes that intentional policies and practices have created segregation and inequity across the country and in New York City, and that it will take concerted effort from all levels of government, as well as partners in the private and non-profit sectors, to undo legacies of segregation and inequity. The plan is separated into six key goals that will guide the city's work in advancing fair housing through 2025:

- Goal 1 – Combat persistent, complex discrimination with expanded resources and protections;
- Goal 2 – Facilitate equitable housing development in New York City and the region;
- Goal 3 – Preserve affordable housing and prevent displacement of long-standing residents;
- Goal 4 – Enable more effective use of rental assistance benefits, especially in amenity-rich neighborhoods;
- Goal 5 – Create more independent and integrated living options for people with disabilities;
- Goal 6 – Make equitable investments to address the neighborhood-based legacy of discrimination, segregation, and concentrated poverty.

Transit Zone

The boundaries of the Transit Zone are set forth in Appendix I of the ZR. The Transit Zone is defined by DCP as an area where special lower accessory parking requirements apply for various types of affordable housing, including IRHUs. Areas located within the Transit Zone 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. As set forth in Appendix I of the ZR, portions of Queens Community District 6 is located within the boundaries of the Transit Zone. As shown in **Figure C-4**, the primary study area and the secondary study area are located within the Transit Zone.

IV. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Land Use

Primary Study Area

As presented in **Attachment A, "Project Description,"** in the 2026 future without the Proposed Actions, the Applicant would develop the Development Site pursuant to the existing R7-1/C1-2 zoning district. The No-Action development would be an eight-story (85-foot-tall; 97-foot-tall including mechanical bulkhead), approximately 158,298-gsf mixed commercial/residential building, comprising approximately 92,763-gsf of residential space (109 DUs) and approximately 20,961-gsf of commercial retail space. There would also be an approximately 44,574-gsf accessory parking garage with 128 spaces located on the first and second floors of the building. The No-Action development would comprise of market-rate units only, as no affordable units would be required under existing zoning.

Secondary Study Area

There are no new developments anticipated within the secondary study area by the anticipated build year of 2026.

Zoning

Primary Study Area

In the future No-Action condition, no zoning changes are anticipated within the primary study area. As such, it is anticipated that the existing R7-1/C1-2 zoning district would be retained.

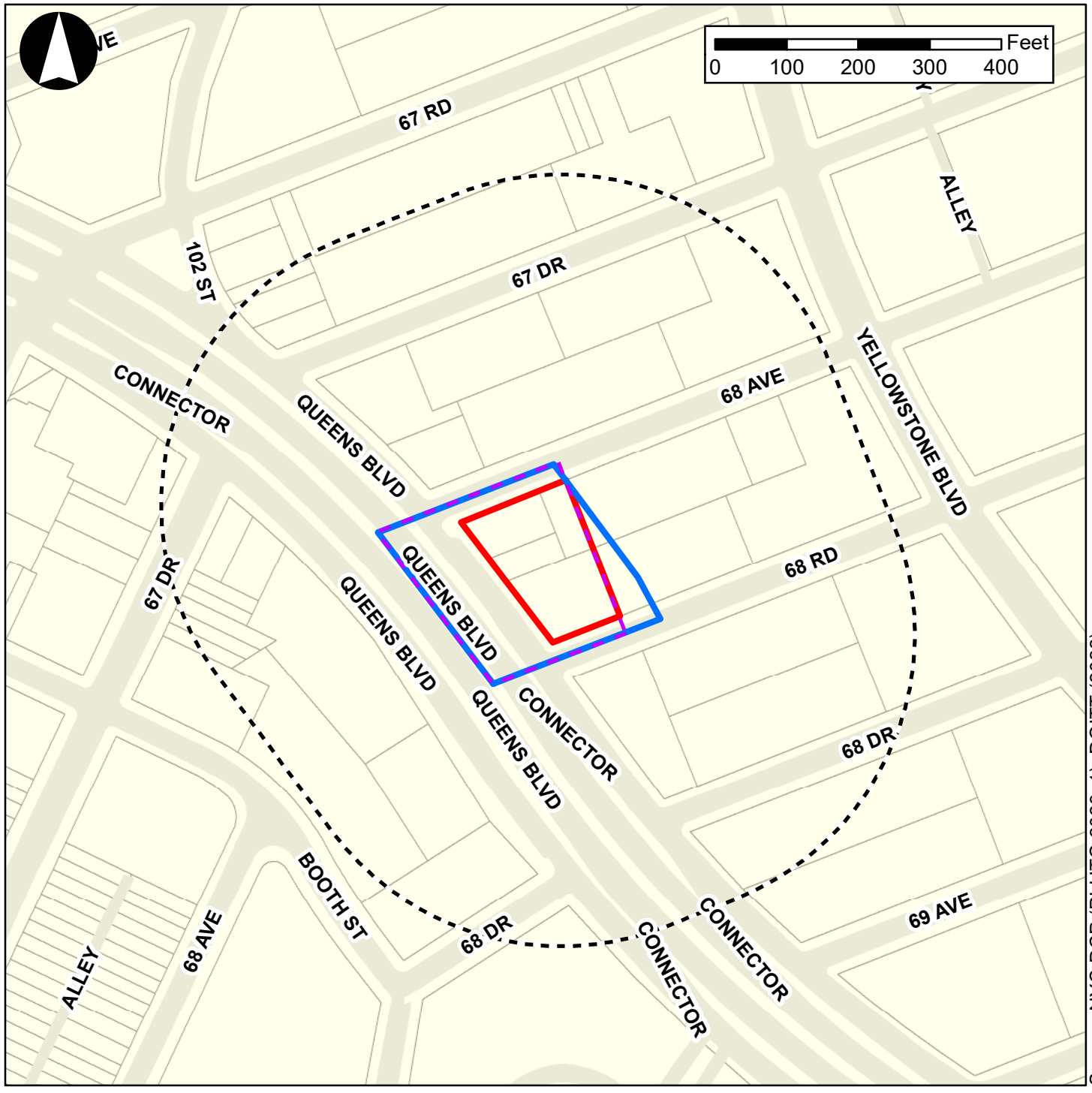
Secondary Study Area

There are currently no planned zoning changes in the secondary study area in the future without the Proposed Action.

Public Policy

In absence of the Proposed Actions, no changes to public policies are anticipated in the primary or secondary study areas.

Figure C-4
Transit Zone



Source: NYC DCP (PLUTO 2023v1); DOITT (2022)

Legend

- Rezoning Area (Primary Study Area)
- Development Site
- 400-Foot Radius
- Proposed R8X/C2-4 District
- Transit Zone

V. FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

Under the With-Action condition, the Proposed Actions, which include a zoning map amendment and a zoning text amendment, would be approved. As described in **Attachment A, "Project Description,**" under the RWCDS, the Proposed Actions would facilitate the development of a new 17-story (175-feet tall; 195-foot-tall including mechanical bulkhead), approximately 247,096-gsf mixed-use residential and commercial building. The future With-Action development would contain approximately 184,118-gsf of residential uses totaling 217 DUs, of which 54 DUs would be income-restricted pursuant to MIH Option 1 (25% of DUs at 60% AMI), and approximately 19,807-gsf of commercial retail uses. There would also be an accessory parking garage with 87 spaces located within the basement and on the second floor of the building.

Table C-3: Comparison of No-Action and With-Action Development Scenarios

Use	No-Action	With-Action	Increment
Residential (GSF)	92,763 gsf	184,118 gsf	+91,355 gsf
Total units	109 DUs	217 DUs	+108 DUs
Affordable units	*0 DUs*	*54 DUs*	*+54 DUs*
Market Rate units	*109 DUs*	*163 DUs*	*+54 DUs*
Commercial Retail (GSF)	20,961 gsf	19,807 gsf	-1,154 gsf
Parking	128	87	-41
Population/Employment1	**No-Action**	**With-Action**	**Increment**
Residents	245	488	+243
Workers	77	77	+0

Notes:
[1] Average household size of 2.25 residents per household in Queens CD 6 (based on 2020 US Census); 3 employees per 1,000-sf of retail space; 1 employee per 25 DUs; and 1 garage employee per 50 spaces.

Land Use

Primary Study Area

The Proposed Actions would result in changes to land use within the primary study area by increasing the allowable density from what is currently allowed as-of-right. Under the RWCDS, the Development Site would be redeveloped to a maximum FAR of 7.2. The Proposed Actions would facilitate new mixed-use residential and commercial development on an underutilized site that contains single-story commercial buildings and a parking lot. The proposed mixed-use residential and commercial building would be consistent with the existing neighborhood character and support existing land uses already present in the surrounding secondary study area. The proposed residential use is expected to complement existing multi-family walkup and elevator residential apartment buildings, mixed-use residential and commercial buildings, and standalone commercial buildings near the primary study area on the bounding streets. The proposed commercial uses are expected to contribute to the neighborhood character of the area.

The Proposed Actions would not generate land uses that would be incompatible with surrounding uses, nor would they directly displace land uses in such a way as to adversely affect surrounding land uses. The introduction of housing in a transit accessible area would further contribute to the mission and purpose of integrating housing with transportation and jobs, thus encouraging live-work communities and transit-oriented development. Additionally, the Proposed Actions would add to recent developments along the Queens Boulevard corridors, a wide street appropriate to accommodate increased density. Therefore, the

Proposed Actions would support land use trends, and no significant adverse land use impacts are expected.

Secondary Study Area

The Proposed Actions are not expected to alter development trends or patterns in the secondary study area. The secondary study area would not undergo any changes because of the Proposed Actions. The Proposed Actions would have no direct effect on land use in the secondary study area. The proposed residential uses at the Development Site would complement and be consistent with the mix of residential uses in the secondary study area. As noted above, land uses in the secondary study area are predominantly residential uses with some commercial uses. Replacing underutilized and underbuilt buildings currently located at the Development Site would also activate the streetscape along Queens Boulevard.

Therefore, the Proposed Actions would not introduce any new land uses that would be incompatible with their surroundings, and the Proposed Actions would not represent a significant adverse impact on land use in the secondary study area in accordance with the criteria set forth in the *CEQR Technical Manual.*

Zoning

Primary Study Area

In the future with the Proposed Actions, the existing zoning in the primary study area would change along Queens Boulevard between 68th Avenue and 68th Road, which would be perpendicular to 68th Road at a depth of approximately 100 feet from the intersection of Queens Boulevard and 68th Road. The existing R7-1 district with a C1-2 overlay would be rezoned to a R8X/C2-4 district.

The proposed zoning district would continue to allow residential and community facility uses (Use Groups 1-4), as well as local retail uses (Use Groups 5 and 6). In fact, it would permit a wider range of commercial uses (Use Groups 7 to 9, and 14). It would also increase the allowable density and would create additional zoning capacity in a transit-accessible area to support new housing creation and increase the number of affordable housing units available in New York City. The proposed rezoning area is well suited for additional development. It is well served by public transportation options in the form of buses and subways and Queens Boulevard is a major arterial road that can support additional density.

The proposed zoning district would permit a residential FAR of 7.2 (with the Mandatory Inclusionary Housing (MIH) Program), community facilities up to 6.5 FAR, and commercial uses up to 2.0 FAR (with the proposed commercial overlay). Buildings would have a maximum height of 175 feet (with MIH and a qualifying ground floor). Buildings would have a maximum base height of 105 feet (with MIH and a qualifying ground floor). Off-street accessory parking would be required for 40 percent of market-rate dwelling units.

The proposed zoning text amendment would establish an MIH area coterminous with the Rezoning Area through ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for CD 1. The proposed text amendment would require the Applicant to develop in accordance with the MIH program and would mandate the provision of affordable housing. Pursuant to the MIH program, a percentage of the new dwelling units would be affordable units, resulting in an affordable housing set-aside for either 25 percent of the residential floor area at an average of 60 percent AMI (Option 1) or 30

percent of the residential floor area at an average of 80 percent of AMI (Option 2). The Applicant intends to pursue MIH Option 1. The proposed affordable housing set aside would ensure that the development within the Rezoning Area would help to address the need for housing to serve diverse incomes. It would also align with one of Community Board 6's needs for more affordable housing.

Secondary Study Area

The Proposed Actions would only apply in the primary study area and would not affect in the larger secondary study area. The proposed one zoning map and one zoning text amendment would align with the City's land use, zoning, and public policy objectives to encourage denser development in areas well served by public transit and to facilitate the development of permanent affordable housing. The proposed zoning changes would be consistent with other residential and commercial overlay zoning designations in the secondary study area as the entire secondary study area is zoned for residential uses with the avenues mapped with commercial overlays. The Proposed Actions would not result in any significant impacts to zoning patterns in the secondary study area, nor have a significant impact on the extent of conformity within the secondary study area.

Public Policy

As detailed below, the Proposed Actions would not result in any significant adverse public policy impacts to the primary or secondary study areas. The proposed zoning changes are expected to help foster diverse and livable neighborhoods with mixed-use residential and commercial buildings in an underutilized area and ensure the City's housing supply increases in a more equitable way, through the construction of new affordable housing units alongside market-rate housing units.

Housing Our Neighbors: A Blueprint for Housing and Homelessness

The proposed zoning actions would be consistent with the *Housing Our Neighbors* blueprint plan and would result in the development of approximately 54 income-restricted DUs pursuant to MIH Option 1 (25% of DUs at 60% AMI). Consistent with the *Our Neighbors* blueprint plan, the Proposed Actions would expand affordable housing and help communities build and maintain wealth. The proposed zoning changes would establish an MIH designated area, which would require residential development in the future with the Proposed Actions to include permanently affordable housing units – including the 54 income-restricted DUs in the Proposed Development. The income-restricted units provided at the Development Site would help foster diverse and livable neighborhood, preserve affordability and quality of housing stock in the surrounding area. Therefore, the Proposed Actions would be supportive of this key public policy goal and further analysis is not warranted.

Where We Live NYC Plan

The Proposed Actions would support Goal 2 of the *Where We Live NYC Plan* by establishing an MIH area encompassing the primary study area, which would require future residential development to include permanent IRHUs. An MIH area requires compliance with one of the income-restricted housing options provided in ZR Section 23-154(d)(3). The Applicant is pursuing MIH Option 1. Therefore, the Proposed Actions would be consistent with Goal 2 of the *Where We Live NYC Plan*.

Transit Zone

The Proposed Actions would facilitate additional residential land uses (Use Group 2) in a transit-accessible area of Queens Community District 6. The primary study area is located within the Transit Zone and the 67th Avenue subway station (serviced by the E/F/M/R train) is located approximately 400 feet to the southeast of the primary study area. The primary study area is also serviced by the local Q60 (connecting Queens Boulevard to East Midtown), express QM11 (connecting Forest Hills to Downtown Manhattan), and express QM18 (connecting South Ozone Park and Midtown Express). To the northwest of the Project Area, over 20 local and express bus lines converge at the Queens Center Mall, located near Queens Boulevard and Woodhaven Boulevard. The Proposed Actions would not conflict with the primary study area's location within the Transit Zone.

For these reasons, the Proposed Actions would not result in a significant adverse impact on public policy within the primary or secondary study areas, in accordance with the criteria set forth in the 2021 *CEQR Technical Manual*.

ATTACHMENT D:
OPEN SPACE

I. INTRODUCTION

This attachment assesses the potential impacts of the Proposed Actions on open space resources. Open space is defined in the 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or serves to protect or enhance the natural environment. An open space analysis should be conducted if an action would result in a direct effect or an indirect effect on open space. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed action would be sufficient to diminish noticeably the ability of an area's open space to serve the existing or future population. Per the *City Environmental Quality Review (CEQR) Technical Manual*, if a project would generate more than 200 residents or 500 nonresidential users, an open space assessment should be conducted pursuant to CEQR.

While the Proposed Actions would not directly displace any existing open space resources, development facilitated by the Proposed Actions at the Development Site (Queens Block 2137, Lots 1, 6, 8, and 11) is expected to result in an incremental increase of up to 108 dwelling units (DUs) over the 2026 No-Action condition. This would result in an incremental increase of approximately 243 residents[1], as compared to the No-Action condition, which would exceed the *CEQR Technical Manual* preliminary screening threshold for an indirect open space analysis. Both quantitative and qualitative assessments were conducted to determine whether the Proposed Actions would significantly affect the use and enjoyment of publicly accessible open space in an identified study area. The Proposed Actions are not expected to introduce a net increment of employees[2] to the Development Site, as compared to the No-Action condition, this is below the *CEQR Technical Manual* preliminary screening threshold for analysis based on nonresidential users. Therefore, the analysis of indirect open space impacts focuses exclusively on the open space needs of the area's residential population.

II. METHODOLOGY

The analysis of open space resources has been conducted in accordance with *CEQR Technical Manual* guidance. Using CEQR methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio (OSR). This quantitative measure is then used to assess the changes in the adequacy of open space resources in the future, both without and with the Proposed Actions. In addition, qualitative factors are considered in assessing the Proposed Actions' potential effects on open space resources.

In accordance with *CEQR Technical Manual* methodology*,* the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential projects and a quarter-mile radius for commercial projects with a significant worker population.

[1] The estimated number of residents is based on the average household size in Queens Community District 6 (2.25 persons per household) per the 2020 Decennial Census.
[2] Estimate of workers based on standard rates and are as follows: three employees per 1,000 sf of retail space; one employee per 25 DUs; and one garage employee per 50 spaces.

Open Space Study Area

The first step in assessing potential open space impacts is to establish the appropriate study areas for the new population(s) to be added as a result of the Proposed Actions. Pursuant to *CEQR Technical Manual* guidance, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources, which differs by user. Workers typically use passive open spaces within a short walking distance of their workplaces. Residents are more likely to travel farther to reach parks and recreational facilities, and they use both passive and active neighborhood open spaces. While residents may also visit certain regional parks (like Flushing Meadows Corona Park and Forest Park), such open spaces were not included in the study area's quantitative analysis but are described qualitatively. Workers are assumed to walk up to a ¼-mile distance to reach neighborhood open spaces, and residents are assumed to walk up to a ½-mile distance.

In accordance with the guidance established in the *CEQR Technical Manual*, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a half mile of the Development Site and all open spaces within it that are publicly accessible.[3][4] As described above, residents typically walk up to a ½-mile distance for recreational spaces.

The Development Site comprises of four lots (Lots 1, 6, 8, and 11) on the western portion of Queens Block 2137, between 68th Avenue and 68th Road, east of Queens Boulevard, and west of Yellowstone Boulevard. As shown in **Figure D-1**, the half-mile open space study area includes the following 10 census tracts in their entirety: census tracts 709, 711, 713.03, 713.04, 713.05, 713.06, 721, 739, 741, and 743. The open space study area extends approximately as far north as 63rd Road, as far south as Harrow Street, as far east as 110th Street, and as far west to a depth of approximately 126 feet west of Selfridge Street.

Analysis Framework

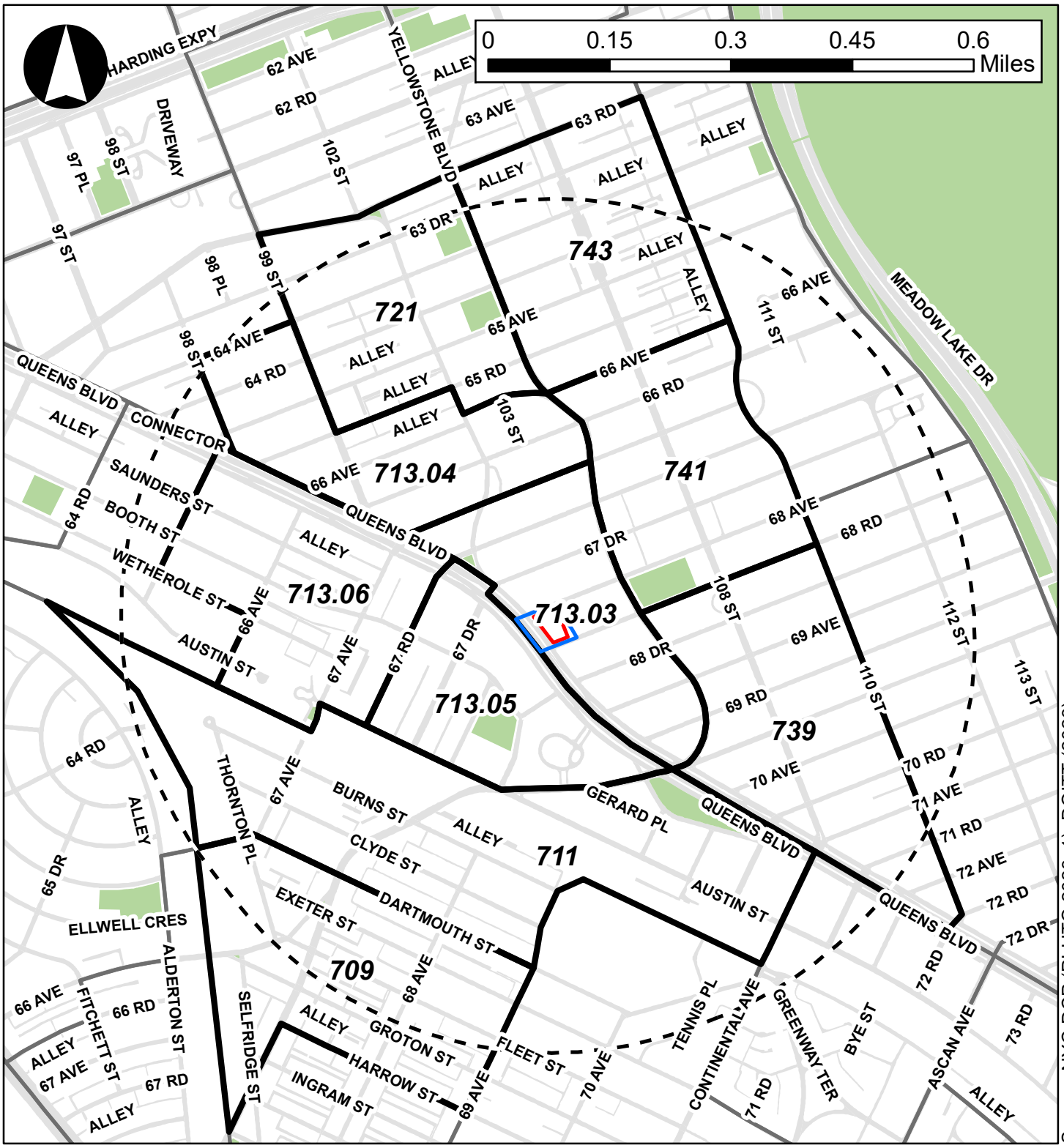
Indirect Effects Analysis

As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add enough population, either workers or residents, to noticeably diminish the ability of an area's open space to serve the existing or future populations. Indirect effects may occur when the population generated by a proposed action overtaxes the capacity of existing public open spaces so that the service provided to existing and future populations in the area would be diminished substantially or noticeably.

As part of the preliminary assessment for open space, a project should be reviewed to determine if it is located in an area of the City within a Walk to a Park Service Area. A Walk to a Park Service Area (WtPSA) is a part of the *OneNYC 2050 Building a Strong and Fair City* plan, in which New York City has laid out a goal for 85 percent of New York City residents living within a walking distance of a park by 2030. Existing areas located within a WtPSA are within a walking distance of a park (i.e., within a ½-mile distance). Areas not located within a WtPSA are considered "walk gaps", which are areas of New York City that are not within walking distance to a park. As shown in **Figure D-2**, the Rezoning Area and a majority of the ½-mile study area are located within area of the City that has been identified as a WtPSA as it is within a walking distance of a park (i.e. not a walk gap area).

[3] As described in **Attachment A, "Project Description"**, the Development Site was chosen over the Rezoning Area for the purposes of defining and determining the study area, given that Lots 13 and 46 would not be materially affected by the proposed rezoning.
[4] Pursuant to the *CEQR Technical Manual,* "public" open space that is analyzed under CEQR is defined as open space that is accessible to the public on a constant and regular basis for active and passive recreation, including for designated daily periods. Public open space may be under government or private jurisdiction.

