78-08 LINDEN BOULEVARD AVENUE REZONING

Environmental Assessment Statement

CEQR No. 24DCP123Q

Prepared for:
Linden Canyon LLC

Environmental Studies Corp.

April 2024

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* 78-08 Linden Boulevard Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) 24DCP123Q	BSA REFERENCE NUMBER (if applicable)
ULURP REFERENCE NUMBER (if applicable) 240145ZMQ N240146ZRQ N240146LDQ	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA) Project ID: 2022Q0154

4a. *Lead Agency Information*

NAME OF LEAD AGENCY NYC Department of City Planning		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, Director, EARD		
ADDRESS 120 Broadway, 31st floor		
CITY New York	STATE NY	ZIP 10271
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov	

4b. *Applicant Information*

NAME OF APPLICANT Linden Canyon LLC		
NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Hiram Rothkrug, Environmental Studies Corp.		
ADDRESS 55 Water Mill Lane		
CITY Great Neck	STATE NY	ZIP 11021
TELEPHONE 718-343-0026	EMAIL hrothkrug@environmentalstudiescorp.com	

5. *Project Description*

Linden Canyon LLC (the Applicant), the owner of 78-08 Linden Blvd. (Block 11384, Lot 1), Projected Development Site 1, in the Lindenwood neighborhood of Queens Community District 10, requests approval of the following Proposed Actions from the New York City Planning Commission (CPC):

- A Zoning Map Amendment to rezone Projected Development Site 1 from R4/C1-2 to R7D/C2-4 and R6A Districts. The R7D and C2-4 overlay would cover the northern portion of the lot, and the R6A district would be mapped on the southern portion of the lot;
- A Zoning Text Amendment pursuant to Appendix F to map a Mandatory Inclusionary Housing (MIH) area over the Project Area; and
- A cancelation of a restrictive declaration recorded against the Project Area in connection with a prior rezoning action.

The Proposed Actions would facilitate the proposed redevelopment of Projected Development Site 1 with a gross square foot (gsf) mixed-use building containing residential and commercial (local retail) uses. The building would contain 242,960 gsf of residential floor area for 267 dwelling units on all building floors and 12,108 gsf of commercial (local retail) uses. The building would be 11 stories with a total height of 115 ft. Of the proposed residential dwelling units, between 68 and 81 units would be reserved as moderate to low-income units under MIH at an average of 60 to 80% of Area Median Income (AMI). Both MIH Options 1 and 2 would be mapped on the Project Area as part of the Proposed Actions. The final MIH option would be determined through the ULURP process. The building would provide 154 accessory parking units located in the cellar and and on the first floor of the building.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 10	STREET ADDRESS 78-08 Linden Blvd.
TAX BLOCK(S) AND LOT(S) Block 11384, Lot 1		ZIP CODE 11414
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS South side of Linden Blvd. between 79th Street and Sapphire Street		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R4/C1-2		ZONING SECTIONAL MAP NUMBER 18b

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION Appendix F

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)

☐ LANDMARKS PRESERVATION COMMISSION APPROVAL

☐ OTHER, explain:

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

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

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

☒ SITE LOCATION MAP ☒ ZONING MAP ☒ SANBORN OR OTHER LAND USE MAP

☒ TAX MAP ☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)

☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 47,960 Waterbody area (sq. ft) and type: 0

Roads, buildings, and other paved surfaces (sq. ft.): 47,960 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): 255,068

NUMBER OF BUILDINGS: 1 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 255,068

HEIGHT OF EACH BUILDING (ft.): 115 NUMBER OF STORIES OF EACH BUILDING: 11

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: 47,960

The total square feet not owned or controlled by the applicant: 0

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: 47,960 sq. ft. (width x length) VOLUME OF DISTURBANCE: 479,600 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 47,960 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.)	242,960	12,108	0	0

Type (*e.g.,* retail, office, school)	267 units	local retail		

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 793 NUMBER OF ADDITIONAL WORKERS: 47

Provide a brief explanation of how these numbers were determined: Residents: based on average household size of 2.97 persons in the Howard Beach-Lindenwood Neighborhood Tabulation Area per 2020 Census Data; Workers: assumes 3 workers per 1,000 sf of retail space (36 workers) and 1 worker per 25 DUs (11 workers)

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

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

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

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2027

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 23

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: parking lots , vacant land, comm facil

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☒	☐
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Early Childhood Programs:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☒	☐
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees?	☒	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		

	YES	NO
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☒	☐
○ If "yes," complete the Jamaica Bay Watershed Protection Plan Project Tracking Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☐	☒
(b) Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure?	☐	☒
(c) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(d) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in the Hazardous Materials Appendix (including nonconforming uses)?	☒	☐
(e) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(f) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(g) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(h) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(i) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See attached report	☒	☐
(j) Based on the Phase I Assessment, is a Phase II Investigation needed?	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(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?	☐	☒

	YES	NO
(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): 17,500		
○ 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): 30,787,636		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☒	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☒	☐
○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☒
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop, or Citywide Ferry Service landing?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒

	YES	NO
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. See attached report		
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.		

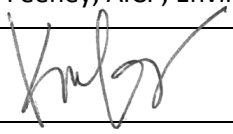
20. *APPLICANT'S CERTIFICATION*

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
Kathleen M Feeney, AICP, Environmental Studies Corp.	April 19, 2024

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.

78-08 Linden Boulevard, Queens

Figure 1: Site Location

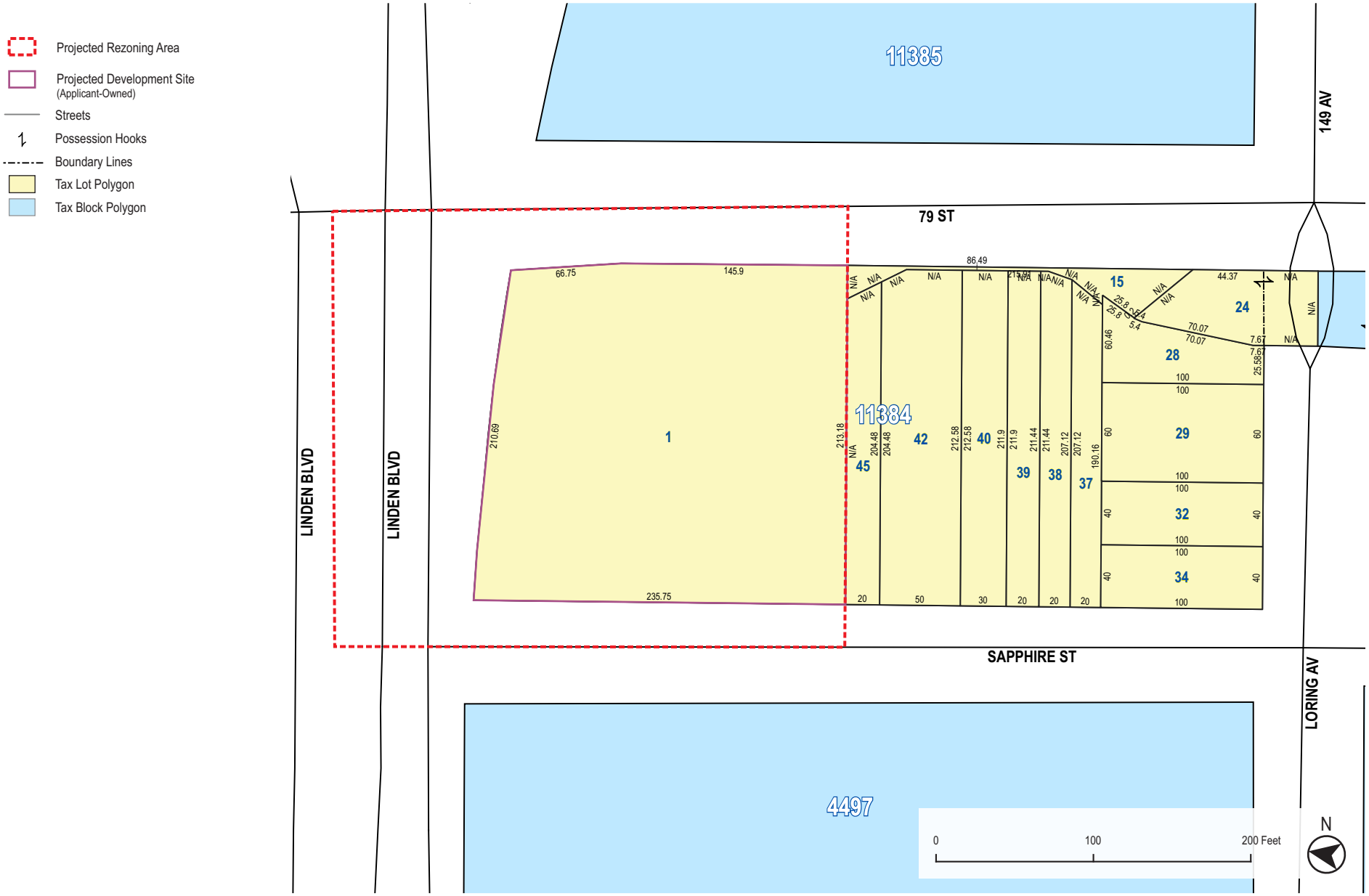


Data Source: MapPLUTO 2022v2

Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 2: Tax Map



Data Source: MapPLUTO 2022v2, NYC DOF Digital Tax Map 8/2/21

Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 3: Land Use Map

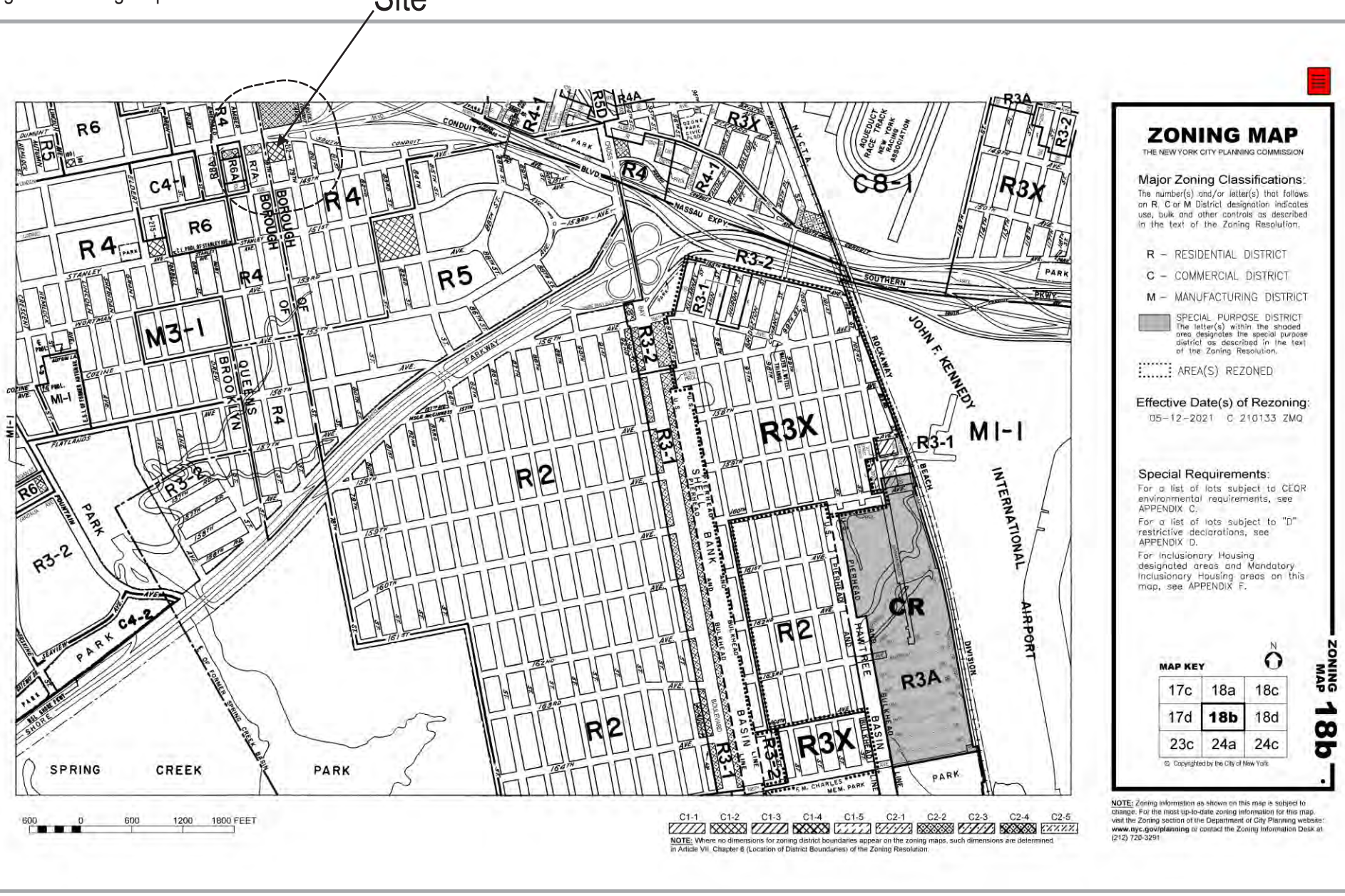


Data Source: MapPLUTO 2022v2, NYC DOF Digital Tax Map 8/2/21

Urban Cartographics

78-08 Linden Boulevard, Queens

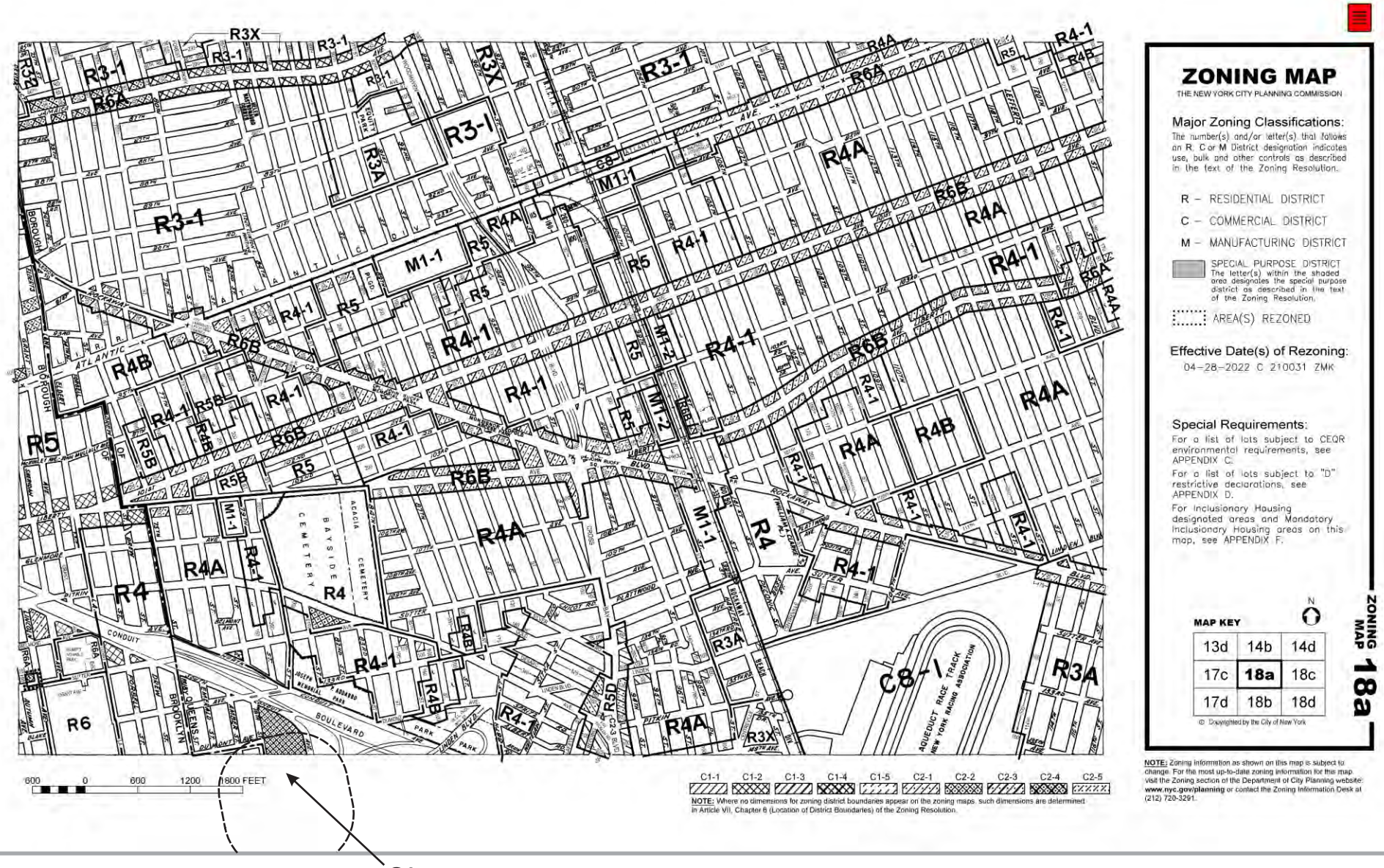
Figure 4: Zoning Map



Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 5: Zoning Map



Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 6: Aerial Map

Projected Rezoning Area

Projected Development Site
(Applicant-Owned)



Imagery Source: 2023 Bing, Microsoft Corporation

Urban Cartographics



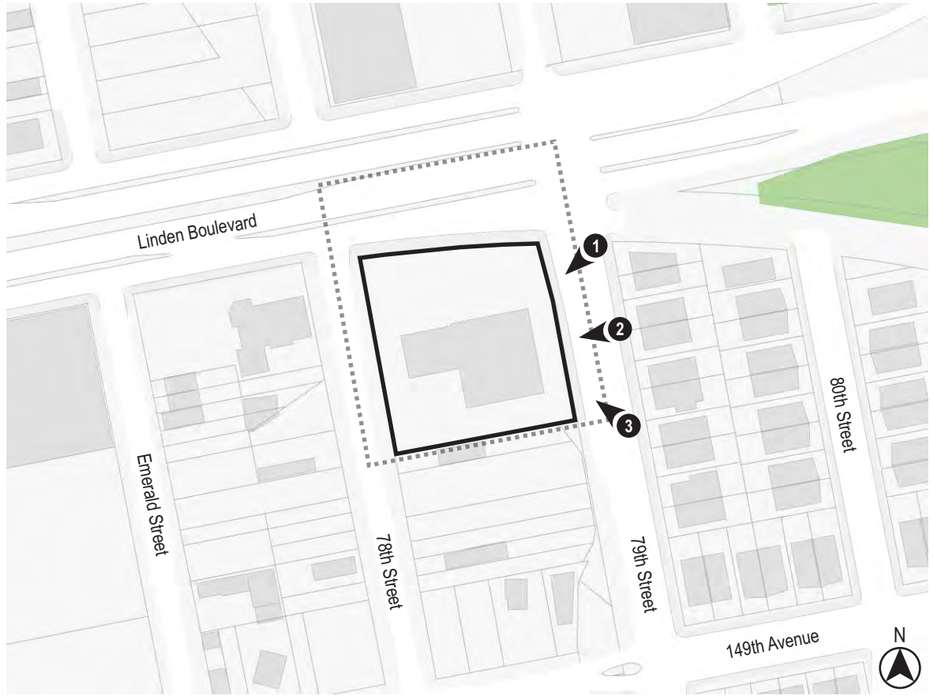
1. View of the Development Site facing southwest from 79th Street.



2. View of the Development Site facing west from 79th Street.



3. View of the Development Site facing northwest from 79th Street.





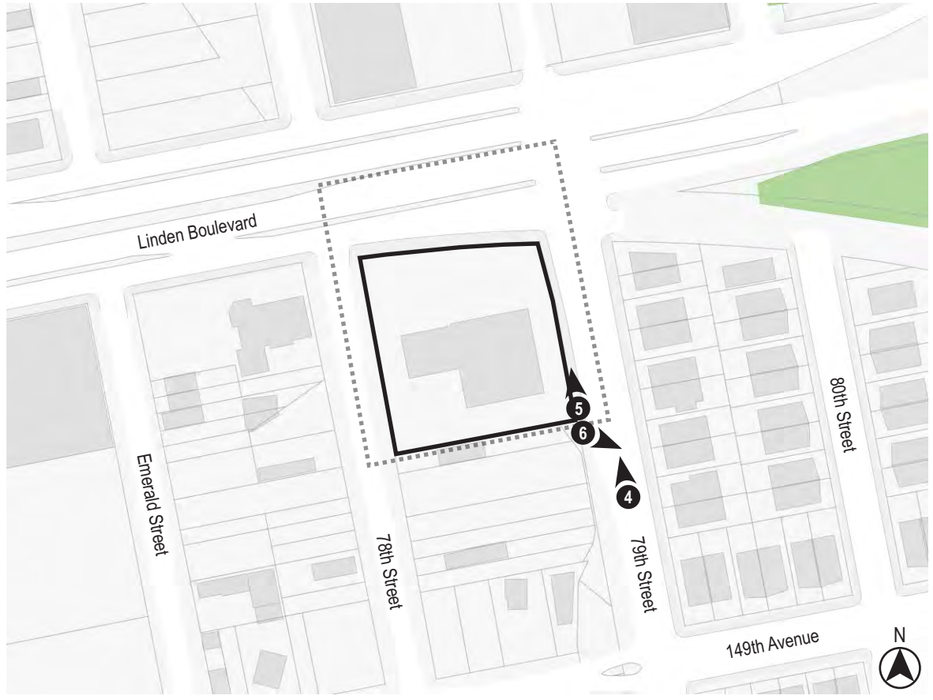
4. View of 79th Street facing north (Development Site at left).



5. View of the sidewalk along the west side of 79th Street facing north (Development Site at left)



6. View of the right side of 79th Street facing southeast from the Development Site.





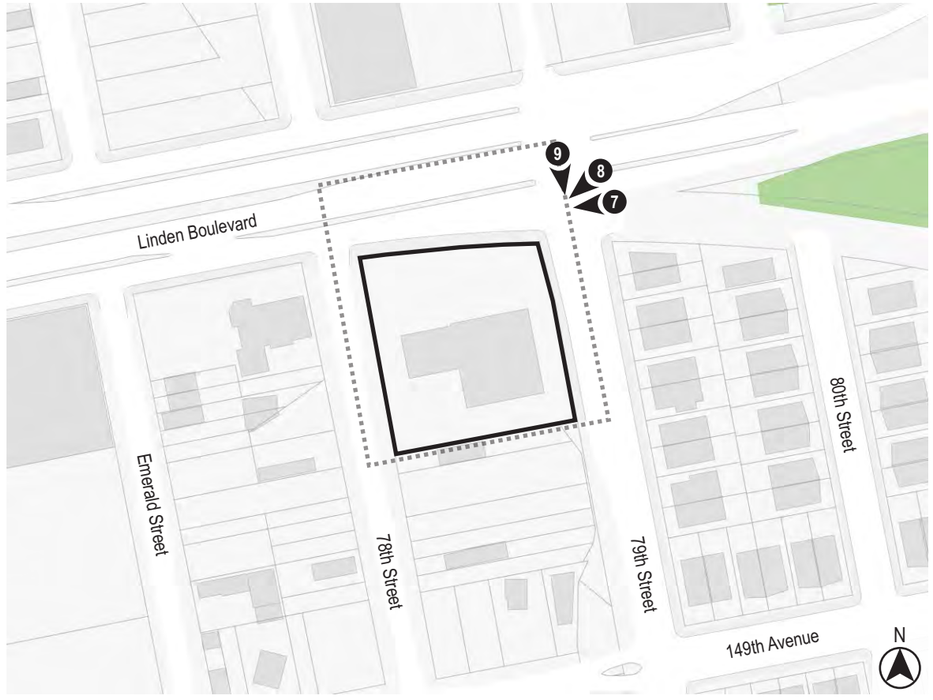
7. View of Linden Boulevard facing west from 79th Street (Development Site at left).