Figure D-1
Open Space Study Area

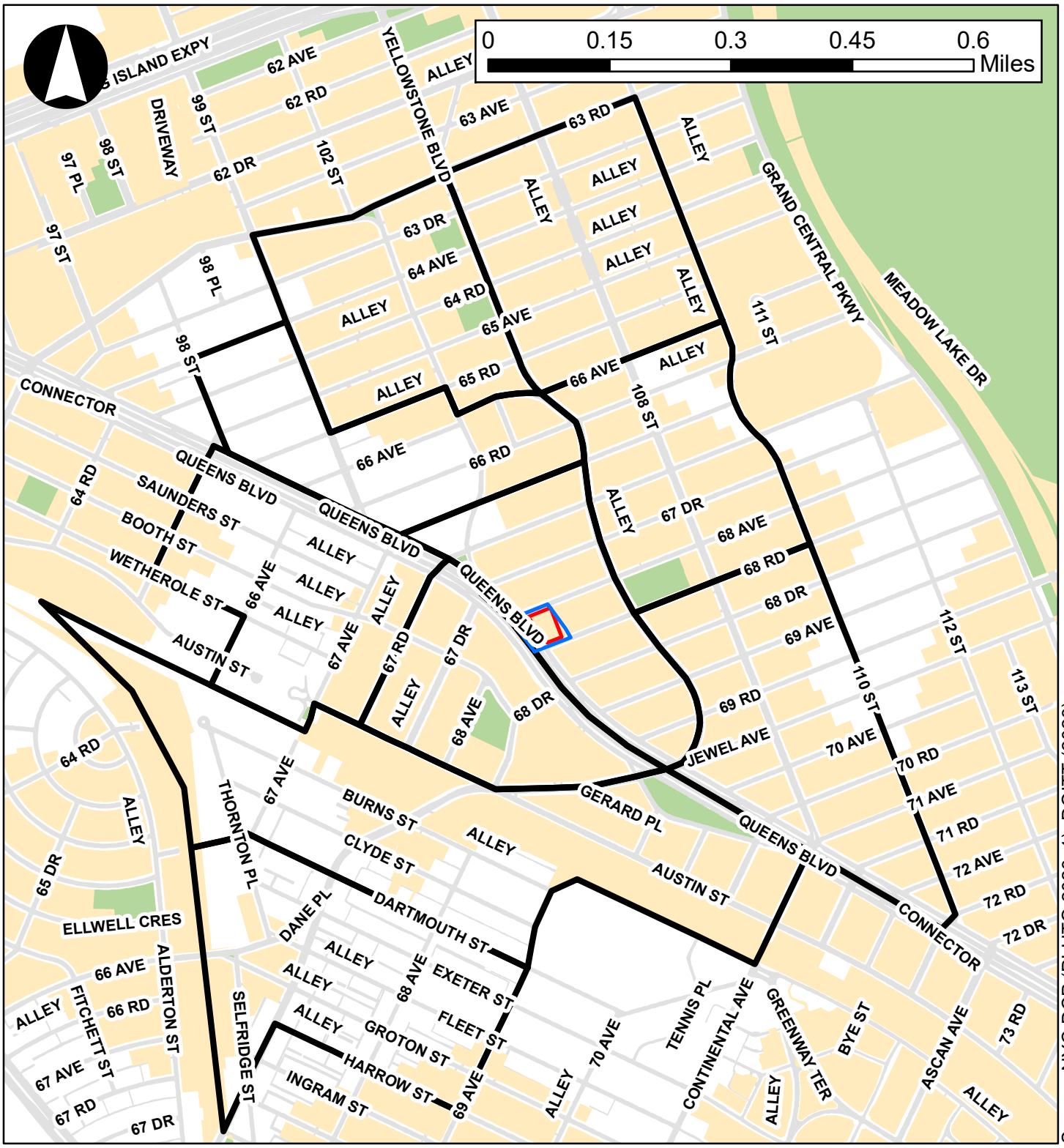


Source: NYC DCP (PLUTO 2023v1); DOITT (2023)

Legend

- Rezoning Area
- Development Site
- 1/2-Mile Radius
- 741 Residential Study Area
- Census Tracts
- Open Space

Figure D-2
Walk to a Park Service Area



Source: NYC DCP (PLUTO 2023v1); DOITT (2023)

Legend

- Rezoning Area
- Development Site
- Residential Study Area
- Open Space
- Walk to a Park Service Area

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that can affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this attachment includes:

- Characteristics of the residential users. To determine the number of residents in the study area, 2017-2021 American Community Survey (ACS) Five-Year Estimates data have been compiled for the census tracts comprising the open space study area.
- An inventory of all publicly accessible passive and active recreational facilities in the open space study area.
- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with the City's planning goal. In New York City, the optimal open space ratio for residential populations is 2.5 acres of open space per 1,000 residents. Ideally, this would be comprised of a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents).
- An evaluation of qualitative factors affecting open space use.
- A determination of the adequacy of open space in the residential open space study area for existing, No-Action, and With-Action conditions.

Preliminary Assessment

According to the *CEQR Technical Manual*, a preliminary assessment may be useful to determine if a detailed open space analysis is necessary, or whether the open space assessment can be targeted to a particular user group. This initial assessment calculates an open space ratio by relating the existing residential and nonresidential populations to the total open space in the study area. It then compares that ratio with the open space ratio in the future with the Proposed Actions. If there is a decrease in the open space ratio that would approach or exceed one percent in areas exhibiting low open space ratios that are 0.50 or less, a detailed analysis is warranted. The detailed analysis examines passive and active open space resources available to residents within the open space study area delineated in accordance with the *CEQR Technical Manual*, as outlined above. As the Proposed Actions would introduce a residential population in an area with a limited amount of available open space, which exhibits a low open space ratio under existing conditions, a detailed open space analysis is warranted and is provided below.

Impact Assessment

As described in the *CEQR Technical Manual,* the significance of an action's effects on an area's open spaces is determined using both quantitative and qualitative factors, as compared to the No-Action condition. The determination of significance is based upon the context of an action, including its location, the quality and quantity of the open space in the future With-Action condition, and any new open space provided by an action.

An action's potential effects on an area's open space are based, in part, on how a project would change the open space ratios in the study area, as well as other qualitative considerations. According to the *CEQR Technical Manual*, a project that would reduce the open space ratio by more than the general guidance for the open space percentage change shown in **Table D-1** may be considered significant, as these

reductions may result in overburdening existing facilities or further exacerbating a deficiency in open space. As shown in **Table D-1**, the guidance for tolerated percent change in open space ratio is determined based on the open space ratio ranges outlined in the *CEQR Technical Manual*. In areas that are within a WtPSA, a greater percentage of change (more than five percent) may be tolerated.

TABLE D-1: Guidance for Percentage Change in Open Space Ratio

Open Space Ratio Range	Percent Change in Open Space Ratio
2.01 to 2.50 or Greater	5%
1.51 to 2.0	4%
1.01 to 1.5	3%
0.51 to 1.0	2%
0.50 or Less	1%
*2.5 open space ratio is the planning goal in New York City.	

Source: Table 7-1 in Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual.*

It should be noted that the City's optimal open space ratios and percentage reductions shown in **Table D-1** do not constitute an absolute impact threshold. The *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. Furthermore, as discussed in Section 321 of Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual*, projects located outside of the WtPSA should be further assessed for qualitative impacts. As such, projects that may result in significant quantitative impacts on open space are typically further assessed in a qualitative assessment to determine the overall significance of the impact.

The qualitative assessment supplements the quantitative assessment and considers the distribution of open space, whether a site is within the WtPSA, the distance from the site to regional parks, the connectivity of open space(s), and any additional open space created by the Proposed Actions not available to the general public, if applicable, and determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment.

III. DETAILED ANALYSIS

Existing Conditions

Study Area Population

To determine the residential population served by existing open space resources, data from the U.S. Census was compiled for the census tracts comprising the ½-mile study area. As shown in **Table D-2**, the study area has a total residential population of approximately 51,945.

Within a given area, the age distribution of a population affects the way open spaces are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages five through nine typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for activities such as ball playing, running, and skipping rope. Children ages ten through 14 use playground equipment, court spaces, Little League fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, *ad hoc* active sports such as Frisbee, and

recreational activities in which all ages can participate. Senior citizens engage in active recreation such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

TABLE D-2: Existing Residential Population in the ½-Mile Study Area

Census Tract	Residential Population
709	3,161
711	6,133
713.03	5,854
713.04	6,275
713.05	5,108
713.06	7,482
721	4,781
739	5,597
741	3,131
743	4,423
Total	***51,945***

Source: 2017-2021 ACS Five-Year Estimates

The residential population of the study area was also broken down by age group. As shown in **Table D-3**, people between the ages of 20 and 64 make up the majority (62.0 percent) of the residential population. Children and teenagers (0 to 19 years old) account for approximately 19.4 percent of the entire residential population, and persons 65 years and over account for approximately 18.6 percent of the residential study area population. Based on this data, the peak hours of open space demand would be expected to be concentrated during weekends and the early morning and late afternoon to evening hours during the week, as it could be assumed that most residents aged 20 to 64 would work or attend school on weekdays.

TABLE D-3: Residential Population Age Distribution in the ½-Mile Study Area

Age Category	Residential Population	Percent of Population
Under 5 years old	3,918	7.5%
5 to 9 years	2,504	4.8%
10 to 14 years	2,238	4.3%
15 to 19 years	1,453	2.8%
20 to 64 years	32,188	62.0%
65 years and older	9,644	18.6%

Source: 2017-2021 ACS Five-Year Estimates

Inventory of Publicly Accessible Open Space

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under CEQR guidance, whereas private open space is not accessible to the public on a regular basis, and is therefore only considered qualitatively. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

An open space is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, and multi-purpose play areas (open lawns and paved areas for active recreation such as running games, informal ball-playing, skipping rope, etc.). Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas.

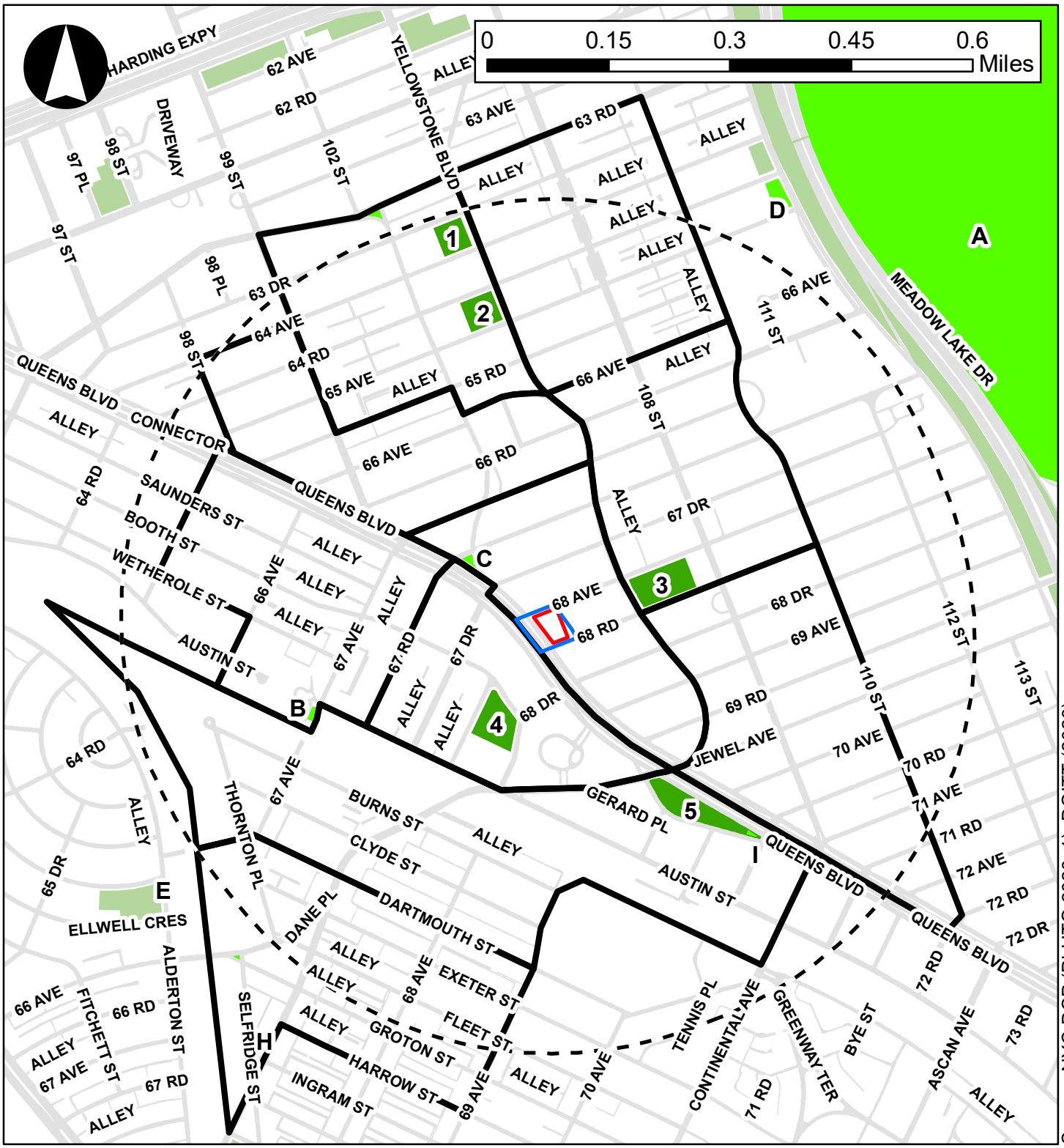
Within the defined study area, all publicly accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. The information used for this

analysis was gathered through field inventories conducted in August 2023, the New York City Department of Parks and Recreation (NYC Parks)'s website, and other secondary sources of information.

The condition of each open space facility was categorized as "Excellent," "Good," "Fair," or "Poor." A facility was considered in excellent condition if the area was clean and attractive and if all equipment was present and in good repair. A good facility had minor problems such as litter or older but operative equipment. A fair or poor facility was one that was poorly maintained, had broken or missing equipment or lack of security, or other factors that would diminish the facility's attractiveness. Determination of the conditions was made based on a visual assessment of the facilities.

Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday afternoon. If a facility seemed to be at or near capacity (i.e. the majority of benches or equipment was in use), then utilization was considered heavy. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. **Table D-4** identifies the address, ownership, hours, and acreage of active and passive open spaces in the study area, as well as their condition and utilization. **Figure D-3** maps their location in the study area.

Figure D-3
Open Space Analysis



Source: NYC DCP (PLUTO 2023v1); DOITT (2023)

Legend

- Rezoning Area
- Development Site
- 1/2-Mile Radius
- Residential Study Area
- Open Space Resources Included in Quantitative Analysis (Refer to Table D-4)
- Open Space Resources Included in Qualitative Analysis (Refer to Table D-4)
- Open Space Not Included in Analysis

TABLE D-4: Inventory of Existing Open Space and Recreational Resources in Study Area

Map No. [1]	Name	Address	Owner/ Agency [2]	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
								%	Acres	%	Acres	
Open Space Resources Included in Quantitative Assessment												
1	JHS 157 Stephen A. Halsey Playground	63-35 102nd Street	NYC DOE	Playground, Handball Courts, Basketball Courts, Benches, Landscaping	Children	Mon-Fri: School close until dusk Sat, Sun, & holidays: 8AM until dusk	0.88	70%	0.62	30%	0.26	Excellent / Low
2	Annadale Playground	Yellowstone Boulevard between 64th Road and 65th Avenue	NYC Parks	Playground, Basketball Courts, Handball Courts, Spray Showers, Benches, Landscaping	Children, Teenagers, Adults, Seniors	8AM - 9PM	1.01	80%	0.81	20%	0.20	Good / Moderate
3	Yellowstone Park	106-21 68th Avenue	NYC Parks	Basketball Courts, Dog Park, Playground, Benches, Landscaping	Children, Teenagers, Adults, Seniors	6AM - 9PM	1.75	50%	0.875	50%	0.875	Good / Moderate
4	Russell Sage Playground	68-98 Booth Street	NYC Parks	Playground, Basketball Courts, Handball Courts, Spray Showers, Fitness Equipment, Benches, Landscaping	Children, Teenagers, Adults, Seniors	6AM - 9PM	1.53	90%	1.38	10%	0.15	Good / Heavy
5	MacDonald Park	8720 Queens Boulevard	NYC Parks	Benches, Landscaping	Children, Teenagers, Adults, Seniors	6AM - 10PM	1.42	0%	0.0	100%	1.42	Good / Moderate
6	Greenstreet: Plaza 67	67-04 Austin Street	NYC DEP	Benches, Landscaping	Children, Teenagers, Adults, Seniors	24/7	0.12	0%	0.0	100%	0.12	Good / Moderate
7	Greenstreet: Federoff Triangle	100-25 Queens Boulevard	NYC DEP	Benches, Landscaping	Children, Teenagers, Adults, Seniors	24/7	0.05	0%	0.0	100%	0.05	Good / Heavy
						½-Mile Study Area Total:	**6.76**	**3.68**	**54.4%**	**3.08**	**45.6%**	
Open Space Resources Not Included in Quantitative Assessment												
A	Flushing Meadows Corona Park	Flushing Meadows	NYC Parks	Baseball/Football/Soccer Fields, Basketball/Handball/Tennis/ Volleyball Courts, Hiking Trails, Monuments, Eateries, Water Features, Boat Rentals, Pools, Zoo, Skate Parks, Playgrounds, Spray Showers, Benches, Landscaping	Children, Teenagers, Adults, Seniors	6AM - 9PM	897.7	50%	448.85	50%	448.85	Excellent / Heavy
B	Underbridge Dog Run	64th Avenue and Grand Central Parkway	NYC Parks	Benches, Landscaping, Dog-Friendly Area	Children, Teenagers, Adults, Seniors	6AM - 9PM	0.46	0%	0.0	100%	0.46	Good / Moderate

Sources: NYC OASIS, NYC Parks, August 2023 field visits.
Notes:
[1] Refer to **Figure D-3**.
[2] NYC Parks = New York City Department of Parks and Recreation; DOE= New York City Department of Education.

TABLE D-4 (Continued): Inventory of Existing Open Space and Recreational Resources in Study Area

Map No. [1]	Name	Address	Owner/ Agency [2]	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
								%	Acres	%	Acres	
Open Space Resources Not Included in Quantitative Assessment												
C	The Painter's Playground	Alderton Street, Dieterle Crescent, & Ellwell Crescent	NYC Parks	Baseball Field, Basketball/Handball Courts, Playgrounds, Spray Showers, Benches	Children, Teenagers, Adults, Seniors	6AM - 9PM	1.70	80%	1.36	20%	0.34	Excellent / Moderate
	Juniper Valley Park[3]	Juniper Boulevard between Lutheran Avenue, 71 Street, & Dry Harbor Road	NYC Parks	Baseball/Soccer/Football Fields, Basketball/Bocce/Handball/Tennis Courts, Running Track, Playgrounds, Roller Hockey, Dog Park, Spray Showers, Restrooms, Benches, Landscaping	Children, Teenagers, Adults, Seniors	6AM – 9PM	55.64	60%	33.38	40%	22.26	Excellent / Heavy
	Forest Park[3]	Myrtle Avenue, Union Turnpike, & Park Lane South	NYC Parks / Forest Park Trust	Baseball/Football Fields, Basketball/Volleyball/Tennis/Bocce/Handball Courts, Skate Park, Playground, Hiking Trails, Horseback Riding Trails, Landscaping, Benches	Children, Teenagers, Adults, Seniors	6AM – 9PM	506.86	90%	456.17	10%	50.69	Excellent / Heavy
½-Mile Study Area Total:							**1,462.4**	**64%**	**939.8**	**36%**	**522.6**	

Sources: NYC OASIS, NYC Parks, January 2023 field visits.

Notes:

[1] Refer to **Figure D-3**.

[2] NYC Parks = New York City Department of Parks and Recreation; DOE= New York City Department of Education.

[3] Juniper Valley Park and Forest Park are two regional parks located just above a mile away from the Rezoning Area and cannot be shown in **Figure F-3**. However, it is anticipated that residents would be willing to travel further to utilize the unique active recreational facilities of these parks and therefore, have been added to the qualitative analysis.

Open Space Resources

As shown in **Table D-4**, approximately 6.76 acres of open space are included in the quantitative analysis, of which approximately 3.68 acres are considered active open space and approximately 3.08 acres are passive open space. Most of the open spaces in the study area are neighborhood parks and playgrounds. A typical neighborhood park within the study area includes facilities for passive use (such as benches, landscaping, lawns, and comfort stations) and active recreation (such as sports fields, dog runs, and basketball courts), and is generally used by people of all ages. The typical playground might include play equipment and sports facilities as well as passive seating areas, and would generally be used by children.

A majority of the publicly accessible open space resources included in the quantitative indirect open space impact assessment are in good to excellent condition. In terms of utilization, all of the study are open space resources exhibit low to heavy utilization. All, with the exception of one playground, are under NYC Parks jurisdiction.

JHS 157 Stephen A. Halsey Playground (Map No. 1) is part of the Schoolyards to Playgrounds program and owned by the NYC Department of Education (DOE). As part of the Schoolyards to Playgrounds program, the resource is open to the public from school close to dusk during the weekdays and from 8AM to dusk during the weekends. JHS 157 Stephen A. Halsey Playground is an approximately 0.88-acre playground located at 63-35 102nd Street. This park includes amenities such as handball and basketball courts, playgrounds, and benches. The playground is in excellent condition and exhibited low utilization.

Annadale Playground (Map No. 2) is an approximately 1.01-acre playground located on Yellowstone Boulevard between 64th Road and 65th Avenue. Annadale Playground consists mainly of active amenities and includes basketball courts, handball courts, playgrounds, and spray showers. It is in good condition and exhibited moderate utilization.

Yellowstone Park (Map No. 3), the largest open space resource in the residential open space study area, is an approximately 1.75-acre park located at 106-21 68th Avenue. The park features both passive and active amenities such as basketball courts, playgrounds, and benches. During field observations, the park is in good condition and exhibited moderate utilization.

Russell Sage Playground (Map No. 4) is an approximately 1.53-acre playground located at 68-98 Booth Street. The playground mainly features active amenities such as a playground, fitness equipment, handball courts, and basketball courts. The playground is in good condition and exhibited heavy utilization.

MacDonald Park (Map No. 5) is an approximately 1.42-acre park located at 8720 Queens Boulevard. The park features passive amenities such as benches and walkways. It is in good condition and exhibited moderate utilization.

Plaza 67 (Map No. 6) and Federoff Triangle (Map No. 7) are two Greenstreets with approximately 0.12-acres and 0.05-acres, respectively. The Greenstreets contains passive amenities such as benches and landscaping. Plaza 67 is in good condition and exhibited moderate utilization. Federoff Triangle is also in good condition and exhibited heavy utilization.

Assessment of Open Space Adequacy

Quantitative Assessment

The following analysis of the adequacy of existing open space resources within the study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents. As an optimal planning goal, the City tries to achieve an overall residential open space ratio of 2.5 acres per 1,000 residents (80 percent [2 acres] active and 20 percent [0.5 acres] passive) for large-scale plans and proposals. Although a typical population mix may call for such a goal, it is often not feasible for many areas of the City (especially higher density areas). As such, the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold.

In calculating the open space ratio per 1,000-user population for the study area, all of the resources listed in the "Open Space Resources Included in the Quantitative Analysis" section of **Table D-4** were included; Resources A to E were not included in the quantitative analysis but are mentioned qualitatively as they are located in close proximity to the study area boundary, in which residents may choose to utilize if willing to travel slightly further.

Table D-5 shows that, with an existing study area residential population of approximately 51,945 people, the existing total open space ratio in the study area is approximately 0.130 acres per 1,000 residents; the study area has approximately 0.071 acres of active open space per 1,000 residents and approximately 0.059 acres of passive open space per 1,000 residents. As indicated in **Table D-5**, the existing total, active, and passive residential open space ratios are below the City's open space planning goals of 2.5, 2.0, and 0.5 acres per 1,000 residents, respectively.

TABLE D-5: Adequacy of Open Space Resource in the Study Area – Existing Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	51,945	6.76	3.68	3.08	0.130	0.071	0.059	2.50	2.0	0.50

Qualitative Assessment

The total, active, and passive open space resources that exist within the open space study area fall below the City's quantitative guidelines, as discussed above. This quantitative deficiency may be partially ameliorated by several factors.

As shown in **Table D-4**, the residential study area resources are in good to excellent condition and feature low to heavy utilization levels, depending on the resource. The residential study area includes a variety of programming for passive and active open space uses, such as playgrounds, basketball courts, handball courts, fitness equipment, spray showers, benches, and landscaped areas. A variety of active programming is available and appropriate for all user groups including children, teenagers, and adults within the study area. As shown in **Figure D-3**, the two largest open space resources in the quantitative analysis are located approximately one block from the Rezoning Area. These resources (Yellowstone Park and Russell Sage Playground) constitute 3.28 acres (approximately 50 percent) of all open space resources in the quantitative analysis and include ball courts, fitness equipment, dog parks, playgrounds, benches, and landscaped areas.

In addition, as detailed in the *CEQR Technical Manual*, residents may travel further than ½-mile to frequent regional parks. Regional parks in close proximity to the Development Site include Flushing Meadows

Corona Park, Juniper Valley Park, and Forest Park. All three regional parks would serve local residents and draw visitors from greater distances throughout the City and provide extensive areas for active recreational activities. The closest, Flushing Meadows Corona Park, is comprised of approximately 898 acres, and located approximately 0.57 miles east of the Rezoning Area. The approximately 507-acre Forest Park is located approximately 1.16 miles south of the Rezoning Area and Juniper Valley Park, approximately 56 acres, is located approximately 1.25 miles west of the Rezoning Area. Regional parks typically contain unique facilities, including expansive ball courts and fields, hiking trails, horseback riding trails, zoos, skate parks, roller hockey, monuments, etc., that are not found within other open space resources in the quantitative analysis. It is likely that residents throughout the residential open space study area would travel further to make use of these open space resources, particularly for active recreational activities such as hiking and jogging and thus, reducing the burden on other open space resources within the residential open space study area. Nevertheless, Flushing Meadows Corona Park, Juniper Valley Park, and Forest Park are not located within the ½-mile open space study area and are not included in the quantitative analysis pursuant to CEQR guidance.

Aside from the regional parks, there are two open space resources located just beyond the study area boundary, which are not included in the quantitative analysis but could be used or enjoyed by the residents (refer to **Figure D-3** and **Table D-4**). Underbridge Dog Run, located just outside the residential open space study area, features 0.46-acres of passive recreational activities, including walkways, benches, and a dog run. The Painter's Playground provides 1.7 acres of primarily active open space with features such as ball courts and ball fields. In total, open space resources not included in the quantitative analysis but in the vicinity of the Rezoning Area provide an additional approximately 1,462.4 acres of open space for residents in the study area. It is expected that a proportion of open space users in the study would frequent these spaces given their proximity, size, and range of amenities.