8. View of the Development Site facing southwest from the intersection of Linden Boulevard and 79th Street.



9. View of 79th Street facing south from Linden Boulevard (Development Site at right).





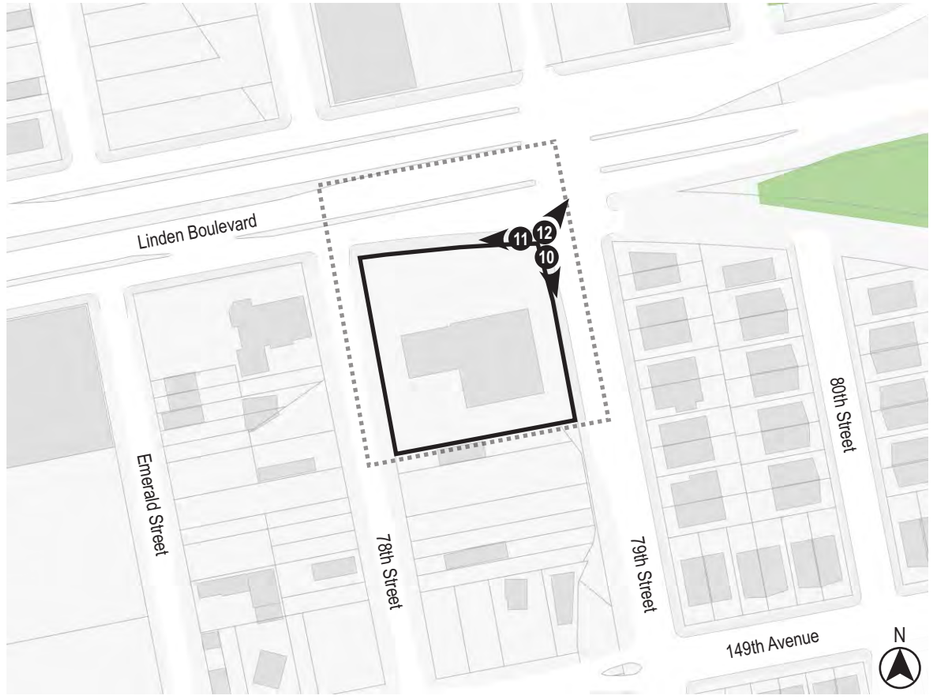
10. View of the sidewalk along the west side of 79th Street facing south from Linden Boulevard (Development Site at right).



11. View of the sidewalk along the south side of Linden Boulevard facing west from 79th Street (Development Site at left).



12. View of the intersection of Linden Boulevard and 79th Street facing northeast from the Development Site.





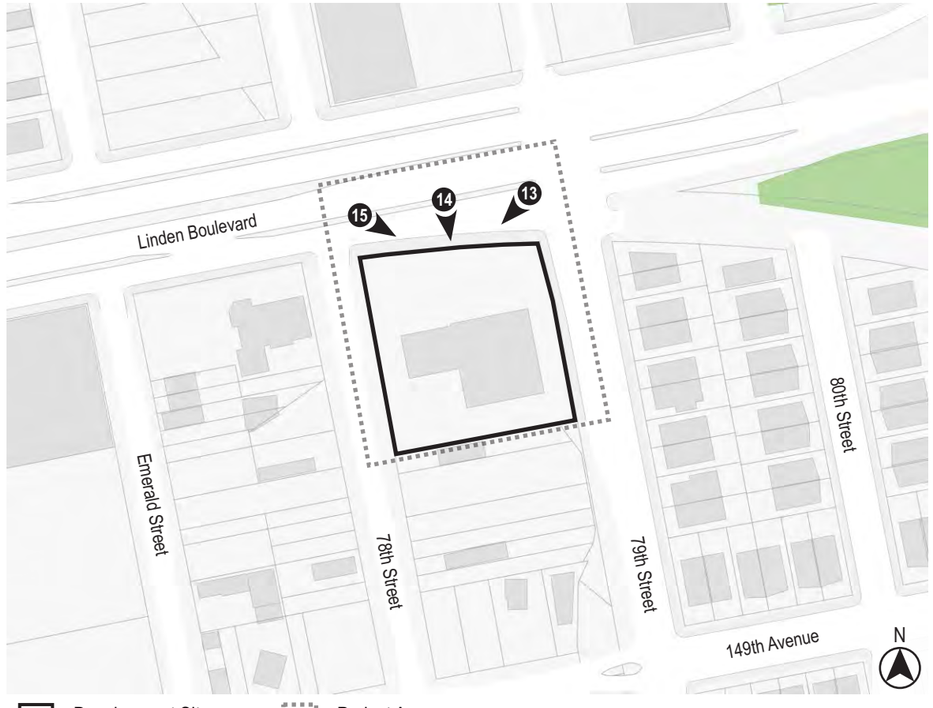
13. View of the Development Site facing southwest from Linden Boulevard.



14. View of the Development Site facing south from Linden Boulevard.



15. View of the Development Site facing southeast from Linden Boulevard.





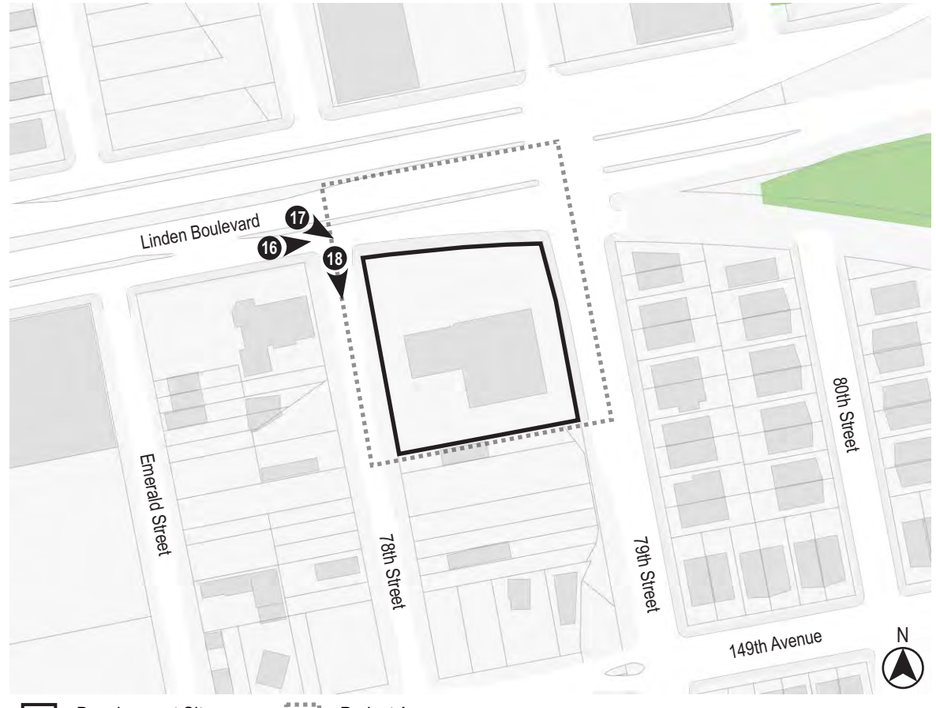
16. View of Linden Boulevard facing east from 78th Street (Development Site at right).



17. View of the Development Site facing southeast from the intersection of Linden Boulevard and 78th Street.



18. View of 78th Street facing south from Linden Boulevard (Development Site at left).





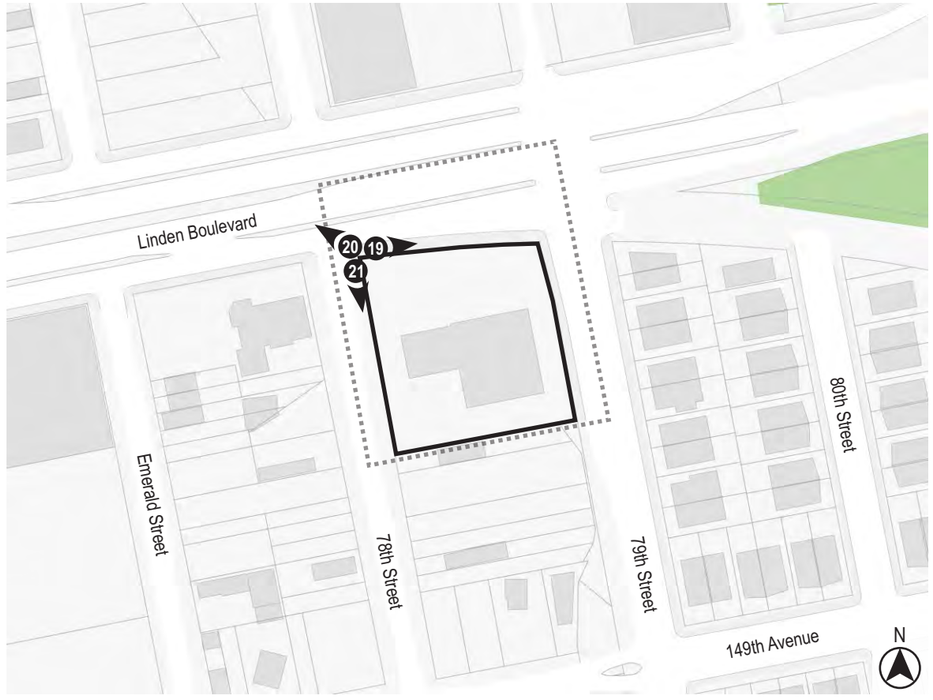
19. View of the sidewalk along the south side of Linden Boulevard facing east from 78th Street (Development Site at right).



20. View of Linden Boulevard facing northwest from the Development Site.



21. View facing south along the east side of 78th Street from Linden Boulevard (Development Site at left).



Urban Cartographics



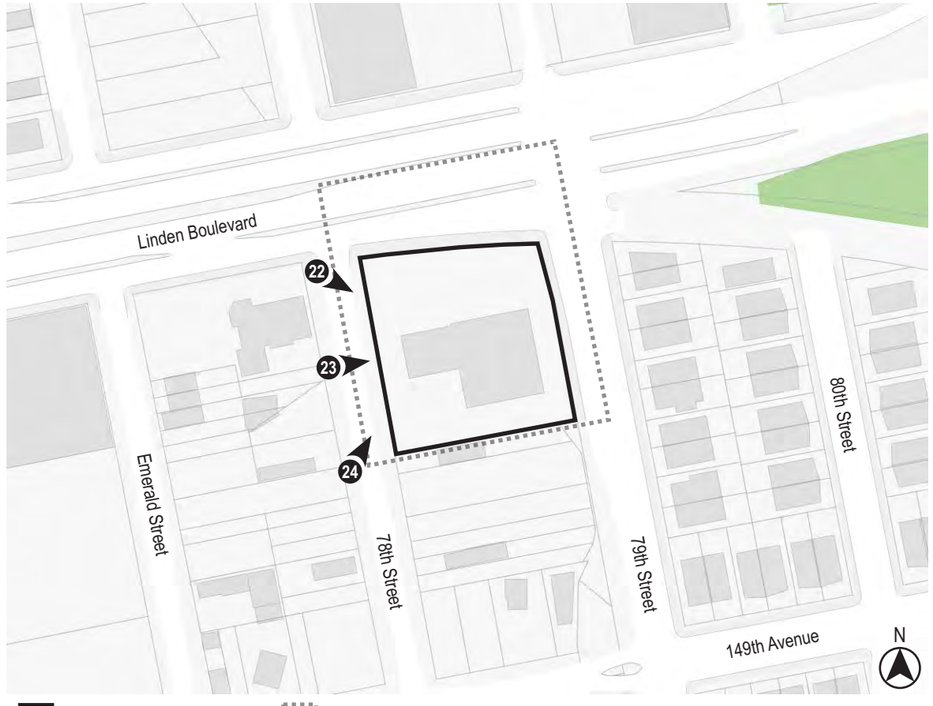
22. View of the Development Site facing southeast from 78th Street.



23. View of the Development Site facing east from 78th Street.



24. View of the Development Site facing northeast from 78th Street.





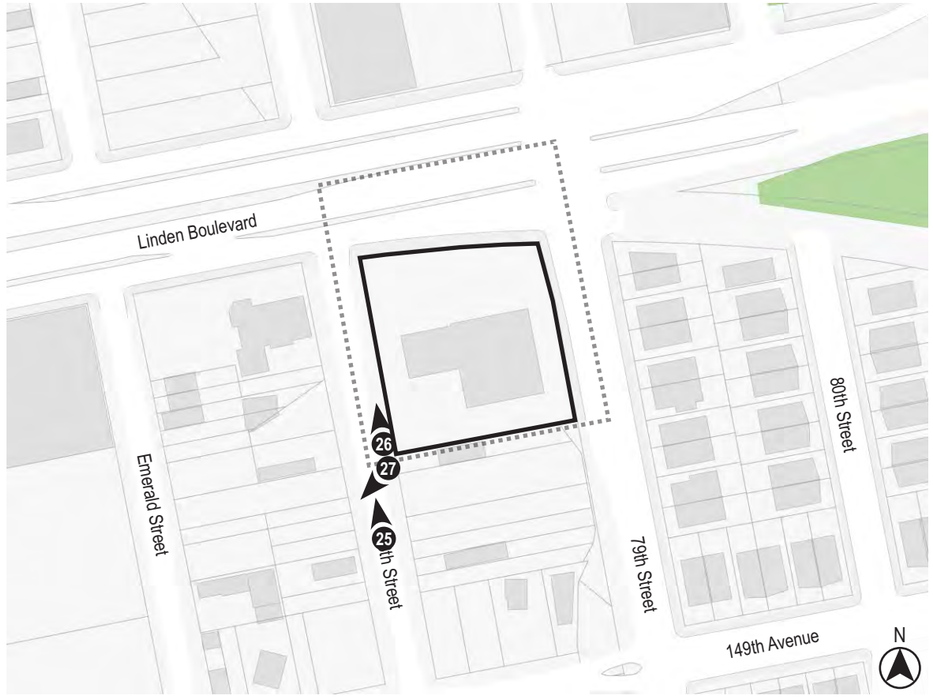
25. View of 78th Street facing north (Development Site at right).



26. View facing north along the east side of 78th Street (Development Site at right).



27. View of the west side of 78th Street facing southwest from the Development Site.



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PROJECT DESCRIPTION

78-08 LINDEN BOULEVARD, QUEENS

Introduction

The applicant, Linden Canyon, LLC, (the "Applicant") seeks a Zoning Map Amendment to rezone Block 11384, Lot 1, (the "Project Area" and "Projected Development Site 1") from R4/C1-2 to R7D/C2-4 and R6A. The R7D and C2-4 overlay would cover the northern portion of the lot (22,379 square feet), with a varying distance of 92-100 feet south of Linden Boulevard. The R6A district would be mapped on the southern portion of the lot (25,581 square feet), to approximately 120 feet south of the southern border of the new R7D/C2-4 zone. The Proposed Actions also include a Zoning Text Amendment to modify Zoning Resolution (ZR) Section 23-933, Appendix F to designate the newly mapped R7D/C2-4 and R6A districts as a Mandatory Inclusionary Housing (MIH) designated area. Finally, the Proposed Actions include the cancelation of a restrictive declaration recorded against the Project Area in connection with a prior rezoning action. If approved, the Proposed Actions would facilitate the construction of mixed-use building containing residential and commercial (local retail) uses (the "Proposed Development") at 78-08 Linden Boulevard in the Lindenwood neighborhood of Queens Community District 10 located within an R4/C1-2 zoning district.

Proposed Actions

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

- *Zoning Map amendment to rezone an R4/C1-2 zoning district to an R7D/C2-4 zoning district and R6A zoning district.*
- *Zoning Text amendment (Appendix F) to make the Rezoning Area applicable as a Mandatory Inclusionary Housing (MIH) Area.*
- *Cancelation of a restrictive declaration recorded against the area in connection with a prior rezoning action.*

Proposed Development

The Applicant seeks to develop the Projected Development Site 1 on Block 11384, Lot 1.

The NYC Department of City Planning is proposing a citywide zoning text amendment, the City of Yes for Housing Opportunity "CHO" (CEQR No. 24DCP033Y) to expand opportunities

for housing within all zoning districts, and across all 59 of the City's Community Districts. These changes to the City's Zoning Resolution would enable more housing and a wider variety of housing types in every neighborhood, from the lowest-density districts to the highest, to address the housing shortage and high cost of housing in New York City. It is anticipated that this proposed zoning text amendment would be referred into public review in Spring 2024. It has been determined that this project may be affected by the proposals included in the text amendment, therefore a preliminary assessment of the effect of CHO on the Projected Development Site 1 is included in **Appendix A**.

Currently, the Proposed Actions would facilitate the proposed redevelopment of Projected Development Site 1 with a 255,068 gross square foot (gsf) mixed-use building containing residential and commercial (local retail) uses. The building would contain 242,960 gsf of residential floor area for 267 dwelling units on floors two through eleven and 12,108 gsf of commercial (local retail) uses. For CEQR analysis purposes, the EAS will assume 25-30 percent of overall residential floor area is set aside for affordable units pursuant to MIH. Of the proposed residential dwelling units, between 68 and 81 units would be reserved as moderate to low-income units under MIH at an average of 60 to 80% of Area Median Income (AMI). Both MIH Options 1 and 2 would be mapped on the Project Area as part of the Proposed Actions. The final MIH option would be determined through the ULURP process. The building would provide 154 accessory parking units located in the cellar and and on the first floor of the building.

Purpose and Need

The Projected Development Site is located at the edge of a mixed commercial and residential neighborhood where higher density development in accordance with proposed R7D/C2-4 District regulations is suitable. The Proposed Actions would support the productive use of underutilized land and address the need for affordable housing. Higher density development allowed by a zoning change to a R7D District is appropriate given the Site's proximity to a large amount of open space that provides light and air. The Site has frontage on two wide streets that include mapped park land and an unmapped street. Mapping a R7D/C2-4 District along Linden Boulevard with a lower density R6A District at the mid-block would ensure a proper transition to the smaller-scale residential buildings that are located more uniformly to the east of the Site.

The current R4 zoning district does not allow for sufficient density, height allowance, or bulk to allow the site to be redeveloped with a mixed-use residential and commercial building. The proposed rezoning would permit the development of new mixed use commercial/residential use building, including income-restricted housing at an appropriate location on a wide street.

In addition to the zoning map amendment, a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) would be required to make the proposed Rezoning Area applicable as an MIH area. The MIH program would require a set aside for permanently income-restricted units, which would be unique to the surrounding area that has no current zoning provisions to promote the development of income-restricted housing.

A restrictive declaration has been recorded against the property as part of a prior rezoning. The Project Area was zoned R4 since 1961. On August 19, 1976, a C1-2 overlay was mapped within the Project Area to a depth of 212 feet from Linden Boulevard (CP No. 23263). As part of the 1976 rezoning, a restrictive declaration was recorded on October 5, 1976, under Reel 939, Page 1609 against the rezoned area, which includes the Project Area (the "RD"). The RD is also identified as D-19 on Zoning Map 18b and in ZR Appendix D. This RD restricts the way the Project Area may be developed, maintained, and operated and it cannot be amended, modified or canceled without the City's approval.

As the Applicant is seeking to rezone the Projected Development Site 1, the existing RD relating to the prior rezoning will effectively be nullified. The Applicant will be formally requesting a cancelation of the existing RD as part of the overall application.

Analysis Framework

Rezoning Area

The Project Area (coterminous with Projected Development Site 1) consists of 47,960 square foot (Block 11384, Lot 1) irregularly shaped lot with 210 feet of frontage on Linden Boulevard, 235 feet of frontage on Sapphire Street, and 213 feet of frontage on 79th Street. The Project Area is situated at the intersection of Linden Boulevard, 79th Street and South Conduit Avenue. Linden Boulevard measures 170 feet wide, Sapphire Street measures 60 feet wide, 79th Street measures 80 feet wide, and South Conduit Avenue is a mapped but unopened 45 feet wide street.

Block 11384, Lot 1 is Applicant owned and has an area of approximately 47,960 sf. It is currently developed with a one-story, approximately 22,040 gsf retail building containing a pharmacy, a dry cleaner, a liquor store, and a small restaurant, as well as approximately 36 at-grade accessory parking spaces.

The Proposed Actions would not affect any other lots.

Surrounding land uses are predominately one and two-family residential to the east and south, mixed-use commercial/residential and community facility uses along Linden Boulevard, and multi-family residential to the west and north. There are vacant lots scattered throughout the area.

In the future with the Proposed Actions, the Proposed Development would reach the upper bounds of permitted FAR under the proposed R7D/C2-4 and R6A zoning districts. The Proposed Development would also reach the maximum permitted building height of 115 feet and maximize available bulk. Therefore, the Proposed Development is assumed to be the same as the With-Action scenario.

Rezoning Area	Block	Lot
Projected Development Site 1 (Applicant Owned Site)	11384	1

Existing Conditions

Projected Development Site 1

Projected Development Site 1 consists of 47,960 square foot (Block 11384, Lot 1) and is an irregularly shaped lot with 210 feet of frontage on Linden Boulevard, 235 feet of frontage on Sapphire Street, and 213 feet of frontage on 79th Street. The Project Area is situated at the intersection of Linden Boulevard, 79th Street and South Conduit Avenue. It is currently developed with a one-story, approximately 22,040 gsf (21,379 zoning square feet and 0.45 FAR) retail building containing a pharmacy, a dry cleaner, a liquor store, and a small restaurant, as well as approximately 36 at-grade accessory parking spaces.

Future No-Action Scenario

Absent the Proposed Actions, Projected Development Site would remain in its existing conditions.

Projected Development Site 1

Block 11384 Lots 1 are assumed to remain in the existing condition of a one-story, approximately 22,040 gsf retail building containing a pharmacy, a dry cleaner, a liquor store, and a small restaurant, as well as approximately 36 at-grade accessory parking spaces. It is Applicant-owned and there are no plans to redevelop this site absent the Proposed Actions.

Future With-Action Scenario

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

Projected Development Site 1

In the future with the Proposed Actions, (Block 11384, Lot 1) would be developed with a new mixed-use commercial/residential building which would be 115 feet and 11 stories within the R7D/C2-4 district and 85 feet and 8 stories within the R6A district. The building would contain 242,960 gsf (200,879 zsf with 4.19 FAR) of residential uses for 267 dwelling units on floors two through eleven and 12,108 gsf (11,608 zsf with 0.24 FAR) of commercial (local retail) uses on the ground/first floor. Between 68 and 81 of the 267 dwelling units would be reserved as low- to moderate-income units pursuant to the requirements of MIH at an average of 60-80% AMI. Both MIH Options 1 and 2 would be mapped on the Project Area as part of the Proposed Actions. The final compliance with MIH would be determined through the ULURP process. The building would provide 154 accessory parking units located in the cellar and on

the first floor accessible from 79th Street. The building's total FAR would be 4.43 based on 212,487 zsf of development on the 47,960 square foot Project Area. No other parcels would be affected by the Proposed Actions.

Land Use	Existing	No-Action	With-Action	Increment
Projected Development Site 1				
Residential	--	--	267 du (242,960 gsf)	+267 du (+242,960 gsf)
Commercial	22,040 gsf	22,040 gsf	12,108 gsf	-9,932 gsf
Accessory Parking	36	36	154	+118

Build Year

It is estimated that the Proposed Project would be completed by the year 2027. Construction and occupancy of the proposed development on Projected Development Site 1 would take approximately 18 months following project approval. The Build Year assumes an 18-month pre-certification timeframe, a seven-month ULURP review and a 23-month construction period.

The Proposed Actions would facilitate development on only one site (The applicant owned Projected Development Site 1). Therefore, there is no need to analyze potential construction time frames for non-applicant controlled sites.

78-08 LINDEN BOULEVARD REZONING

ENVIRONMENTAL ASSESSMENT STATEMENT

INTRODUCTION

Based on the analysis and the screenings contained in the Environmental Assessment Statement Short Form, the analysis areas that require further explanation include land use, zoning, and public policy, socioeconomic conditions, community facilities, open space, shadows, historic and cultural resources, urban design and visual resources, hazardous materials, transportation, air quality, noise, neighborhood character, and construction as further detailed below. The subject heading numbers below correlate with the relevant chapters of the *CEQR Technical Manual.*

1. LAND USE, ZONING AND PUBLIC POLICY

Introduction

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

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 the project, as well as the location and context of the area that could be affected by the project. To assess the potential for project related impacts, the land use study area has been defined as the area located within a 400-foot radius of the proposed Project Area. The 400-foot radius study area is generally bounded by an area between Linden Boulevard and Dumont Avenue on the north, an area slightly south of 149th Avenue on the south, an area roughly midway between Amber and Emerald Streets on the west, and an area approximately midway between 80th and 81st Streets to the east. Various sources have been used to prepare a comprehensive analysis of land use, zoning, and public policy characteristics of the area, including field surveys, studies of the neighborhood, census data, and land use and zoning maps.

LAND USE

Existing Conditions

Project Area/Projected Development Site

The Project Area/Projected Development Site 1 (the area subject to the Zoning Map and Zoning Text Amendments) are coterminous and consist of approximately 40% of the area of Block 11384 in the Lindenwood neighborhood of Queens bounded by Linden Boulevard, 79th

Street, Loring Avenue, and Sapphire Street. The Project Area is located immediately east of the Brooklyn Borough boundary line in the Lindenwood neighborhood of Queens, within Community Board 10. The Project Area/Projected Development Site 1 includes Block 11384, Lot 1 located along the south side of Linden Boulevard between Sapphire Street and 79th Street and constitutes the Applicant's property which is proposed for development. No other properties are proposed for development or anticipated to be developed as a result of the Proposed Actions.

The Project Area is an irregularly shaped lot with 210 feet of frontage on Linden Boulevard, 235 feet of frontage on Sapphire Street, and 213 feet of frontage on 79th Street. The Project Area is situated at the intersection of Linden Boulevard, 79th Street and South Conduit Avenue. Linden Boulevard measures 170 feet wide, Sapphire Street measures 60 feet wide, 79th Street measures 80 feet wide, and South Conduit Avenue is a mapped but unopened 45 feet wide street.

The 47,960 square foot Project Area/Projected Development Site 1 is developed with a one-story, approximately 22,040 gsf retail building containing a pharmacy, a dry cleaner, a liquor store, and a small restaurant, as well as approximately 36 at-grade accessory parking spaces.

400-Foot Radius Project Study Area

The proposed Project Area is located in the Lindenwood neighborhood of Queens within Community District 10. The remainder of the block on which the Project Area is located is improved with a two-story warehouse, several vacant lots, a two-story two-family residence, a one-story single-family residence, and a one-story landscaping and gardening establishment.

The 400-foot radius project study area to the west of the Project Area south of Linden Boulevard generally consists of a mix of higher-density residential and mixed commercial and residential buildings and numerous vacant lots. Development west of the Project Area south of Linden Boulevard includes Linden Terrace, the site of four new 8-12 story buildings and a diner. In contrast, land immediately east of the Project Area to the south of Linden Boulevard primarily consists of two-story, two- and three-family dwellings.

The 400-foot radius project study area to the north of the Project Area across Linden Boulevard proceeding from east to west includes an open space area, Gemini Fields; a four-story charter school directly across Linden Boulevard from the Project Area and the adjacent Linden Center shopping mall comprised of approximately 250,000 gsf of retail space within one- and two-story buildings and open accessory parking on approximately 307,000 sf of land; numerous vacant lots; and a three-story mental health care facility.

Future No-Action Scenario

Project Area

Under the No-Action Scenario for the project build year of 2027, it is assumed Projected Development Site 1 would remain in its existing condition as detailed above. The R4 zoning on the site allows for 0.75 FAR of residential use while the C1-2 overlay permits 1.0 FAR of

commercial use. The existing 21,379 zoning square foot (zsf) commercial building on the 47,960 sf Projected Development Site 1 represents an FAR of 0.45. One parking space per 300 square feet of general retail floor area is required under the property's C1-2 commercial overlay zoning. The 21,379 zsf commercial building on the property requires the provision of approximately 71 parking spaces while only approximately 36 spaces are provided. The existing building on the property was built in 1967 and it is not reasonable to assume that the structure would be entirely demolished and reconfigured to accommodate an expansion under the property's existing zoning. The existing development in the Project Area maximizes the overall development potential on the site under its existing R4/C1-2 zoning.

No other projected or potential development sites are located within the Project Area. Therefore, no additional development would be anticipated under the Future No-Action scenario.

400-Foot Radius Project Study Area

Based on reviews conducted on March 20, 2023, no new development projects were identified for the 400-foot radius project study area on the NYC Department of City Planning's (DCP) ZAP Search of Zoning and Land Use Applications. However, the NYC Active Major Construction website and a search of the NYC Department of Buildings (DOB) website indicated that the following development is planned within 400 feet of the Project Area.

- 583 Emerald Street, Brooklyn – An 8-story, 154,643 square foot building containing 154 residential dwelling units to be developed on a currently vacant site approved 3/10/23.

No development plans are known to exist for any other undeveloped parcels or other uses within the project study area as identified above by the project build year of 2027.

Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2027.

Future With-Action Scenario

Project Area

Under the With-Action Scenario for the project build year of 2027, the Project Area/Projected Development Site 1 would be developed with a new 255,068 gsf mixed-use building containing residential and commercial (local retail) uses. The new building height would be 115 feet and 11 stories within the R7D/C2-4 district and 85 feet and 8 stories within the R6A district. The building would contain 242,960 gsf of residential uses for 267 dwelling units on floors two through eleven and 12,108 gsf of commercial (local retail) uses on the ground/first floor. Between 68 and 81 of the 267 dwelling units would be reserved as low- to moderate-income units pursuant to the requirements of MIH at an average of 60-80% AMI. Both MIH Options 1 and 2 would be mapped on the Project Area as part of the Proposed Actions. The final compliance with MIH would be determined through the ULURP process. The building would provide 154 accessory parking units located in the cellar and on the first floor accessible

from 79th Street. The building's total FAR would be 4.43 based on 212,487 zsf of development on the 47,960 sf Project Area. No other parcels would be affected by the Proposed Actions.

The U-shaped building has an open recreation area above the first floor measuring approximately 14,663 sf (187.5' x 78.2') opening onto 79th Street will satisfy the applicable requirement for a rear yard equivalent on the through lot portion of the zoning lot. The building will be situated 25 feet from the adjoining R4 district thereby satisfying both side yard and building height limitations applicable to zoning lots adjacent to a zoning lot located within an R4 district.

The zoning lot must provide an amount of recreational space that equals at least 3.3 percent of the residential floor area (a minimum of 6,6,786 sf) in accordance with the Quality Housing program regulations. Proposed outdoor recreation areas will exceed the minimum requirement and total 19,732.59 sf, consisting of roof gardens on the second floor (1,585 sf), an indigenous plant sanctuary, children's play area, greenhouse urban farming area, and cooking/dining area/lounge above the roof of the first floor (5,491.14 sf), roof gardens on the ninth floor (10,239.42 sf), and a roof garden on the tenth floor (2,417.19 sf).

The With-Action Scenario would be the same as the Applicant's proposed development. In the future with the Proposed Actions, the Proposed Development would reach the maximum permitted FAR of 4.43 under the proposed R7D/C2-4 and R6A zoning districts. The Proposed Development would also reach the maximum permitted building height of 115 feet and maximize available bulk. The existing structures and uses on the Site would be demolished and removed.

400-Foot Radius Project Study Area

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

Conclusion

The Applicant seeks to develop Projected Development Site 1 to provide 267 dwelling units, including between 68 and 81 affordable dwelling units under MIH, together with 12,108 gsf of retail space, and 154 residential accessory parking spaces.

The Proposed Actions would constitute a significant land use change in the Project Area, but the Applicant believes this change would be beneficial as it would fully develop the underutilized Site and would provide new housing, including affordable housing, commercial space, and accessory parking. The Project Area is located at the edge of a mixed commercial and residential neighborhood where the Applicant believes that higher density development would be appropriate. The Proposed Actions would support the productive use of underutilized land currently occupied by low density commercial uses and address the need for affordable housing. Higher density development would be appropriate given the Project Area's proximity to a large amount of open space. Mapping to an R7D/C2-4 District along Linden Boulevard with a lower density R6A District at the mid-block would ensure a proper

transition to the smaller-scale residential buildings that are located more uniformly to the east of the Site.

The projected developments could alter existing development patterns in the surrounding project study area in the future, especially of the underutilized parking lots and vacant parcels, by encouraging the development of new residential uses. However, this would be in compliance with City policies to encourage the development of new housing, especially affordable housing, in underutilized areas of the City.

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

ZONING

Existing Conditions

Project Area

The Project Area was zoned R4 since 1961. On August 19, 1976, a C1-2 overlay was mapped within the Project Area to a depth of 212 feet from Linden Boulevard (CP No. 23263). As part of the 1976 rezoning, a restrictive declaration was recorded on October 5, 1976, under Reel 939, Page 1609 against the rezoned area, which includes the Project Area (the "Restrictive Declaration").

The Restrictive Declaration is also identified as D-19 on Zoning Map 18b and in ZR Appendix D. The Restrictive Declaration restricts the manner in which the Project Area may be developed, maintained and operated and it cannot be amended, modified or canceled without the City's approval. This covenant prohibited the conversion of two-family homes to three-family homes and open space and condominium guidelines. The City's approval is required to cancel the Restrictive Declaration so that development may proceed as-of-right in accordance with the proposed zoning map and text amendments.

The Project Area is not mapped within a Transit Zone. However, a Transit Zone is mapped on the north side of Linden Boulevard, directly opposite the Project Area.

Residential and community facility uses are allowed as-of-right in an R4 district. Maximum residential floor area ratio (FAR) is 0.75. The residential 0.75 FAR may be increased by up to 20 percent provided that the additional floor area is located directly under a sloping roof. In R4 districts, community facility FAR is 2.00. The existing C1-2 commercial overlay mapped within an R4 district allows retail stores and personal service establishments that serve frequently recurring local needs. Typical uses include neighborhood grocery stores, restaurants, and beauty parlors. Maximum commercial FAR is 1.0 and no commercial uses are allowed above the level of the first story ceiling in a building occupied on one or more of its upper stories by residential or community facility uses.

The maximum height of a perimeter wall in R4 districts is 25 feet, above which the maximum building height of 35 feet is controlled by sloping planes, requiring either a setback or a pitched roof. In R4 districts, front yards must be at least 10 feet deep; however, if the depth of the front yard exceeds 10 feet, the front yard must be at least 18 feet deep. Detached residences must have two side yards at least 5 feet wide and a minimum total width of 13 feet. Semi-detached residences must have a side yard at least 8 feet wide. A rear yard measuring at least 30 feet deep must be provided in R4 districts. One accessory off-street parking space must be provided for each dwelling unit.

400-Foot Radius Project Study Area

Most of the 400-foot radius project study area around the Project Area is zoned R4 which is discussed above. A C1-2 commercial overlay, also discussed above, is mapped over the Project Area and the Linden Boulevard blockfront of Block 4497 across Sapphire Street from the Project Area to the west. Moving further west across Amber Street, the Linden Boulevard blockfront of Block 7501 is mapped with a C2-4 commercial overlay. A C2-2 commercial overlay is mapped over the entire Block 11377 across Linden Boulevard from the Project Area to the north. The only other zoning districts within 400 feet of the Project Area are a R6A, R7A, R8A, and R8A/C2-4 district mapped on the block between Amber and Emerald Streets south of Linden Boulevard to the west. This block is also mapped as an MIH area. The R6A, R7A, R8A, C2-2, and C2-4 districts are discussed below.

R6A District

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

The FAR in R6A districts is 3.0. Above a minimum base height of 40 feet, the building must set back by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 70 feet, or 75 feet if providing a qualifying ground floor. To preserve the traditional streetscape, the street wall of a new building can be no closer to the street line than any adjacent street wall, but need not be farther than 10 feet. The area between a building's street wall and the street line must be planted. R6A buildings must have interior amenities for the residents pursuant to the Quality Housing Program. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

Off-street parking is generally required for 50 percent of a building's dwelling units, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone, or for lots less than 10,000 square feet. Parking can be waived if five or fewer spaces are required. Off-street parking is not allowed in front of a building.

The contextual Quality Housing regulations, which are mandatory in R7A districts, typically produce high lot coverage, seven- to nine-story apartment buildings, blending with existing buildings in many established neighborhoods.

R7A District

The FAR in R7A districts is 4.0. Above a base height of 40 to 65 feet, or 75 feet if providing a qualifying ground floor, the building must set back to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum height of 80 feet, or 85 feet if providing a qualifying ground floor. In order to preserve the traditional streetscape, the street wall of a new building can be no closer to the street line than any adjacent street wall, but need not be farther than 10 feet. Buildings must have interior amenities for the residents pursuant to the Quality Housing Program. Off-street parking is not allowed in front of a building. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

Off-street parking is generally required for 50 percent of a building's dwelling units, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone, or for lots 10,000 square feet or less. Off-street parking requirements can be waived if 15 or fewer parking spaces are required.

R8A District

The contextual Quality Housing bulk regulations, which are mandatory in R8A districts, typically result in high lot coverage apartment buildings of roughly 12 to 14 stories, set at or near the street line. Limitations on the base height and maximum building height of new buildings ensure compatibility with existing buildings on the street.

The FAR in R8A districts is 6.02. Above a base height of 60 to 85 feet, the building must set back to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 120 feet. If providing a qualifying ground floor, the maximum base height is 95 feet, and the maximum height is 125 feet. On a wide street, the street wall must extend along the entire width of the zoning lot and at least 70% of the street wall must be within eight feet of the street line. The area between a building's street wall and the street line must be planted and the building must have interior amenities pursuant to the Quality Housing Program. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

Off-street parking is generally required for 40 percent of a building's dwelling units, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone, or for lots less than 15,000 square feet. Off-street parking requirements can be waived if 15 or fewer parking spaces are required or if the zoning lot is 10,000 square feet or less. Off-street parking is not allowed in front of a building.

C2-2 and C2-4 Commercial Overlay Districts

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

When commercial overlays are mapped in R1 through R5 districts, the maximum commercial FAR is 1.0; when mapped in R6 through R10 districts, the maximum commercial FAR is 2.0. Commercial buildings are subject to commercial bulk rules.

Generally, the lower the numerical suffix, the more off-street parking is required. For general retail or service uses, for example, the provision of one parking space per 300 square feet of retail floor area is required in the C2-2 district while only one parking space per 1,000 square feet of retail floor area is required in the C2-4 district.

The Lindenwood Commons rezoning, adopted on June 30, 1999, mapped a C2-2 overlay district on the north side of Linden Boulevard opposite the Project Area (C 910332 ZMQ). The overlay was mapped on a 7.82 acre portion of an existing R4 district to facilitate the construction of a 104,000 sf shopping center with 409 parking spaces.

The Linden Boulevard Rezoning, adopted on October 31, 2017, changed a 100,000 sf area located one block west of the Project Area from R4 and R4/C1-2 zoning districts to R8A/C2-4, R7A, and R6A zoning districts (C 170430 ZMK). The rezoning facilitated the development of four mixed-use buildings ranging in height from eight to 12 stories. A text amendment was also adopted on the same date that designated an MIH Area (N 170431 ZRK).

Future No-Action Scenario

Project Area

In the future and absent the Proposed Actions, the Project Area would continue to be zoned R4/C2-1.

400-Foot Radius Project Study Area

Based on a review of DCP's LUCATS listings for Queens Community District 10, no rezoning applications are proposed for the 400-foot radius project study area. No rezoning actions are presently being contemplated by the DCP, as indicated on the DCP website, for the study area by the final project build year of 2027.

Future With-Action Scenario

Project Area

The Proposed Actions consist of a Zoning Map Amendment, a Zoning Text Amendment, and the cancelation of a restrictive declaration in connection with a prior rezoning action. The zoning map amendment from R4/C1-2 to R7D/C2-4 and R6A would solely involve a rezoning of the Applicant's property, Block 11384, Lot 1. The proposed R7D/C2-4 is located along Linden Boulevard to a depth of 260 feet from Loring Avenue. An R6A district is proposed over the remainder of the Project Area, to a depth of 120 feet from the proposed R7D/C2-4 district boundary.

A zoning text amendment is proposed to modify ZR §23-933, Appendix F to designate the newly mapped R7D/C2-4 and R6A districts as Mandatory Inclusionary Housing designated areas. According to the NYC Planning Community District Profile, 50.1 percent of households in Queens Community District 10 spend 35 percent or more of their income on rent, which reflects a higher percentage of rent-burdened households compared to the Borough of Queens (46.2 percent) and New York City (44.2 percent). Under the MIH provisions applicable to the project, between 68 and 81 (25% or 30%) of the 267 dwelling units in the proposed development would be reserved as low- to moderate-income units under Mandatory Inclusionary Housing (MIH) at an average of 60 to 80% of Area Median Income (AMI), respectively.

The MIH program requires that permanently affordable housing be provided within new residential developments, enlargements, and conversions from non-residential to residential use within the mapped MIH Areas. Within the MIH Area, all housing developments, enlargements, and conversions that meet the criteria set forth in the MIH program must comply with the requirements of either Option 1 or Option 2 described below.

The Applicant is also proposing to map MIH Options 1 and 2 on the property. The final MIH Option will be chosen by the City Council through the ULURP process.

- Option 1[1]: 25 percent of the residential floor area shall be provided as housing affordable to households at an average of 60 percent of AMI, with no unit targeted at a level exceeding 130 percent of AMI.

- Option 2[2]: 30 percent of the residential floor area shall be provided as housing affordable to households at an average of 80 percent of AMI, with no unit targeted at a level exceeding 130 percent of AMI.

The Proposed Actions also include cancelation of the recorded Restrictive Declaration identified as D-19 on Zoning Map 18b and in ZR Appendix D. The Restrictive Declaration restricts the manner in which the Project Area may be developed. The City's approval is required to cancel the Restrictive Declaration so that development may proceed as-of-right in

[1] Calculated at 25% of 206,195 zsf (does not include first floor residential lobby) divided by 769 sf per unit.
[2] Calculated at 30% of 206,195 zsf (does not include first floor residential lobby) divided by 769 sf per unit.

accordance with the proposed Zoning Map and Zoning Text amendments. The cancellation of the RD will be assigned a separate action with the prefix "LD."

As indicated above, the Project Area/Projected Development Site 1 is projected to be redeveloped with one new building containing a total of 255,068 gsf of floor area. The building would contain 242,960 gsf of residential floor area for 267 dwelling units (based on an average size of 769 zsf/900 gsf per dwelling unit), 68 to 81 of which would be affordable units, 12,108 gsf of commercial local retail space, and 154 accessory parking spaces.

The proposed R7D zoning district would be mapped along Linden Boulevard to a depth of 260 feet from Loring Avenue. The proposed R7D zoning district is a contextual zoning district that requires development to be in accordance with Quality Housing standards. For Inclusionary Housing, the district typically produces 11-story apartment buildings set at or near the street line. The maximum residential and community facility FAR in the R7D zone is 4.2. The residential FAR can be increased up to 5.6 with the Inclusionary Housing Program bonus. For Inclusionary Housing, above a base height of 60 to 95 feet, the building must set back to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum height of 115 feet. Parking is required for 50% of the market rate dwelling units but may be waived if 15 or fewer spaces are required.

The proposed Zoning Map Amendment includes a C2-4 commercial overlay mapped over a portion of the Project Area. The C2-4 overlay would be located along Linden Boulevard to a depth of 260 feet from Loring Avenue. C2 districts are designed to provide for a variety of local services. Retail stores, personal service establishments, home maintenance or repair services, amusements, business and other services are allowed as-of right in C2-4 districts. C2 local service districts provide a wide range of essential local services and are not limited to the type of convenience establishments that promote continuous retail frontage. Uses allowed in the proposed C2-4 district will be compatible with existing uses in the C2-4 and C2-2 overlays mapped along Linden Boulevard to the west and north of the Project Area. The C2-4 overlay would permit a maximum commercial FAR of 2.0 for local retail services. The C2-4 district requires one parking space for each 1,000 square feet of general retail floor area. No loading spaces are required for the first 8,000 square feet of floor area, and one loading berth is required for the next 17,000 square feet of commercial retail floor area.

An R6A district is proposed over the remainder of the Project Area, to a depth of 120 feet from the proposed R7D/C2-4 district boundary. The proposed R6A district is a moderate density district that promotes new contextual development along transit corridors. Residences of all kinds and community facilities are allowed as-of-right in R6A districts. In these districts, any building containing residences must comply with regulations for Quality Housing buildings. The Quality Housing Program encourages development consistent with the character of established neighborhoods. Its bulk regulations set height limits and allow high coverage buildings set at or near the street line. The Quality Housing Program also requires amenities relating to interior space, recreation areas and landscaping. For developments in R6A districts providing affordable housing pursuant to the Inclusionary Housing Program in MIH areas,

the maximum residential FAR is 3.60 and maximum community facility FAR is 4.20. For MIH developments in R6A districts, minimum base height is 40 feet, maximum base height is 65 feet, maximum building height with non-qualifying ground floors is 85 feet and the maximum number of stories is 8. A setback of at least 10 feet must be provided on a wide street, and a setback of at least 15 feet must be provided on a narrow street. In addition, the height of a building within R6A districts that is within 25 feet of an adjoining R4 district is limited to 45 feet. The reduced maximum FAR and maximum building height allowed in the proposed R6A district will create a transition between the proposed R7D district and the adjoining R4 district and the smaller-scale residential buildings that are located more uniformly to the east of the Project Area. For dwelling units in R6A districts, accessory off-street parking spaces must be provided for at least 50 percent of the total number of dwelling units.