IV. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

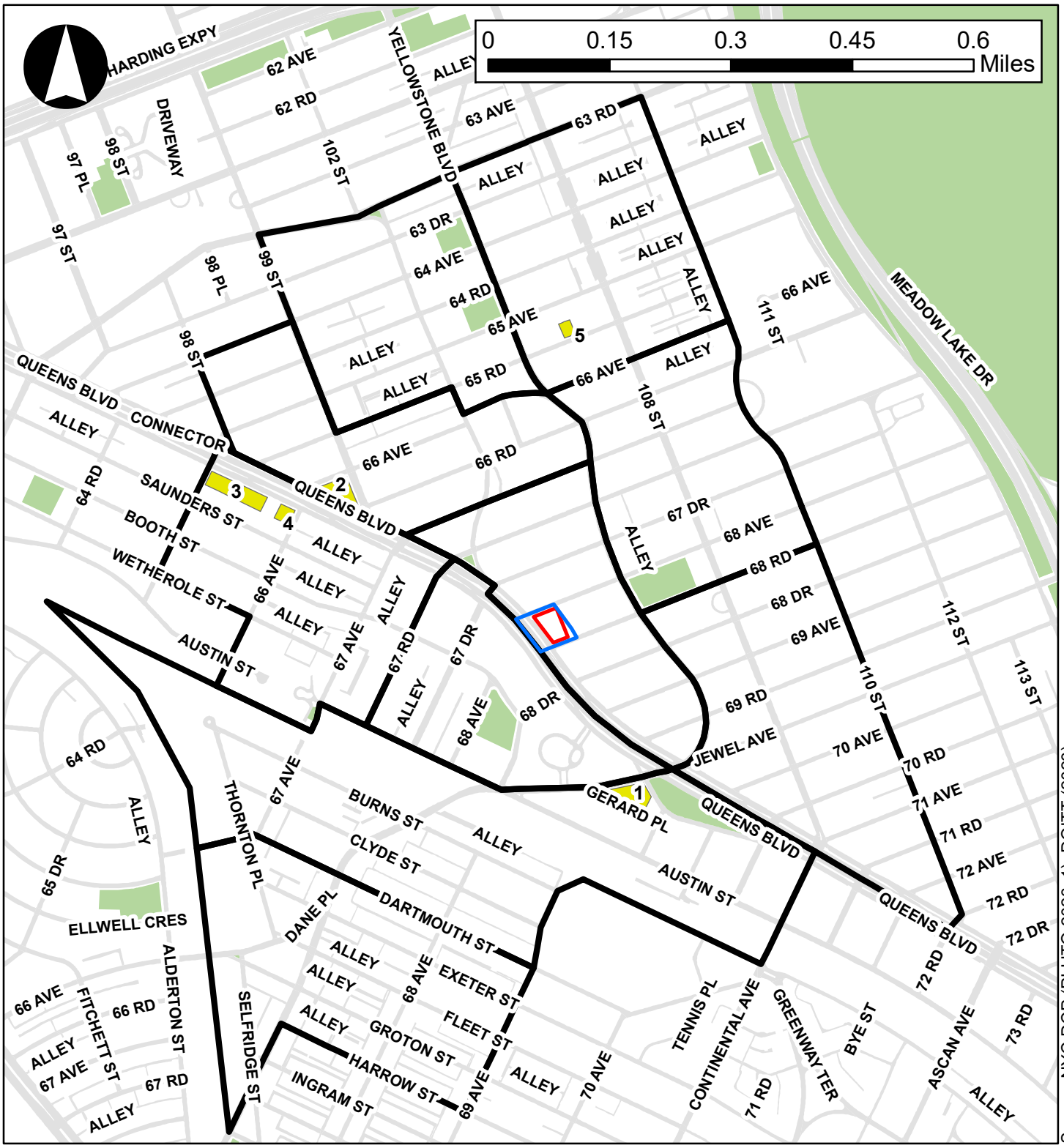
In the absence of the Proposed Actions, it is expected that the Applicant would develop the Development Site pursuant to the existing R7-1/C1-2 zoning district. The No-Action development would be an eight-story (85-foot-tall; 97-foot-tall including the mechanical bulkhead), approximately 158,298-gsf mixed commercial/residential building, comprising approximately 92,763-gsf of residential space (109 DUs) and approximately 20,961-gsf of commercial retail space (4.0 FAR). There would also be an approximately 44,574-gsf accessory parking garage with 128 spaces located on the first and second floors of the building. The No-Action development is anticipated to add 109 new residential units to the study area, generating approximately 245 residents.[5]

Study Area Population

As presented below in **Table D-6** and shown in **Figure D-4**, five new developments are currently planned or anticipated to be completed within the ½-mile open space study area in the future without the Proposed Actions by 2026, which would increase the residential population within the study area. These No-Action developments are anticipated to add approximately 610 new residential units to the study area. **Table D-6** shows that with the Applicant-owned No-Action development, these five No-Action developments are anticipated to increase the ½-mile study area population by approximately 1,619 residents, for a total residential population of approximately 53,564 by 2026.

[5] The estimated number of residents is based on the average household size in Queens Community District 6 (2.25 persons per household) per the 2020 Decennial Census.

Figure D-4
No-Build Residential Development Sites



Source: NYC DCP (PLUTO 2023v1); DOITT (2023)

Legend

- Rezoning Area
- Development Site
- Residential Study Area
- No-Build Sites (refer to Table D-6)
- Open Space Resources

TABLE D-6: Known Planned No-Action Developments within the ½-Mile Study Area

Map No.[1]	Address	Dwelling Units (DUs)	Estimated Residents [2]
Development Site	102-51 Queens Boulevard (Applicant-owned)	109	245
1	69-65 Yellowstone Boulevard	166	374
2	98-14 66th Avenue	170	383
3	97-12 65th Road	186	419
4	98-60 Queens Boulevard	51	115
5	103-51 65th Road	37	83
	Half-Mile Total	***719***	***1,619***

Source: NYC DOB, January 2023
Notes:
[1] Refer to **Figure D-4**
[2] The estimated number of residents is based on the average household size in Queens Community District 6 (2.25 persons per household) per the 2020 Decennial Census.

Open Space Resources

There are no new publicly accessible open spaces expected to be added to either the residential or non-residential study areas under the 2026 No-Action condition, and there are no anticipated changes to any of the existing open space resources currently located within those study areas.

Open Space Adequacy

As detailed above, it is anticipated that under 2026 No-Action conditions, new development in the residential (½ -mile) study area would result in an increase in the population, and thus, would increase the demand on the area's open spaces. As shown in **Table D-7**, similar to existing conditions, the total, active, and passive open space ratios in the No-Action condition would be less than the City's open space planning goals of 2.5 acres of open space per 1,000 residents (including 0.5 acres of passive open space and two acres of active open space), as well as the City's median community district open space ratio of 1.5 acres per 1,000 residents. The total, active, and passive open space ratios would continue to be less than the established open space planning goals, and there would be a net decrease of approximately 0.004, 0.002, and 0.002 in the total, active, and passive open space ratios, respectively, as a result of the anticipated population growth in the 2026 No-Action condition.

TABLE D-7: Adequacy of Open Space Resource in the Study Area – No-Action Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	53,564	6.76	3.68	3.08	0.126	0.069	0.058	2.5	2.0	0.5

V. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

This section describes the open space conditions that would result from the Proposed Actions by 2026. It evaluates the potential for the Proposed Actions to result in significant adverse indirect impacts to open space resources based on a comparison of the No-Action condition (described above) to the With-Action condition.

As described in **Attachment A, "Project Description,"** the Applicant is seeking a zoning map amendment and text amendment to facilitate new development in the Development Site. The With-Action development would be a 17-story (175-foot-tall; 195-foot-tall including mechanical bulkhead),

approximately 247,096-gsf mixed commercial and residential building (7.2 FAR), containing approximately 184,118 gsf of residential space (216 DUs, of which approximately 54 DUs would be permanently affordable pursuant to MIH Option 1) and 19,807-gsf of local retail space. There would also be an accessory parking garage with 87 parking spaces.

The Proposed Development would result in the incremental development of approximately 91,355 gsf of residential uses, including approximately 108 dwelling units (DUs); of which, up to approximately 54 units would be permanently affordable pursuant to MIH, and a net decrease of approximately 1,154 gsf of local retail uses and 41 parking spaces. The Proposed Development is expected to generate approximately 243 incremental residents and 0 incremental workers, as compared to the 2026 No-Action condition.

Direct Effects Analysis

No publicly accessible open space is currently located within the Rezoning Area. Therefore, the Proposed Actions would not cause the physical loss of publicly accessible open space. In addition, the Proposed Actions would not result in any significant adverse shadows, operational air quality, or noise impacts affecting existing open space resources. Furthermore, the Proposed Actions would not change the use of a publicly accessible open space resource so that it no longer serves the same user population, nor would it limit public access to any open space resources.

Indirect Effects Analysis

Study Area Population

In the 2026 future with the Proposed Actions, the Proposed Development would introduce approximately 217 DUs to the Development Site, for a net increment of approximately 108 DUs. Using the same planning assumptions as the No-Action conditions of 2.25 residents per DU, the Proposed Actions are expected to introduce a net increase of approximately 243 residents, and would therefore increase the study area's population to approximately 53,807 residents in the 2026 With-Action condition (refer to **Table D-8**).

TABLE D-8
2026 With-Action Open Space Study Area Population

	No-Action Population	Additional Population from With-Action Developments[1]	Future 2024 With-Action Population
Residential (0.5-mile)	53,564	243	53,807

Notes:
[1] Residential population estimate for With-Action developments based on Queens CD 6 average of approximately 2.25 persons per household (U.S. Census Bureau, 2020 Census).

Open Space Resources

The Proposed Actions would not introduce any new active or passive open space resources to the study area as part of the Proposed Development. As such, under the With-Action condition, open space in the ½-mile open space study area would total approximately 6.76 acres, comprised of approximately 3.68 acres of active open space and approximately 3.08 acres of passive open space.

Open Space Adequacy

As noted above, the open space impact analysis consists of both quantitative and qualitative assessments. The quantitative assessment considers how a proposed action(s) could change the open space ratios in the study area.

The total open space ratio in the study area would remain the same at approximately 0.126 acres per 1,000 residents in the With-Action condition, which falls below the 2.5 total open space ratio goal set by the City (see **Table D-9**). The active open space ratio would decrease from approximately 0.069 acres to 0.068 acres per 1,000 residents and the passive open space ratio would also decrease from approximately 0.058 acres to 0.057 acres per 1,000 residents. Both active and passive open space ratios would remain below the City's open space planning ratio goal. Thus, the total, active, and passive open space ratios are expected to decrease slightly from the No-Action to the With-Action conditions.

TABLE D-9: Adequacy of Open Space Resource in the Study Area – With-Action Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	53,807	6.76	3.68	3.08	0.126	0.068	0.057	2.5	2.0	0.5

Potential Effects of the Proposed Actions on Publicly Accessible Open Space

Quantitative Assessment

According to the 2021 *CEQR Technical Manual*, a significant adverse open space impact may occur if proposed actions would reduce the open space ratio by more than the general guidelines for the open space percentage change provided in **Table D-10**.

TABLE D-10: Detailed Assessment – Percentage Change Guidance to Determine Possible Open Space Impact

Total Open Space Ratio Range*	Active Open Space Ratio Range*	Passive Open Space Ratio Range*	Percentage Change in Open Space ratio Signifying a Possible Adverse Open Space Impact
2.01 to 2.50 Or greater	1.61 to 2.0 Or greater	0.41 to 0.50 Or greater	5%
1.51 to 2.00	1.21 to 1.60	0.31 to 0.40	4%
1.01 to 1.50	0.81 to 1.20	0.21 to 0.30	3%
0.51 to 1.00	0.41 to 0.80	0.11 to 0.20	2%
0.50 or less	0.01 to 0.40	0.01 to 0.10	1%
* 2.5 open space ratio is the planning goal in NYC, with optimal distribution goal of 2.0 active open space ratio and 0.5 passive open space ratio.			

Source: Table 7-5 in Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual.*

Table D-11 expresses the percentage change from No-Action to With-Action conditions for the study area. As noted previously, in the future with the Proposed Actions, ratios of total, active, and passive open spaces to residents would continue to be lower than the optimal planning goals furnished by DCP. As shown in **Table D-11**, the study area's total open space ratio in the future with the Proposed Actions would be remain at approximately 0.126 acres per 1,000 residents, in which there would be a minor decrease from the No-Action condition. The active open space ratio for residents would also decrease from approximately 0.069 acres per 1,000 residents in the No-Action condition to approximately 0.068 acres per 1,000 residents in the With-Action condition. The passive open space ratio in the study area would also decrease from approximately 0.058 acres per 1,000 residents in the No-Action condition to approximately 0.057 acres per 1,000 residents in the With-Action condition.

TABLE D-11: Comparison of No-Action to With-Action Open Space Ratios in the ½-Mile Study Area

Ratio	*CEQR Technical Manual* Open Space Optimal Planning Goal (acres per 1,000)	Open Space Ratios Per 1,000			Percent Change
		Existing	No-Action	With-Action	Future No-Action to Future With-Action
Total – Residents	2.50	0.130	0.126	0.126	-0.45%
Active – Residents	2.0	0.071	0.069	0.068	-0.45%
Passive – Residents	0.5	0.059	0.058	0.057	-0.45%

As shown in **Table D-11**, the Proposed Actions would result in a percentage change in open space ratio below the threshold signifying a possible adverse impact for total, active, and passive open space. The expected approximately 0.45 percent change in the total, active, and passive open space ratios would be a smaller decrease than the applicable one precent decrease figures referenced in **Table D-10** for considering the significance of changes to the total, active, and passive open space ratios. In addition, considering the project's location, the quality, quantity, and types of nearby open space, and the balance of passive and active open space, the Proposed Actions would not result in a possible adverse open space impact.

Qualitative Assessment

In the future with the Proposed Actions, the study area would continue to have a shortfall of total, active, and passive open space similar to the existing and No-Actions conditions. Although these open space ratios in the study area would remain less than the DCP planning goals, the deficiency of open space resources in the study area would be ameliorated by several factors.

The population to be generated by the Proposed Actions is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific groups. Residents in the future with the Proposed Actions are expected to exhibit similar characteristics to the current residents of the study area and the breakdown in population by age group is expected to remain the same. Moreover, the open space resources included in the quantitative analysis were found to be in good to excellent condition and characterized by low to heavy utilization (refer to **Table D-4**).

Data from the U.S. Census Bureau's American Community Survey indicates the approximately 62 percent of the population in the study area falls between the ages of 20 and 64. According to the *CEQR Technical Manual*, this user group utilizes active recreational facilities such as courts and fields for sports, as well as individualized recreation such as biking, jogging, and rollerblading, which require bike paths, esplanades, and vehicle-free roadways. Adults also engage in passive recreational activities such as picnicking, and ad-hoc active sports such as Frisbee, and other recreation activities in which all ages can participate. Per this definition, open space resources in the future with the Proposed Actions would generally be suitable to meet the needs of this user population (refer to **Table D-4**).

The demand for open space generated by the Proposed Actions is not expected to exacerbate the No-Action deficiency, with an approximate 0.45 percent change in the study area's total, active, and passive open space ratios. The population added because of the Proposed Actions is not expected to noticeably affect utilization of the area's open spaces. As noted above, most of the study area open space resources are in good condition and offer a variety of amenities which, therefore, could likely handle some increased demand. In addition, as shown in **Figure D-2**, the Rezoning Area is located within a WtPSA and, therefore, is not located within a walk gap area (i.e., an area of the City that is not within a walking distance to a park).

Furthermore, and as described above, there are several open space resources not included in the quantitative analysis as per guidance from the *CEQR Technical Manual*. These resources include the Painter's Playground and Underbridge Dog Run. The Underbridge Dog Run is located approximately 500 feet to the west of both the open space study area and ¼-mile radius and is expected to provide approximately 0.46 acres of passive open space for seating and a dog run. The 1.7-acre Painter's Playground is located approximately 400 feet to the west of both the open space study area and ¼-mile radius and would primarily provide active open space with amenities such as ball courts and playgrounds. There are also several other Greenstreets located within the residential open space study area that have not been included in the quantitative analysis as they do not provide seating and therefore, do not meet the *CEQR Technical Manual* definition of a public open space. The three largest open space resources not included in the quantitative analysis and located beyond the residential open space study area are Queens regional parks, including the approximately 897.7-acre Flushing Meadows Corona Park, the approximately 55.6-acre Juniper Valley Park, and the approximately 506.9-acre Forest Park. Of the three regional parks, Flushing Medows Corona Park is the closest in proximity to the Rezoning Area at 0.57 miles to the east. Forest Park is located 1.16 miles to the south of the Rezoning Area and Juniper Valley Park is located 1.25 miles to the west of the Rezoning Area. Combined, these open space resources offer approximately 1,462.5 acres (939.8 acres of active open space and 522.8 acres of passive open space) for the residential study area population that is not considered in the quantitative analysis. As such, it can be assumed that residents from both the residential open space study area and those that would reside in the future Proposed Development would likely visit and utilize these additional open space resources.

ATTACHMENT E:
SHADOWS

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions and associated reasonable worst-case development scenario (RWCDS) to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the *City Environmental Quality Review* (CEQR) *Technical Manual*, a shadows assessment is warranted if a proposed action(s) would result in structures (or additions to existing structures) of 50 feet in height or greater, or those that would be located adjacent to, or across the street from, a sunlight sensitive resource. As discussed in **Attachment B, "Supplemental Screening,"** the Proposed Actions would facilitate the development of a new building that would be greater than 50 feet in height. As such, a shadows analysis was prepared in accordance with 2021 *CEQR Technical Manual* guidance to determine the potential for the Proposed Actions to result in significant adverse shadows impacts on sunlight-sensitive resources.

II. METHODOLOGY

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. For projects or actions resulting in structures less than 50 feet tall, a shadow assessment is generally not necessary, unless the site is adjacent to a park, historic resource, or important natural feature (if the feature that makes the structure significant depends on sunlight).

First, a preliminary screening assessment must be conducted to ascertain whether shadows resulting from an action or project could reach any sunlight-sensitive resource at any time of year. The *CEQR Technical Manual* defines sunlight-sensitive resources as those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. The following are considered sunlight-sensitive resources[1]:

- *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in an open space establishes its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots, particularly plots for food production in community gardens. The amount of sunlight typically considered the minimum that plantings and vegetation would need is six to eight hours of direct sunlight. However, certain plantings and vegetation can tolerate partial sun, with a reduced minimum requirement of four to six hours of direct sunlight. Examples of areas that can tolerate partial sun are established tree canopies, shrubs or perennials.

[1] According to the *CEQR Technical Manual*, city streets, sidewalks, and private open spaces (such as private residential front and back yards, stoops, and vacant lots) are not considered sunlight-sensitive resources.

- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features of an architectural resource are considered in a shadows analysis. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids, such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychromy [multicolored] features found on Victorian Gothic Revival or Art Deco facades); historic landscapes, such as scenic landmarks, including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.
- *Natural resources where the introduction of shadows could alter the resource's condition or microclimate.* Such resources could include community gardens, surface water bodies, wetlands, or designated resources, such as coastal fish and wildlife habitats.

The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around each of the development sites representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier, which reduces the area that could be affected by action-generated shadows by accounting for a specific range of angles that can never receive shade in New York City due to the path of the sun in the northern hemisphere. If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by new shadows by looking at specific representative days of the year and determining the maximum extent of shadow over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow – or the additional, or new, shadow that a building or other built structure resulting from a proposed action would cast on a sunlight-sensitive resource during the year – resulting from the proposed project. Incremental shadows are determined by establishing a baseline condition (the No-Action condition) and comparing it to the future condition resulting from the Proposed Actions (i.e., the With-Action condition), thus illustrating the shadows cast by existing or future buildings and distinguishing the additional (incremental) shadows cast by the Proposed Actions. In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern were modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21 vernal equinox (or the September 21 autumnal equinox, which is approximately the same), the June 21 summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6 or August 6 (which are approximately the same). For the cold weather months, the December 21 winter solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive resources.

The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

The detailed analysis provides the data needed to assess the shadow impacts. The effects of incremental shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The results of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text. As described in the *CEQR Technical Manual*, an incremental shadow is generally not considered significant when its duration is ten minutes or less at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of ten minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- *Vegetation:* a substantial reduction in sunlight duration available to sunlight-sensitive features of the resource to less than the time of its minimum sunlight needs (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum sunlight needs).
- *Historic and cultural resources:* a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.
- *Open space utilization:* a substantial reduction in the usability of open space because of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected times.
- *For any sunlight-sensitive feature of a resource:* complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

In general, a significant adverse shadow impact occurs when the incremental shadow added by a proposed action falls on a sunlight-sensitive resource and substantially reduces or eliminates completely direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

III. PRELIMINARY SCREENING

Tier 1 Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. The maximum radius for the Development Site warranting a preliminary shadow analysis was determined using the site's maximum height, including the mechanical bulkhead. The longest shadows that could be cast by the new 195-foot-tall building on the Development Site would be approximately 838.5 feet in length.[2]

Within the maximum shadow radius for the Development Site, there are three identified potentially sunlight-sensitive open spaces, including two public parks and one Greenstreet (refer to **Figure E-1**). Within the Tier I study area, there are no architectural or archaeological resources that are eligible or have been designated as a New York City Landmark (NYCL), on the New York State or National Register of

[2] Although the Applicant is proposing a building with a maximum building height of 175 feet (which maximizes the allowable FAR), with the inclusion of the mechanical bulkhead, the building envelope will rise to a maximum height of 195 feet.

Historic Places (S/NR), or within a New York City, New York State or National Register Historic District. As such, further screening will focus on the three identified potentially sunlight-sensitive open spaces.

Tier 2 Screening Assessment

Due to the path of the sun across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given development site. In New York City, this area lies between -108 and +108 degrees from true north. The purpose of the Tier 2 screening is to determine whether the sunlight-sensitive resources identified in the Tier 1 screening are located within portions of the longest shadow study area that could receive incremental shadows from the proposed developments.

Figure E-1 illustrates the results of the Tier 1 and Tier 2 screening assessments (i.e., the portion of the longest shadow study area lying within -108 degrees from the true north and +108 degrees from true north as measured from the southernmost portions of the development sites). As shown in **Figure E-1**, Russell Sage Playground is located within the Tier 2 area (the area that cannot be shaded) and therefore would not be cast in any shadow from the Proposed Actions. Two sunlight-sensitive resources were identified as sunlight-sensitive resources that warranted further assessment (refer to **Table E-1** below).

Table E-1: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 2 Screening

Map Number [1]	Sunlight-Sensitive Resources
1	Yellowstone Park
2	Greenstreet: Federoff Triangle

[1] Numbers keyed to **Figure E-1**.

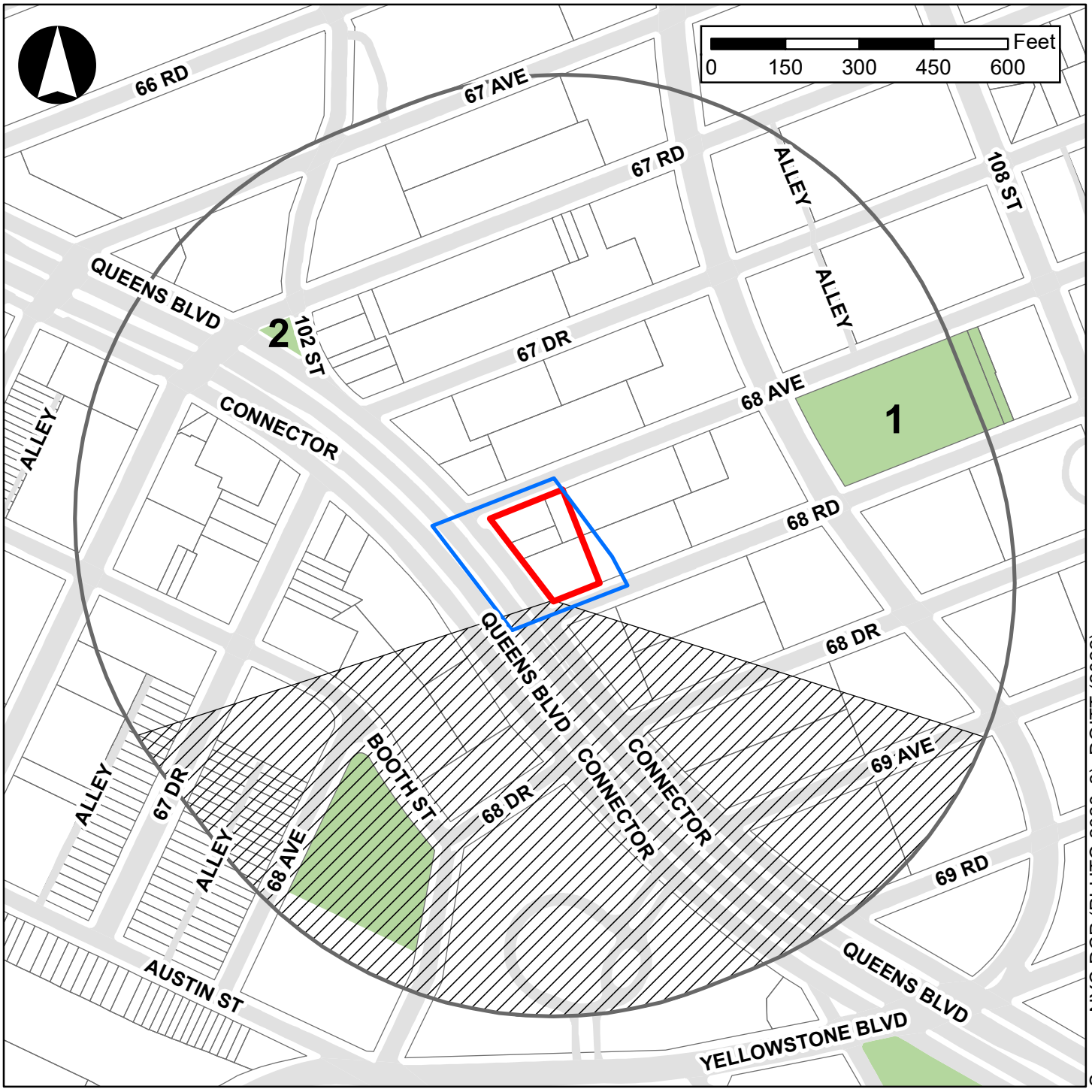
Tier 3 Screening Assessment

According to the *CEQR Technical Manual*, a Tier 3 screening assessment should be performed to determine if, in the absence of intervening buildings, shadows resulting from a proposed action(s) could reach a sunlight-sensitive resource, thereby warranting a detailed shadow analysis. The Tier 3 screening assessment is used to determine if shadows resulting from a proposed action(s) can reach a sunlight-sensitive resource at any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis dates.

A Tier 3 assessment was performed using three-dimensional (3D) computer mapping software for the Development Site to calculate and display action-generated shadows on individual representative analysis dates. The model contained 3D representations of the elements in the base map used in the preceding assessments and a 3D model of the Development Site as a result of the Proposed Actions. At this stage of the assessment, surrounding buildings within the study area were not included in the model so that it may be determined whether action-generated shadows would reach any sunlight sensitive resources.

As shown in **Figure E-2a** and **Figure E-2b** and summarized in **Table E-2**, the Tier 3 screening assessment results determined that Yellowstone Park could each receive incremental shadows from the With-Action RWCDS development, and therefore require a detailed shadows analysis. The other sunlight-sensitive resource, Federoff Triangle (Greenstreet), would not receive incremental shadows from the With-Action RWCDS development, and therefore do not require a detailed shadows analysis.

Figure E-1
Shadows Tier I and Tier II Screening



Legend

- Rezoning Area
- Development Site
- Tier I: Longest Shadow Study Area (838.5' Radius)
- Tier II: Area that Cannot be Shaded
- 1 Resources Keyed to Table E-1

Figure E-2a
Tier III Screening Analysis



MARCH 21/SEPTEMBER 21



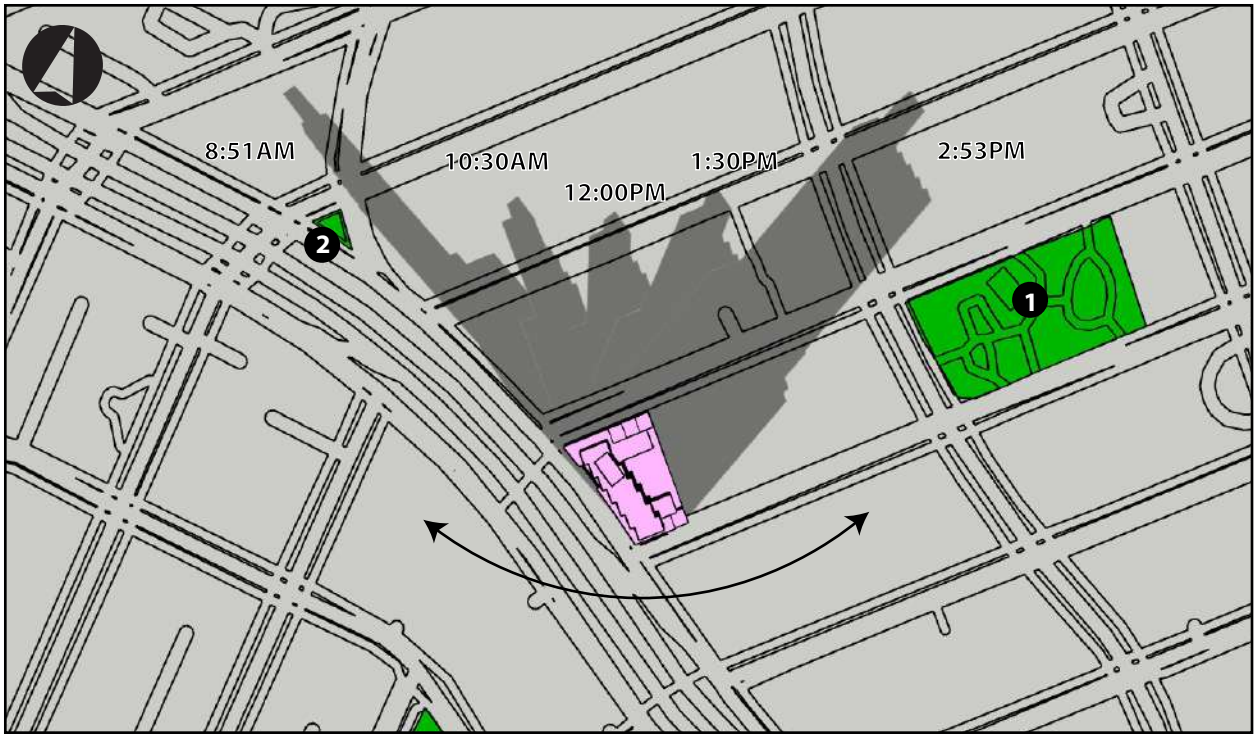
MAY 6/AUGUST 6

Development Site **Incremental Shadows** **1 Open Space**

Note: Open Space keyed to Table E-2



JUNE 21



DECEMBER 21

Development Site **Incremental Shadows** **1 Open Space**

Note: Open Space keyed to Table E-2

Table E-2: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening

No.[1]	Name	March 21/Sept. 21 7:36AM - 4:29PM	May 6/August 6 6:27AM - 5:18PM	June 21 5:57AM - 6:01PM	December 21 8:51AM - 2:53PM	Number of Analysis Days
1	Yellowstone Park	**YES**	**NO**	**NO**	**NO**	**1**
2	Greenstreet: Federoff Triangle	**NO**	**NO**	**NO**	**NO**	**0**

Notes:
[1] Numbers keyed to sunlight-sensitive resources shown in **Figures E-2a and E-2b.**

E. DETAILED ANALYSIS OF SHADOW IMPACTS

Detailed Shadow Analysis

Per *CEQR Technical Manual* guidance, shadow analyses were performed for the one sunlight-sensitive resource identified above on the four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of shadows over the course of the year. CEQR guidance defines the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. As discussed above, the results of the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions (see **Table E-2**).

It should be noted that, per the *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early November. As such, the times reported in this attachment for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect the Eastern Daylight Saving Time.

As shown in **Table E-3**, no incremental shadows would reach Yellowstone Park as a result of the Proposed Actions. Therefore, the Proposed Actions would not result in any significant adverse shadows impacts and further analysis is not warranted.

Table E-3*:* Duration of Incremental Shadows on Sunlight-Sensitive Resources (Increment Compared to No-Action)

Resource	Analysis Day	March 21/Sept. 21 7:36 AM – 4:29 PM	May 6/August 6 6:27 AM – 5:18 PM	June 21 5:57 AM – 6:01 PM	December 21 8:51 AM – 2:53 PM
Yellowstone Park	Shadow enter-exit time	-			
	Incremental shadow duration	-			

Notes:
[A] All times are Eastern Standard Time.
[B] Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.

ATTACHMENT F:
URBAN DESIGN AND VISUAL RESOURCES

I. INTRODUCTION

The 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* states that the urban design components and visual resources determine the "look" of a neighborhood – its physical appearance, including the street pattern, the size and shape of buildings, their arrangement on blocks, streetscape features, natural resources, and noteworthy views that may give an area a distinctive character. Pursuant to CEQR methodology, actions that would allow a project to potentially obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings may warrant a detailed urban design and visual resources analysis. Since the Proposed Actions under the reasonable worst case development scenario (RWCDS) would facilitate the construction of building that would be different in bulk, type, and/or height than what is allowed or required by existing zoning, a detailed urban design and visual resources analysis was prepared.

This attachment considers the potential for the Proposed Actions to affect urban design characteristics and visual resources of the Rezoning Area and the surrounding secondary study area. The technical analysis presented in this attachment follows the guidance of the *CEQR Technical Manual* and addresses each of the previously listed characteristics for existing conditions, the future without the Proposed Actions (the No-Action condition), and the future with the Proposed Actions (the With-Action condition) for Proposed Development under the RWCDS.

As described in **Attachment A, "Project Description,"** the Proposed Actions consist of a zoning map and text amendment that would affect the western portion of a single block (Queens Block 2137) in the Forest Hills neighborhood of Queens Community District (CD) 6. The Applicant is seeking (i) a zoning map amendment to rezone the Rezoning Area from an R7-1/C1-2 district to an R8X/C2-4 district; and (ii) a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to establish the Rezoning Area as a Mandatory Inclusionary Housing (MIH) area.

As also described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of a new, 17-story, 247,096-gross-square-foot (gsf) mixed-use residential and commercial building, containing approximately 184,118 gsf of residential space and 19,807-gsf of local retail space (the "Proposed Development") at the Applicant-owned Development Site (Block 2137, Lots 1, 6, 8, and 11). The residential component is assumed to be comprised of a total of 216 dwelling units (DUs), of which approximately 54 units would be income-restricted pursuant to MIH Option 1. There would also be an accessory parking garage with 87 parking spaces. The maximum building height of the Proposed Development is expected to be 175 feet tall (not including the mechanical bulkhead, which will rise an additional 20 feet). The Proposed Development is the RWCDS With-Action scenario for the Development Site as it maximizes the permitted floor area ratio (FAR) of 7.2, as well as the maximum building height of 175 feet with provision of a Qualifying Ground Floor (QGF). Compared to the No-Action condition, the Proposed Actions would facilitate an incremental (net) increase of 108 DUs and a net reduction of 1,154 gsf of local retail space and 41 parking spaces.

II. METHODOLOGY

Together, the urban design components and visual resources of an area define the distinctive identity of a neighborhood. In an urban design assessment under CEQR, one considers whether and to what degree a project may change the visual experience of a pedestrian in the study area. The assessment focuses on the components of the proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment from the pedestrian point of view. These components include building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. The concept of bulk is created by the size of a building and the way it is massed on a site. Height, length, and width define a building's size; volume, shape, setbacks, lot coverage, and density define its mass. A visual resources analysis identifies and assesses the effects of the proposed action on the study area's visual resources, which are its unique, or important public view corridors, vistas, or natural or built features. Waterfront views, public parks, landmarked structures, landmarked districts, and natural resources are examples of visual resources. As per the guidance of CEQR, only views of visual resources from public and publicly-accessible locations will be assessed. The analysis in this attachment addresses each of these characteristics of existing conditions and the future without and with the Proposed Actions for the year 2026.

In accordance with the *CEQR Technical Manual*, this assessment considers the effects of the Proposed Actions under the RWCDS on the following elements that play an important role in the pedestrian's experience of public space:

- ***Streets*** – the arrangement and orientation of streets define location, flow of activity, street views, and create blocks on which buildings and open spaces are arranged. Other elements including sidewalks, plantings, streetlights, curb cuts, and street furniture also contribute to an area's streetscape.
- ***Buildings*** – building size, shape, pedestrian and vehicular entrances, lot coverage and orientation to the street are important urban design components that define the appearance of the built environment.
- ***Open Space*** – open space consists of public and private areas that do not include structures, such as parks and other landscaped areas, cemeteries, and parking lots.
- ***Natural Features*** – natural features include vegetation, geologic and aquatic features that are natural to the area.
- ***View Corridors and Visual Resources*** – visual resources include significant natural or built features, such as important view corridors, public parks, landmark structures or districts, or otherwise distinct buildings.
- ***Wind*** – Channelized wind pressure from between tall buildings and down-washed wind pressure from parallel tall buildings may cause winds that may jeopardize pedestrian comfort and safety.

Wind Screening

As per Section 230 of the *CEQR Technical Manual*, projects involving multiple, tall buildings at or in close proximity to the waterfront may result in an exacerbation of wind conditions due to "downwash" effects that may affect the pedestrian experience in the area. The Rezoning Area is in the upland area of Forest Hills and is not located in a high wind location (such as along west and northwest-facing waterfronts) and would not experience wind effects from proximity to a body of water. The Proposed Actions would not result in the construction of multiple tall buildings that would have the potential to alter wind conditions. Therefore, a study of wind conditions and their effect on pedestrian level safety is not warranted.

Study Area Definition

The *CEQR Technical Manual* defines the urban design study area as the area "where the project may influence land use patterns and the built environment, and is generally consistent with [the study area] used for the land use analysis." The urban design study area consists of both a primary study area (where urban design effects of the Proposed Actions are direct) and a secondary study area (where the effects of the Proposed Actions are indirect). For this assessment, the primary study area encompasses the Development Site (Brooklyn Block 2137, Lots 1, 6, 8, and 11)[1]. Consistent with **Attachment C**, **"Land Use, Zoning, and Public Policy,"** the secondary study area for urban design and visual resources has been identified as a 400-foot radius from the Development Site, with that boundary extended to include lots with buildings that fall substantially (over 50 percent) within the 400-foot radius (see **Figure F-1**). This is considered the area within the surrounding area whose land use and built environment have the potential to be indirectly affected by the Proposed Actions. As shown in **Figure F-1**, the secondary study area is generally bound by Yellowstone Boulevard to the east, to a depth of 100 feet south of 68th Drive to the south, Booth Street and 67th Drive to the west, and to a depth of 100 feet north of 67th Drive to the north.

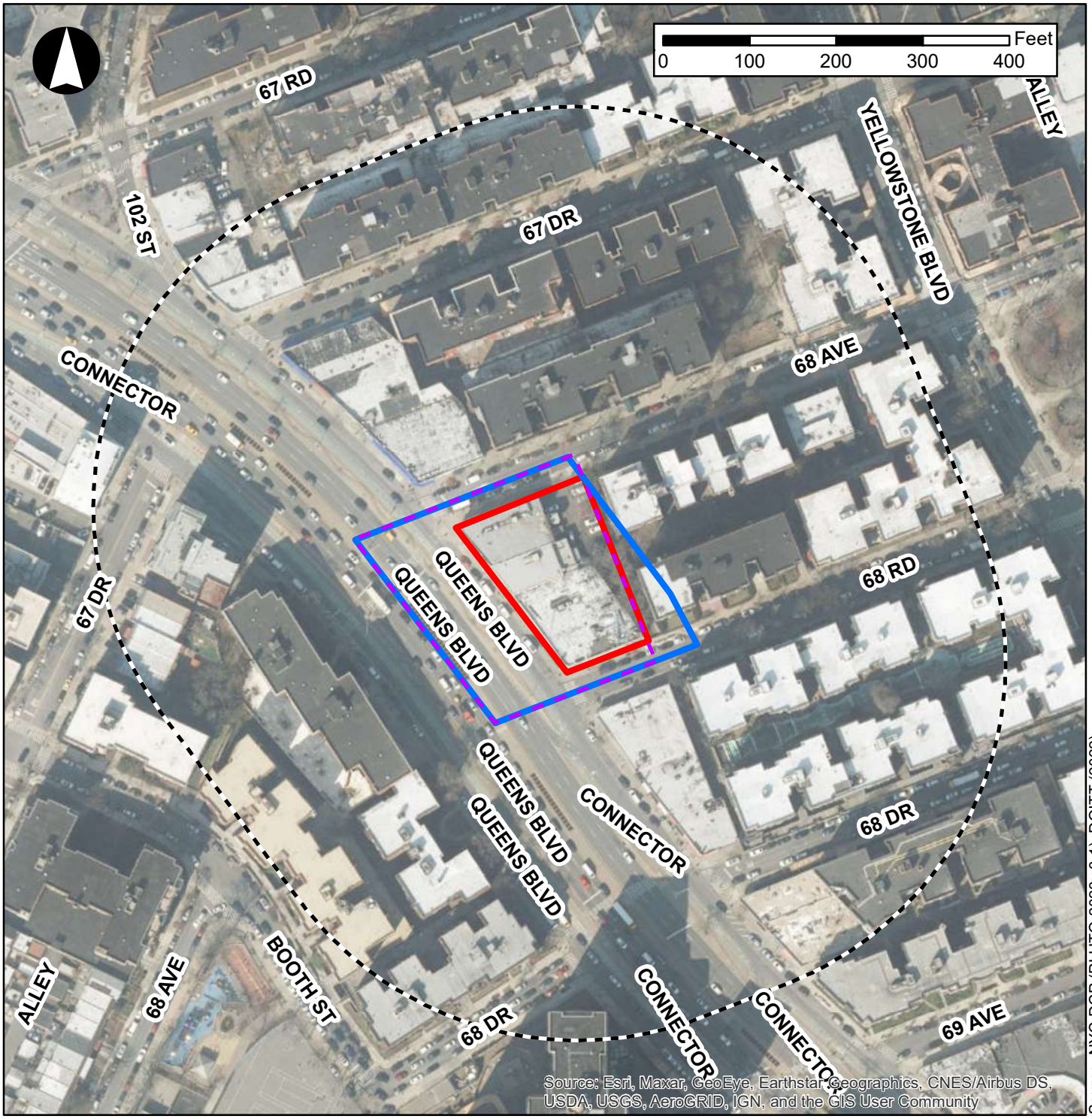
The analysis is based on field visits, aerial views, photographs, and other graphic images of the Development Site and surrounding secondary study area. An aerial photo of the study areas is provided in **Figure F-1**. **Figures F-2a** through **F-3c** present photos and display urban design characteristics of the study areas.

As the Proposed Actions would result in physical changes within the Development Site beyond the bulk and form currently permitted as-of-right, it has the potential to result in development that could alter the arrangement, appearance, and functionality of the built environment and, therefore, change a pedestrian's experience of the Development Site. Therefore, it is appropriate to assess the Proposed Actions potential impacts to urban design and visual resources. As described in **Attachment A, "Project Description,"** this analysis assumes that the With-Action condition would attempt to maximize the building envelope permitted through zoning. The urban design analysis presented below follows the guidance of the *CEQR Technical Manual.*

III. PRELIMINARY ASSESSMENT

Under CEQR, a preliminary assessment of urban design 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; and 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 action. According to the *CEQR Technical Manual*, detailed analyses are generally appropriate if an action introduces a new building requiring exception to existing zoning and would result in changes in height and setback requirements. As the Proposed Actions include a zoning map amendment that would facilitate a building with bulk characteristics and density beyond what is permitted as-of-right, a detailed urban design and visual resources assessment is warranted.

[1] As described in **Attachment A, "Project Description,"** the rezoning affects only small portions of the adjacent lots (Lots 13 & 46). Because this small change is not expected to result in any changes to land use for these lots, the Development Site, not Rezoning Area, has been chosen as the primary study area for the purposes of this analysis.

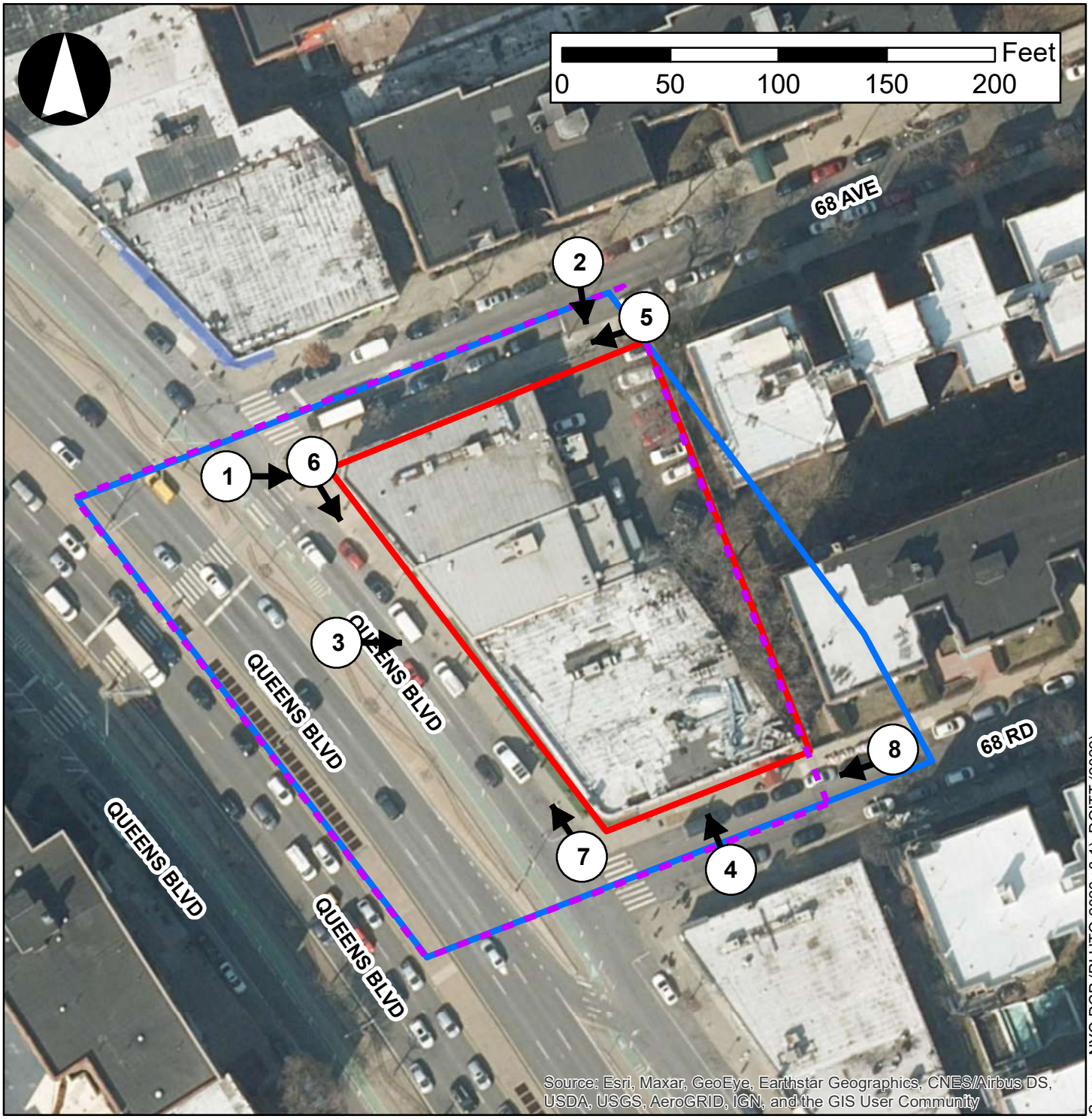


Source: NYC DCP (PLUTO 2023v3.1); DOITT (2022)

Legend

- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- 400-Foot Radius

Figure F-2a
Photo Indicator Map - Primary Study Area



Source: NYC DCP (PLUTO 2023v3.1); DOITT (2022)

Legend

- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- 1 → Photo Location



1. View looking southwest along 68th Avenue towards the intersection of 68th Avenue and Queens Boulevard.



2. View looking southeast along Queens Boulevard from the intesection of Queens Boulevard and 68th Avenue.



3. View looking northwest along Queens Boulevard from the intersection of Queens Boulevard and 68th Road.



4. View looking southwest along 68th Road towards the intersection of 68th Road and Queens Boulevard.



5. View looking east at the Development Site from the intersection of Queens Boulevard and 68th Avenue.



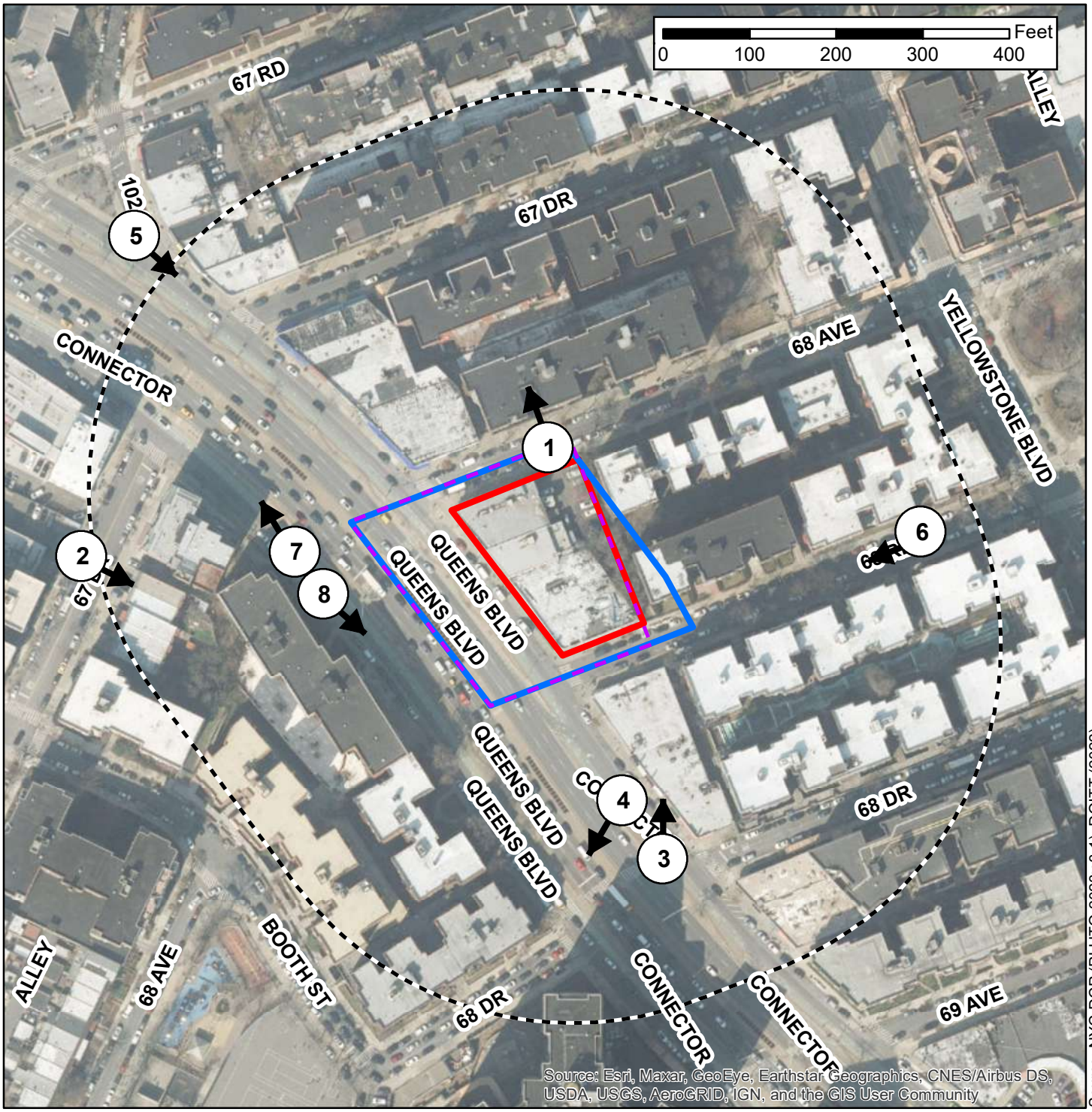
6. View looking south at the Development Site from the midblock of 68th Avenue between Queens Boulevard and Yellowstone Boulevard.