The Proposed Actions, including the proposed rezoning from R4/C1-2 to R7D/C2-4 and R6A, are needed to provide sufficient residential floor area for the proposed project to be economically feasible. The Applicant seeks to develop the zoning lot with housing consistent with the standards of the Quality Housing Program as well as the Mandatory Inclusionary Housing (MIH) Program zoning regulations. The development of the building with affordable units is consistent with the expressed desires of the City's mayoral administration to substantially increase the amount of affordable housing.

The proposed project cannot be developed under the current R4/C1-2 zoning district as the maximum residential FAR of 0.75, with an attic allowance of 20%, and the permitted commercial FAR of 1.0 is well below the proposed project FAR of 4.43. The current low-density regulations of the existing R4/C1-2 district results in the underutilization of the Project Area, which fronts on a major roadway and a spacious street intersection and has access to nearby public transportation and outdoor recreation space. Instead, the Applicant believes that the moderate increase in density allowed in R7D/C2-4 and R6 districts is suitable to this location. The proposed increase in density paired with the proposed designation of an MIH area will facilitate development of a significant number of permanently affordable housing units in a community district with a relatively high number of rent-burdened households.

400-Foot Radius Project Study Area

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

Conclusion

The Applicant believes that the Proposed Actions would not result in any significant impacts to zoning patterns in the area since the proposed R7D and R6A districts will allow a moderate increase in residential density at the intersection of wide streets near public transportation with building heights that are consistent with 8- and 12-story mixed-use buildings two blocks west of the Project Area. Allowable bulk in the two proposed residential districts fits within the context of taller buildings generally located to the west of the Project Area while being responsive to lower density buildings located to the east of the Project Area. The C2-4 overlay will provide opportunities for a wide range of local services along an active roadway that are

similar to those in C2-4 and C2-2 overlays along Linden Boulevard to the west and north of the Project Area. Lastly, the proposed rezoning and designation of an MIH area will facilitate the creation of a significant number of new affordable housing units. Mapping the Project Area as an MIH area will establish a requirement for permanently affordable housing units in an area where as-of-right residential development does include such affordable units.

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

PUBLIC POLICY

Existing Conditions

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

Project Area and 400-Foot Radius Project Study Area

Waterfront Revitalization Program (WRP)

The Project Area and most of the 400-foot radius project study area, with the exception of the area to the northeast across Linden Boulevard, are located within the City's Coastal Zone boundary. Therefore, these areas are subject to the provisions of the City's Waterfront Revitalization Program (WRP) which requires additional review as further discussed below. Both the Project Area and the 400-foot radius project study area are also located within the Jamaica Bay Watershed and subject to the Jamaica Bay Watershed Protection Plan as discussed further in the Natural Resources section of this document. **Appendix B** contains the WRP Consistency Assessment Form (CAC) and associated narrative, the Flood Elevation Worksheet, and the Jamaica Bay Watershed Protection Plan Project Tracking Form.

The Food Retail Expansion to Support Health (FRESH)

The Food Retail Expansion to Support Health (FRESH) program is mapped over the Project Area and the entire 400-foot radius project study area. The City has established the FRESH program in response to the issues raised in neighborhoods that are underserved by grocery stores. FRESH provides zoning and financial incentives to promote the establishment and retention of neighborhood grocery stores in underserved communities throughout the five boroughs. The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator. Stores that benefit from the FRESH program must provide a minimum of 6,000 square feet of retail space for a general line of food and nonfood grocery products intended for home preparation, consumption and utilization. The Project Area and the project study area directly to the north, south and east are eligible for various tax

incentives related to grocery store development and operation while the project study area directly to the west is eligible for both zoning and tax incentives.

OneNYC

In April 2015, Mayor Bill de Blasio released OneNYC, a comprehensive plan for a sustainable and resilient city for all New Yorkers that speaks to the profound social, economic, and environmental challenges faced. OneNYC is the update to the sustainability plan for the City started under the Bloomberg administration, previously known as PlaNYC 2030: A Greener, Greater New York. Growth, sustainability, and resiliency remain at the core of OneNYC, but with the poverty rate remaining high and income inequality continuing to grow, the de Blasio administration added equity as a guiding principle throughout the plan. In addition to the focuses of population growth, aging infrastructure, and global climate change, OneNYC brings new attention to ensuring the voices of all New Yorkers are heard and to cooperating and coordinating with regional counterparts. Since the 2011 and 2013 updates of PlanNYC, the City has made considerable progress towards reaching original goals and completing initiatives. OneNYC includes updates on the progress towards the 2011 sustainability initiatives and 2013 resiliency initiatives and also sets additional goals and outlines new initiatives under the organization of four visions: growth, equity, resiliency, and sustainability.

PlaNYC

In 2011, the Mayor's Office of Long Term Planning and Sustainability released an update to PlaNYC: A Greener, Greater New York. PlaNYC represents a comprehensive and integrated approach to planning for New York City's future. It includes policies to address three key challenges that the City faces over the next twenty years: population growth, aging infrastructure, and global climate change. In the 2011 update, elements of the plan were organized into ten categories—housing and neighborhoods, parks and public space, brownfields, waterways, water supply, transportation, energy, air quality, solid waste, and climate change—with corresponding goals and initiatives for each category.

Other Public Policies

No other public policies would apply to the Proposed Actions as the Project Area and the surrounding 400-foot radius study area are not located within the boundaries of any 197-a Community Development Plans or Urban Renewal Area plans, and also are not within a critical environmental area, a significant coastal fish and wildlife habitat, a wildlife refuge, or a special natural waterfront area. They are also not located within a Federal Empowerment Zone, a Business Improvement District, or an Industrial Business Zone. No Historic Districts or individually designated historic resources are located within the Project Area or the surrounding 400-foot radius study area.

Future No-Action Scenario

In the future, without the Proposed Actions, new development in the Project Area and within the 400-foot radius project study area would remain subject to the provisions of the Waterfront Revitalization Program (WRP), the Jamaica Bay Watershed Protection Plan, OneNYC, PlaNYC,

and the FRESH Program. No other public policy initiatives would pertain to the Project Area or to the 400-foot study area around the Area by the project build year of 2027. In addition, no changes are anticipated to any public policy documents relating to the Project Area or the surrounding study area by the project build year.

Future With-Action Scenario

Waterfront Revitalization Plan

The proposed Rezoning Area is within the Coastal Zone, so this section assesses the proposed project's consistency with New York City's Waterfront Revitalization Program (WRP). **Appendix B** contains the WRP Consistency Assessment Form (CAF) and associated narrative, and the Flood Elevation Worksheet.

Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas.

The affected area is not within a Special Natural Waterfront Area (SNWA) or a Significant Maritime and Industrial Area (SMIA), and it is in a well-developed area with existing residential and commercial development. The Howard Beach neighborhood is a residential community, where additional residential development is appropriate. The inclusion of retail space would not introduce a new land use because retail space now occupies the site. The Proposed Actions would therefore be consistent with Policy 1.1.

Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

Howard Beach is an established community served by roads, sidewalks, sewers, schools, retail establishments, and police, fire, and emergency medical services. The Proposed Actions would therefore be consistent with Policy 1.3.

Policy 1.5: Integrate consideration of climate change and sea level rise into the planning and design of commercial and residential development, pursuant to WRP Policy 6.2.

See the discussion of Policy 6.2 below for an explanation of how the Proposed Actions would be consistent with Policies 1.5 and 6.2.

Policy 6.1: Minimize losses from flooding and erosion by flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.

As shown in the New York City Flood Hazard Mapper, the site is within a 500- year-floodplain as designated on FEMA's 2015 preliminary flood maps and is within the shaded X flood zone. Residential development in a shaded X zone is not subject to New York City Building Code provisions applicable to flood hazard areas, so no non-structural or structural management measures are needed to protect against flooding either now or in the immediate future. The site's elevation is approximately 14 feet NAVD88, which is four feet above the base flood elevation. The Proposed Actions would be consistent with Policy 6.1.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published by the NPCC, or any successor thereof) into the planning and design of projects in the city's Coastal Zone.

The New York City Panel on Climate Change has projected that, relative to sea levels in the year 2000, sea levels at New York City will have risen 4 to 8 inches in the 2020s, 11 to 21 inches in the 2050s, 18 to 39 inches in the 2080s, and 22 to 50 inches by 2100. These changes will increase the frequency and severity of coastal flooding, expand existing flood zones, and increase base flood elevations at locations within existing flood zones.

As shown in the New York City Flood Hazard Mapper, the site is expected to be within the 100-year-floodplain by the 2080s.

The Proposed Action would facilitate the development of a mixed-use commercial/residential building which would be 115 feet and 11 stories within the R7D/C2-4 district and 85 feet and 8 stories within the R6A district. The building would contain 242,960 gsf of residential uses for 267 dwelling units on floors two through eleven and 12,108 gsf of commercial (local retail) uses on the ground/first The cellar floor (elevation (EL) 4.0') would be for parking and storage space. The first floor (EL 14.0') would include additional parking, retail space, the residential lobby, and elevator space for access to the residential floors. There is discussion of raising the first floor elevation in order to prevent flood damage past the 2080s. The second floor would be the first habitable floor would be at EL 29'.

No mechanicals or utilities would be in the cellar. Mechanical equipment will be located on the roof and utility rooms would be on the first floor, above the flood level. No other critical elements would be in the cellar or on the ground floor of the proposed development. The cellar level will contain only accessory parking, stairwells, and elevator shafts. The elevator shaft will be protected by a series of pumps which will prevent water from infiltrating the pit. There is no design in place for the prevention of flooding at the cellar garage level as it falls 100% below the future floodplain level.

The building's design at its lowest level will incorporate measures to alleviate any potential damage cause by current day flooding as well as consider future flood plain elevations. Primarily, there will be no utilities located within the floodplain, current or future. This includes electrical service, fire alarms, fire sprinklers and domestic water backflow prevention devices.

The Proposed Actions would be consistent with Policy 6.2.

In summary, the Proposed Actions and the resulting development would be consistent with all relevant WRP policies. No significant adverse impacts related to the WRP are anticipated because of the Proposed Actions, and further assessment is not warranted.

FRESH Program

The FRESH program would not be relevant to the Proposed Actions as grocery stores are not currently located in the Project Area and are not proposed.

OneNYC

The Proposed Actions are consistent with the City's sustainability goals, including those outlined in OneNYC. Notably, the Proposed Actions would support OneNYC's land use goals of creating new housing for a range of incomes, including permanently affordable housing; redeveloping underutilized parcels with new active uses; focusing development in areas that are served by mass transit; and fostering walkable retail destinations. The Proposed Actions would not result in significant adverse impacts related to business displacement as the existing business to be displaced consist of local retail shops which exist in abundance in the surrounding area. The Proposed Actions are expected to introduce approximately 12,108 gsf of new local retail floor area which would be consistent with the OneNYC goal of fostering an environment in which small businesses can succeed. Overall, the Proposed Actions would be supportive of the applicable goals and objectives of OneNYC.

PlaNYC

- The Proposed Actions would be consistent with PlaNYC's land use goals. The Proposed Actions would encourage increased development in an area well served by public transportation. The Proposed Actions would encourage mixed-use development, including residential and commercial uses, thereby promoting walkable destinations for retail services. In addition, the proposed development would facilitate new affordable housing.

- The Proposed Actions would support PlaNYC's transportation goals by facilitating transit-oriented development in an area served by multiple public transportation options. Varied retail offerings and a mix of uses are a key part of livable communities, providing destinations within walking distance and reducing the need for vehicle trips outside of the neighborhood.

- The Proposed Actions would meet PlaNYC's air quality goals by promoting the use of mass transit through encouraging development in close proximity to existing transit stops.

- The proposed development facilitated by the Proposed Actions would have to comply with all applicable regulations regarding the implementation of low-flow, water efficient fixtures, as per the New York City Plumbing Code, Local Law 33 of 2007 and the United Stated Environmental Protection Agency's (EPA's) WaterSense Program. In addition, any development facilitated by the Proposed Actions would comply with the City's laws and regulations. Therefore, the Proposed Actions are consistent with PlaNYC's water quality goals.

- Development facilitated by the Proposed Actions would be required to meet the more stringent green building practices established in the 2010 update to the New York City Building Code as part of the Greener, Greater Buildings Law. The updated Building Code requires energy audits and benchmarking for larger buildings, among other requirements. The 2011 Enterprise Green Communities Criteria constitute the only comprehensive green building framework designed for affordable housing and provide proven, cost-effective standards for creating healthy and energy- efficient homes.

- The Proposed Actions would not result in any significant adverse impacts to natural resources as such resources are not present in the Project Area or in the immediate surroundings.

- The Proposed Actions would not result in any significant adverse impacts to the City' solid waste system. The proposed development in the Project Area would be subject to mandatory recycling requirements. As such, the Proposed Actions would be consistent with PlaNYC's solid waste management goals.

- The Proposed Actions would not alter or conflict with the policies of the Industrial Action Plan. The Proposed Actions would not alter zoning within an IBZ.

- The Proposed Actions would not result in new development within an LPC designated and/or S/NR-listed historic districts.

The Proposed Actions would meet the City's public policy goals by providing new housing and encouraging appropriate associated development. In addition, the zoning text amendment to Appendix F required to make the Rezoning Area applicable as a Mandatory Inclusionary Housing Area (MIH) would ensure future residential development in the Project Area would include permanent affordable housing, a demonstrated city-wide need. No adverse impact to public policies would occur because of the Proposed Actions.

Conclusion

No impact to public policies would occur as a result of the Proposed Actions. The Applicant believes that the Proposed Actions would be an appropriate development in the Project Area and would be a positive contribution to Queens Community District 10 and to the surrounding neighborhood.

The proposed project would meet the City's public policy goals related to MIH as well as similar State and national public policy goals related to the provision of affordable housing.

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

2. SOCIOECONOMIC CONDITIONS

Introduction

According to the *CEQR Technical Manual*, an analysis of socioeconomic conditions is conducted to determine whether a proposed project would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of an area. The *CEQR Technical Manual* considers the socioeconomic character of an area to include its population, housing, and economic activity.

The *CEQR Technical Manual* primarily considers four types of potential impacts relative to socioeconomic conditions: *direct residential displacement, direct business displacement, indirect residential displacement* and *indirect business displacement*. The *CEQR Technical Manual* recommends an analysis of socioeconomic conditions if a project would directly displace residents or businesses, or if a project has the potential to indirectly displace them by altering any of the underlying forces that shape socioeconomic conditions in an area. If a project is expected to directly displace 500 residents or 100 workers by, for example, demolishing existing residential or commercial buildings, the *CEQR Technical Manual* considers that this may have a significant impact on the socioeconomic conditions of the Study Area. Further, a proposed project may result in significant changes to the socioeconomic conditions of a Study Area if the project introduces more than 200 dwelling units or 200,000 square feet of commercial space to the Study Area. As the Proposed Actions would result in the removal of approximately 22,040 gsf of existing local retail space and facilitate the construction of more than 200 dwelling units, a preliminary assessment of socioeconomic conditions is warranted and is provided below.

Preliminary Assessment

Study Area

Per the *CEQR Technical Manual*, the Study Area for an assessment of socioeconomic conditions may be 400 feet, a 0.25-mile radius, or a 0.5-mile radius depending on the size of the development facilitated by the Proposed Actions. The *CEQR Technical Manual* suggests that if a project increases the population of the 0.25-mile radius by more than 5 percent, a 0.5-mile Study Area should be used.

Table 2-1 (No-Action vs. With-Action Population in the 0.25 Mile Radius)

Census Tracts(Queens and Brooklyn)	Existing Condition (Residents)	No-Action Scenario (Residents)	With-Action Scenario (Residents)	No-Action vs. With-Action Population Increase
44.01, 58, 62.02, 1208.03	21,322[1]	22,080[2]	22,882[3]	802 (3.63%)

[1] Source: 2020 US Census

[2] Assumed annual growth factor of 0.5% per year through the 2027 Build Year

[3] Includes the development of 267 incremental dwelling units in the Project Area and average household size of 2.97 persons per household in the 0.25-mile radius (2020 US Census)

The With-Action Scenario would introduce an incremental 802 residents within the 0.25-mile radius, which includes Queens and Brooklyn Census Tracts 44.01, 58, 62.02, and 1208.03. In the Existing Condition, this area includes 21,322 residents, and in the No-Action Scenario this area includes 22,080residents. In the With-Action Scenario, the 0.25-mile radius would include 22,882residents. This represents a 3.63% increase in the population. Per the *CEQR Technical Manual,* a 0.25-mile Study Area is therefore appropriate. See Figure 1, Socioeconomics Analysis Map. This area is described further below.

Direct Residential Displacement

There are no existing residential units on Projected Development Site 1. There would not be a direct residential displacement impact in the With-Action Scenario and no further analysis is required.

Direct Business Displacement

Projected Development Site 1 is improved with approximately 22,040 gsf of local retail space including a pharmacy, a dry cleaner, a liquor store, and a small restaurant. In the With-Action Scenario, it is anticipated that the existing building on Projected Development Site 1 would be demolished and replaced with new development, as detailed above. The *CEQR Technical Manual* states that there may be a direct business displacement impact when any of the following is true:

- The project would directly displace more than 100 employees;
- The businesses to be displaced provide products or services essential to the local economy that would no longer be available in its "trade area" to local residents or businesses due to the difficulty of either relocating the businesses or establishing new, comparable businesses; and/ or
- A category of businesses is the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it.

In terms of direct business displacement, the With-Action Scenario would directly displace existing retail uses on Projected Development Site 1. These businesses do not employ more

than 100 employees. On the basis of approximately 3 workers per 1,000 gsf of retail space, it is anticipated that the existing businesses employ approximately 66 workers. None of the existing businesses contain "products or services essential to the local economy that would no longer be available in its "trade area" to local residents or businesses" in the With-Action Scenario, nor are any of the existing uses "subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect [them]." As such, there would be no direct business displacement impacts related to the proposed project and no further analysis is required.

Indirect Residential Displacement

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

As noted above, a 0.25-mile Study Area is appropriate for this project, which includes Queens and Brooklyn Census Tracts 44.01, 58, 62.02, and 1208.03. The population of the Study Area in the Existing Conditions is 21,322; in the No-Action Scenario (assuming a conservative 0.5% annual background growth rate) the population is 21,332; and in the With-Action Scenario the population would be 22,882.[3] This represents a 3.63 percent increase (see Table 2-2).

Table 2-2 (No-Action vs. With-Action Population in the 0.25 Mile Study Area)

Census Tracts (Queens and Brooklyn)	Existing Condition (Residents)	No-Action Scenario (Residents)	With-Action Scenario (Residents)	No-Action vs. With-Action Population
44.01, 58, 62.02, 1208.03	21,322[1]	21,322[2]	22,882[3]	802 (3.63%)

[1] Source: 2020 US Census

[2] Assumed annual growth factor of 0.5% per year through the 2027 Build Year

[3] Includes the development of 267 incremental dwelling units in the Project Area and average household size of 2.97 persons per household in the 0.25-mile radius (2020 US Census)

[3] Includes the development of 267 incremental dwelling units in the Project Area and average household size of 2.97 persons per household (2020 US Census)

The dwelling unit characteristics, income distribution, and median and average incomes for the Study Area are illustrated in Tables 2-3, 2-4, and 2-5 Table 2-3 (Dwelling Unit Characteristics in the Study Area)

Census Tracts (Queens and Brooklyn)	Total Dwelling Units	Occupied Dwelling Units	Renter Occupied DwellingUnits	Owner Occupied Dwelling Units
44.01, 58, 62.02, 1208.03	6,045	5,612	2,523	3,089

Source: Population FactFinder, DCP (ACS 2016-2020 5-year Estimate)

Table 2-4 (Income Distribution in the Study Area)

Census Tracts (Queens and Brooklyn)	Total Households	Percent earning less than $24,999	Percent earning $25,000-$49,999	Percent earning $50,000-$99,999	Percent earning $100,000-$199,999	Percent earning $200,000+
44.01, 58, 62.02, 1208.03	5,612	1,143 (20.4%)	1,023 (18.2%)	1,639 (29.2%)	1,289 (23%)	518 (9.2%)

Source: Population FactFinder, DCP (ACS 2016-2020 5-year Estimate)

Table 2-5 (Median and Average Household Incomes for Households in the Study Area)

Census Tracts (Queens and Brooklyn)	Median Household Income in Study Area	Average Household Income in Study Area	Median Household Income in Queens & Brooklyn	Average Household Income in Queens & Brooklyn	Median Household Income in New York City	Average Household Income in New York City
44.01, 58, 62.02, 1208.03	$70,340	$88,939	$72,028 (Qns), $63,973 (Bk)	$94,363 (Qns), $96,572 (Bk)	$67,046	$107,000

Source: Population FactFinder, DCP (ACS 2016-2020 5-year Estimate)

The Proposed Actions would introduce 267 incremental dwelling units to the Study Area, including between 68 and 81 units as low- to moderate-income units pursuant to the

requirements of MIH at an average of 60-80% AMI ($72,060 to $96,080 per year for a family of three). The existing population of the Study Area has a higher median income but a lower average income than Queens, Brooklyn, and New York City as a whole. As such, the Proposed Actions would facilitate development in character with the neighborhood's existing socioeconomic conditions. The Proposed Actions would not introduce a substantial new population with incomes higher than the area average.

Furthermore, per the CEQR *Technical Manual*, population changes of 5 percent or less within the Study Area "would not be expected to affect real estate market conditions." As the change between the No-Action and With-Action Scenarios is 3.52%, no further analysis is necessary.

Indirect Business Displacement

The *CEQR Technical Manual* states that there may be an indirect business displacement impact when any of the following is true:

- The project would directly displace more than 100 employees;
- A commercial development contains more than 200,000 square feet of space that is "markedly different than existing uses".
- The project would add to, or create a retail concentration that may draw a substantial amount of sales from existing businesses within the Study Area to the extent that certain categories of business close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets (i.e. retail market saturation); or
- Certain regulatory changes that could cause adverse impacts to specific industries.

In the With-Action Scenario, approximately 66 employees would potentially be displaced. This is below the 100-employee threshold established by the *CEQR Technical Manual.* The *CEQR Technical Manual* additionally states that "projects resulting in less than 200,000 square feet of retail on a single development site would not typically result in socioeconomic impacts". In the With-Action Scenario, only 12,108 gsf of commercial space would be provided. Therefore, the proposed project would not have potential impacts related to retail market saturation or constitute a development greater than 200,000 square feet with uses "markedly different than existing uses." The proposed project would also not introduce any changes that would adversely impact a specific industry. As such, there would be no indirect business displacement impacts related to the proposed project and no further analysis is required.