7. View looking east at the Development Site from the midblock of Queens Boulevard between 68th Avenue and 68th Road.



8. View looking northwest at the Development Site from the intersection of 68th Road and Queens Boulevard.



Source: NYC DCP (PLUTO 2023v3.1); DOITT (2022)

Legend

- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- 400-Foot Radius
- 1 → Photo Location



1. View looking southeast along Queens Boulevard from the intersection of Queens Boulevard, 102nd Street.



2. View looking southwest along the midblock of 68th Road between Queens Boulevard and Yellowstone Boulevard.



3. View looking northwest along the midblock of Queens Boulevard between 67th Drive and 68th Drive.



4. View looking southeast along the midblock of Queens Boulevard between 67th Drive and 68th Drive.



5. View looking north at a mid-rise residential building from the midblock of 68th Avenue between Queens Boulevard and Yellowstone Boulevard.



6. View looking southeast at low-rise residential buildings from the midblock of 67th Drive between Queens Boulevard and Booth Street.



7. View looking northeast at low-rise commercial buildings from the intersection of Queens Boulevard and 68th Drive.



8. View looking southwest at mid-rise residential buildings from the intersection of Queens Boulevard and 68th Drive.

IV. EXISTING CONDITIONS

As noted above, **Figure F-1** shows both the primary (i.e., Development Site) and 400-foot secondary study areas. **Figure F-2a** and **F-3a** provides a photograph key for the approximate locations of where each of the photographs included in **Figures F-2b** through **F3c** had been taken.

Development Site (Primary Study Area)

The Development Site consists of four contiguous lots on the western portion of Queens Block 2137, including Lots 1, 6, 8, and 11, in their entirety. The Development Site totals approximately 25,590-square-feet (sf) and has approximately 208 feet of frontage along the north side of Queens Boulevard, approximately 100 feet of frontage along the north side of 68th Road, and approximately 158 feet of frontage along the south side of 68th Avenue. **Figure F-2b** provides views of the primary study area streetscape and **Figure F-2c** provides views of the existing buildings in the primary study area.

Streets

Queens Boulevard is a major two-way arterial road that runs east-west directly west of the Development Site. It is a New York City Department of Transportation (DOT) truck route and supports large volumes of traffic. With a total width of 200 feet, Queens Boulevard is classified as a "wide" street for the purposes of zoning. The road has three mainline moving lanes, one service road, and a conventional bike lane in each direction as well as curbside parking on both curbs. An approximately 15-foot-wide median divides the east-west mainline lanes and an approximately 12-foot-wide median divides the mainline road lanes from the service road lane in each direction (see **Figure F-3b, Photos #3 and #4**). Streetscape elements along Queens Boulevard vary, including standard DOT street signage, street lamps, fire hydrants, public trash cans, bike racks, and a Muni-meter (see **Figure F-2b, Photos #2** and **#3**). In addition, artificial grass and flowerpots are placed along Lot 1 to provide an inviting environment for customers of the existing restaurant (see **Figure F-2b, Photo #3**). There are no existing curb cuts fronting the Development Site's Queens Boulevard frontage.

68th Avenue and 68th Road are local streets and each feature a width of 60 feet and are considered "narrow" streets for the purposes of zoning. 68th Avenue has one westbound moving lane with parking on both curbs and 68th Road has one eastbound moving lane with parking on both curbs. On the southern sidewalk of 68th Avenue adjacent to the Development Site, there are street lamps, standard DOT street signage, two street trees, a newspaper box, and a Muni-meter. There is also a single, approximately 23-foot-wide curb cut that serves the existing parking lot on Lot 11 of the Development Site (see **Figure F-2b, Photo #1**). On the northern sidewalk of 68th Road adjacent to the Rezoning Area, streetscape elements are limited to standard DOT street signage and Muni-Meter, as well as the artificial grass and flowerpots which wrap around a portion of the restaurant's frontage on 68th Road (see **Figure F-2c, Photo #8**). Due to the existing mixed residential and commercial uses immediately surrounding the Development Site, cars are often parking along both curbs of 68th Avenue and 68th Road adjacent to the Development Site.

The ground floors of the four existing retail buildings on Lots 1, 6, and 8 feature west-facing storefront windows along the Development Site's Queens Boulevard frontage. The only windows facing the street at ground level on the Development Site's 68th Avenue are the north-facing storefront of the corner lot urgent care facility on Lot 8. On the Development Site's 68th Road frontage, the restaurant on Lot 1 has one south-facing window.

Buildings

The Development Site is comprised of three commercial lots (Lots 1, 6, and 8) and one parking lot on Lot 11. Lot 1 (11,348-sf) is a large, irregular-shaped corner lot with approximately 103 feet of frontage along the east side of Queens Boulevard and approximately 101 feet of frontage along the north side of 68th Road. As shown in **Figure F-2c**, **Photos #7** and **#8**, the lot is currently occupied by a single-story, 19,100-gsf (0.99 FAR) commercial building containing five restaurants. The building features a peach-colored stucco façade with faux columns along Queens Boulevard and a dark-red and light-tan stucco façade along 68th Road.

Lot 6 (3,715-sf) is a narrow, irregular-shaped interior lot with approximately 42 feet of frontage along the west side of Queens Boulevard. The lot is currently improved with a one-story, 3,680-gsf (0.95 FAR) commercial building containing a restaurant (see **Figure F-2c, Photo #5**). The building features a white-painted brick façade with faux columns along the ground floor and a peach-colored stucco façade above brick façade.

Lot 8 (6,527-sf) is an irregular-shaped corner lot with approximately 63 feet of frontage along the west side of Queens Boulevard and approximately 119 feet of frontage along the south side of 68th Avenue. As shown in **Figure F-2c**, **Photo #5**, the lot is currently occupied by a one-story, 5,770-gsf (0.88 FAR) commercial building containing a bank and an urgent care facility. Lot 8 features a gray stucco façade for the urgent care facility and a gray masonry wall for the bank.

Lot 11 (4,000-sf) is a narrow rectangular-shaped interior lot with approximately 40 feet of frontage along 68th Avenue. As shown in **Figure F-2c**, **Photo #6**, the lot currently functions as an approximately 10-space parking lot for employees of the bank on the adjacent Lot 8. No buildings are located on Lot 11.

Visual Resources

The primary study area does not contain any notable natural or built features, including views of the waterfront, public parks, designated landmark structures or districts, or otherwise distinctive buildings or groups of buildings.

Open Space

As the primary study area is occupied by three commercial buildings (five restaurants, a bank, and an urgent care facility) and a paved parking lot accessory to the bank, there are no publicly accessible open spaces located within the primary study area.

Natural Features

As the primary study area is in an urbanized location, it does not contain any natural features. The topography of the primary study area is generally flat with elevations within the primary study area at a slight slope upwards from east to west along 68th Avenue and 68th Road and a slight slope downwards from north to south along Queens Boulevard.

Secondary Study Area

The larger secondary study area contains all or part of five tax blocks. The secondary study area extends as far east as Yellowstone Boulevard, as far south as 100 feet south of 68th Drive, as far west as Booth

Street and 67th Drive, and as far north as 100 feet north of 67th Road (see **Figure F-1**). Refer to **Figure F-3b** for photographs of the streetscape within the secondary study area and **Figure F-3c** for photographs of existing buildings within the secondary study area.

Streets

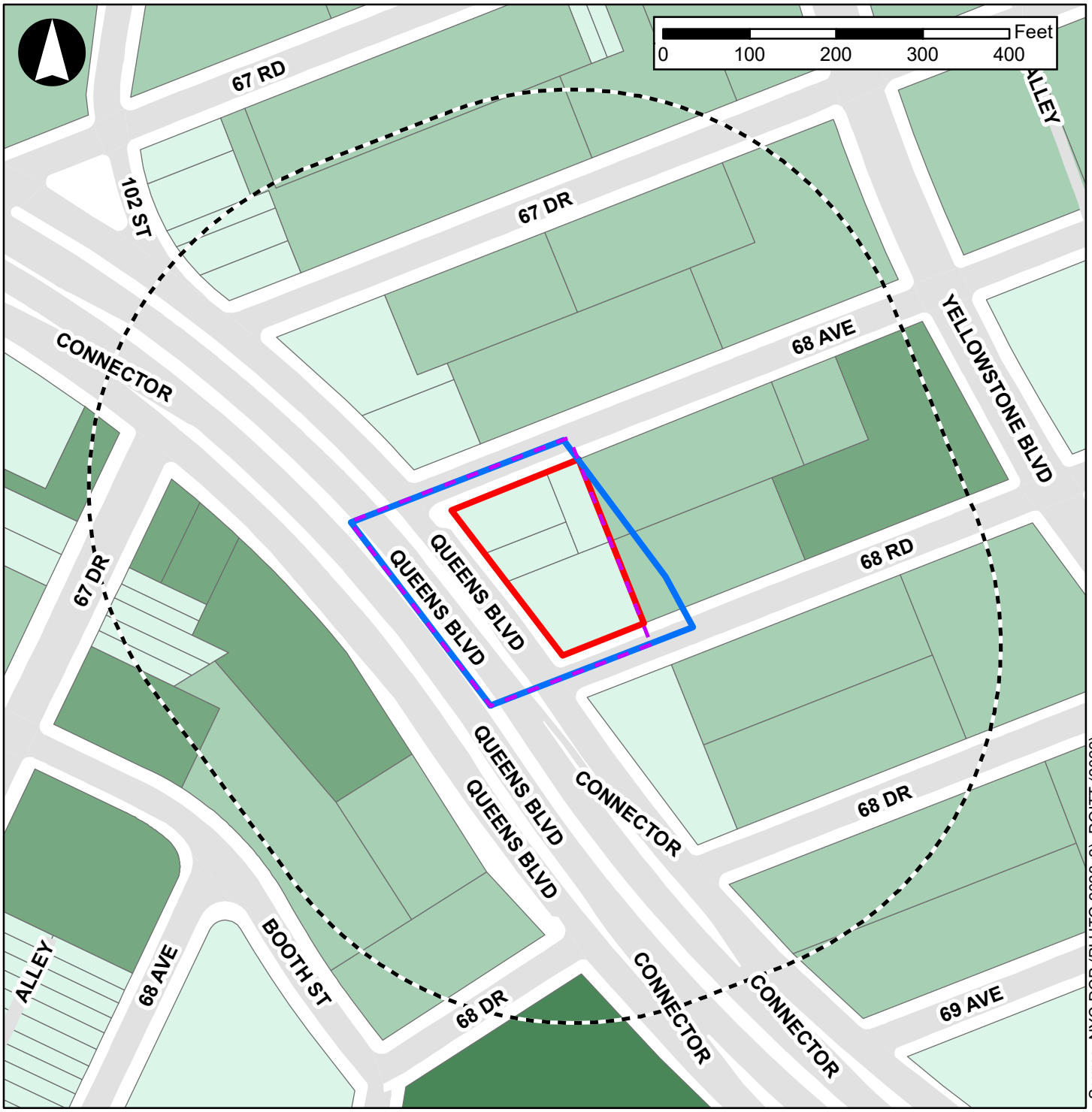
The street pattern in the larger secondary study area roughly forms a rectilinear grid that is made irregular by Queens Boulevard traversing diagonally. As a result, blocks throughout the secondary study area are varied in shape, length, and width. Though most blocks located to the east of the secondary study area are oriented perpendicular to Queens Boulevard, the westernmost block in the secondary study area is oriented parallel to Queens Boulevard. As discussed above, Queens Boulevard is a major arterial road supporting large volumes of traffic and its streetscape is characterized by its status as a commercial corridor. It is the widest street in the secondary study area with a width of 200 feet. As mentioned above, three raised curb medians (two 12-foot-wide and one 15-foot-wide) are located to the west of the Rezoning Area along Queens Boulevard, separating the type (i.e., mainline or service) and direction of the moving lanes (see **Figure F-3b, Photos #3 and #4**). The medians also offers pedestrians who cannot cross the boulevard in time a safe refuge. The character of Queens Boulevard's streetscape within the secondary study area is pedestrian-oriented through the presence of residential and ground floor retail uses as well as nearby transit attracting pedestrian traffic. Within the secondary study area, these uses generally form continuous streetwalls with windows facing the street at the ground floor. While commercial uses are built to the lot line, residential buildings often include entrance stairways or walkways that extend into the sidewalk, as well as small, landscaped areas at the lot lines. Queens Boulevard features a more varied streetscape with elements such as street trees, standard DOT street signage, fire hydrants, public trash cans, mailboxes, relay boxes, newspaper boxes, red fire alarm boxes, bike racks, Muni-meters, and a bus stop and shelter for the Q60 bus route.

Yellowstone Boulevard is an 80-foot-wide, two-way north-south local street with one moving lane and on-street parking on both curbs. Within the secondary study area, Yellowstone Boulevard is generally characterized by residential uses, creating a pedestrian-friendly streetscape featuring abundant street trees and landscaping at the lot lines and by building entrances. Residential buildings generally form continuous streetwalls with ground floor street-facing windows throughout.

67th Road, 67th Drive, 68th Road, 68th Avenue, 68th Drive, and Booth Street are all 60-foot-wide narrow local streets carrying one-way local traffic with parking lanes on both curbs (see **Figure F-3b, Photo #2**). Sidewalk widths, though narrow, vary from approximately five feet on the south curb of 68th Drive to approximately 15 feet on the north curb of 67th Drive and 68th Avenue. Residential buildings are typically located along these streets and form continuous streetwalls with some exceptions and limited streetscape elements, including standard DOT street signage, street trees, and fire hydrants. These residential buildings often include entrance walkways that extend to the sidewalk and small, landscaped areas at the lot lines.

Buildings

As described in **Attachment C, "Land Use, Zoning, and Public Policy,"** land uses within the secondary study area are limited, with residential land uses represented as the predominant land use within the secondary study area. Refer to **Figure F-3c** for photographs of buildings within the secondary study area; **Figures F-4** and **F-5,** respectively, show built densities and heights of buildings throughout the secondary study area.



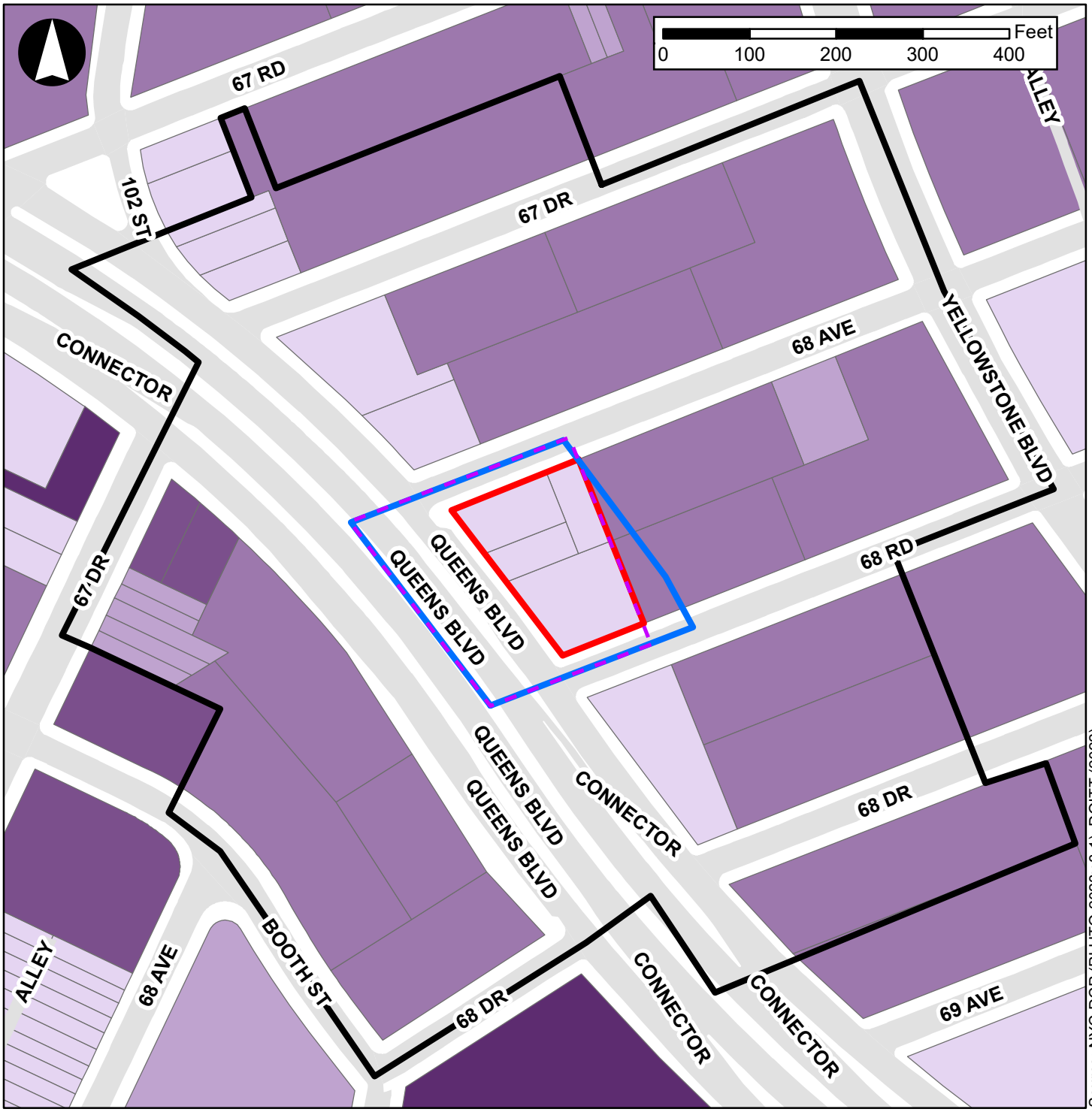
Legend

- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- 400-Foot Radius

Built FAR

- Less than 2 FAR
- 2.01-4.0 FAR
- 4.01-6.0 FAR
- 6.01-8.0 FAR
- Greater than 8 FAR

Figure F-5
Building Heights



Legend

- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- Urban Design Study Area

Number of Floors

- Less than 2 Stories
- 3-4 Stories
- 5-6 Stories
- 7-8 Stories
- Greater than 8 Stories

There are approximately 37 buildings located wholly within the secondary study area, excluding the existing buildings within the Rezoning Area. These buildings can be categorized into three general typologies, including small walk-up residential buildings under four stories, medium-sized residential and mixed residential/commercial buildings, and commercial buildings of under two stories. Six-story multi-family elevator and mixed-use residential/commercial buildings are the most common building type in the secondary study area and are located along the residential side streets and to the west of Queens Boulevard and Yellowstone Boulevard (see **Figure F-3c, Photo #5** and #**8**). These buildings typically occupy larger lots and are generally set back approximately five to 15 feet from the lot lines, with the setback area occupied by landscaping and entrance walkways. The six-story mixed residential/commercial buildings along Queens Boulevard to the west are more recent developments built in the past 30 years while the other medium-sized residential and mixed residential/commercial buildings were built in the early 1940s to early 1960s. The largest building within the secondary study area is located at 102-25 67th Drive (Queens Block 2135, Lot 59). The approximately 138,700-gsf, six-story multi-family elevator building owned by 102-25 67th Drive GST SMO 5, LLC occupies 39,000 sf of lot area and was built in 1960. There is a row of five attached, three-story brick residential walk-up buildings located along 67th Drive to the south of Queens Boulevard (see **Figure F-3c, Photo #6**). These buildings exhibit typical features such as a front-yard setback of approximately 15-20 feet from the lot lines and paved driveways. Commercial buildings are located along Queens Boulevard, the major commercial corridor in the secondary study area. The east side of Queens Boulevard features low-rise, single-story commercial retail buildings that are oriented towards the street (see **Figure F-3c, Photo #7**). These buildings are built to the lot line and form continuous streetwalls. The commercial retail stores feature prominent awnings and signage along with large ground floor windows oriented towards the street.

As shown in **Figure F-4**, lots with the highest built density are typically located to the west of Queens Boulevard. The built density ranges from 0.49 FAR to 4.83 FAR, with the highest FAR building located at 102-10 Queens Boulevard (Queens Block 3173, Lot 7502) to the west of the Rezoning Area. As shown in **Figure F-5**, lots within the secondary study area typically six-story buildings, with low-rise buildings (less than three stories) generally concentrated on lots along Queens Boulevard to the east and lots along 67th Drive to the south of Queens Boulevard. The building heights range from a minimum of 14 feet (one-story) to a maximum of 75 feet (six-stories).

Visual Resources

There are no visual resources within the secondary study area.

Open Space

There are no parks within the secondary study area. Open space is generally limited to landscaped areas at residential buildings, which feature interior courtyards and small landscaped areas along the lot lines of residential buildings.

Natural Features

The topography of the secondary study area is more varied than that of the Rezoning Area. From north to south along Queens Boulevard, the secondary study area's topography slopes downwards approximately 21 feet, from a high elevation of approximately 87 feet at 67th Drive to a low elevation of approximately 66 feet at 68th Drive. There is also an east-west slope to the east of Queens Boulevard, where the side streets of 67th Road, 67th Drive, 68th Avenue, 68th Road, and 68th Drive all slope downwards to an elevation of approximately 41 feet along Yellowstone Boulevard. There are no other notable natural features in the secondary study area.

V. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Primary Study Area (Rezoning Area)

In the 2026 future without the Proposed Actions (the No-Action condition), the Rezoning Area's existing R7-1/C1-2 zoning would remain in place. The Applicant would develop an as-of-right eight-story (85-foot-tall; 97-foot-tall including mechanical bulkhead), mixed residential/commercial building on the Development Site (Block 2137, Lots 1, 6, 8, and 11). The building would total approximately 158,298-gsf (4.0 FAR), of which approximately 92,763-gsf would be residential uses (109 market rate DUs) and 20,961-gsf would be commercial retail uses. The future No-Action development would also contain 128 enclosed accessory parking spaces (44,574-gsf) located on the first and second floors of the building.

As shown in **Figures F-6a** and **F-6b**, in accordance with the existing R7-1/C1-2 zoning, the No-Action development would be constructed at the street line and would form solid streetwalls along the eastern portion of Queens Boulevard. The building would have a base height of 65 feet and then would setback 10 feet before rising to a maximum height of 85 feet (not including the mechanical bulkhead, which will rise an additional 12 feet).

Visual Resources

In the No-Action condition, the as-of-right development on the Applicant's Development Site would not obstruct any view corridors or alter any visual resources in the primary study area, as the development would occur on an existing block that contains no visual resources, and no new visual resources are anticipated to be introduced within the primary study area as a result of the as-of-right development.

Secondary Study Area

Within the approximately 400-foot secondary study area, there are no known projects anticipated to be completed in the 2026 future without the Proposed Actions. As such, the built character of the secondary study area would remain characterized by the building typologies identified above. In addition, no changes to streets or streetscapes are anticipated within the secondary study area. The secondary study area does not contain any natural features. Existing secondary study open space, such as the landscaped areas along existing residential buildings, are anticipated to remain unchanged from existing conditions.

Visual Resources

There are no visual resources within the secondary study area and no new visual resources are anticipated to be introduced within the secondary study area in the 2026 future without the Proposed Actions.