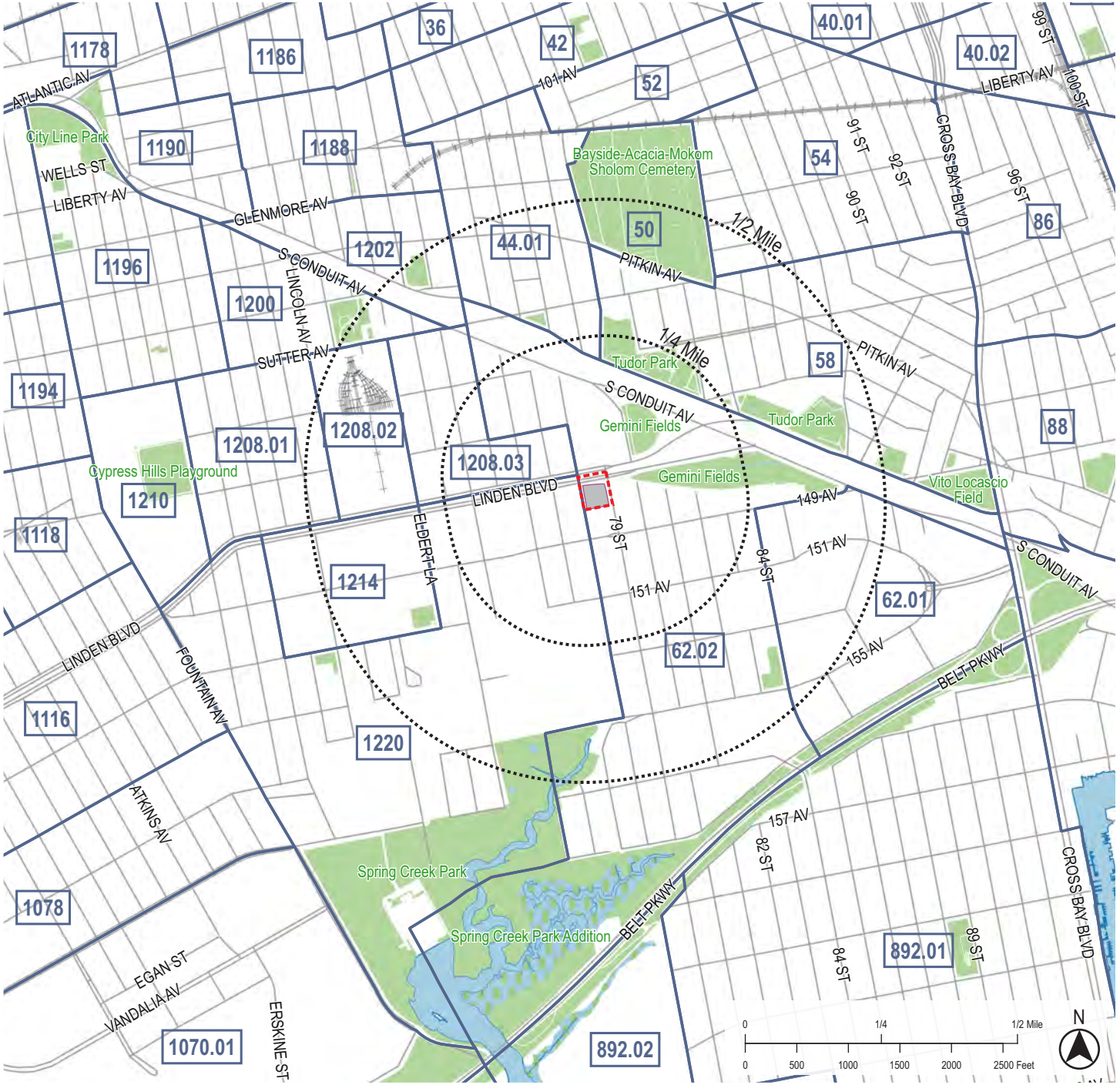
Conclusion

Per the methodology described in the *CEQR Technical Manual*, in the With-Action Scenario there would be no potential significant adverse impacts to socioeconomic conditions. The proposed project would not lead to direct or indirect residential or business displacement in excess of the *CEQR Technical Manual* thresholds. As such, no further analysis is required.

78-08 Linden Boulevard, Queens

Figure 1: Socioeconomic Analysis Map

- Proposed Rezoning Area
- Projected Development Sites
- Study Area
- Census Tract Boundaries
- 123 Census Tract Labels



Urban Cartographics

3. COMMUNITY FACILITIES AND SERVICES

Introduction

According to the *CEQR Technical Manual,* community facilities are public or publicly funded schools, libraries, childcare centers, health care facilities, and fire and police protection. The CEQR analysis looks at a project's potential effect on the services provided by these facilities. A project can affect facility services when it physically displaces or alters a community facility or causes a change in population that may affect the services delivered by a community facility, as might happen if a facility is already over-utilized, or if a project is large enough to create a demand that could not be met by the existing facility. The CEQR analysis examines potential impacts on existing facilities and generally focuses in detail on those services that the City is obligated to provide to any member of the community. These services also have precisely defined measures of utilization (e.g., enrollment/available seats for public education). The CEQR analysis is not a needs assessment for new or additional services. Service providers like schools or libraries conduct their own needs assessments on a continuing basis.

The CEQR analysis considers both *direct effects*--such as if a proposed project would displace existing community facilities--and *indirect effects*. An analysis of *indirect effects* considers whether the introduction of new residents to a given area may increase the utilization rate of a given community facility, thereby triggering a potential significant adverse impact.

Preliminary Assessment

Direct Effects

The Proposed Actions would not physically displace or affect any existing community facilities and would therefore have no direct effect on any community facilities or services. As such, further assessment of direct effects is not required.

Indirect Effects

The *CEQR Technical Manual* provides a set of thresholds to use in determining whether detailed studies of potentially significant adverse indirect impacts related to community facilities and services are warranted. The With-Action Scenario assumes the development of 270 new dwelling units on Projected Development Site 1, totaling 270 incremental dwelling units in the Project Area. No new residential development is anticipated to occur under the No-Action Scenario.

Public Schools

According to the *CEQR Technical Manual*, the introduction of 50 or more incremental students requires a detailed analysis of potential impacts to public elementary and middle schools. An increase of 150 incremental high school students would likewise warrant a detailed analysis.

Table 3-1 (Incremental Public-School Students) summarizes the total number of students expected to be generated in the With-Action Scenario.

Table 3-1: Incremental Public School Students

Incremental Dwelling Units	School Type	Public School Students per Unit[1]	Total Estimated Students	Analysis Threshold
270	Elementary	0.17	46	50
270	Middle School	0.07	19	
270	High School	0.1	27	150

[1] Based on SCA/DCP 2019 housing multiplier data.

In the With-Action Scenario, 46 students would be generated for elementary schools, 19 students for middle schools, and 27 students for high schools. In total, 65 estimated elementary/middle school students would be generated in the With-Action Scenario. High schools do not exceed the threshold and no further analysis is required. A detailed analysis of the potential significant adverse impacts to elementary schools/ intermediate schools is included below.

Childcare Centers

According to the *CEQR Technical Manual*, the introduction of 20 or more eligible children under age 6 (based on the number of low or low/moderate income dwelling units) would warrant a detailed analysis. The minimum number of low or low/ moderate income dwelling units required in the Borough of Queens to trigger a detailed analysis is 139 dwelling units. For conservative analysis purposes, the Childcare analysis will assume that MIH Option 2 is selected in conjunction with the Proposed Actions. Projected Development Site 1 would provide a maximum of 81 affordable dwelling units under MIH Option 2. As the With-Action Scenario falls below the indicated threshold, no further analysis is required.

Libraries

According to the *CEQR Technical Manual*, a more than 5% increase in the ratio of residential units to library branches would warrant a detailed analysis. The minimum number of residential units required in the Borough of Queens to trigger a detailed analysis is 622 dwelling units. The With-Action Scenario would produce 270 incremental dwelling units. As this number is below the threshold provided in the *CEQR Technical Manual,* no further analysis is required.

Police/Fire Services and Health Care Services

According to the *CEQR Technical Manual*, a detailed analysis for police/fire services and health care services is only required if the With-Action Scenario would introduce a "sizeable new neighborhood, e.g., Hunter's Point South." The With-Action Scenario would introduce an increment of 270 dwelling units to an already built-up area and would not therefore create a "sizeable new neighborhood." As such, no further analysis is required.

Detailed Analysis

Public Schools

According to the *CEQR Technical Manual*, the study area for the analysis of elementary and intermediate schools should be the "sub-district" in which the project is located (see map below). The *CEQR Technical Manual* further states that the detailed analysis should include information on the relevant "sub-district" in the Existing Conditions, No-Action, and With-Action Scenarios.

Existing Conditions

The Project Area is located in Queens Community School District (CSD) 27, Sub-district 4, which is considered to be the primary study area for the analysis of elementary and intermediate schools. Figure 1, Public Schools Within CSD 27, Subdistrict 4, illustrates the locations of these schools.

Table 3-2 (Existing Elementary Schools) provides a listing of the elementary and intermediate schools within this sub-district. The table identifies the schools by school number/name, address, and grades served, and includes the latest available enrollment and school capacity numbers.

Elementary school capacity numbers are less than actual building capacities, as they assume a class size reduction of 20 students for kindergarten through the third grades, 28 students for grades 4 to 8, and 30 students for grades 9 to 12. This is defined as their "target capacity."

Table 3-2 indicates that the elementary schools within the sub-district are generally over capacity, with an average utilization rate of approximately 105%. Schools have enrollments ranging from 90% to 126% of target capacity at individual schools. The elementary schools within the sub-district have a total enrollment of 2,809 students relative to a target capacity of 2,686 seats, resulting in a shortfall of 123 seats.

Table 3-2: Existing Elementary Schools*

Map Key No.	Bldg. ID	School Name/(Grades Served)	Address	Enrollment	Target Capacity	Available Seats	Utilization (%)
1	Q063	P.S. 063 (PK-5)	90-15 Sutter Avenue	1,040	1,009	-31	103%
2	Q064	P.S. 064 (PK-5)	82-01 101 Avenue	475	433	-42	110%
7	Q146	P.S./I.S. 146 (PK-5)	98-01 159 Avenue	336	281	-55	120%
6	Q207	P.S./I.S. 207 (PK-5)	159-15 88 Street	470	524	54	90%
5	Q232	P.S./I.S. 232 (PK-5)	153-23 83 Street	488	439	-49	126%
	TOTALS			**2,809**	**2,686**	**-123**	**105%**

*Source: 2021-2022 Blue Book, NYC School Construction Authority

Table 3-3 (Existing Intermediate Schools) indicates that the intermediate schools within the sub-district are generally at capacity, with an average utilization rate of approximately 100%. Schools have enrollments ranging from 84% to 120% of target capacity at individual schools. The intermediate schools within the sub-district have a total enrollment of 3,249 students relative to a target capacity of 3,247 seats. This results in a shortfall of 2 seats.

Table 3-3: Existing Intermediate Schools*

Map Key No.	Bldg. ID	School Name/(Grades Served)	Address	Enrollment	Target Capacity	Available Seats	Utilization (%)
3	Q137	M.S.137 (6-8)	109-15 98 Street	1,774	1,636	-138	108%
7	Q146	P.S./I.S. 146 (6-8)	98-01 159 Avenue	176	147	-29	120%
4	Q202	I.S. 202 (6-8)	138-30 Lafayette Street	874	1,046	172	84%
6	Q207	P.S./I.S. 207 (6-8)	159-15 88 Street	167	186	19	90%
5	Q232	P.S./I.S. 232 (6-8)	153-23 83 Street	258	232	-26	111%
	TOTALS			**3,249**	**3,247**	**-2**	**100%**

*Source: 2021-2022 Blue Book, NYC School Construction Authority

No-Action Scenario

This section presents an analysis of public school enrollments (including pre-kindergarten enrollments) and capacities for the project build year of 2027 in the No-Action Scenario. The analysis includes the primary study area of CSD 27, Sub-district 4 and is derived from Department of Education enrollment projections.

In the No-Action Scenario, it is assumed that no new residential development would occur in the Project Area by the project build year of 2027. However, based on the NYC School Construction Authority's (SCA) "Projected New Housing Starts" (a.k.a. Housing Pipeline) projections, additional student enrollments would occur in CSD 27, Sub-district 4 in the No-Action Scenario by the project build year. This information is presented in Table 3-4 below.

Table 3-4 below also presents No-Action school capacity changes anticipated by the Project Build Year of 2027. No Schools in CSD 27, Subdistrict 4 are listed in the SCA's List of Lost Sites (for seats lost), the FY 2015-2109 Projects in Process (for seats to be gained or created), or the List of Projects in Process (for FY 2020-2024 Capital Plan for projects in design or constriction). In addition, no Schools in CSD 27, Subdistrict 4 are listed in the January 19, 2023, DCP list of DOE All Proposals 2020-23 Implementation. Finally, no Proposals for Changes to School Utilization for CSD 27, Subdistrict 4 were listed on the DOE website for the period September 21, 2022, to May 17, 2023. Therefore, no changes to school capacities within CSD 27, Subdistrict 4 are anticipated by the Project Build Year of 2027 and school capacities would remain at current levels as presented in Tables 3-2 and 3-3.

Table 3-4: No-Action Enrollment and Capacity

Study Area	Projected 2027 Enrollment*	Students Introduced by No Action Development**	Total No Action Enrollment	Capacity	Available Seats	Utilization (%)
Primary Schools (K-5)						
C27, S4	2,870	38	2,908	2,686	-222	108%
Intermediate Schools (6-8)						
D27, S4	1,244	16	1,260	3,247	1,987	39%

* Year 2026-2027 for CSD 27, Subdistrict 4 based on 2021-2030 Enrollment Projections By Grade (Updated) and 2024 Enrollment % by Zone, PS & IS, NYC Dept of City Planning, Jan 19, 2023

** Projected Housing Starts for PS Level Analysis, FY 2020-2024 Capital Plan, NYC School Construction Authority, June 2020 for CDS 27, Howard Beach/Lindenwood Area housing starts of 224 DUs multiplied by Projected Public School Ratio # of Pupils Generated of New Housing Per Unit by School District and Age (CSD 27, 0.17 for PK-5 and 0.07 for 6-8)

In the No-Action Scenario, the utilization rate for elementary schools would be 108%; for intermediate schools the utilization rate would be 39%. These figures represent a 3% increase in the utilization rate of the elementary schools and a 61% decrease in the utilization rate of middle schools as compared to existing conditions.

With-Action Scenario

According to the *CEQR Technical Manual,* a significant impact on schools may occur if the following two conditions are met:

- if the project results in a collective utilization rate of the elementary and/or intermediate schools in the sub-district study area that is equal to or greater than 100% in the With-Action Scenario, and if the project results in 100 or more new students generated from the proposed development past the 100% utilization rate.

In the With-Action Scenario, the utilization rate for elementary schools would increase to 110% and the utilization rate for intermediate schools would remain approximately the same at 39%. The difference between the No-Action and With-Action Scenario utilization rate would be a 2.0% increase for elementary schools and no change for middle schools. The increase of 46 new

elementary school students generated by the project would not meet or exceed the threshold of 100 or more new students generated from the proposed development past the 100% utilization rate. The projected increase of elementary school students resulting from the Proposed Actions in 2027 would have a limited impact upon the utilization rates of the schools in the sub-district and would not exceed the impact threshold described in the *CEQR Technical Manual.*

Table 3-5: With Action Enrollment and Capacity

School Level	No-Action Enrollment	Students Generated by Project	With Action Projected Enrollment	Projected Capacity	Available Seats	Utilization with Project
Primary Schools	2,908	46	2,954	2,686	-268	110% (2.0% increase)
Intermediate Schools	1,260	19	1,279	3,247	1,968	39% (0% change)

It is expected that DOE will continue to monitor enrollment trends within Queens CSD 27, Sub-district 4, as new housing units identified in the No-Action and With-Action conditions are developed, and will plan for new capacity or administrative actions to accommodate new students accordingly.

Measures utilized by DOE to address increased elementary school enrollment could include relocating administrative functions to other sites, thereby freeing up space for classrooms; making space within the study area available to DOE; restructuring or reprogramming existing school space within the district; or providing for new capacity by constructing a new school or an addition to an existing school. It should also be noted that the analysis of public elementary school conditions relies on conservative assumptions regarding both background growth in the student population and the development of new residential units in future conditions. Should this level of background growth and residential development in the district not occur, the shortage of elementary school seats in CSD 27, Sub-district 4 could be reduced or potentially eliminated.

While the utilization rate for elementary schools exceeds the 100% threshold in the With-Action Scenario, the Proposed Actions do not result in 100 or more new students generated from the proposed development past the 100% utilization rate. As such, the With-Action Scenario would not be expected to result in a significant adverse impact on elementary or intermediate schools. No further analysis is required.

Conclusion

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

A preliminary analysis of the indirect effects of the With-Action Scenario found that the applicable thresholds described in the *CEQR Technical Manual* for libraries, childcare, police/fire services, and health care centers were not exceeded. Therefore, detailed analyses were not required. The preliminary analysis of the indirect effects of the With-Action Scenario relative to public schools found that a detailed analysis was required. These detailed analyses concluded that there would be no significant adverse impact to school facilities in the With-Action Scenario.

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Figure 1: Public Elementary and Intermediate Schools Within CSD 27, Sub-district 4

- Proposed Rezoning Area
- Projected Development Site (Applicant-Owned)
- # Elementary Schools (see Table 1)
- # Elementary/Intermediate Schools (see Table 1)
- # Intermediate Schools (see Table 1)
- # High Schools (see Table 1)



Urban Cartographics

4. OPEN SPACE

Introduction

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

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

Direct Effects

For the purposes of the shadows analysis, the With-Action Development Scenario evaluates the maximum allowable development envelope with respect to bulk and height under the proposed R7D/C2-4 and R6A zoning as the zoning approvals sought do not lock in a specific building design. On Projected Development Site 1, the Applicant would erect a building whose maximum height would reach 115'-0", maximizing the permitted FAR and building height.

The maximum building height on Projected Development Site 1 would reach 140'-0" to the top of its mechanical bulkhead. The maximum shadows that would be cast by the building on Projected Development Site 1 would be 602.0 feet (4.3 times the maximum building height with bulkhead). There is one open space resource located within the maximum shadows' radius of the projected development. A detailed discussion of potential shadows impacts of the Proposed Actions is presented in the Shadows section below. The analysis found that the building anticipated to be constructed on Projected Development Site 1 would not cast any significant adverse new shadows on shadow sensitive open space resources. Therefore, the Proposed Actions would not result in any significant adverse shadows impacts.

Indirect Effects

Introduction

On the basis of *CEQR Technical Manual* criteria, the projected development could potentially result in indirect effects to open space resources within the project study area and must be further assessed to determine whether significant indirect effects would be expected to occur. The *CEQR Technical Manual* requires that an open space assessment be conducted if a project would generate more than 200 residents or 500 workers.

The Proposed Actions would result in the development of 270 new dwelling units in the Project Area as well as 14,415 gsf of new local retail space. 22,040 gsf of existing local retail space would be removed to accommodate the projected development for a net decrease of 7,625 gsf of retail floor area. The 270 dwelling units are expected to generate approximately 802 residents based on the 2020 US Census average household size of 2.97 persons for Census Tracts within ¼-mile of the Project Area including tracts 44.01, 58, 62.02, and 1208.03. The Proposed Actions would exceed the threshold number of 200 new residents and a preliminary quantitative analysis of indirect open space impacts is therefore required.

As the Proposed Actions would result in a net loss of 7,625 gsf of local retail floor area, fewer workers would be in the Project Area in the future with the Proposed Actions compared to the No-Action scenario. New employees would therefore not exceed the threshold number of 500 new workers, and a quantitative analysis of indirect open space impacts for employees would not be required.

Preliminary Assessment

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

Based on the calculation of the ratio of publicly accessible open space acres to the study area population, a determination of the adequacy of open space resources in the study area was quantified. The resultant computation for the study area was then compared with the median ratio for New York City, which is 1.5 acres per 1,000 residents, and with the City's planning goal as expressed in the CEQR Technical Manual of 2.5 acres per 1,000 population. Ideally, this would comprise 0.50 acres of passive space and 2.0 acres of active open space per 1,000 residents.

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

resources. However, if the existing open space ratio is low even an open space ratio change of less than 1 percent may result in potential significant open space impacts.

The open space project study area exhibits an above average open space ratio of 2.404 acres per 1,000 residents, based on 64.75 acres of existing open space divided by the 2020 US Census data ½-mile radius study area population of 26,939 persons.

New York City, as part of the *OneNYC 2050 Building a Strong and Fair City* plan, has put forth a goal for 85 percent of New York City residents living within a walking distance of a park by 2030. To help the City reach this goal, NYC Parks has a Walk to a Park initiative that focuses on increasing access to parks and open space in areas of the City where residents live further than a walk to a park. The City has created a Walk to a Park Service Area map which illustrates areas of the city that are within a walking distance of a park. Areas of the Walk to a Park Service Area map that are not covered by a Walk to a Park Service Area are considered "walk gaps" – i.e., areas of the City that are not within a walking distance to a park. 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. Project sites that are located outside of a Walk to a Park Service Area (i.e., located in a known walk gap areas) suggests there is a need for a detailed analysis to be performed to determine if the project may further exacerbate a condition of residents living in areas of the city with inadequate park access, potentially leading to a significant impact. While the focus of the Walk to a Park initiative is on residents living within a walking distance to a park, projects that create a non-residential population (e.g., new workers) should also review if the project is located within a known walk gap and assess if the project would generate a new non-residential population within areas of the City with inadequate access to open space resources.

Existing Conditions

Study Area Population

The study area population was estimated using 2020 US Census data for the census tracts located fully or at least 50 percent within the one-half mile study area. As shown in Table 4-1, in 2020 the study area contained an estimated 26,939 residents within the six relevant census tracts.

Table 4-1
Study Area Population

Census Tract	Total Population (2020)[4]
44.01	3,916
58	6,194
62.02	6,949
1208.02	3,770
1208.03	2,010
1214	4,100
Study Area Total	**26,939**

Study Area Open Space

The one-half mile open space study area is roughly bounded by an area between Pitkin and Glenmore Avenues on the north, 156th Avenue on the south, 88th Street on the east, and Autumn Avenue on the west. Six publicly owned and accessible facilities are located within the ½ -mile radius project study area and within the census tracts that are fully or at least 50 percent within this area. **(See Figure 1, Open Space Study Area Map and Table 4-2, Inventory of Open Space Resources)**. These six facilities provide a total of 64.75 acres of open space resources within one-half mile of the Project Area. 21.032 acres or 32.5% of the open space resources are considered to be active open space and 43.718 acres or 67.5% of the open space resources are considered to be passive open space.

[4] Source: 2020 US Census data.

Table 4-2
Inventory of Open Space Resources

Map Key	Open Space Name & Location	Owner	Total Size (acres)	Size/ Access in Study Area (acres)	Passive Acres	Active Acres	Main Features
1	Gemini Fields - S Conduit Ave & Linden Blvd bet 80 & 88 Sts	DPR	10.76	10.76	2.15	8.61	Baseball fields, horseback riding trails & arena, lawns and landscaping
2	Tudor Park – N Conduit Ave bet 80 & 88 Sts	DPR	13.54	13.54	2.71	10.83	Baseball fields, basketball & handball courts, cricket fields, playgrounds, spray showers lawns and landscaping
3	Judge Angelo Graci Triangle - N Conduit Ave bet Sutter Ave & 78 St	DPR	0.25	0.25	0.25	0	Open lawn
4	Pink Plygrd – Elderts Lane & Stanley Ave	DPR	1.0	1.0	0.2	0.8	Basketball & handball courts, playgrounds, spray shower
5	Spring Creek Park Addition - Fountain Ave, Belt Pkwy, Flatlands Ave, 155 Ave	DPR	57.92	38.32	38.32	0	Nature area
6	Harold Schneiderman Plygrd – 84 St & 155 Ave	DPR	0.88	0.88	0.088	0.792	Basketball & handball courts, playgrounds, spray shower
Tot			**84.35**	**64.75**	**43.718**	**21.032**	

The Project Area is entirely located within a Walk to a Park Service Area as shown on the attached **Figure 2, Walk to Park Service Areas**.

Assessment of Open Space Adequacy

The open space ratio was calculated based on the study area population of 26,939 persons shown in Table 4-1 and the total open space acreage of 64.75 acres including 21.032 acres of active open space and 43.718 acres of passive open space shown in Table 4-2. The resultant ratio is 2.404 acres of open space per 1,000 residents comprised of 0.781 acres of active open space per 1,000 residents and 1.623 acres of passive open space per 1,000 residents. This ratio is above the citywide average of 1.5 acres and is close to the benchmark of 2.5 acres per 1,000 population, indicating that the area has an above average amount of public open space resources. The area's residential active open space ratio is below DCP's planning guideline of 2.0 acres per 1,000 residents. The study area's residential passive open space ratio is above DCP's goal of 0.5 acres per 1,000 residents.

Future No-Action Condition

Study Area Population

As stated above, the 2020 US Census population of the half-mile open space study area was 26,939 persons. In order to account for background growth to the 2027 project build year, a conservative annual growth rate of 0.5% per year (for 7 years) was applied to the 2020 population of the ½-mile open space study area. This growth factor would result in the addition of 943 additional residents. Therefore, as projected to 2027, the base population is projected to be 27,882 residents. No new residential development would occur in the Project Area under the future No-Action Scenario. Therefore, the open space study area would have a No-Action population of 27,882 persons in 2027.

Study Area Open Space

There would be no increase or decrease in the 64.75 acres of existing open space area including 21.032 acres of active open space and 43.718 acres of passive open space within within the project study area by the project build year of 2027.

Assessment of Open Space Adequacy

The future no-action open space ratio within a ½ mile radius of the Project Area is 2.322 based on the area population of 27,882 persons in 2027 and the 64.75 acres of open space area. The open space project study area would have an active open space ratio of 0.754 acres per 1,000 residents and a passive open space ratio of 1.568 acres per 1,000 residents.

Future With-Action Scenario

Study Area Population

As discussed above, the project is expected to generate approximately 802 residents based on the 2020 US Census average household size of 2.97 persons for Census Tracts within ¼-mile of the Project Area including tracts 44.01, 58, 62.02, and 1208.03. Adding these 802 residents to the future no-action population of 27,882 persons would result in a total population of 28,684 persons.

Study Area Open Space

The Applicant is proposing to provide a total of approximately 19,733 square feet of outdoor recreational space consisting of three separate roof gardens, an indigenous plant sanctuary, children's play area, greenhouse urban farming area, and a cooking/dining area/lounge area. However, these recreational facilities would only be accessible to residents and other occupants of the proposed development and would not be available for use by the general public. Therefore, this area has not been included in the quantitative open space analysis.

Therefore, in 2027 with the Proposed Actions, the project study area would contain 64.75 acres of existing open space area including 21.032 acres of active open space and 43.718 acres of passive open space by the project build year of 2027, the same as under future no-action conditions.

Assessment of Open Space Adequacy

The projected open space ratio in 2027 with the Proposed Actions would be 2.257 acres per 1,000 residents compared with the projected ratio of 2.322 acres in the study area in the future without the project. This represents a decrease of approximately 0.065 acres or 2.8 percent in the open space ratio. The open space project study area would have an active open space ratio of 0.733 acres per 1,000 residents with the Proposed Actions compared to 0.754 acres in the future without the project, a decrease of 0.021 acres or 2.8 percent. The study area would have a passive open space ratio of 1.524 acres per 1,000 residents with the Proposed Actions compared to 1.568 acres in the future without the project, a decrease of 0.044 acres or 2.8 percent. Therefore, the community would continue to have an above average amount of open space compared to the City as a whole and would continue to be close to meeting DCP's open space planning goal.

Table 4-3 shows the calculation of open space ratios for the existing, Future No-Action, and Future With-Action Scenarios.

Table 4-3

Existing, Future No-Action, and Future With-Action Open Space Ratios

	Existing Conditions (2020)	Future No-Action (2027)	Future With-Action (2027)	Incremental Change (No-Action to With-Action
Publicly Accessible Open Space - Total Acres	64.75	64.75	64.75	0
- Active Acres	21.032	21.032	21.032	0
- Passive Acres	43.718	43.718	43.718	0
Study Area Population	26,939	27,882	28,684	+802
Open Space Ratio (Total Acres/1,000 Residents)	2.404	2.322	2.257	-0.065 acre/2.8% decrease
- Active Ratio (Active Acres/1,000 Residents)	0.781	0.754	0.733	-0.021 acre/2.8% decrease
- Passive Ratio (Passive Acres/1,000 Residents	1.623	1.568	1.524	-0.044 acre/2.8% decrease

Impact Significance

Quantitative Impact

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would directly displace or alter an existing resource to the detriment of its users. The projected development associated with the Proposed Actions would not result in the direct displacement of any parklands or recreational facilities. The Proposed Actions would, however, reduce the open space ratio as further discussed below.

At 2.257 acres per 1,000 population, the amount of publicly accessible open space with the Proposed Actions would be above the average of 1.5 acres per 1,000 population in community districts in the City but slightly below the City's planning goal as expressed in the *CEQR Technical Manual* of 2.5 acres per 1,000 population.

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would decrease the open space ratio substantially, thereby reducing the availability of open spaces for an area's population. A decrease in the open space ratio of 5 percent or more is generally considered to be a significant adverse impact on open space resources if the area has an average open space ratio of 1.5 acres per 1,000 population or greater. Although not applicable to this project, in areas that are extremely lacking in open space, a reduction as small as 1 percent may be considered significant.

The Future With Action open space ratio for the ½-mile radius residential study area of 2.257 acres per 1,000 population is considered to be relatively high as it exceeds 1.5 acres per 1,000 population. Therefore, a decrease in the open space ratio of 5 percent or more is the relevant threshold for the Proposed Action. The 2.8% decrease in both the active and passive open space ratios relative to Future No-Action conditions is less than 5% and would therefore not be considered to be potentially significant. The open space ratio would not decrease substantially relative to existing and Future No-Action conditions. In addition, private open space would be provided on Projected Development Site 1 which would also serve the open space needs of the project's residents, visitors, and employees and may serve to limit the usage of public open space resources by the project's occupants. See the qualitative impact discussion below. Therefore, based on *CEQR Technical Manual* criteria, the proposed project would not be expected to result in a significant adverse impact on open space resources.

As the Project Area is entirely located within a Walk to a Park Service Area, residents, workers, and visitors of the proposed development would be within walking distance of existing parks in the surrounding area and no significant adverse impacts would be anticipated. **(See Figure 2, Walk to Park Service Areas.)**

Qualitative Impact

The Proposed Actions would result in the creation of new private open space as further discussed below.

The Applicant is proposing to provide a total of approximately 19,733 square feet of outdoor recreational space consisting of three separate roof gardens, an indigenous plant sanctuary, children's play area, greenhouse urban farming area, and a cooking/dining area/lounge area. These recreational facilities would only be accessible to residents and other occupants of the proposed development and would not be available for use by the general public.

There are four additional open space resources within close proximity to the project study area which have not been included in the quantitative analysis as they generally lie outside of the ½ mile radius. These resources are discussed below.

1. Rocket Playground, located along North Conduit Avenue and Arion Road between Whitelaw and Lafayette Streets, borders the ½-mile project study area to the east with only a small portion of the playground extending into the study area. The approximately 1.05-acre playground is operated by DPR and consists of approximately 0.945-acres of active

recreational space and approximately 0.105-acres of passive recreational area. The resource contains basketball and handball courts, playgrounds, and fitness equipment.

2. Vito Locascio Field, located along North Conduit Avenue between 149th Avenue and Cross Bay Blvd., is a short distance from the eastern edge of the ½-mile project study area. The approximately 3.26-acre playground is operated by DPR and consists of approximately 2.934-acres of active recreational space and approximately 0.326-acres of passive recreational area. The resource primarily consists of baseball fields.

3. Robert Venable Park, bordered by Belmont Avenue, Sutter Avenue, Sheridan Avenue west of Eldert Lane, borders the ½-mile project study area to the west with a portion of the park extending into the study area. The approximately 2.94-acre park is operated by DPR and consists of approximately 1.76-acres of active recreational space and approximately 1.18-acres of passive recreational area. The resource contains basketball, handball, and volleyball courts, playgrounds, a skate park, and fitness equipment.

4. Spring Creek Park Addition – 38.32 acres of passive open space within the Spring Creek Park Addition are located within the project study area and have been included in the quantitative analysis, an additional approximately 19.6 acres of Spring Creek Park Addition passive open space are located immediately adjacent to this resource outside of the project study area and have not been included in the quantative analysis.

5. Belmont Playground, bounded by Pitkin Avenue, North Conduit Avenue, Drew Street, Forbell Street, and Belmont Avenue, is located within ½-mile of the project site but is not located within a census tract that is fully or at least 50 percent within the project study area and has therefore not been included in the quantitative analysis. The approximately 0.68-acre playground is operated by DPR and the Board of Education and consists of approximately 0.41-acres of active recreational space and approximately 0.27-acres of passive recreational area. The resource contains basketball and handball courts and a playground.

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would significantly increase shadows, noise, air pollutant emissions, or odors on existing public open spaces resources compared to the future without the action conditions. The project development associated with the Proposed Actions would not significantly increase such impacts on existing public open spaces resources. Based on *CEQR Technical Manual* criteria and as explained further in the Shadows section below, the proposed project would not result in any significant shadows impacts on any open space or other shadow sensitive uses.

Conclusion

Due to the absence of direct impacts on any open space resource and the minimal decrease in the future with the action open space ratio, as well as the provision of additional private open space to be provided on Projected Development Site 1 under the Proposed Actions as discussed in the qualitative impact analysis above, it is anticipated that the project would not

have any potentially significant adverse open space impacts and further assessment is not warranted.

78-08 Linden Boulevard, Queens

Figure 1: Open Space Facilities and Census Tracts

- Proposed Rezoning Area
- Projected Development Sites
- 1/2-Mile Study Area
- Census Tract Boundaries
- 123 — 50% or More of Census Tract Within Study Area
- 123 — Less Than 50% of Census Tract Within Study Area
- 1 — Open Space Resources (see Table 1)



Urban Cartographics

78-08 Linden Boulevard, Queens

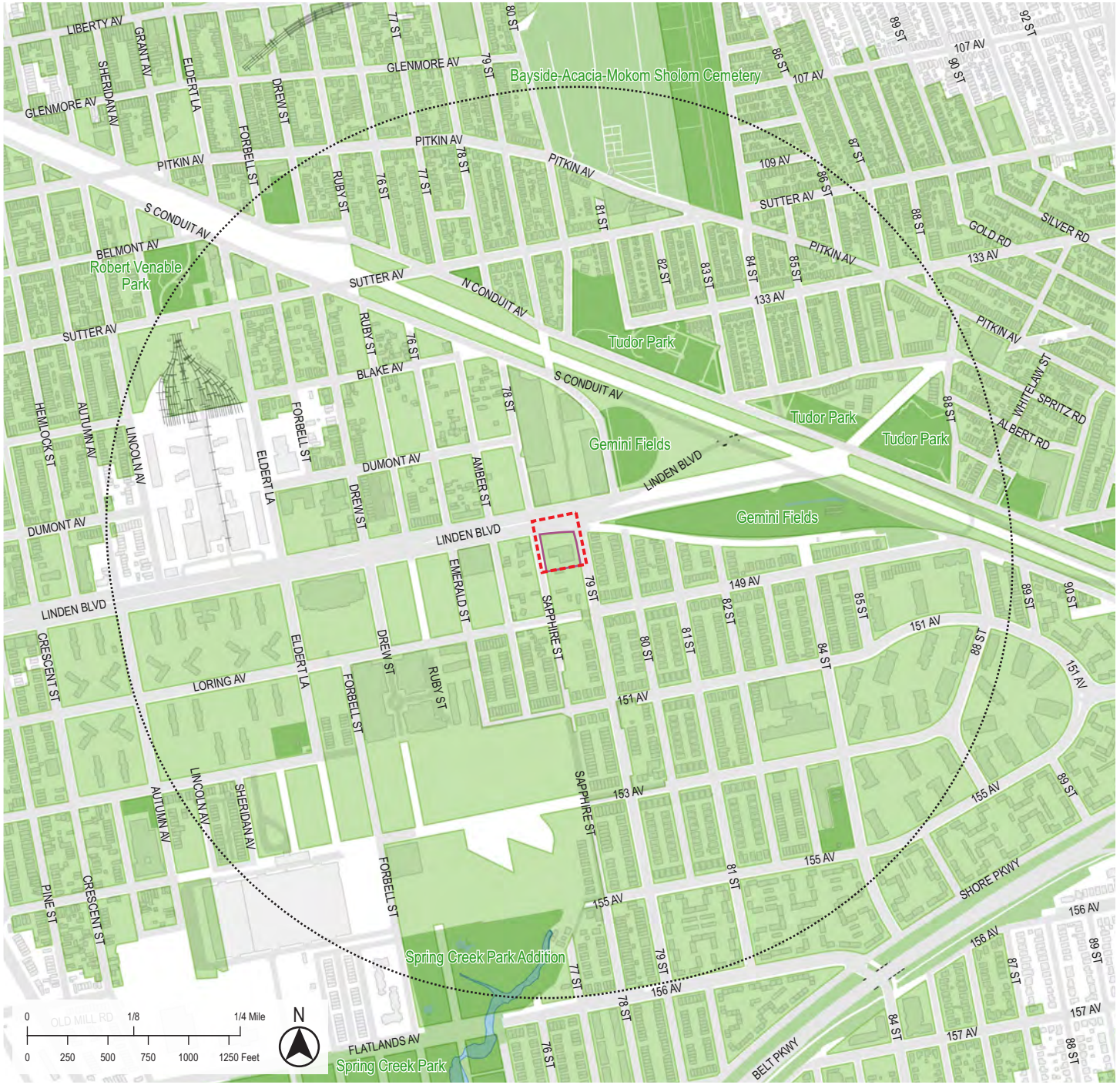
Figure 1: Walk to Park Service Areas

Proposed Rezoning Area

Projected Development Sites
(Applicant-Owned)

1/2-Mile Study Area

Walk to Park Service Area



Urban Cartographics

5. SHADOWS

Introduction

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

The rooftop and mechanical bulkhead heights for the building proposed to be built on Projected Development Site 1 would be as follows:

- Building at 8 stories: Rooftop height: 95'-0", Mechanical bulkhead height: 110'-0"

- Building at 11 stories: Rooftop height: 115'-0", Mechanical bulkhead height: 140'-0"

According to the *CEQR Technical Manual*, a shadows assessment is not required unless the project would include a structure or an addition to a structure at least 50 feet in height or if it would contain shorter structures that might cast substantial new shadows on an adjacent park, historic resource, or an important natural resource. A shadows analysis is required for this project since the building on Projected Development Site 1 would exceed 50 feet in height and is located in close proximity to an open space resource.

Preliminary Screening Assessment

Tier 1 Screening Assessment

There is one shadow sensitive open space resource in the vicinity of Projected Development Site 1 as shown on the attached Tier 1 Screening Assessment diagram. The shadow sensitive open space resource includes the following:

- Gemini Fields (10.76 acres) located in two sections along S. Conduit Ave. & Linden Blvd. between 80th and 88th Streets. The portion of the Fields located north of Linden Blvd. is labeled "1" on the attached Figure 1, Tier 1 Screening Assessment diagram while the portion of the Fields located south of Linden Blvd. is labeled "2". The portion of the Fields south of Linden Blvd. is natural vegetated land primarily consisting of grassed areas bordered by trees and

shrubs. The portion of the Fields to the north of Linden Blvd. is almost entirely occupied by baseball fields edged by a grassed area and several trees.

There are no historic resources in the vicinity of the Projected Development Site.

The longest shadows radius is calculated as 4.3 times the maximum proposed building height including rooftop bulkheads, as measured from curb level. The longest shadows cast by the two building heights on the Projected Development Site are as follows:

- Building at 8 stories: mechanical bulkhead roof: 110′-0″ x 4.3 = 473.0′

- Building at 11 stories: mechanical bulkhead roof: 140′-0″ x 4.3 = 602.0′

The longest shadow of 602.0 feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum building height of 140.0 feet including mechanical bulkheads on the roof of the 11-story section of the building.

Due to the proximity of the Projected Development Site to the Gemini Fields open space resource, potential shadow impacts could occur from the Proposed Actions.

Tier 2 Screening Assessment

Based on the Tier 1 assessment, which showed the potential for the longest shadow to reach a sunlight sensitive open space resource, a Tier 2 assessment was generated. A Tier 2 assessment locates the area south of a building that cannot be cast in shadow. This area in New York City lies between -108 and +108 degrees from true north.

The attached Figure 2, Tier 2 Screening Assessment diagram shows the area south of the Projected Development Site that cannot be shaded by the proposed project. As illustrated on the figure, no portion of Gemini Fields is located within the area that cannot be shaded by the project. Therefore, the entire area of Gemini Fields located within the maximum shadow radius could potentially experience new shadows from the project and further assessment is required.

Tier 3 Screening Assessment

The Tier 3 screening assessment is used to determine if shadows resulting from the proposed project can reach a sunlight-sensitive resource. The screening assessment uses three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns.

A Tier 3 screening assessment was performed for the four representative days of the year set forth in the *CEQR Technical Manual*: December 21, the winter solstice and shortest day 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); and June 21, the summer solstice and the longest day of the year. 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. In accordance with the *CEQR Technical Manual*, surrounding buildings are not included in the Tier 3 shadow assessment model.

A Tier 3 screening assessment has been performed as a portion of Gemini Fields lies within the area that could be shaded by the proposed project.

As shown on the attached Figures 3 through 6, Tier 3 Screening Assessment diagrams, shadows from the development could reach the northern portion of Gemini Fields on the December 21 analysis day and the southern portion of Gemini Fields on the March 21 analysis day. No new shadows would reach Gemini Fields on the May 6 or June 21 analysis days.

The attached Figure 7, Detailed Analysis diagrams, shows the extent of incremental shadows on Gemini Fields on the December 21 and March 21 analysis days as follows:

- New shadows from the building would be cast on the northern portion of Gemini Fields for approximately 32 minutes between 2:21 PM and 2:53 PM on the December 21st analysis day. The new shadow would extend over the southwestern corner of the baseball field and the adjacent planted area.

- New shadows from the building would be cast on the southern portion of Gemini Fields for approximately 50 minutes between 3:39 PM and 4:29 PM on the March 21st analysis day. The new shadow would extend over the extreme western tip of the Fields from where the open space begins just west of 80th Street to the mid-block between 80th and 81st Streets, a distance of approximately 135 feet.

Table 5-1 below presents the incremental shadows that would affect the Gemini Fields on each of the analysis days.

Table 5-1: Incremental Shadows

Analysis Day	**December 21**	**March 21/ September 21**	**May 6 /August 6**	**June 21**
Timeframe Window	8:51 a.m. - 2:53 p.m.	7:36 a.m. - 4:29 p.m.	6:27 a.m. - 5:18 p.m.	5:57 a.m. - 6:01 p.m.
Shadow enter - exit times	2:21-2:53 PM (north Gemini Fields)	3:39-4:29 PM (south Gemini Fields)	N/A	N/A
Incremental shadow duration	32 minutes	50 minutes	N/A	
Note: Daylight savings time not used.				

Shadow Impact Significance

The incremental shadow coverage on Gemini Fields would not be considered significant on any of the analysis days since new shadows would only occur for 32 minutes on December 21st , the shortest day of the year in the winter, and 50 minutes on March 21/September 21, the spring and vernal equinoxes. No new shadows would be cast on any other analysis days.

The new shadow duration of up to 50 minutes would not be long enough for the shadows to have an adverse impact on the existing vegetation in Gemini Fields. Per the *CEQR Technical Manual,* a minimum of six to eight hours of sunlight per day is required for the survival of vegetation during the growing season. There are over 12 hours of daylight on March 21st/September 21st. After accounting for the new shadow period and subtracting 1.5 hours before sunset and 1.5 hours after sunrise per the *CEQR Technical Manual* methodology, the total hours of sunlight falling on the affected area of Gemini Fields would be over 8 hours on March 21st/September 21st. Therefore, Gemini Fields would continue to receive ample sunlight for the survival of its vegetation despite the new shadows.

It is not anticipated that the 32 minutes of new shadow cast on one baseball field in the northern portion of Gemini Fields on December 21st would be significant as it would not be likely that the baseball field would be in use during this period. Even if the baseball field were in use during this 32 minute period, the short duration of the new shadow would not represent a significant impact on the users of the field.