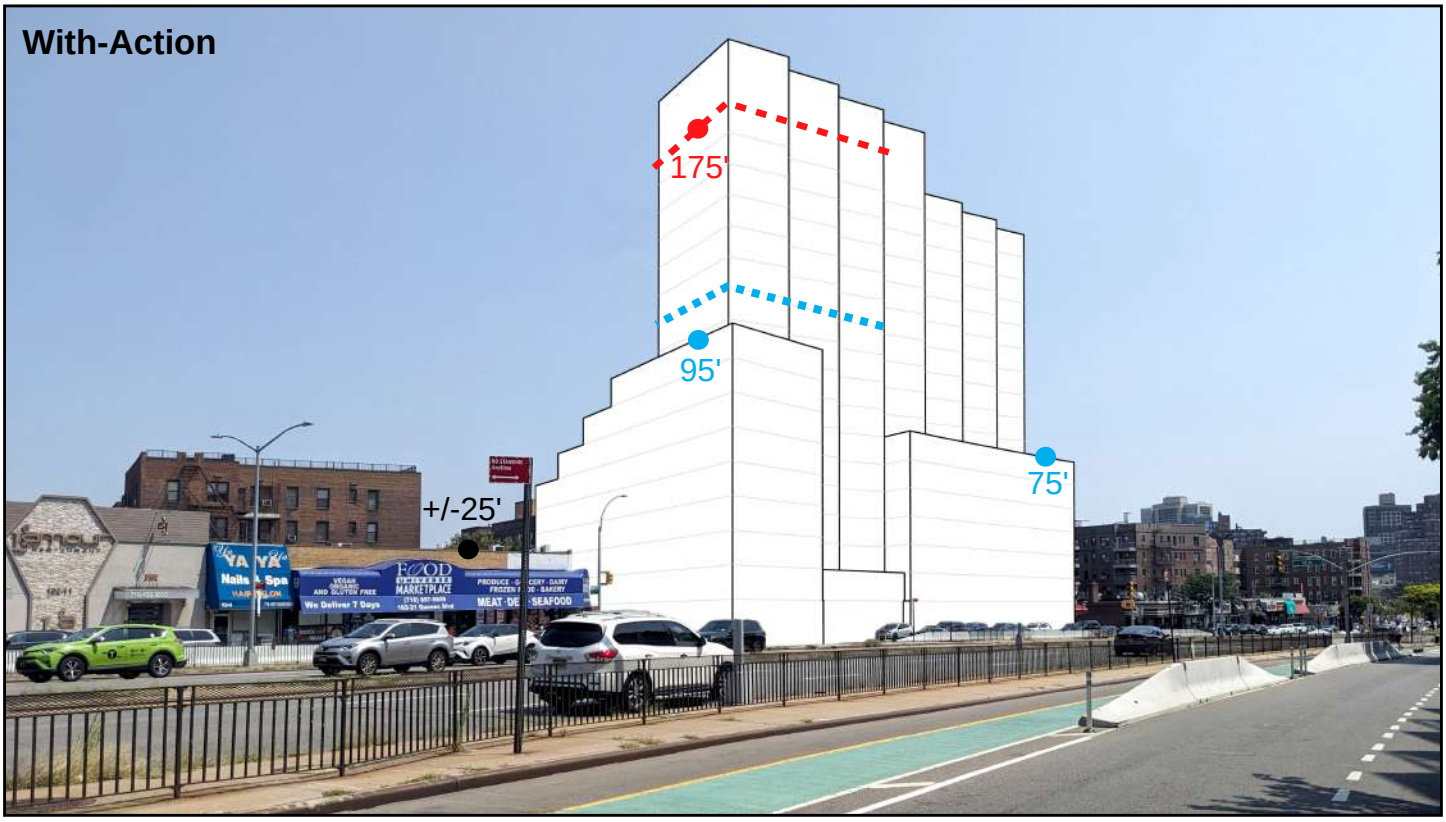
VI. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

Primary Study Area/Rezoning Area

In the 2026 future with the Proposed Actions (the With-Action condition), the Applicant-owned Development Site would be developed by the Applicant with a new 17-story, approximately 247,096 gsf mixed-use building with approximately 216 DUs (approximately 217 DUs assumed for RWCDS purposes), approximately 184,118 gsf of residential uses, and approximately 19,807 gsf of local retail uses. The Proposed Development would maximize the allowable 7.2 FAR under the Proposed Actions. The Proposed Development would also include 87 parking spaces located in the basement and the second floor of the building.

Illustrative Comparison of the No-Action vs. With-Action Conditions





Illustrative Comparison of the No-Action vs. With-Action Conditions



Maximum Permitted Base Height (75') | Maximum Permitted Building Height (85') | Approximate Adjacent Building Height

Proposed Base Height | Proposed Building Height



Maximum Permitted Base Height (105') | Maximum Permitted Building Height (175') | Approximate Adjacent Building Height

Proposed Base Height | Proposed Building Height

The Proposed Development would fully occupy the Development Site at the ground floor and no rear yard would be required or provided. The building would have a base height of 75 feet along the 68th Road frontage and a base height of 95 feet along the 68th Avenue frontage, with a 10-foot setback along Queens Boulevard. The building would have a maximum roof height of approximately 175 feet (not including the 20 feet mechanical bulkhead).

The Proposed Actions would result in the removal of the existing commercial buildings at the Development Site and would also result in the removal of the existing paved areas occupying portions of the Development Site (Lot 11), which is mainly used for vehicle maneuvering and parking. No open space is expected to be provided as part of the Proposed Development.

The Proposed Actions would likely lead to increased pedestrian activity in the streets directly bordering the Rezoning Area as well as the surrounding street network. The residential and commercial uses at the Development Site facilitated by the Proposed Actions could contribute to increased foot traffic in the With-Action condition as opposed to the existing and No-Action conditions. The Proposed Development would replace the existing vehicle-oriented uses, which are set back from the street by paved areas, with mixed-use development that is closer to the street and more pedestrian-oriented. The Proposed Actions are not expected to result in changes to natural features or publicly accessible open space in the Rezoning Area, as no natural features or publicly accessible open space are present within the Rezoning Area.

Massing diagrams showing views of the Proposed Project from publicly accessible locations are presented in **Figures F-6a** and **F6-b**, comparing the RWCDS No-Action and With-Action conditions.

Visual Resources

In the With-Action condition, development facilitated by the Proposed Actions would not obstruct or alter any visual resources in the primary study area, as the new development would occur on a portion of an existing block that contains no visual resources, and no new visual resources are anticipated to be introduced within the Rezoning Area as a result of the Proposed Actions.

Secondary Study Area

Though the Proposed Actions would facilitate the development of a building with a greater bulk, height, and density than what is permitted under existing zoning, as well as permitting a wider range of commercial uses (Use Groups 5 to 9) that would not be permitted under existing zoning, the Proposed Actions would not result in any changes to buildings, streets, natural resources, or open space within the secondary study area.

Visual Resources

As in the No-Action condition described above, there are no visual resources within the secondary study area and no visual resources are anticipated to be introduced within the secondary study area. As such, the development facilitated by the Proposed Actions in the Rezoning Area would not alter or obstruct views as there are no visual resources in the secondary study area.

Assessment

The Proposed Actions would facilitate development that is not currently permitted in the Rezoning Area pursuant to existing zoning, which would create a change in the urban design character of the Rezoning Area and surrounding secondary study area. Compared to the future without the Proposed Actions, the visual appearance, and the pedestrian experience of the Rezoning Area, would change. **Figures F-6a** and

F-6b show a visual comparison of pedestrian views of the Rezoning Area in the No-Action and With-Action conditions.

The Proposed Actions would facilitate a development that could reach up to a maximum height of approximately 175 feet under the RWCDS, an approximately 90-foot height increment over the existing and No-Action conditions at the Development Site. The proposed R8X/C2-4 zoning district, allowing for the increase in building density, is consistent with City policy to position higher density developments near transit services and along wide streets that can support such development. The proposed zoning district is appropriate because of the Rezoning Area's close proximity to public transportation and its location along Queens Boulevard, a 200-foot-wide street. Building heights of existing buildings in the secondary study area range from approximately 14- to 75-foot tall and generally do not have setbacks. Though the new building would be taller than the existing buildings in the secondary study area, its visual impact would be ameliorated by the required 10-foot setback above the proposed 75- and 95-foot base heights. In addition, the bulk and building height of the Proposed Development would be compatible with buildings located just outside of the secondary study area, in particular three, 20-story (176-foot-tall) multi-family elevator buildings located at 104-20 Queens Boulevard (Block 3175, Lot 1) immediately south of the Rezoning Area across from Queens Boulevard.

Furthermore, similar to most of the existing buildings in the secondary study area, the Proposed Project would be a high lot coverage building with a streetwall. The new building under the With-Action condition would enhance pedestrian conditions through the introduction of articulated facades with multiple building entries, windows, street trees, and signage facing the surrounding public streets. While the larger secondary study area includes some low-rise, low lot coverage buildings with vehicular curb cuts, those development patterns generally do not represent a desired land use and urban design character for urban neighborhoods such as Forest Hills that is well served by transit and in which improved pedestrian conditions would be beneficial to neighborhood character.

In the future with the Proposed Actions the visual appearance and thus the pedestrian experience of the Development Site within the Rezoning Area would change compared to the No-Action condition; however, this change would not meet the *CEQR Technical Manual* threshold for a significant adverse urban design impact in that it would not alter the arrangement, appearance, or functionality of the Development Site within the Rezoning Area such that the alteration would negatively affect a pedestrian's experience of the Rezoning Area and surrounding secondary study area. The pedestrian experience of the Rezoning Area would include a new building with active ground floor uses, including retail space. The proposed zoning includes the mapping of a commercial overlay, which permits a wider range of commercial uses (Use Groups 5 to 9) and is compatible with the arterial and existing commercial nature of Queens Boulevard.

Moreover, the Proposed Project on the Development Site within the Rezoning Area would not block any significant visual resources from pedestrian vantage points. As such, these changes are not anticipated to be significantly adverse, as no views of visual resources would be obstructed. Therefore, the Proposed Actions would not result in any significant adverse impacts on visual resources.

Overall, the Proposed Actions would not result in any negative effects on the urban design characteristics of the primary or secondary study areas and therefore would not result in significant adverse urban design and visual resources impacts.

ATTACHMENT G:
HAZARDOUS MATERIALS

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

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) dated September 12, 2023 was performed by HydroTech Environmental Engineering and Geology, DPC (HydroTech) for Queens Block 2137, Lots 1, 6, 8, and 11 (refer to **Appendix II** for Phase I ESA Executive Summary). A Phase I ESA is intended to define the historical uses of the Subject Property and identify any potential Recognized Environmental Conditions (RECs) that could warrant further consideration, in accordance with ASTM International Standard Practice E1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process). HydroTech utilized a variety of information sources to perform the Phase I ESA , including a site visit, a review of federal, state, and local regulatory databases pertaining to hazardous wastes and contaminated materials, a review of resources that provided historical information about the subject property, as well as interviews with the property owner, current tenants, and other appropriate person(s) with knowledge of the subject property.

The Phase I ESA report identified two recognized environmental conditions ("RECs") in connection with the subject property.

Recognized Environmental Condition

- The presence of historical occupants related with dry cleaning operations.
- The presence of potential vapor encroachment conditions.

Assessment

The assessment above established that the subject property (Block 2137, Lots 1, 6, 8, and 11) has potential hazardous materials contamination. Under existing conditions, the subject property includes multiple businesses, of which the urgent care and bank operate 16 hours per day, 7 days per week. The urgent care offers treatment for medical situations that require time-sensitive care, while the bank offers personal and business banking and a 16-hour ATM. Aside from the parking lot located along 68th Avenue for employees of the bank, the remainder of the subject property contains restaurants that are generally open to the public from 12PM to 10:30PM.

As the Applicant rents the subject property to active commercial retail tenants, it does not have the ability to force the businesses to close. As such, Phase II ESA testing is not feasible at this time and an (E)

Designation is required to undertake Phase II ESA testing once the subject property is vacated, demolished, and cleared, following approval of the Proposed Actions. A Phase II ESA Investigation Protocol/Work Plan would be best designed and implemented for a vacant property in order to address the environmental concerns that focus on the design of the Proposed Development.

Therefore, by assigning an (E) Designation on Queens Block 2137, Lots 1, 6, 8, and 11, the potential for a significant adverse impact to human health and the environment resulting from the Proposed Actions would be reduced or avoided. The (E) Designation provides the impetus to identify and address environmental conditions so that significant adverse impacts during development would be reduced, with OER providing the regulatory oversight of the environmental investigation and remediation during the development process. Building permits are not issued by the New York City Department of Buildings ("NYCDOB") without prior OER approval of the investigation and/or remediation pursuant to the provisions of Section 11-15 of the New York City Zoning Resolution.

The text of the hazardous materials (E) Designation (E-###) for Queens Block 2137, Lots 1, 6, 8, and 11 would be as follows:

Task 1: Sampling Protocol

> **Prior to construction, the Applicant must submit to the New York City Mayor's Office of Environmental Remediation (OER), for review and approval, a Phase II Investigation protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.**
>
> **No sampling should begin until written approval of a protocol is received by OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source 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 the sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.**

Task 2: Remediation Determination and Protocol

> **A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.**
>
> **If remediation is indicated for the test results, a proposed remedial action plan (RAP) must be submitted by 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.**
>
> **An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the**

community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.

With the measures outlined above included as part of the Proposed Actions, and adherence to existing regulations, there would be no increase in the exposure of people or the environment to hazardous materials associated with the Proposed Actions. Therefore, no significant adverse impacts related to hazardous materials would be expected to occur as a result of the Proposed Actions.

ATTACHMENT H:
NOISE

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions to result in significant adverse noise impacts. As described in **Attachment A, "Project Description,"** the Proposed Actions include (i) a zoning map amendment to rezone the Rezoning Area from R7-1/C1-2 to R8X/C2-4, and (ii) a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to establish the Rezoning Area as a Mandatory Inclusionary Housing (MIH) area (collectively, the "Proposed Actions"). The Proposed Actions would facilitate the development of a new mixed-use, 17-story predominantly residential building with ground floor retail (the "Proposed Development"). Under the reasonable worst-case development scenario (RWCDS), the Proposed Actions would result in the development of approximately 184,118 gsf of residential uses (217 total dwelling units [DUs], including 54 income-restricted DUs pursuant to MIH Option 1) and approximately 19,807-gsf of local retail uses (the "Proposed Development"). There would also be an accessory parking garage for residential uses, with approximately 87 spaces.

The proposed zoning map amendment would affect all of Block 2137, Lots 1, 6, 8, and 11 (the "Development Site"). The Rezoning Area would be bound by 68th Avenue to the north, Queens Boulevard to the west, 68th Road to the south, and a line 100 feet perpendicular to 68th Road to a depth of 100 feet from the intersection of Queens Boulevard and 68th Road to the east. The Rezoning Area encompasses a total of approximately 25,590-square-foot (sf), with approximately 208 feet of frontage along Queens Boulevard, approximately 100 feet of frontage along 68th Road, and approximately 158 feet of frontage along 68th Avenue. The Development Site is currently occupied by three single-story commercial buildings containing various local retail uses.

As discussed in **Attachment B, "Supplemental Screening,"** approval of the Proposed Actions would not generate sufficient traffic volumes near the Rezoning Area to warrant a detailed traffic analysis, and thus, it is unlikely that the Proposed Actions would result in a significant noise impact due to mobile sources (i.e., it would not result in a doubling of noise passenger car equivalents [PCEs] which would be necessary to a cause a 3 dBA increase in noise levels). However, as the Proposed Actions would create new noise-sensitive uses (or "receptors"), a noise assessment was conducted in order to determine the level of attenuation required to ensure that future interior noise levels within the enclosed fifth floor would satisfy applicable noise exposure criteria.

II. NOISE FUNDAMENTALS

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

"A"-Weighted Sound Level (dBA)

In order to establish a uniform noise measurement that simulates people's perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human ear. This is known as the A-weighted sound level, or "dBA," and it is the descriptor of noise levels most often used for community noise. As shown in **Table H-1**, the threshold of human hearing is defined as 0 dBA; very quiet conditions (as in a library, for example) are approximately 40 dBA; levels between 50 dBA and 70 dBA define the range of noise levels generated by normal daily activity; levels above 70 dBA would be considered noisy, and then loud, intrusive, and deafening as the scale approaches 130 dBA.

Table H-1: Common Noise Levels

Sound Source	(dBA)
Military jet, air raid siren	130
Amplified rock music	110
Jet takeoff at 500 meters	100
Freight train at 30 meters	95
Train horn at 30 meters	90
Heavy truck at 15 meters	80–90
Busy city street, loud shout	80
Busy traffic intersection	70–80
Highway traffic at 15 meters, train	70
Predominantly industrial area	60
Light car traffic at 15 meters, city or commercial areas, or residential areas close to industry	50–60
Background noise in an office	50
Suburban areas with medium-density transportation	40–50
Public library	40
Soft whisper at 5 meters	30
Threshold of hearing	0

Note: A ten dBA increase in level appears to double the loudness, and a ten dBA decrease halves the apparent loudness.
Sources: Cowan, James P. *Handbook of Environmental Acoustics,* Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

Community Response to Changes in Noise Levels

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

Table H-2: Average Ability to Perceive Changes in Noise Levels

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

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

Noise Descriptors Used in Impact Assessment

Because the sound pressure level unit of dBA describes a noise level at just one moment and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level," L_{eq}, can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., one hour, denoted by $L_{eq(1)}$, or 24 hours, denoted as $L_{eq(24)}$), conveys the same sound energy as the actual time-varying sound. The Day-Night Sound Level (i.e., L_{dn}) refers to a 24-hour average noise level with a 10 dB penalty applied to the noise levels during the hours between 10:00 PM and 7:00 AM, due to increased sensitivity to noise levels during these hours. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are used to indicate noise levels that are exceeded one, ten, 50, 90 and x percent of the time, respectively.

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

For purposes of this analysis, the maximum one-hour equivalent sound level (i.e., L_{eq}) has been selected as the noise descriptor to be used in this noise impact evaluation. L_{eq} is the noise descriptor recommended for use in the *City Environmental Quality Review* (CEQR) *Technical Manual* for vehicular traffic and is used to provide an indication of highest expected sound levels. The one-hour L_{10} is the noise descriptor used in the *CEQR Technical Manual* noise exposure guidance for city environmental impact review classification associated with vehicular traffic, whereas the L_{dn} is the noise descriptor used in the *CEQR Technical Manual* noise exposure guidance associated with train noise.

III. NOISE STANDARDS AND CRITERIA

New York CEQR Technical Manual Noise Standards

The New York City Department of Environmental Protection (NYCDEP) has set external noise exposure standards based on L_{10} noise levels. These standards are shown on the following page in **Table H-3**. Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable.

Table H-3: Noise Exposure Guidance 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 ----------						
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 65$ dBA	---------- 60 < DNL ≤ 65 dBA ----------	65 < $L_{10} \leq 80$ dBA	(1) 65 < DNL ≤ 75 dBA	$L_{10} > 80$ dBA	---------- 75 dBA < DNL ----------
3. Residence, residential hotel or motel	7:00 AM to 10:00 PM	$L_{10} \leq 65$ dBA		65 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	10:00 PM to 7:00 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 (7:00 AM-10:00 PM)		Same as Residential Day (7:00 AM-10:00 PM)		Same as Residential Day (7:00 AM-10:00 PM)		Same as Residential Day (7:00 AM-10:00 PM)	
5. Commercial or office		Same as Residential Day (7:00 AM-10:00 PM)		Same as Residential Day (7:00 AM-10:00 PM)		Same as Residential Day (7:00 AM-10:00 PM)		Same as Residential Day (7:00 AM-10:00 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 the Impact Thresholds detailed in Section 410 of Chapter 19, "Noise," of the *CEQR Technical Manual*;

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

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

[3] One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.

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

Source: NYCDEP (adopted policy 1983).

The *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise level (see **Table H-4**). Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential and community facility (e.g., child care and school) uses and 50 dBA or lower for commercial office uses, and are determined based on exterior $L_{10(1)}$ (vehicular traffic) and/or L_{dn} (train) noise levels.

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

	Marginally Unacceptable				Clearly Unacceptable
Vehicular Traffic	$70<L_{10}\leq 73$	$73<L_{10}\leq 76$	$76<L_{10}\leq 78$	$78<L_{10}\leq 80$	$80<L_{10}$
Aircraft[A]	65<DNL ≤68	68<DNL ≤71	71<DNL ≤73	73<DNL ≤75	75< DNL
Train	$65<L_{dn}\leq 68$	$68<L_{dn}\leq 71$	$71<L_{dn}\leq 73$	$73<L_{dn}\leq 85$	$75< L_{dn}$
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 L_{dn} over a year period

[B] The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.

[C] The required attenuation value is the difference between L_{build} and $L_{interior,}$ using the appropriate noise descriptor where:

L_{build} is the projected noise level under the build condition rounded up to a whole number

$L_{interior}$ is the designed interior noise level (45 dBA for vehicular noise, 40 dBA for aircraft and train noise)

Source: New York City Department of Environmental Protection / 2021 *CEQR Technical Manual*

IV. METHODOLOGY

Noise Prediction Methodology

Future No-Action and With-Action noise levels were calculated using a proportional modeling technique, which is used as a screening tool to estimate changes in noise levels. The proportional modeling technique is an analysis methodology recommended for analysis purposes in the *CEQR Technical Manual.*

Using the proportional modeling technique, the prediction of future noise levels where traffic is the dominant noise source is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine noise levels in the future without the Proposed Action (the No-Action condition) and with the Proposed Action (the With-Action condition). Vehicular traffic volumes are converted into noise PCE values, for which one medium-duty truck (cargo vehicles with two axles and six tires) is assumed to generate the noise equivalent of 13 cars, one heavy-duty truck (cargo vehicles with three or more axels) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles having two or three axels and designed to carry more than nine passengers) is assumed to generate the noise equivalent of 18 cars. Future noise levels are calculated using the following equation:

F NL – E NL = 10 * log10 (F PCE / E PCE)

where:

F NL = Future Noise Level
E NL = Existing Noise Level
F PCE = Future PCEs
E PCE = Existing PCEs

Sound levels are measured in decibels and, therefore, increase logarithmically with sound source strength. In this case, the sound source is traffic volumes measured in PCEs. For example, assume that traffic is the dominant noise source at a particular location. If the existing traffic volume on a street is 100 PCEs and if the future traffic volume were increased by 50 PCEs (to a total of 150 PCEs), the noise level would increase by 1.8 dBA. Similarly, if the future traffic were increased by 100 PCEs, or doubled to a total of 200 PCEs, the noise level would increase by 3.0 dBA.

For the purpose of this analysis, during the noise recording, vehicles were counted and classified. To calculate the 2026 No-Action PCE values, an annual background growth rate of 0.5 percent (for 2023 to 2026)[1], plus the estimated travel demand from the No-Action condition (refer to **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum"** for the No-Action condition's estimated travel demand) was applied to the counted PCE values. In order to obtain the necessary 2026 With-Action PCE values to calculate the With-Action noise levels, the With-Action condition's estimated travel demand presented in **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum,"** were converted into PCE values and added to the calculated No-Action PCE values.