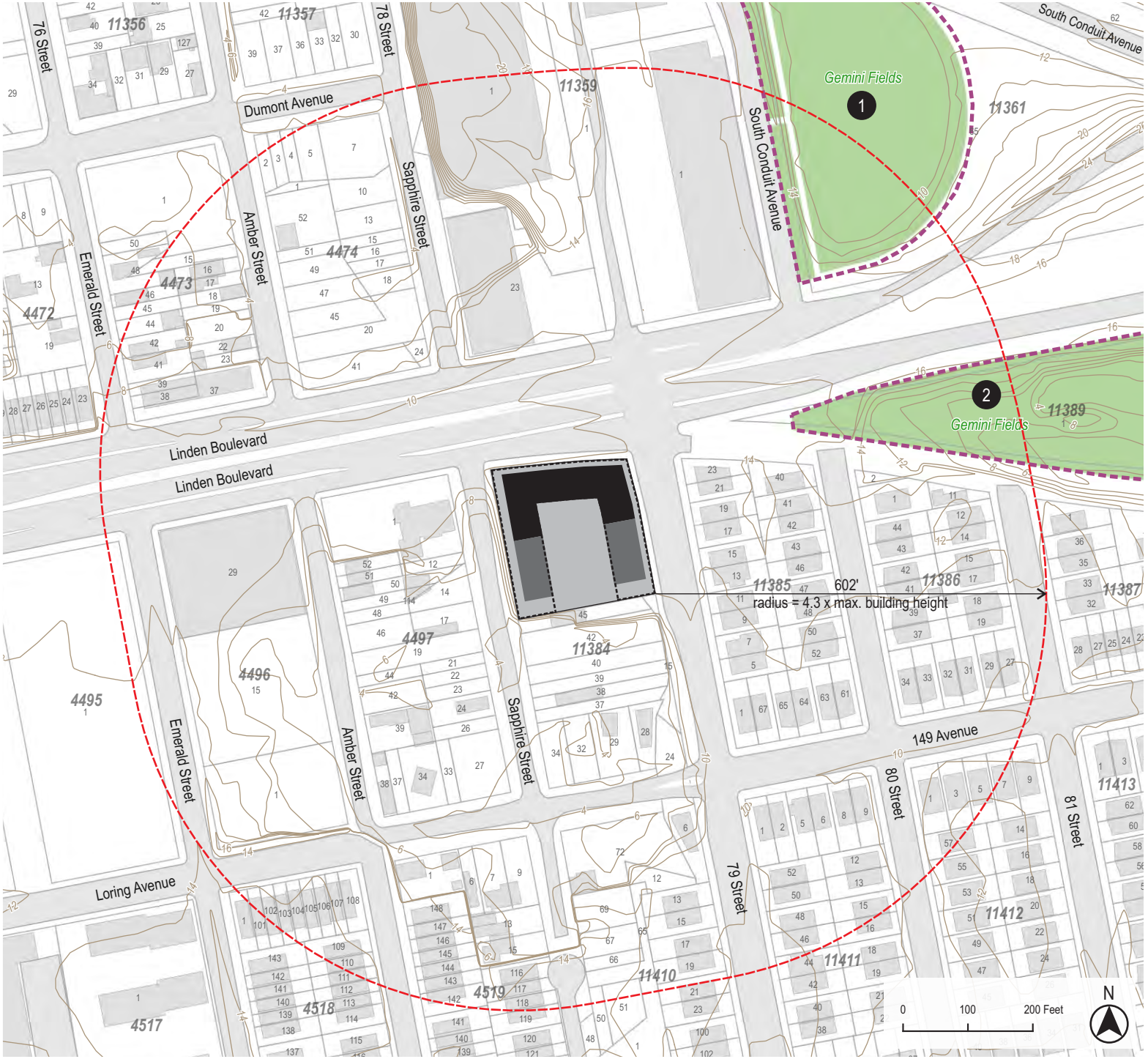
Conclusion

The building is anticipated to be constructed on Projected Development Site 1 would not cast any significant adverse new shadows on shadow sensitive open space or historic resources. Therefore, the Proposed Actions would not result in any significant adverse shadows impacts, and no further assessment is needed for the project.

78-08 Linden Boulevard, Queens

Figure 1: Tier 1 Screening Assessment

- Project Site
- Projected Building Footprint
- Bulkhead Above 8th Floor (110')
- Bulkhead Above 11th Floor (140')
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

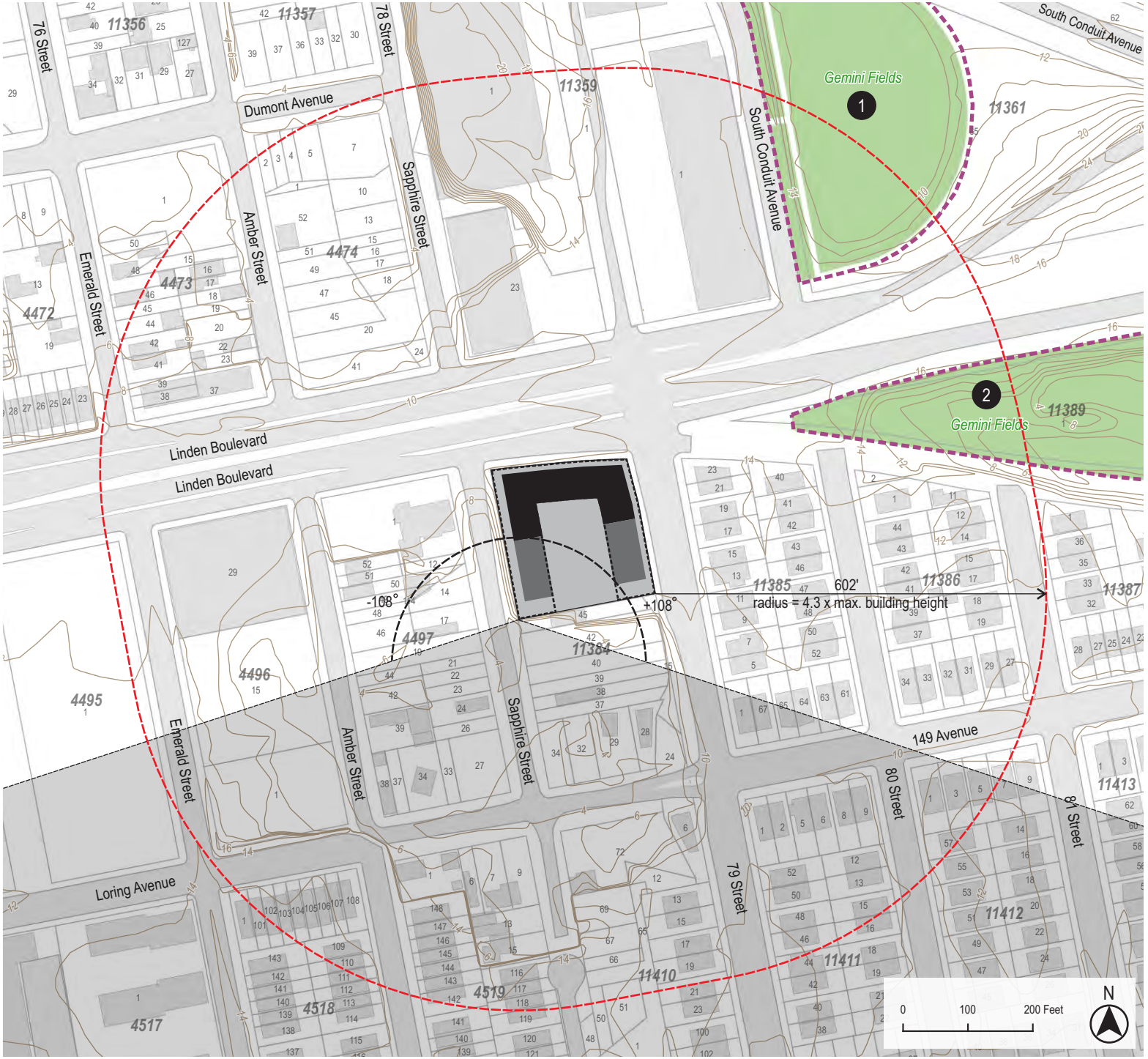


Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 2: Tier 2 Screening Assessment

- Project Site
- Projected Building Footprint
- Bulkhead Above 8th Floor (110')
- Bulkhead Above 11th Floor (140')
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource
- Area That Cannot Be Shaded by the Proposed Building

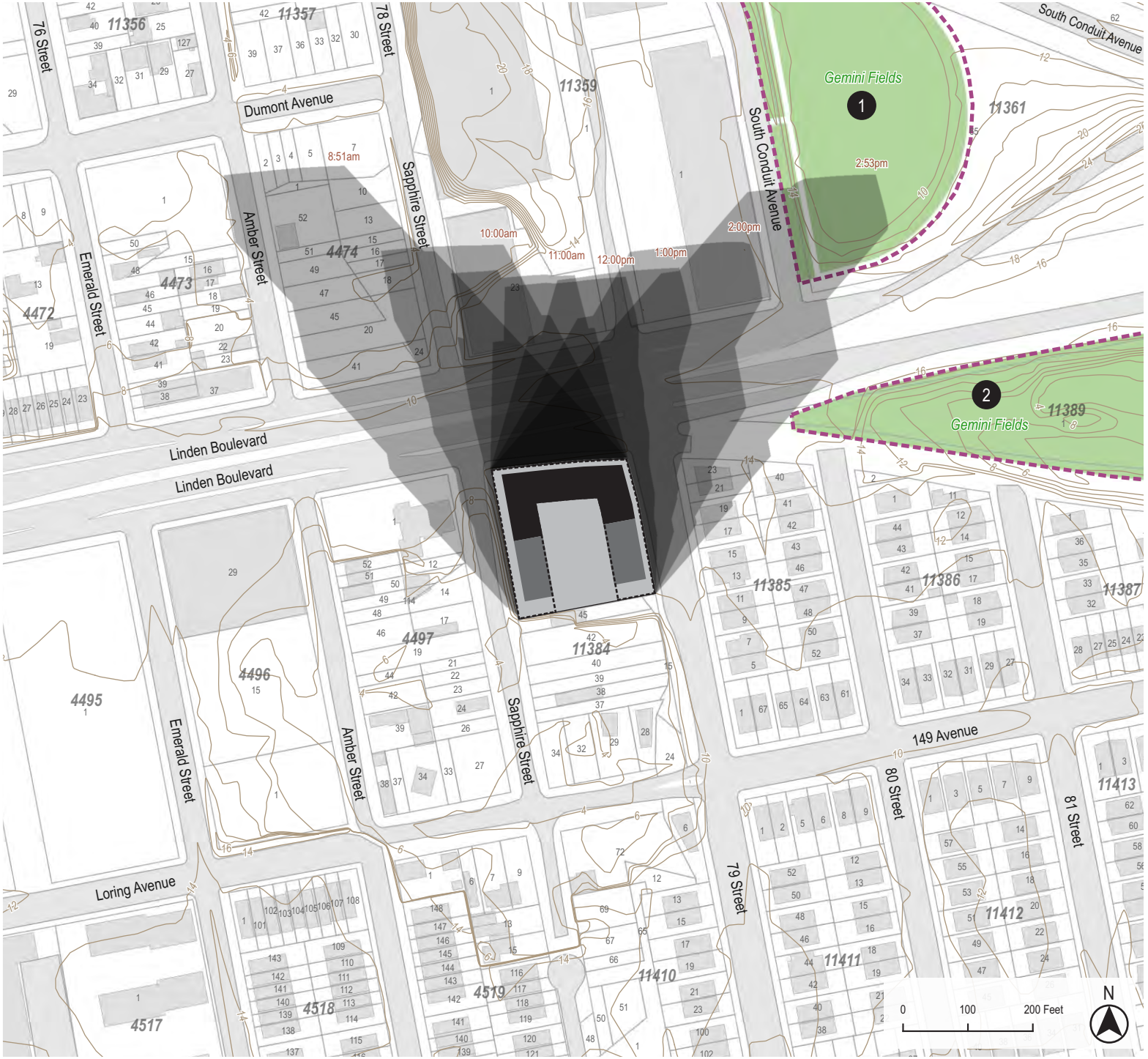


Urban Cartographics

78-08 Linden Boulevard, Queens

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

- Project Site
- Projected Building Footprint
- Bulkhead Above 8th Floor (110')
- Bulkhead Above 11th Floor (140')
- 8:51am — Shadow Cast/Analysis Time
- # — Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

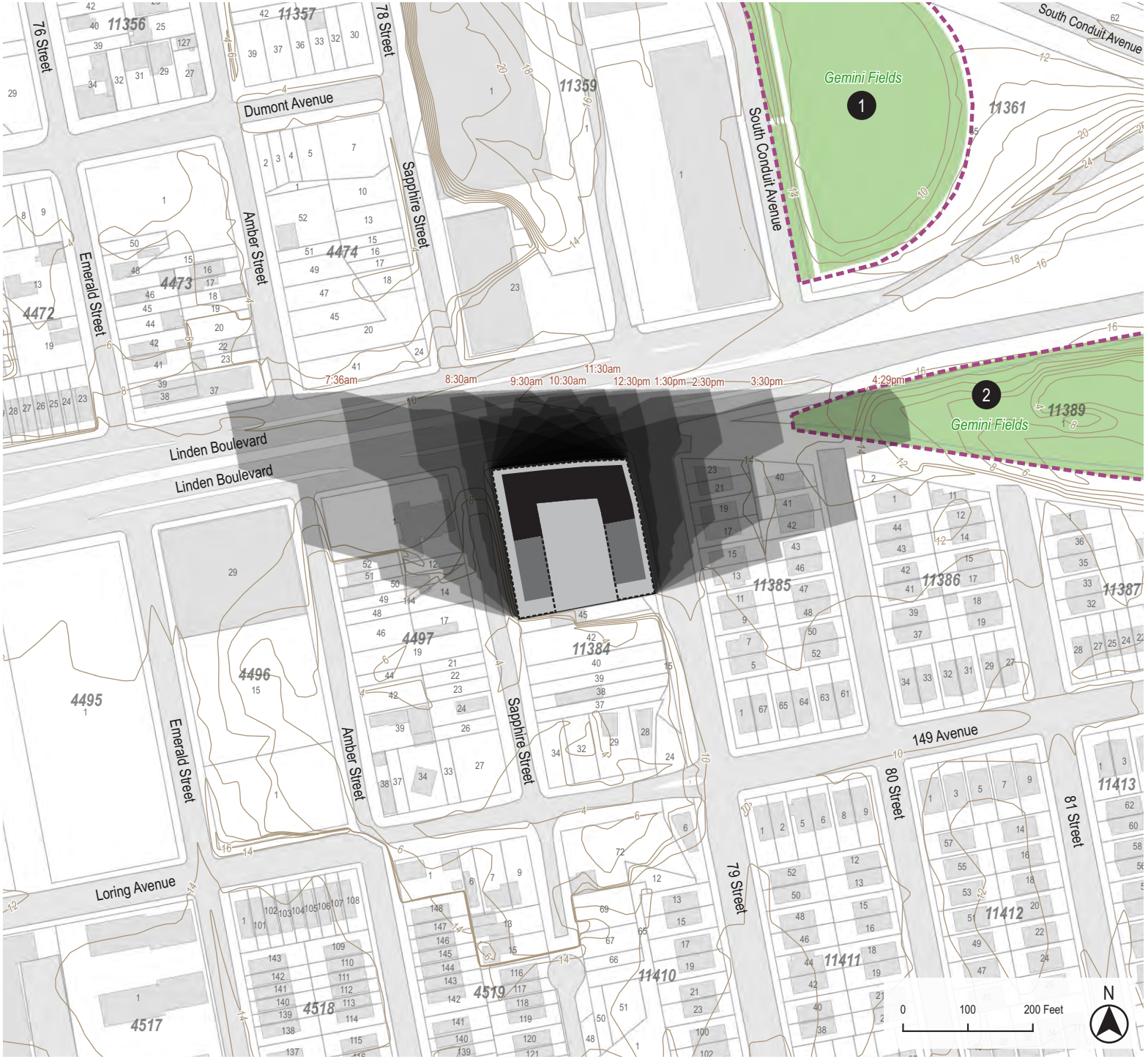


Urban Cartographics

78-08 Linden Boulevard, Queens

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

- Project Site
- Projected Building Footprint
- Bulkhead Above 8th Floor (110')
- Bulkhead Above 11th Floor (140')
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

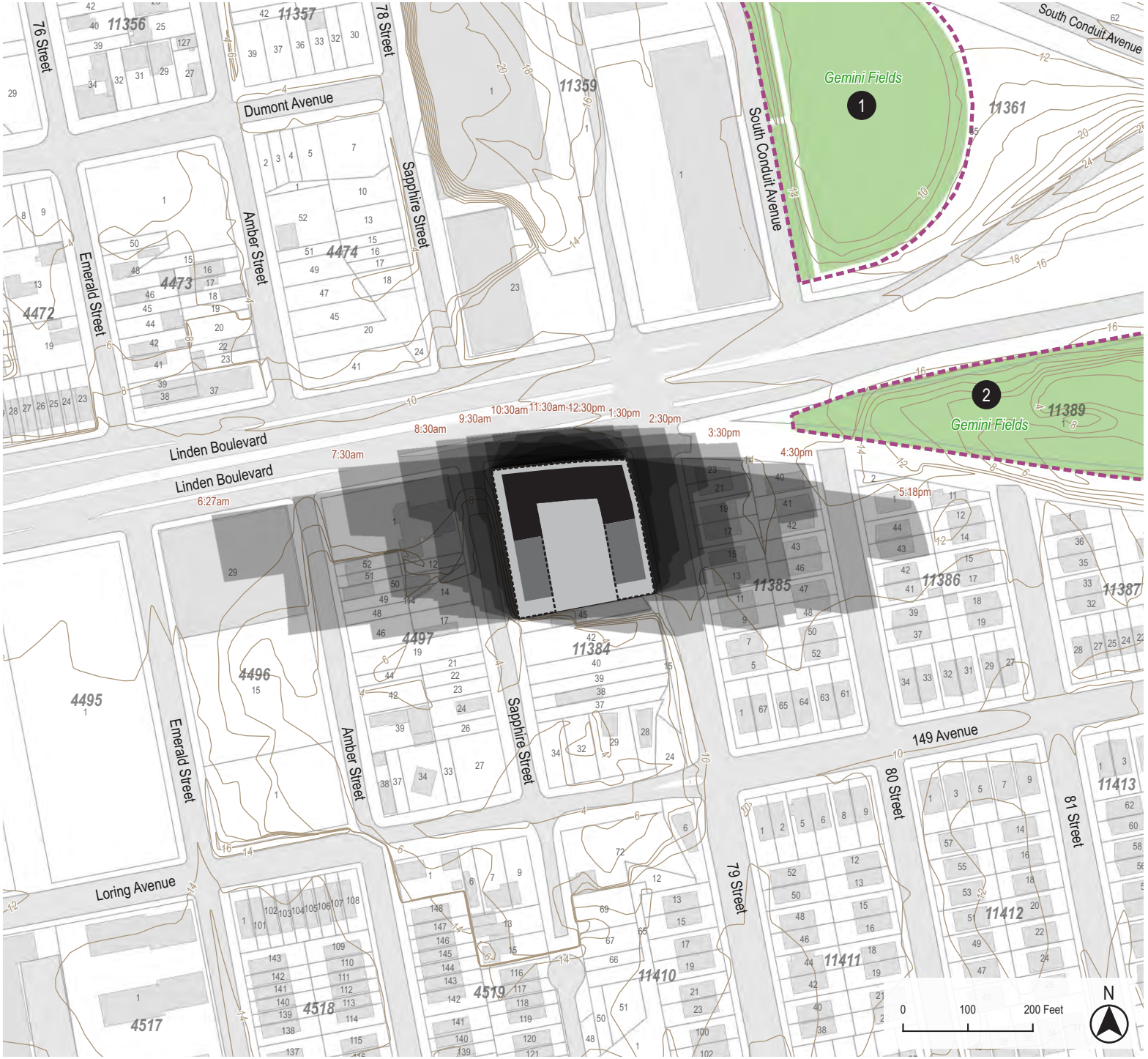


Urban Cartographics

78-08 Linden Boulevard, Queens

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

- Project Site
- Projected Building Footprint
- Bulkhead Above 8th Floor (110')
- Bulkhead Above 11th Floor (140')
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

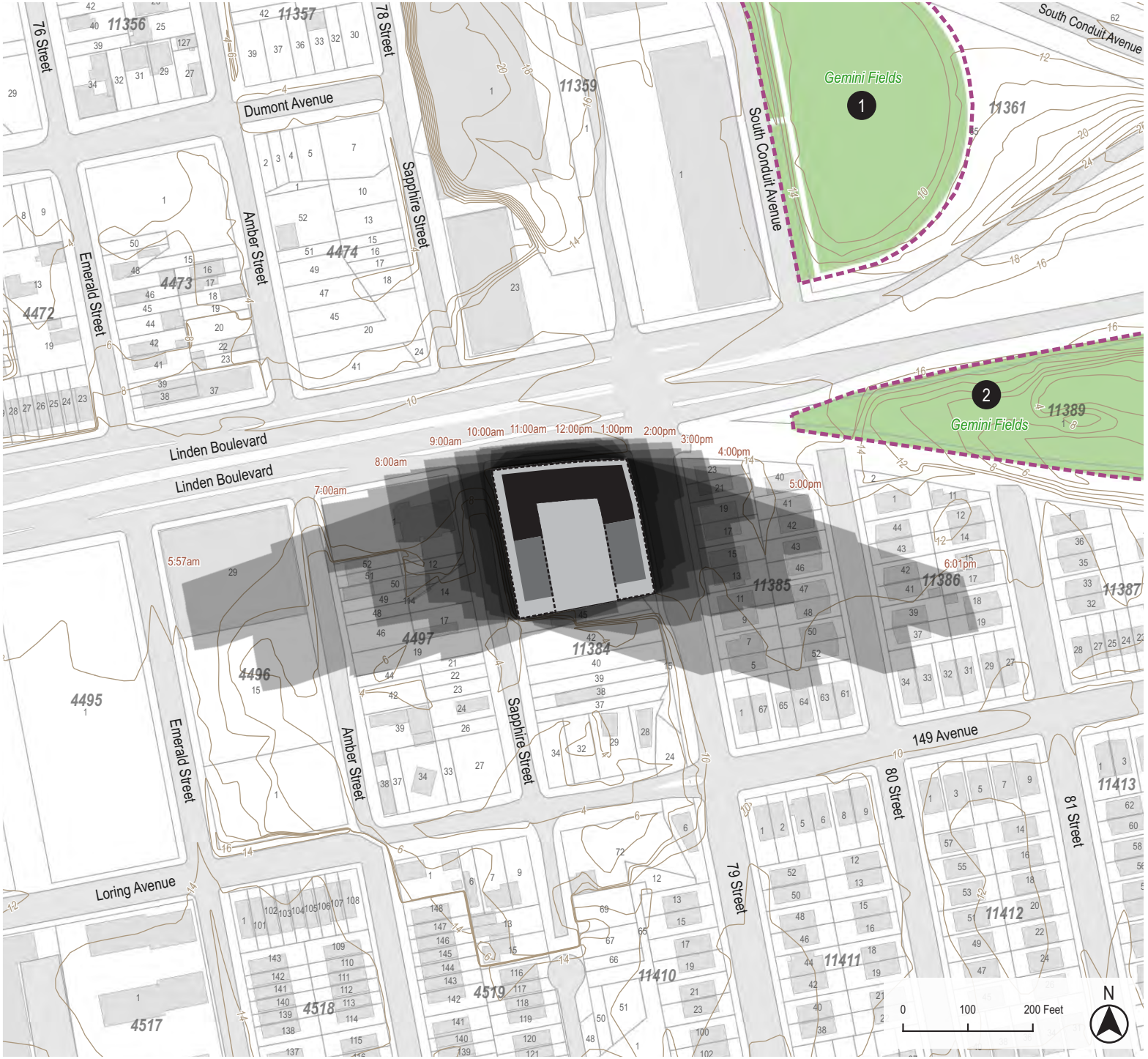


Urban Cartographics

78-08 Linden Boulevard, Queens

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

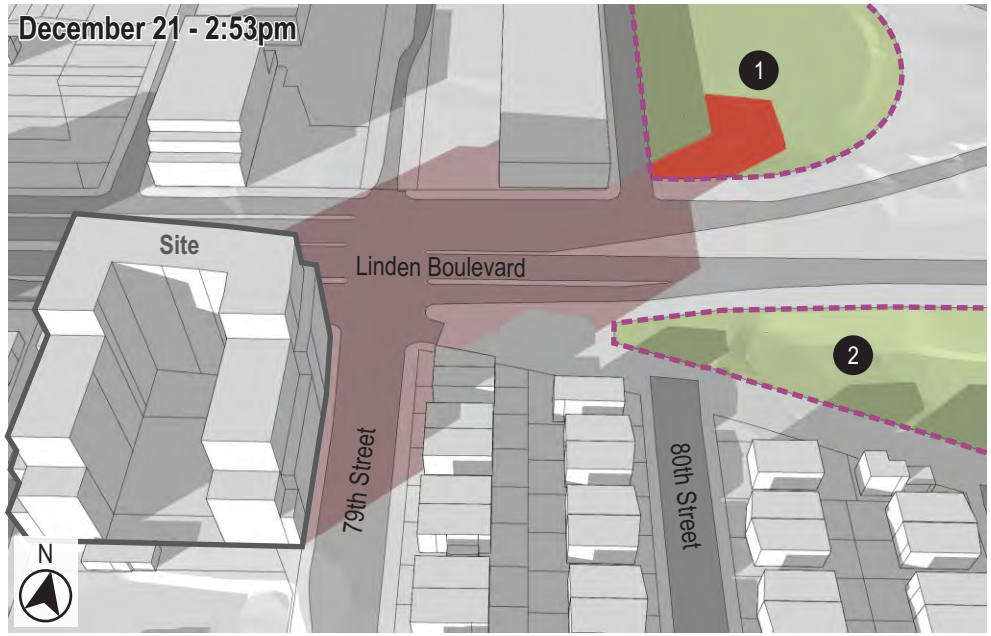
- Project Site
- Projected Building Footprint
- Bulkhead Above 8th Floor (110')
- Bulkhead Above 11th Floor (140')
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource



Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 7: Detailed Analysis



Shadows Cast on Sunlight-Sensitive Resources

1. 2:21pm – 2:53pm
2. n/a



Shadows Cast on Sunlight-Sensitive Resources

1. n/a
2. 3:39pm – 4:29pm

6. HISTORIC AND CULTURAL RESOURCES

The 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks (NYCL); properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed in the State/National Registers of Historic Places (S/NR) or contained within a district listed in or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHL); and properties not identified by one of the programs listed above, but that meet their eligibility requirements. An assessment of historic/archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures or within historic districts, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

As discussed in the Project Description, the Applicant requests approval from the City Planning Commission of Zoning Map and Zoning Text Amendments and a cancelation of a restrictive declaration (the Proposed Actions) on the Applicant owned Project Area/Projected Development Site 1 located at 78-08 Linden Blvd. (Block 11384, Lot 1) in the Lindenwood neighborhood of Queens. If approved, the Applicant seeks to construct a 255,068 gsf mixed-use building containing residential and commercial (local retail) uses. The proposed building would contain 242,960 gsf of residential floor area for 267 dwelling units on floors two through eleven and 12,108 gsf of commercial (local retail) uses. The building would be 11 stories with a total height of 115 feet. The building would provide 154 accessory parking units located in the cellar and and on the first floor of the building.