Building Attenuation Analysis Procedure

In general, the following procedure was used in performing the *CEQR Technical Manual* building attenuation analysis:

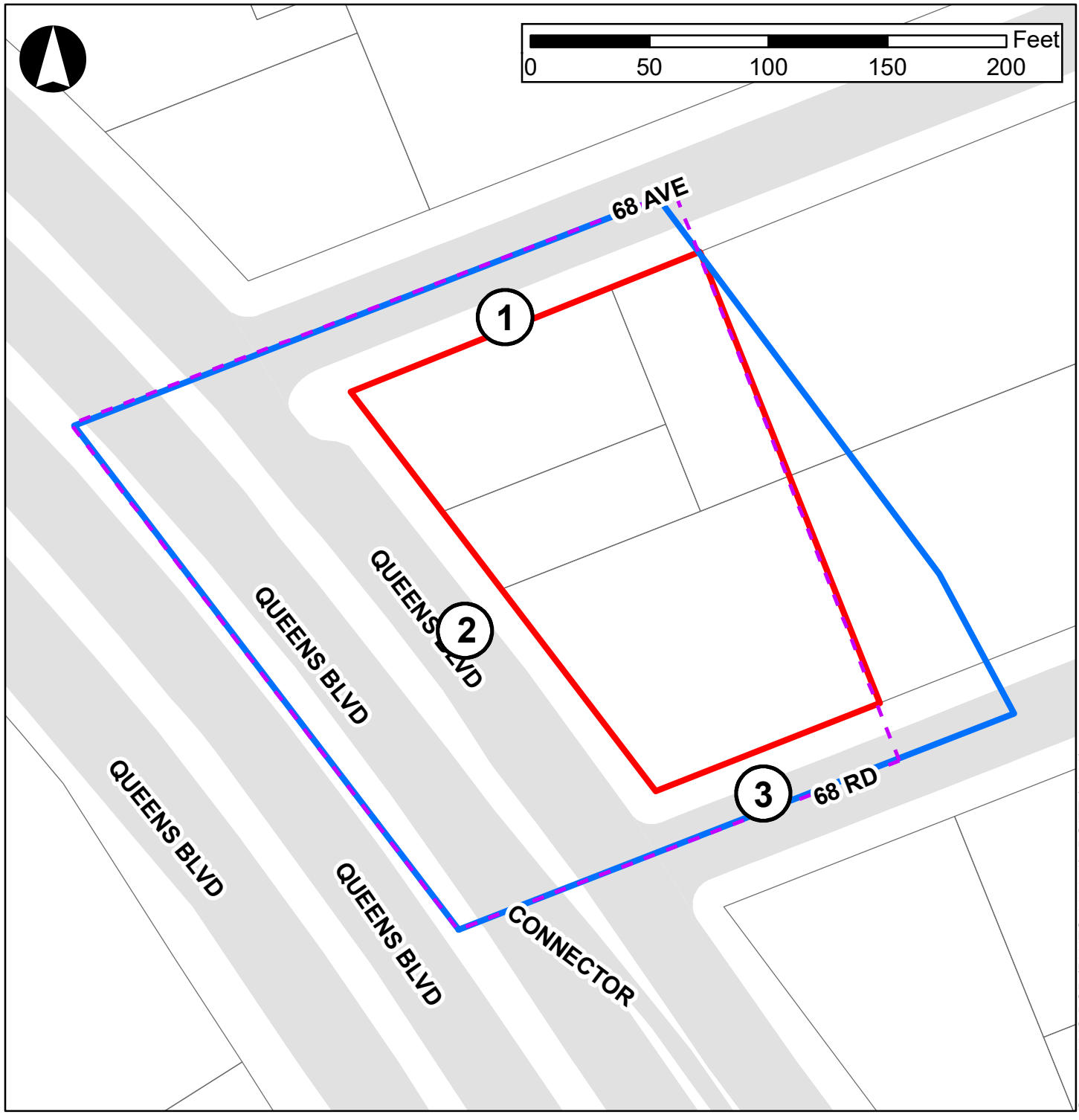
- Noise-sensitive receptor locations that have the greatest potential for being adversely affected by action-generated noise in the 2026 analysis year and the location of dominant sources of ambient noise were identified;
- Noise receptor locations were selected based on the following criteria: (1) locations where the highest noise levels are likely to occur based upon the consideration of existing land use patterns (e.g., locations near major commercial roadways, industrial uses, or stationary sources, etc.); and (2) along future street frontages of the Development Site;
- Existing noise levels were determined through field measurements of ambient noise adjacent to the Development Site;
- Future (2026) noise levels without the Proposed Actions were predicted using the PCE-based proportionality equation (per *CEQR Technical Manual* guidelines) for all locations where local traffic is the dominant source of noise and were based on background growth for the 2026 analysis year;
- Future (2026) noise levels with the Proposed Actions were predicted using the PCE-based proportionality equation (per *CEQR Technical Manual* guidelines) based on the 2026 With-Action vehicle trip generations and/or assignments presented in **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum;"**
- Future (2026) noise levels with the Proposed Actions were compared with future noise levels without the Proposed Actions to determine, by applying *CEQR Technical Manual* impact criteria, whether the Proposed Actions and resultant RWCDS would have the potential to result in a significant adverse impact;
- Noise levels were determined for exterior building façades at the Development Site; and
- In compliance with CEQR requirements to determine an acceptable interior space noise environment, façade-based composite window/wall attenuation specifications for the Development Site were estimated based on future projected maximum exterior noise exposure at the Development Site; CEQR requirements are based on the maximum L_{10} values.

Impact Significance Criteria

According to *CEQR Technical Manual*, for the purposes of determining a significant impact during daytime hours, it is reasonable to consider a L_{eq} noise level of 65 dBA as an absolute noise level that should not be significantly exceeded. Therefore, a significant noise impact would occur at a noise receptor (i.e.,

[1] Calculation according to Table 16-4 in the *CEQR Technical Manual.*

Figure H-1
Noise Monitoring Locations



Legend

- Rezoning Area
- Development Site
- Proposed R8X/C2-4 District
- 1 Noise Receptor Location

residences, play areas, parks, schools, libraries, and houses of worship) during daytime hours under the following circumstances:

- A noise increase of 3 dBA or greater is predicted in the With-Action condition, when the future noise level in the No-Action condition is 62 dBA or greater; or
- When the No-Action noise level is below 62 dBA, a predicted With-Action noise increase that exceeds the difference between 65 dBA and the No-Action noise level. For example, if the No-Action noise level is 61 dBA, then the maximum noise increment with the Proposed Actions would be 4 dBA, since an increase higher than 4 dBA would result in a noise level that exceeds the 65 dBA L_{eq} significant impact threshold.
- Additionally, an increase of With-Action noise levels by 5 dBA over a No-Action noise level that is at or below 60 dBA would be considered significant.

V. EXISTING NOISE LEVELS

Selection of Noise Receptor Locations

The Development Site is in the Forest Hills neighborhood of Queens. As discussed above, it encompasses Queens Block 2137, Lots 1, 6, 8, and 11 in its entirety, totaling 25,590-sf and is bound by 68th Avenue to the north, Queens Boulevard to the west, 68th Road to the south, and Lots 13 and 46 to the east. The Development Site is currently occupied by three single-story commercial buildings containing various local retail uses.

Noise receptor locations were selected along each of the three street frontages bounding the Development Site (see **Table H-5** and **Figure H-1**). As discussed, local traffic is the dominant source of noise near the Development Site.

Table H-5: Noise Receptor Locations

Receptor Location/Map Number[1]	Duration	Location
1	20 minutes	South side of 68th Avenue, approximate midpoint of the Development Site's northern frontage (approximately 79 feet east of Queens Boulevard); street level
2	20 minutes	East side of Queens Boulevard, approximate midpoint of the Development Site's western frontage (approximately 104 feet north of 68th Road); street level
3	20 minutes	North side of 68th Road, approximate midpoint of the Development Site's southern frontage (approximately 50 feet east of Queens Boulevard); street level

[1] Noise receptor locations are keyed to **Figure H-1**.

Noise Monitoring

Monitoring was conducted during the typical midweek conditions. At both receptor locations, 20-minute spot measurements of existing noise levels were performed for the weekday AM peak hour (8:00AM to 9:00AM), weekday midday peak hour (12:00PM to 1:00PM), and weekday PM peak hour (5:00PM to 6:00PM). Noise measurements were performed on Wednesday, October 25, 2023. The weather was clear with a high temperature of 70°F and average wind speeds of six miles-per-hour. As discussed above in Section IV, traffic volumes and vehicle classifications were documented during the noise monitoring.

Equipment Used During Noise Monitoring

Measurements were performed using Brüel & Kjær Sound Level Meters (SLM) Types 2260, 2250 and 2270, Brüel & Kjær ½-inch microphones Type 4189, and Brüel & Kjær Sound Level Calibrators Type 4231. The Brüel & Kjær SLMs are Type 1 instruments according to ANSI Standard S1.4-1983 (R2006). The SLMs had a laboratory calibration date within the past year at the time of use, as is standard practice. The microphones were mounted at a height of approximately five feet above the ground surface on a tripod and approximately six feet or more away from any large sound-reflecting surface to avoid major interference with sound propagation. The SLMs were calibrated before and after readings with a Brüel & Kjær Type 4231 Sound Level Calibrator using the appropriate adaptor. The data were digitally recorded by the SLMs and displayed at the end of the measurement period in units of dBA. Measured quantities included the L_{eq}, L_1, L_{10}, L_{50}, L_{90}, and 1/3 octave band data. A windscreen was used during all sound measurements except for calibration. All measurement procedures were based on the guidelines outlined in ANSI Standard S1.13-2005.

Existing Noise Levels At Noise Receptor Locations

Measured Noise Levels

The results of the 20-minute spot noise measurements of existing noise levels at Receptor Locations 1, 2, and 3 are summarized in **Table H-6**. As discussed above, area traffic was the dominant source of noise at Receptor Locations 1, 2, and 3. The existing noise levels reflect the moderate-to-high level of vehicular activity on the roadways adjacent to the Development Site. In terms of *CEQR Technical Manual* criteria, existing noise levels at Receptor Locations 1, 2, and 3 are in the "Acceptable," "Marginally Unacceptable (II)," and "Marginally Acceptable" CEQR Noise Exposure categories, respectively.

Table H-6: Existing Noise Levels (in dBA)

Receptor[1]	Measurement Location	Time[2]	L_{eq}	L_1	L_{10}[3]	L_{50}	L_{90}	CEQR Noise Exposure Category
1	South side of 68th Avenue (approx. 79 ft. east of Queens Boulevard)	AM	61.9	67.9	**64.4**	61.0	57.0	Acceptable
		MD	59.6	67.7	61.9	57.6	55.3	
		PM	63.3	72.6	63.4	59.0	57.0	
2	East side of Queens Boulevard (approx. 104 ft. north of 68th Road)	AM	70.6	78.7	**73.1**	69.7	58.7	Marginally Unacceptable (II)
		MD	65.0	74.5	67.5	62.1	58.0	
		PM	67.5	76.0	70.6	65.3	60.0	
3	North side of 68th Road (approx. 50 ft. east of Queens Boulevard)	AM	63.1	72.0	**65.7**	61.5	55.4	Marginally Acceptable
		MD	61.7	65.9	63.1	60.0	56.6	
		PM	61.4	69.0	63.8	60.0	57.2	

Notes: Field measurements were performed by Philip Habib & Associates on October 25, 2023.
[1] Refer to **Figure H-1** for noise monitoring receptor locations.
[2] AM = AM weekday peak period; MD = midday weekday peak period; PM = PM weekday peak period.
[3] The highest L_{10} at each receptor location is shown in **bold**.

VI. FUTURE WITHOUT THE PROPOSED ACTION (NO-ACTION) NOISE LEVELS

Mobile Source Noise Screening Analysis

In the 2026 future without the Proposed Actions (the No-Action condition), the Development Site would be developed with an approximately 158,298 gsf mixed-use building, consisting of approximately 92,763

gsf of residential uses (109 DUs), approximately 20,961 gsf of commercial retail uses, and approximately 44,574 gsf of accessory parking garage with 128 spaces. As such, traffic patterns and volumes under the No-Action condition are expected to differ slightly from existing conditions. As vehicle noise emissions on adjacent roadways are the dominant source of noise at Receptor Locations 1, 2, and 3, the change in traffic patterns is expected to affect the levels of ambient noise at those locations. Using the noise prediction methodology described in Section IV above, future noise levels in the No-Action condition were calculated for the three analysis periods for the 2026 analysis year. **Table H-7** shows the measured existing noise levels and calculated future No-Action condition noise levels at the receptor locations.

Comparing future No-Action noise levels with existing noise levels, the increases in L_{eq} noise levels at the three receptor locations would range from 0.10 dBA to 2.73 dBA for all analysis periods. According to *CEQR Technical Manual* guidelines, increases of less than 3.0 dBA would be barely perceptible. The projected No-Action L_{10} noise levels at Receptor Location 1 would range from 64.3 dBA to 66.1 dBA and would now be in the "Marginally Acceptable" CEQR Noise Exposure category; projected L_{10} noise levels at Receptor Location 2 would range from 67.7 dBA to 73.2 dBA and would remain in the "Marginally Unacceptable (II)" CEQR Noise Exposure category, as under existing conditions; and projected L_{10} noise levels at Receptor Location 3 would range from 64.9 dBA to 67.8 dBA and would remain in the "Marginally Acceptable" CEQR Noise Exposure category, as under existing conditions.

Table H-7: 2026 No-Action Condition Noise Levels and PCE Values (dBA)

Noise Receptor Location[1]	Time[2]	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change in L_{eq}[3]	No-Action L_{10}[4]	CEQR Noise Exposure Category
1	AM	99	148	61.9	63.7	1.76	**66.1**	Marginally Acceptable
	MD	72	127	59.6	62.1	2.47	64.3	
	PM	159	236	63.3	65.0	1.72	65.1	
2	AM	5,580	5,712	70.6	70.7	0.10	**73.2**	Marginally Unacceptable (II)
	MD	2,571	2,664	65.0	65.1	0.15	67.7	
	PM	3,930	4,064	67.5	67.7	0.15	70.7	
3	AM	78	127	63.1	65.2	2.12	**67.8**	Marginally Acceptable
	MD	105	161	61.7	63.6	1.85	64.9	
	PM	87	163	61.4	64.2	2.73	66.5	

Notes:
[1] Receptor locations shown in **Figure H-1**.
[2] AM = weekday AM peak period; MD = weekday midday peak period; PM = weekday PM peak period.
[3] Change in L_{eq} = No-Action L_{eq} – Existing L_{eq}.
[4] The highest No-Action noise level at each receptor is indicated in **bold.**

VII. FUTURE WITH THE PROPOSED ACTION (WITH-ACTION) NOISE LEVELS

Mobile Source Noise Screening Analysis

In the 2026 future with the Proposed Actions (the With-Action condition), the zoning map and text amendment would be approved, and under the RWCDS, would allow the Applicant to facilitate an approximately 247,096 gsf mixed-use building, consisting of approximately 184,118 gsf of residential space (217 DUs, of which 54 units would be designated income-restricted pursuant to MIH Option 1) and 19,807 gsf of local retail space. Using the methodology described in Section IV, future noise levels in the With-Action condition were calculated for the three analysis periods for the 2026 analysis year, which are presented in **Table H-8**. As presented in the table, after accounting for additional traffic introduced by the Proposed Actions, the maximum projected L_{10} noise level in the With-Action condition would be 73.3 dBA

during the AM weekday peak period at Receptor Location 2. Therefore, the highest noise level would remain in the "Marginally Unacceptable (II)" CEQR Noise Exposure category, as under No-Action conditions. The maximum projected noise levels in the With-Action condition at Receptor Location 1 would be 67.3 dBA, and thus would remain in the "Marginally Acceptable" CEQR Noise Exposure category, as under No-Action conditions. The maximum projected noise levels in the With-Action condition at Receptor Location 3 would be 69.1 dBA and would remain in the "Marginally Acceptable" CEQR Noise Exposure category, as under No-Action conditions.

Furthermore, comparing the future With-Action noise levels with No-Action noise levels, increases in L_{eq} noise levels would vary at the three receptor locations, ranging from 0.02 to 1.29 dBA. However, increases of these magnitudes would not be perceptible as they are less than 3.0 dBA, and based upon CEQR impact criteria would not be significant. As the noise levels at all receptor locations would experience changes of less than 3.0 dBA in all peak hours, the overall changes to noise levels as a result of the Proposed Actions would not result in any significant adverse impacts.

Table H-8: 2026 No-Action and With-Action Condition Noise Levels and PCE Values (dBA)

Noise Receptor Location[1]	Time[2]	No-Action PCEs	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change in L_{eq}[3]	With-Action L_{10}[4]	CEQR Noise Exposure Category
1	AM	148	192	63.7	64.8	1.13	**67.3**	Marginally Acceptable
	MD	127	165	62.1	63.2	1.14	65.5	
	PM	236	253	65.0	65.3	0.30	65.4	
2	AM	5,712	5,756	70.7	70.8	0.03	**73.3**	Marginally Unacceptable (II)
	MD	2,664	2,702	65.1	65.2	0.06	67.7	
	PM	4,064	4,081	67.7	67.7	0.02	70.7	
3	AM	127	1771	65.2	66.5	1.29	**69.1**	Marginally Acceptable
	MD	161	199	63.6	64.5	0.92	65.8	
	PM	163	180	64.2	64.6	0.43	67.0	

Notes:
[1] Receptor locations shown in **Figure H-1**.
[2] AM = weekday AM peak period; MD = weekday midday peak period; PM = weekday PM peak period.
[3] Change in L_{eq} = No-Action L_{eq} – Existing L_{eq}.
[4] The highest No-Action noise level at each receptor is indicated in **bold.**

VIII. NOISE ATTENUATION REQUIREMENTS

As shown in **Table H-4**, the 2021 *CEQR Technical Manual* has set noise attenuation requirements for buildings based on exterior noise levels. For dominant traffic noise, recommended noise attenuation values for buildings are designed to maintain a maximum interior noise level of 45 dBA or lower for residential uses and interior noise levels of 50 dBA or lower for commercial office uses and are determined based on exterior L_{10} noise levels.

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Typically, a building façade is composed of the wall, windows, and any vents or louvers for HVAC systems in various ratios of area. Since the existing building is masonry construction, which typically provides a high level of sound attenuation, the attenuation requirements for HUD or CEQR purposes apply primarily to the windows, but may also represent a composite window/wall attenuation value. Window/wall attenuation can be described in terms of sound transmission class (STC), transmission loss (TL), and outdoor-indoor transmission class (OITC). Although these terms are sometimes used interchangeably, they are unique from each other. Transmission loss refers to how many decibels of sound a façade (wall) or façade accessory (window or

door) can stop at a given frequency. The TL for a given construction material varies with the individual frequencies of the noise.

To simplify the noise attenuation properties of a wall, the STC rating was developed. It is a single number that describes the sound isolation performance of a given material for the range of test frequencies between 125 and 4,000 Hz. These frequencies sufficiently cover the range of human speech. Higher STC values reflect greater efficiencies to block airborne sound. HUD uses the STC when identifying the required sound attenuation for a façade.

The OITC is similar to the STC, except that it is weighted more towards the lower frequencies associated with aircraft, rail, and truck traffic. The OITC classification is defined by the American Society of Testing and Materials (ASTM E1332-90 (Reapproved 2003)) and provides a single-number rating that is used for designing a building façade including walls, doors, glazing, and combinations thereof. The OITC rating is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation noise. NYCDEP uses the OITC when identifying the required sound attenuation for a façade.

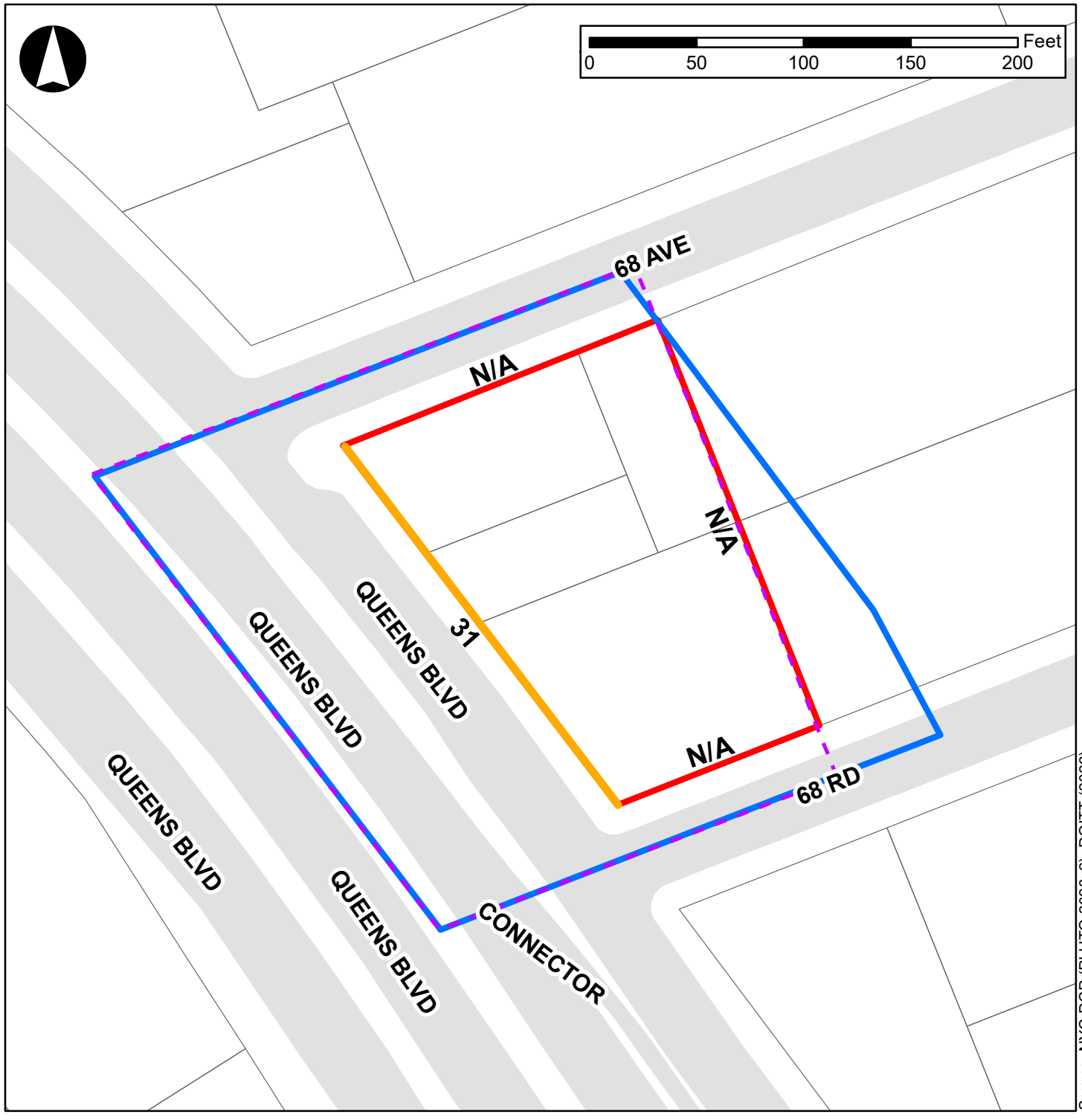
For dominant traffic noise, all façades that would experience an L_{10} of 70 dBA or greater must provide an alternate means of ventilation ("AMV") permitting a closed window condition during warm weather. This can be achieved by installing double-glazed windows on a heavy frame for masonry structures or windows consisting of laminated glass, along with AMV such as central air conditioning, through-wall sleeve-fitted air conditioners, packaged terminal air conditioning ("PTAC") units, trickle vents integrated into window frames, or other approved means. Where the required window/wall attenuation is above 40 dBA, special design features may be necessary that go beyond the normal double-glazed window and air conditioning. These may include specially designed windows (e.g., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.) and additional building insulation.

Noise Attenuation Measures

As described above and presented in **Table H-9**, the maximum L_{10} noise levels adjacent to the Development Site were measured at 67.3 dBA along the Development Site's northern frontage facing 68th Avenue, 73.3 dBA along the Development Site's western frontage facing Queens Boulevard, and 69.1 dBA along the Development Site's southern frontage facing 68th Road. Based on With-Action exterior noise levels and 2021 *CEQR Technical Manual* criteria, With-Action noise levels at Receptor Locations 1 and 3 would remain below the 70 dBA CEQR threshold, and no special noise attenuation measures beyond standard construction practices would be required for the Development Site's 68th Avenue and 68th Road frontages within the Rezoning Area in order to achieve interior noise levels of 45 dBA or lower for residential uses. As such, future development for two of the three frontages (68th Avenue and 68th Road) at the Development Site would provide sufficient attenuation to achieve the 2021 *CEQR Technical Manual* interior noise level guidelines. However, as the With-Action noise levels at Receptor Location 2 would be above the 70 dBA threshold, building attenuation would be required for the Development Site's Queens Boulevard frontage.

The composite building attenuation requirement for the Development Site's Queens Boulevard frontage was calculated based on the maximum L_{10} noise level and is presented in **Table H-9** and illustrated in **Figure H-2** (refer to **Table H-4** for CEQR Noise Exposure category guidance).

Figure H-2
Noise Attenuation Requirements



Legend

- Rezoning Area
- Proposed R8X/C2-4 District
- Development Site
- 31 CEQR Noise Attenuation Requirements (in dBA)

Table H-9: Required Attenuation at the Development Site (CEQR)

Site	Frontage	Receptor #	Maximum L_{10} Noise Level in dBA	CEQR Noise Exposure Category[1]	CEQR Minimum Required Attenuation in dBA
Development Site (Block 2137, Lots 1, 6, 8, and 11)	Northern (facing 68th Avenue)	1	67.3	Marginally Acceptable	-
	Western (facing Queens Boulevard)	2	73.3	Marginally Unacceptable (II)	31
	Southern (facing 68th Road)	3	69.1	Marginally Acceptable	-

Notes:
[1] CEQR Noise Exposure category for each Receptor Location determined by the worst-case noise level between the calculated L_{dn} and maximum calculated L_{10} at each receptor.

Table H-9 shows the minimum window/wall attenuation necessary to meet the *CEQR Technical Manual* requirement for internal noise levels at each of the Development Site's frontages based on the projected L_{10} noise levels described above. As presented in **Table H-9** and illustrated in **Figure H-2**, to satisfy the CEQR interior noise level requirement and ensure acceptable interior noise levels for residential uses, any building façade with frontage facing Queens Boulevard (western façade) must provide a minimum composite window/wall attenuation rating of 31 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. As mentioned above, as the With-Action exterior noise levels would remain below the 70 dBA CEQR threshold at the frontages facing 68th Avenue and 68th Road, composite building attenuation requirements are not required for the northern and southern façades of the Development Site.

(E) Designation

The composite window/wall noise attenuation described above would be required through the assignment of an (E) designation (E-###) for noise to the Development Site (Block 2137, Lots 1, 6, 8, and 11) in conjunction with the Proposed Actions. With implementation of this composite window/wall noise attenuation, no significant adverse noise impacts would occur as a result of the Proposed Actions.

> **Block 2137, Lots 1, 6, 8, and 11 (Development Site)**
>
> **To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 31 dBA window/wall attenuation on all façades facing Queens Boulevard, as illustrated in the EAS. 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.**

With the implementation of the attenuation levels outlined above and described in **Table G-9**, the Proposed Actions would provide sufficient attenuation to achieve *CEQR Technical Manual* interior noise level guidance. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation.

IX. OTHER NOISE CONCERNS

Mechanical Equipment

The Proposed Actions would not include any unenclosed mechanical equipment for building ventilation purposes, and would not include any active outdoor recreational space that could result in stationary source noise impacts to the surrounding area. All mechanical equipment would be located either inside the building or would be enclosed on the roof of the structures, and should be designed to meet all applicable noise regulations and requirements (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code). Therefore, the Proposed Actions would not result in any significant increase in ambient noise levels in the vicinity of the Development Site, the Rezoning Area, or the surrounding study area.

Train Noise

An initial train noise impact screening analysis could be warranted if a new receptor would be located within 1,500 feet of existing rail activity and have a direct line of sight to that activity. The 67th Avenue Subway Station (serviced by the E/F/M/R trains) is located approximately three blocks to the north of the Rezoning Area (i.e., within 1,500 feet of the Rezoning Area). However, the subway station and associated rail activity are located underground and there is no direct line of sight to the rail activity from the Rezoning Area. Therefore, no initial train noise impact screening analysis is warranted for the Proposed Actions.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptor would either generate or reroute aircraft or introduce a new receptor that is within a 65 dBA DNL contour. Since the Proposed Actions would not generate or reroute aircraft, and as the Development Site is not within a 65 DBA DNL contour, no initial aircraft noise impact screening analysis is warranted.

APPENDIX I:
LPC DETERMINATION

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: 102-51 QUEENS BLVD REZONING
Date Received: 7/31/2023

Properties with no Architectural or Archaeological significance:

1) 102-43 QUEENS BOULEVARD, BBL: 4021370001
2) 102-37 QUEENS BOULEVARD, BBL: 4021370006
3) 102-29 QUEENS BOULEVARD, BBL: 4021370008
4) 68 AVENUE, BBL: 4021370011



8/10/2023

SIGNATURE DATE

Gina Santucci, Environmental Review Coordinator

File Name: 37130_FSO_DNP_08102023.docx

APPENDIX II:
PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)

HydroTech Environmental
ENGINEERING AND GEOLOGY, DPC
231 West 29th Street, Suite 1104
New York, New York 10001 USA
Tel: (631) 462-5866
Email: Info@hydrotechenvironmental.com
WWW.HYDROTECHENVIRONMENTAL.COM
USA – Middle East – North Africa

Phase I Environmental Site Assessment Report

Block 2137, Lot 8: 102-29 Queens Boulevard
Block 2137, Lot 6: 102-37 Queens Boulevard
Block 2137, Lot 1: 102-43 to 102-55 Queens Boulevard
Block 2137, Lot 11: Parking Lot - 68th Avenue
Queens, NY



Prepared For:

QBM Properties, LLC
215-15 Northern Boulevard
Queens, NY 11361

September 12, 2023

HydroTech Job No. 230048

Phase I Environmental Site Assessment Report

Block 2137, Lot 8: 102-29 Queens Boulevard
Block 2137, Lot 6: 102-37 Queens Boulevard
Block 2137, Lot 1: 102-43 to 102-55 Queens Boulevard
Block 2137, Lot 11: Parking Lot - 68th Avenue

September 12, 2023

HydroTech Environmental Engineering and Geology, DPC appreciates the opportunity to work for QBM Properties, LLC at the above properties in Queens, New York.

Should you require any additional information or have any comments regarding the contents of this report, please feel free to contact our office at your convenience.

We declare that, to the best of my professional knowledge and belief, HydroTech personnel meet the definition of an environmental professional as defined in §312.10 of 40 C.F.R. Part 312, and we have the specific 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 inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

Very Truly Yours,

HydroTech Environmental Engineering and Geology, DPC

Prepared By:

X_____

Mark E. Robbins, PG

Senior Geologist

Approved By:

X_____

Tarek Z. Khouri, PE

President

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1.0 EXECUTIVE SUMMARY

HydroTech Environmental Engineering and Geology, DPC. (HydroTech) has performed a Phase I Environmental Site Assessment (Phase I ESA) at the tax parcels located at Block 2137, Lots 1, 6, 8 and 11 in Queens, New York. The Phase I ESA was performed to meet or surpass the American Standard of Testing Materials Standard for Phase I Environmental Site Assessments E 1527-21. The Phase I ESA is also compliant with USEPA All Appropriate Inquires as set forth in E 1527-13. The purpose of the assessment was to characterize the environmental quality of the Subject Property through the identification of Recognized Environmental Conditions. All work was performed under the supervision of a HydroTech Project Manager and under the guidance of a HydroTech geologist.

The results of the Phase I Environmental Site Assessment are contained in this report. The Phase I ESA has identified the following Recognized Environmental Conditions:

- The presence of historical occupants related with dry cleaning operations (§4.0).
- The presence of Potential Vapor Encroachment Conditions (§5.0).

The following Non-Scope Consideration was identified:

- The presence of an MTA Subway line within 200 feet (§7.0).
- The presence of historical occupants associated with the generation of PFOS/PFOAs.

No effort has been made to perform any investigation beyond what is included in this Report. The observations and conclusions included herein summarize the results of the Phase I Environmental Site Assessment up to the date of the fieldwork and the date of this Report.

The following sections provide the details and specific information pertaining to the various components of the Phase I Environmental Site Assessment.

APPENDIX III:
TRANSPORTATION PLANNING FACTORS AND TRAVEL DEMAND FORECAST MEMORANDUM

Philip Habib & Associates
Engineers and Planners • 432 Park Avenue S • New York, NY 10016 • 212 929 5656 • 212 929 5605 (fax)

TECHNICAL MEMORANDUM

TO: **NYCDCP**

FROM: **Philip Habib & Associates**

DATE: **July 24, 2023**

PROJECT: **102-51 Queens Boulevard Rezoning EAS (PHA No. 2318)**

RE: **Transportation Planning Factors and Travel Demand Forecast**

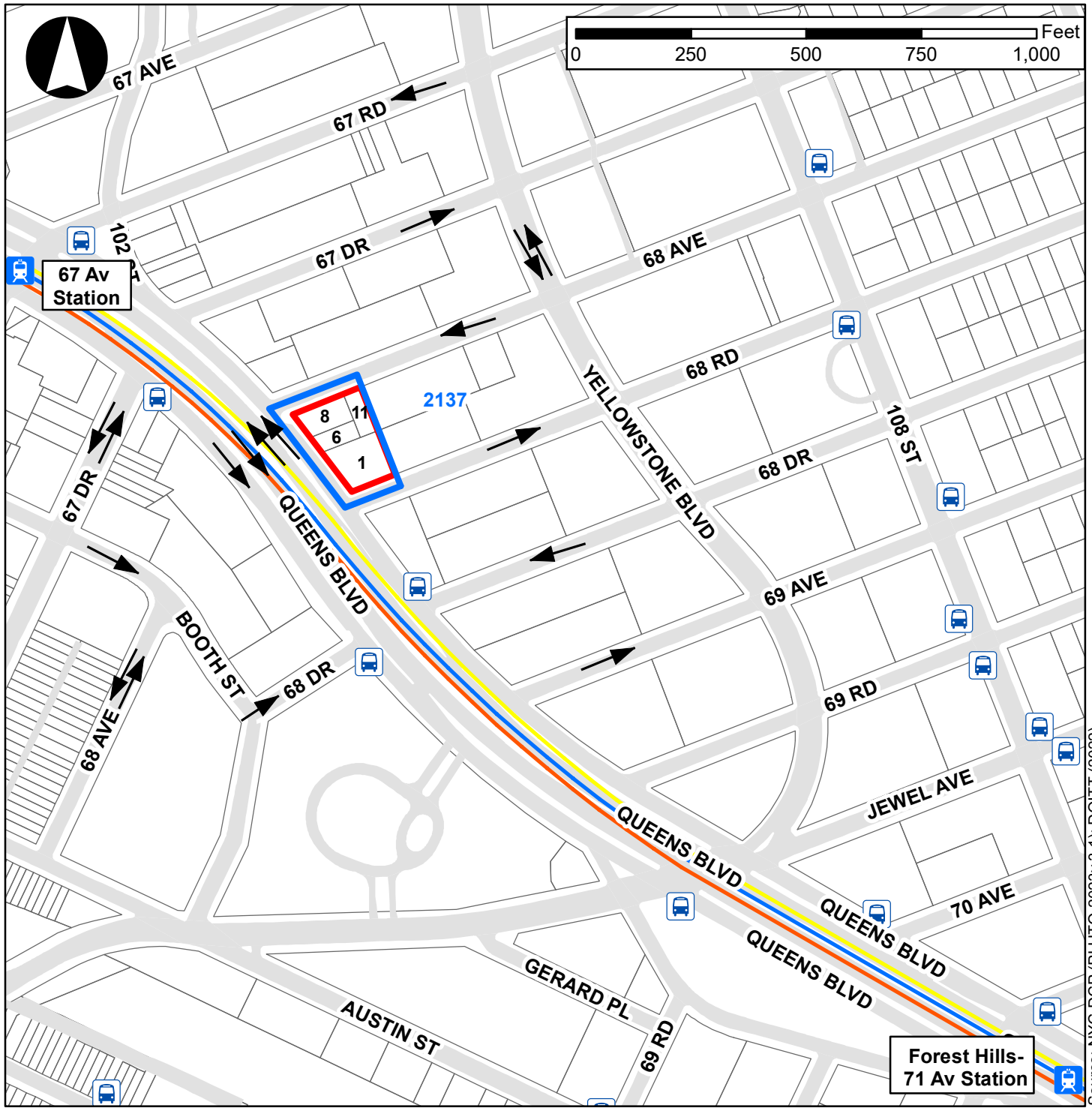
This memorandum summarizes the transportation planning factors to be used for the analysis of traffic, parking, transit, and pedestrian conditions for the 102-51 Queens Boulevard Rezoning. Estimates of the peak travel demand for the Proposed Actions' reasonable worst-case development scenario (RWCDS) are provided, along with a discussion of trip assignment methodologies and study area definitions.

THE PROPOSED ACTIONS

As shown in **Figure 1**, the "Rezoning Area" is located on the western-most portion of Block 2137 in the Forest Hills neighborhood of Queens Community District (CD) 6. The Rezoning Area encompasses the entirety of Block 2137, Lots 1, 6, 8, and 11, which are all owned by the Applicant, QBM Properties LLC, and comprise of the "Development Site." Block 2137 is bound by 68th Avenue to the north, Yellowstone Boulevard to the east, 68th Road to the south, and Queens Boulevard to the west. The Applicant is proposing to rezone the Rezoning Area from R7-1/C1-2 to R8X/C2-4 and establish it as an MIH area (the "Proposed Actions"), in order to increase the allowable density for the Development Site from a maximum floor area ratio (FAR) of 4.0 to 7.2. The proposed R8X district permits a maximum FAR of 7.2 under MIH and the proposed commercial overlay permits a wide range of commercial uses (Use Groups 6-9 & 14) at the Development Site with an allowable commercial FAR of 2.0.

The Proposed Actions would facilitate the development of 17-story (175-feet-tall), approximately 247,096-gsf (184,042-zoning-square-feet [zsf] or 7.2 FAR) mixed-use residential and commercial building, consisting of approximately 184,118-gsf of residential uses (216 dwelling units [DUs], including 162 market rate units and 54 permanently affordable units pursuant to MIH) and 19,807-gsf of local retail uses (the "Proposed Development"). There would also be an accessory parking garage for residential uses, with approximately 87 spaces, located on the ground and second floors of the building.

Figure 1
Project Location



Legend

- Rezoning Area
- Development Site
- Street Direction
- 2137 Blocks
- 1 Lots
- Bus Stops
- Subway Stations

Subway Lines

- E
- F/M
- R



THE REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDS)

In order to assess the potential effects of the Proposed Actions, a RWCDS for both "future without the Proposed Actions" (No-Action) and "future with the Proposed Actions" (With-Action) conditions are analyzed for an analysis year of 2026. As per the RWCDS, the No-Action scenario assumes that the Applicant would develop the Development Site pursuant to the existing R7-1/C1-2 zoning district. The No-Action development would be an eight-story (85-foot-tall), approximately 158,298-gsf mixed commercial/residential building, comprising approximately 92,763-gsf of residential space (109 DUs) and approximately 20,961-gsf of commercial retail space. There would also be an approximately 44,574-gsf accessory parking garage with 128 spaces located on the first and second floors of the building. Absent of the Proposed Actions, are expected to be introduced in the No-Action condition. The No-Action development would comprise of market-rate units only.

In the future with the Proposed Actions (the "With-Action condition"), the proposed zoning map and text changes would be approved, and the Development Site would be redeveloped with a 17-story (175-foot-tall), approximately 247,096-gsf mixed commercial and residential building (7.2 FAR). The Development Site would contain approximately 184,118 gsf of residential space, and approximately 19,807-gsf of local retail space. The residential component is assumed to comprise a total of 216 DUs, of which approximately 54 DUs would be made permanently affordable under MIH Option 1. The Proposed Development would also include 87 parking spaces located on the first and second floors of the building. The Applicant is proposing a development with 216 DUs (approximately 852-gsf). As such, the RWCDS will analyze a more conservative scenario in which the average DU size is 850-gsf. This would result in one additional DUs (217 total DUs) over the Applicant's proposed total of 216 DUs.

As shown in **Table 1**, compared to the No-Action condition, the Proposed Actions would result in a net incremental increase of 108 DUs and 91,355 gsf of residential space. There would also be a net incremental decrease of 1,154 gsf of local retail space. On-site accessory parking within the Development Site would decrease by approximately 41 spaces.

TABLE 1
2026 RWCDS No-Action and With-Action Land Uses

Land Use	Existing	No-Action	With-Action	Increment
Residential	0	92,763 gsf	184,118 gsf	**+91,355 gsf**
DUs	0	109	217	**+108**
Commercial	28,550 gsf	20,961 gsf	19,807 gsf	**-1,154 gsf**

TRANSPORTATION PLANNING FACTORS

The trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies and truck trip factors used to forecast travel demand for the RWCDS's residential, local retail, warehouse, and medical office uses are summarized in **Table 2**. They were based on factors cited in the 2021 *City Environmental Quality Review (CEQR) Technical Manual;* 2015-2019 American Community Survey (ACS) journey-to-work data for Queens census tracts in proximity to the Rezoning Area (tracts 711, 713.03, 713.04, 713.06, 739, and 741); data provided by the New York City Department of Transportation (DOT); and factors developed for recent environmental reviews. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand).

Residential

Residential person trip rates, temporal distribution, and directional in/out splits reflect data from the *CEQR Technical Manual.* The modal splits and auto -vehicle occupancies were based on ACS 2015-2019 5-year journey-to-work data for census tracts in the vicinity of the Rezoning Area. The taxi vehicle occupancy was based on the data from the 2022 *Innovation QNS Rezoning and LSGDFEIS*. Truck generation rates and temporal distributions reflect those cited in the *CEQR Technical Manual*.

Retail

The trip generation rates, temporal distributions, and directional in/out splits for local retail use were based on data from the *CEQR Technical Manual*. The modal splits and vehicle occupancy rates were based on data provided by DOT. Truck trip generation rates were also based on data from the *CEQR Technical Manual*.

TABLE 2: Transportation Planning Factors

Land Use:	Residential		Local Retail	
Trip Generation:	(1)		(1)	
Weekday	8.18		329	
Saturday	9.08		358	
	per DU		per 1,000 gsf	
Temporal Distribution:	(1)		(1)	
AM	9.3%		4.8%	
Midday	5.6%		8.0%	
PM	8.5%		10.9%	
Saturday	8.4%		11.7%	
Modal Splits:	(2)		(1)	
	All Periods		Weekday	Weekend
Auto	25.6%		11.0%	8.0%
Taxi	0.4%		0.0%	0.0%
Subway/Rail	64.7%		3.0%	4.0%
Transit Bus	3.2%		4.0%	7.0%
Ferry	0.0%		0.0%	0.0%
Walk/Other	6.2%		82.0%	81.0%
	100.0%		100.0%	
In/Out Splits:	(1)		(1)	
	In	Out	In	Out
AM	22%	78%	52%	48%
Midday	50%	50%	50%	50%
PM	62%	38%	50%	50%
Saturday	55%	45%	50%	50%
Vehicle Occupancy:	(2)(3)		(4)	
	All Periods		All Periods	
Auto	1.08		1.40	
Taxi	1.40		1.40	
Truck Trip Generation:	(1)		(1)	
Weekday	0.06		0.35	
Saturday	0.02		0.04	
	per DU		per 1,000 gsf	
Truck Temporal Distribution:	(1)		(1)	
AM	12%		8.0%	
MD	9%		11.0%	
PM	2%		2.0%	
Saturday	9%		11.0%	
Truck Directional Distribution:	In	Out	In	Out
AM	50%	50%	50%	50%
MD	50%	50%	50%	50%
PM	50%	50%	50%	50%
Saturday	50%	50%	50%	50%

Notes:
(1) 2021 *City Environmental Quality Review (CEQR) Technical Manual.*
(2) 2015-2019 ACS journey-to-work data for Queens Census Tracts 711, 713.03, 713.04, 713.06, 739, and 741.
(3) Based on data from *Innovation QNS Rezoning and LSGD FEIS*
(4) Based on data provided by NYCDOT.

TRIP GENERATION

The net incremental change in person and vehicle trips expected to result from the Proposed Actions by the 2026 analysis year was derived based on the net change in land uses shown in **Table 1** and the transportation planning factors shown in **Table 2. Table 3** shows estimates of the net incremental change in peak hour person trips and vehicle trips, respectively, which would occur in 2026 under the Proposed Actions. These data are further summarized in **Table 4**. As shown in **Table 3**, compared to the No-Action condition, the Proposed Actions would generate a net increase of approximately 64 person trips (in and out combined) in the weekday AM peak hour, 20 trips in the weekday midday peak hour, 36 trips in the weekday PM peak hour and 34 trips in Saturday peak hour.

As shown in **Table 4**, peak hour vehicle trips (including auto, taxi and truck trips) would increase by a net total of approximately 20, 14, 17, and 17 during the weekday AM, midday PM, and Saturday peak hours, respectively. Subway demand would increase by approximately 54, 32, 48, and 51 trips in the weekday AM, midday, PM, and Saturday peak hours, respectively. Bus demand would decrease by one trip in the Saturday peak hour; and increase by approximately two and one trips in the weekday AM and PM peak hours, respectively. There would be no change in bus trips during the weekday midday peak hour. There would also be no change in ferry trips during any peak hour. Lastly, trips made entirely on foot (walk-only trips) or by other non-motorized modes would decrease approximately 11, 24, 29, and 30 during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively.

TABLE 3: Travel Demand Forecast – Incremental Person Trips and Vehicle Trips

Land Use:		**Local Retail**		**Residential**			
Size/Units:		-1,154 gsf		108 DUs			
Peak Hour Trips:						**Total Trips**	
	AM	-18		82		64	
	Midday	-30		50		20	
	PM	-40		76		36	
	Saturday	-48		82		34	
Person Trips:							
AM		In	Out	In	Out	In	Out
	Auto	-1	-1	4	16	3	15
	Taxi	0	0	0	1	0	1
	Subway	0	0	12	42	12	42
	Public Bus	0	0	0	2	0	2
	Ferry	0	0	0	0	0	0
	Walk/Other	-8	-8	1	4	-7	-4
	Total	-9	-9	17	65	8	56
Midday		In	Out	In	Out	In	Out
	Auto	-1	-1	7	7	6	6
	Taxi	0	0	0	0	0	0
	Subway	0	0	16	16	16	16
	Public Bus	-1	-1	1	1	0	0
	Ferry	0	0	0	0	0	0
	Walk/Other	-13	-13	1	1	-12	-12
	Total	-15	-15	25	25	10	10
PM		In	Out	In	Out	In	Out
	Auto	-2	-2	12	8	10	6
	Taxi	0	0	0	0	0	0
	Subway	0	0	29	19	29	19
	Public Bus	-1	-1	2	1	1	0
	Ferry	0	0	0	0	0	0
	Walk/Other	-17	-17	3	2	-14	-15
	Total	-20	-20	46	30	26	10
Saturday		In	Out	In	Out	In	Out
	Auto	-2	-2	11	9	9	7
	Taxi	0	0	0	0	0	0
	Subway	-1	-1	30	23	29	22
	Public Bus	-2	-2	2	1	0	-1
	Ferry	0	0	0	0	0	0
	Walk/Other	-19	-19	3	3	-16	-16
	Total	-24	-24	46	36	22	12
Vehicle Trips :		**Local Retail**		**Residential**			
						Total Trips	
AM		In	Out	In	Out	In	Out
	Auto	-1	-1	3	15	2	14
	Taxi	0	0	0	1	0	1
	Taxi (Balanced	0	0	1	1	1	1
	Truck	0	0	1	1	1	1
	Total	-1	-1	5	17	4	16
Midday		In	Out	In	Out	In	Out
	Auto	0	0	6	6	6	6
	Taxi	0	0	0	0	0	0
	Taxi (Balanced	0	0	0	0	0	0
	Truck	0	0	1	1	1	1
	Total	0	0	7	7	7	7
PM		In	Out	In	Out	In	Out
	Auto	-1	-1	11	8	10	7
	Taxi	0	0	0	0	0	0
	Taxi (Balanced	0	0	0	0	0	0
	Truck	0	0	0	0	0	0
	Total	-1	-1	11	8	10	7
Saturday		In	Out	In	Out	In	Out
	Auto	-1	-1	10	9	9	8
	Taxi	0	0	0	0	0	0
	Taxi (Balanced	0	0	0	0	0	0
	Truck	0	0	0	0	0	0
	Total	-1	-1	10	9	9	8

TABLE 4: Travel Demand Forecast Summary

Peak Hour	Vehicle Trips[1]			Person Trips														
				Subway			Bus			Ferry			Walk/Other			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	4	16	20	12	42	54	0	2	2	0	0	0	-7	-4	-11	5	40	45
Midday	7	7	14	16	16	32	0	0	0	0	0	0	-12	-12	-24	4	4	8
PM	10	7	17	29	19	48	1	0	1	0	0	0	-14	-15	-29	16	4	20
Saturday	9	8	17	29	22	51	0	-1	-1	0	0	0	-16	-16	-32	13	5	18

Notes:

[1]Includes auto, taxi, and truck trips.

[2]Includes walk-only trips and pedestrians walking to/from subway stations, bus and ferry stops.

LEVEL 1 SCREENING ASSESSMENT

The *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine if quantified operational analyses of transportation conditions are warranted. As discussed in the following sections, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the numbers of person and vehicle trips attributable to the Proposed Actions. According to the *CEQR Technical Manual*, if the Proposed Actions is expected to result in fewer than 50 vehicle or ferry trips in each peak hour, and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (a Level 2 assessment) are to be performed to estimate the incremental trips that could occur at specific transportation elements and to identify potential locations for further analysis. If the trip assignments show that the Proposed Actions would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, 25 or more peak hour trips by Citywide Ferry Service ("CWFS") in a single direction on a single route, 50 or more at a ferry landing, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area or crosswalk, then further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, ferry, pedestrians, and parking.

Traffic

Based on *CEQR Technical Manual* guidance, a quantified traffic analysis is typically required if the Proposed Actions would result in 50 or more vehicle trip ends in a peak hour at one or more intersections. As shown in **Table 4**, under the Proposed Actions there would be net increases of 20, 14, 17, and 17 vehicle trips in the weekday AM, midday, and PM peak hours, and Saturday peak hours, respectively. Therefore, significant adverse traffic impacts are not expected to occur under the Proposed Actions, and a detailed traffic analysis is not warranted based on *CEQR Technical Manual* guidance.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if the Proposed Actions is projected to result in fewer than 200 peak hour rail or bus transit riders. If the Proposed Actions would result in 50 or more bus passengers being assigned to a single bus route in one direction, or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours, as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in **Table 4**, the Proposed Actions are expected to generate a net total of approximately 54, 32, 48and 51 incremental subway trips in the weekday AM, midday, and PM peak hours, and Saturday peak hours, respectively. As these numbers of trips would not exceed the 200-trip *CEQR Technical Manual* analysis threshold, further analysis is not warranted. As also shown in **Table 4,** there is expected to be a net reduction of one bus trip in the Saturday, and net increase of approximately two and one bus trips in the weekday AM and PM peak hour, respectively. As these numbers of trips would not exceed the 50-trip *CEQR Technical Manual* analysis threshold, further analysis is not warranted. Therefore, significant adverse impacts to transit subway and bus services are not expected to occur under the Proposed Actions, and a detailed analysis of subway and bus conditions is not warranted based on *CEQR Technical Manual* guidance.

CWFS

According to *CEQR Technical Manual* guidance, detailed analyses of the CWFS are not typically required if the Proposed Actions would result in 50 or fewer peak hour CWFS peak hour ferry riders to a ferry landing or if the Rezoning Area is located more than half-mile from a ferry landing. As shown in **Table 4**, there would also be no change in ferry trips during the weekday peak hour and Saturday. As these numbers of trips would not exceed the 50-trip *CEQR Technical Manual* analysis threshold and there is no ferry landing within half-mile of the Rezoning Area, further analysis is not warranted and significant adverse impacts to ferry services are not expected to occur under the Proposed Actions.

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if the Proposed Actions would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in **Table 4**, the Proposed Actions would generate a net incremental increase of approximately 45, 8, 20 and 18 total pedestrian trips in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. These would include walk-only trips, pedestrians walking to and from the subway and bus and ferry stops, and a portion of residential person trips by auto that are expected to utilize off-site parking. As the numbers

of trips would not exceed the 200-trip threshold in all periods, a Level 2 screening assessment is not warranted to determine which, if any, pedestrian elements require quantified analysis.

PARKING

According to *CEQR Technical Manual* guidance, on- and off-street parking analyses may be warranted if a quantified traffic analysis is necessary based on the Levels 1 and 2 screening assessments. Based on the screening assessments detailed above, a quantified traffic analysis would not be warranted for the Proposed Actions. Therefore, according to CEQR Technical Manual guidance, quantified on- and off-street parking analyses would also not be warranted for the Proposed Actions.