The Project Area and the 400-foot radius project study area are not a Federal, State, or New York City designated Historic District and do not contain any individually designated historic resources. As such, a historic architectural analysis is not warranted for the Proposed Actions.

It is not known if the Project Area contains any subsurface archaeological remains. The Project Area is currently developed with a small shopping center and paved surface parking areas. The building on the site contains a cellar which would likely have disturbed any potential archaeological remains under the building. However, the extent of any additional subsurface disturbance on the site beneath the surface parking areas is not known. This is determined by the LPC as part of their review. The required documentation was forwarded to the LPC for their determination regarding the historic or archaeological significance of the Applicant's Projected Development Site 1. In a letter dated May 2, 2023, the NYC LPC affirms that the proposed Rezoning Area has no architectural or archaeological significance and further analysis is not warranted. See the **Appendix C**.

7. URBAN DESIGN AND VISUAL RESOURCES

Introduction

An assessment of urban design is needed when a project may have effects on any of the elements that contribute to the pedestrian experience of public space. A preliminary assessment is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including the following:

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

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

The Proposed Actions include:

A. A Zoning Map Amendment to Sectional Map # 18b – Rezoning of Projected Development Site 1 (Block 11384, Lot 1) from R4/C1-2 to R7D/C2-4 and R6A Districts. The R7D and C2-4 overlay would cover the northern portion of the lot, and the R6A district would be mapped on the southern portion of the lot;

B. A Zoning Text Amendment - Modify ZR §23-933, Appendix F to designate the newly mapped R7D/C2-4 and R6A districts as Mandatory Inclusionary Housing designated areas.

C. Cancelation of a restrictive declaration recorded against the Project Area in connection with a prior rezoning action.

The Proposed Actions would permit the modification of the existing yard, height, and setback requirements of the lot within the Project Area and would introduce a new building with greater height. The maximum amount of floor area that would be permitted in the Project Area in the future under the existing and future No-Action zoning is up to 35,970 zoning square feet of residential floor area, up to 47,960 zsf of commercial space, or up to 95,920 square feet of community facility space. The maximum amount of floor area that would be permitted in the Project Area in the future With-Action zoning calculated based on maximum FAR is up to 212,487 zoning square feet of residential floor area, up to 44,602 square feet of commercial space, or up to 170,737 square feet of community facility space. A preliminary urban design assessment is therefore required.

Preliminary Assessment

Existing Conditions

Project Area

The Project Area/Projected Development Site 1 consists of approximately 40% of the area of one block in the Lindenwood neighborhood of Queens bounded by Linden Boulevard, 79th Street, Loring Avenue, and Sapphire Street. The Project Area is an irregularly shaped lot with

210 feet of frontage on Linden Boulevard, 235 feet of frontage on Sapphire Street, and 213 feet of frontage on 79th Street. The Project Area is situated at the broad intersection of Linden Boulevard, 79th Street and South Conduit Avenue. The 47,960 square foot Project Area is developed with a one-story, approximately 22,040 gsf retail building constructed in 1966 and containing a pharmacy, a dry cleaner, a liquor store, and a small restaurant, with approximately 36 at-grade accessory parking spaces on the lot.

The Project Area does not contain any visual resources such as open space facilities, historic resources, or natural resources.

400-Foot Radius Project Study Area

In addition to the existing development on Projected Development Site 1 described above, the block on which the Site is located is improved with a two-story warehouse, several vacant lots, a two-story two-family residence, a one-story single-family residence, and a one-story landscaping and gardening establishment.

The 400-foot radius project study area to the west of the Project Area south of Linden Boulevard generally consists of a mix of higher-density residential and mixed commercial and residential buildings and numerous vacant lots. Development west of the Project Area south of Linden Boulevard includes Linden Terrace, the site of four new 8-12 story buildings and a diner. In contrast, land immediately east of the Project Area to the south of Linden Boulevard primarily consists of two-story, two- and three-family dwellings.

The 400-foot radius project study area to the north of the Project Area across Linden Boulevard proceeding from east to west includes an open space area, Gemini Fields; a four-story charter school directly across Linden Boulevard from the Project Area and the adjacent Linden Center shopping mall comprised of approximately 250,000 gsf of retail space within one- and two-story buildings and open accessory parking on approximately 307,000 sf of land; numerous vacant lots; and a three-story mental health care facility.

The 400-foot radius Project Study Area contains one visual resource located to the north and east of Project Area, that being Gemini Fields which consists of baseball fields and open vegetated land containing trees, shrubs, and grassed areas.

An aerial photograph of the project study area and ground level photographs of the Project Area and the immediate context are attached which show existing conditions in the Project Area and in the surrounding area. Zoning calculations of the existing conditions in the Project Area, including floor area calculations, lot coverage, and building heights, are shown in Table 7-1 below.

No-Action Scenario

Project Area

As explained in the Land Use section above, it is assumed that under the No-Action Scenario, Projected Development Site 1 would remain in its existing condition as detailed above. The R4 zoning on the site allows for 0.75 FAR of residential use while the C1-2 overlay permits 1.0 FAR of commercial use. The existing 21,379 zoning square foot (zsf) commercial building on the 47,960 sf Projected Development Site 1 represents an FAR of 0.45. One parking space per 300 square feet of general retail floor area is required under the property's C1-2 commercial overlay zoning. The 21,379 zsf commercial building on the property requires the provision of approximately 71 parking spaces while only approximately 36 spaces are provided. The existing building on the property was built in 1967 and it is not reasonable to assume that the structure would be entirely demolished and reconfigured to accommodate an expansion under the property's existing zoning. The existing development in the Project Area maximizes the overall development potential on the site under its existing R4/C1-2 zoning.

No other projected or potential development sites are located within the Project Area. Therefore, no additional development would be anticipated under the Future No-Action scenario, and no changes would occur to the existing urban design and visual character of the Project Area.

400-Foot Radius Project Study Area

The following new development is planned within 400 feet of the Project Area.

- 583 Emerald Street, Brooklyn – An 8-story, 154,643 square foot building containing 154 residential dwelling units to be developed on a currently vacant site approved 3/10/23.

No development plans are known to exist for any other undeveloped parcels or other uses within the project study area as identified above by the project build year of 2027.

Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2027.

With the exception of the one new building noted above, the character of the surrounding project study area would not be expected to change significantly in the absence of the project. Zoning calculations of future No-Action conditions on the Site, including floor area calculations, lot coverage, and building heights, are shown in Table 7-1 below.

Future With-Action Scenario

The future With-Action Development Scenario would result in a denser development on the property as compared to the Existing/No-Action Development Scenario. Under the With-Action Scenario for the project build year of 2027, the Project Area/Projected Development Site 1 would be developed with a new 255,068 gsf mixed-use building containing residential and commercial (local retail) uses. The building would range from 8 to 11 stories and reach a total height of 115 feet. The proposed building height is 115 feet and 11 stories within the R7D/C2-4

district and 85 feet and 8 stories within the R6A district. The building would contain 242,960 gsf of residential uses (267 dwelling units) on floors two through eleven and 12,108 gsf of commercial (local retail) uses on the ground/first floor. Between 68 and 81 of the 267 dwelling units would be reserved as low- to moderate-income units pursuant to MIH. The building would provide 154 accessory parking units located in the cellar and on the first floor which would be accessed from two different 15 ft curb cuts. One would be located on the west side of 79th Street approximately 145 feet south of Linden Blvd. and the other would be located on the east side of Sapphire St. approximately 220 feet south of Linden Blvd.

The difference between the No-Action and With-Action Scenarios on the Projected Development Site would be the removal of the existing retail store building on the site and the development under the With-Action Scenario of one new building resulting in an increase of 230,551 gsf of total floor area consisting of 242,960 gsf of new residential floor area for 267 residential dwelling units (including between 68 and 81 low- to moderate-income units), a decrease of 9,932 gsf of local retail floor area, and an increase of 118 total parking spaces. The No-Action and With-Action development scenarios would also differ in the heights of the proposed buildings which would increase from 1 story to 11 stories and from 15 feet to and 115 feet.

The existing retail building in the Project Area is set back from the Linden Boulevard frontage of the property with at-grade parking between the building and Linden Boulevard. The proposed new building would be built out to the street line on the property along Linden Boulevard, Sapphire Street, and 79th Street. The building would have a "U" shape with an open area measuring 78.19 feet deep located midway between 79th Street and Sapphire Street as a rear yard equivalent on the through lot portion of the zoning lot. Twenty-six new street trees would be planted on the streets bordering the Project Area. The new building would include outdoor recreation areas totaling 19,732.59 sf in size and will consist of roof gardens on the second floor (1,585 sf), an indigenous plant sanctuary, children's play area, greenhouse urban farming area, and cooking/dining area/lounge above the roof of the first floor (5,491.14 sf), roof gardens on the ninth floor (10,239.42 sf), and a roof garden on the tenth floor (2,417.19 sf).

The With-Action development would change the low-density local retail use and character of the Project Area to a higher density mixed-use residential and commercial development with structured accessory parking. The With-Action development would increase the density of development on the Projected Development Site. In addition to a significantly greater amount of floor area, the building height would be significantly greater under the With-Action Scenario with the development of a new 8- to 11-story building. The existing building in the Project Area is one-story in height.

Zoning calculations of future With-Action conditions on the Site, including floor area calculations, lot coverage, and building heights, are shown in Table 7-1 below. Three-dimensional representations of the future With-Action condition streetscape are also attached. See Urban Design figures 1 and 2.

Table 7-1
Zoning Calculations Relevant to Urban Design Analysis – Projected Development Site 1

Item	Existing Conditions	No-Action Conditions	With-Action Conditions
Development Scenario	4 local retail uses in one building with 36 at-grade accessory parking spaces	4 local retail uses in one building with 36 at-grade accessory parking spaces	267 dwelling units including 68 to 81 affordable units; 12,108 gsf retail; 154 garage accessory parking spaces
Building Floor Area	22,040 gsf	22,040 gsf	255,068 gsf
Building Lot Coverage	46.2%	46.2%	80.6%
Building Heights	One-story	One-story	8-story (85') to 11-story (115')

Conclusion

The Proposed Actions would result in the development of new residential and commercial uses and structured accessory parking on one Projected Development Site located in an area characterized by a mixture of residential, commercial, and community facility uses, open space, parking lots, and vacant land.

The Applicant believes that the Proposed Actions would result in new development that would be compatible with the urban design and visual character of other recent developments in the surrounding area. The proposed R7D and R6A districts will allow a moderate increase in residential density at the intersection of wide streets near public transportation with building heights that are consistent with 8- and 12-story mixed-use buildings two blocks west of the Project Area. Allowable bulk in the two proposed residential districts fits within the context of taller buildings generally located to the west of the Project Area while being responsive to lower density buildings located to the east of the Project Area. The C2-4 overlay will provide opportunities for a wide range of local services along an active roadway that are similar to those in C2-4 and C2-2 overlays along Linden Boulevard to the west and north of the Project Area.

The With-Action Development Scenario would not result in any significant impacts to Gemini Fields, which is the only visual resource located in proximity to the Project Area located approximately 340 feet east of the Project Area at its closest point. The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. The Applicant believes that the development that would be facilitated by the rezoning would represent a visual improvement to the area and would result in new development on the underdeveloped Projected Development Site that is believed to be more compatible with the urban design and

visual character of recent new developments in the surrounding area. A detailed urban design analysis would not be required.

78-08 Linden Boulevard, Queens

Figure 1: Urban Design Diagram

No-Action Scenario

Linden Boulevard facing southwest (Site at left)



With-Action Scenario

Linden Boulevard facing southwest (Site at left)



Maximum Permitted Base Height (95'/65')
Maximum Permitted Building Height (115'/85')
Maximum Permitted Building Height (140'/110')
Proposed Base Height
Proposed Building Height
Proposed Bulkhead Height

Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 2: Urban Design Diagram

No-Action Scenario

Linden Boulevard facing southeast (Site at right)



With-Action Scenario

Linden Boulevard facing southeast (Site at right)



Maximum Permitted Base Height (95'/65') | Maximum Permitted Building Height (115'/85') | Maximum Permitted Building Height (140'/110')

Proposed Base Height | Proposed Building Height | Proposed Bulkhead Height

Urban Cartographics

8. HAZARDOUS MATERIALS

Introduction

Environmental Studies Corp. has performed a Phase I Environmental Site Assessment (ESA) of the subject property located at 78-08 Linden Boulevard, in the Borough of Queens, New York City, New York. This Phase I ESA was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-13).

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

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

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

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

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

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

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

Site Description

The subject property at 78-08 Linden Boulevard, Queens, New York is approximately 14,660 square feet in area, and contains a 1-story (plus basement) commercial/retail building with a footprint of approximately 22,040 square feet. At the time of the site visit the building was occupied by Walgreen Pharmacy, Jade Linden Chinese Restaurant, Cut-Rate Liquors and Wines, and one vacant store. Heat for the building is provided by gas-fired systems, and hot water is provided by individual electric hot water heaters.

Exterior portions of the project site consist of asphalt-paved parking areas on the north and south sides of the lot.

Site History

Research into the history of the project site shows that the site building was completed in 1967, as a commercial/retail building. The identified former occupants/uses in the building from 1967 to the present time include restaurants, liquor stores, pharmacies, a decorating store, an electronics store, a bagel store, a video store, beauty salons, locksmiths, a toy store, and two dry cleaners. From at least 1970 to circa 2018, there was a retail dry cleaner located in the

building (Jen-Ann French Dry Cleaners and One Stop Dry Cleaners). Dry cleaners typically use various solvents and other chemicals including tetrachloroethylene, also known as perchloroethylene or perc, in their operations. Any past spills, leaks or discharges of such materials at the site would represent a potential source of contamination to the property. In addition, solvents such as perc have the propensity to move through the soil in the form of a vapor and therefore, the potential for vapor encroachment into the existing or future buildings exists at the subject property.

One of the former pharmacies at the project site (Rite Aid #04693) is identified in the RCRA Hazardous Waste Generator database. Hazardous waste activities are identified at this facility in 2011, 2014, 2015, 2018. Hazardous waste types generated by this operation include ignitable wastes, corrosive wastes, heavy metals, pesticides, benzene, formaldehyde, methanol, naphthalene, phenol, and others. Any past spills, leaks or discharges of such materials at the subject property would be a potential source of contamination to the project site.

Prior to the construction of the building, there were four single-family dwellings on the site. These dwellings were constructed sometime between 1911 and 1928, and were demolished sometime between 1928 and 1950. Prior to the construction of these dwellings, the project site was vacant and undeveloped, as shown on the 1908 and 1911 Sanborn maps.

Historical Urban Fill Materials

The 1908 and 1911 Sanborn maps show a tidal creek (Spring Creek) on the project site. The portion of this creek on the property was filled in sometime between 1911 and 1928. Additionally, numerous soil piles are visible on the project site on the 1962 historical aerial photograph. Therefore, it is likely that there are historical urban fill materials underlying the project site.

Site Drainage

Typical lavatory drainage structures such as sinks and toilets are located in the building. Several floor drains and drainage sumps were present in the basement and several storm water drains were located in the parking areas of the property. The drainage destination of these structures is not known; however, it is likely that they discharge to the municipal sewer system. No staining or other indications of the discharge or disposal of hazardous substances or petroleum products were observed around any of the drainage structures at the project site.

Petroleum Storage Tanks

No aboveground tanks were observed at the property during the site visit. A fuel oil tank fillport is located outside the north wall of the portion of the building occupied by Walgreens Pharmacy. This fillport was sealed with concrete and located immediately adjacent to the building's foundation. Given the close proximity of this fillport to the foundation wall, it is considered likely that it was formerly connected to an aboveground tank in the basement of the building. No aboveground tanks were present in the basement below the Walgreens Pharmacy, and it is considered likely that the tank was removed from the basement when the heating system was converted to natural gas fuel. No other tank fillports, vent lines, or other

indications of the presence of petroleum storage tanks were observed at the property during the site visit.

Prior to the construction of the existing building, there were four single-family dwellings located on the property. It is not known how these former dwellings were heated (e.g., gas, oil, electric, etc.). Any former fuel oil tanks from the dwellings which were not removed at the time of their demolition may remain at the property.

Asbestos/Lead-Based Paints/PCBs

Given the age of the building (completed in 1967), it is possible that it contains asbestos building materials and lead-based paints in underlying layers. Potential asbestos-containing materials observed in the building include roofing materials, flooring materials, and surfacing materials. No suspected asbestos-containing thermal system insulation materials were observed in the building. Painted surfaces in the building were observed to be generally in good condition, with no large areas of chipped or peeling paint noted. No electrical transformers or other large electrical equipment containing suspected of containing PCBs were observed at the site.

Regulatory Agency Database Records

The property is identified in the RCRA Hazardous Waste Handler database, the NYS Registered Dry Cleaner database, and the EDR Historical Dry Cleaner list. The property does not appear in the other Federal or State environmental databases reviewed including the United States Environmental Protection Agency (USEPA's) Superfund, CERCLIS or ERNS databases, the RCRA hazardous waste Treatment/Storage/Disposal Facilities list, or the New York State Department of Environmental Conservation (NYSDEC's) Spill Logs or Petroleum Bulk Storage (PBS) database, Solid Waste Facilities database, Voluntary Cleanup Program database, Brownfield Cleanup Program database, or the Registry of Inactive Hazardous Waste Disposal Sites.

Surrounding Land Uses

The property is adjoined to the north by Linden Boulevard, beyond which is a commercial office building. Adjacent and to the south of the site is a contractor's storage yard. Adjacent and to the east is 79th Street, beyond which are residential dwellings. The project site is adjoined to the west by Sapphire Street, beyond which the Lindenwood Diner, dwellings, and a parking lot. Land uses in the immediate vicinity of the property (i.e., within approximately 500 feet of the site) are comprised of a mix of residential uses, commercial/retail uses, professional office building, contractor's yards, and vacant lots. No gasoline filling stations or heavy industrial uses were located in the immediate vicinity of the project site.

A review of Sanborn historical maps shows that land uses in the immediate vicinity of the subject property have historically contained predominantly residential uses, commercial/retail uses, and vacant lots. There were not any heavy industrial uses identified in the immediate vicinity of the project site on any of the historical Sanborn maps reviewed. The 1963 through 2006 Sanborn maps show a gasoline filling station at 78-01 Linden Boulevard, which is located

approximately 200 feet north of the property. There are three reported spill incidents identified at this former filling station. According to the spill report for Spill Number 9808553, subsurface investigation and remediation activities were performed at the gasoline filling station at 78-01 Linden Boulevard between 1999 and 2013. These activities were performed in response to petroleum-impacted soils and groundwater discovered at the site following the removal of USTs. The investigation determined that the depth to groundwater at the site was between 7 and 11 feet below grade, and the direction of groundwater flow was in a southwesterly direction. This spill incident was closed by the NYSDEC on 6/12/2013. At the time of the closure, there were slight exceedances of groundwater standards in two of the wells at the site, and the spill incident was closed as currently not meeting standards. Given the close proximity of this former filling station, and the direction of regional groundwater flow (southwest), the potential for groundwater contamination exists in the immediate vicinity of the property.

Conclusions

A Phase I Environmental Site Assessment has been prepared in conformance with the scope and limitations of ASTM Practice E 1527-13 of 78-08 Linden Boulevard, Queens, N.Y., the property. This assessment has revealed no evidence of *Historical Recognized Environmental Conditions* or *Controlled Recognized Environmental Conditions* in connection with the property. This assessment has revealed no evidence of *Recognized Environmental Conditions* in connection with the property, with the following exception:

- The potential for site contamination from past on-site dry cleaning and hazardous waste activity operations, including the potential for soil vapor encroachment to the existing or former buildings at the subject property.
- The potential for contamination at the subject property from the former gasoline filling station located at 78-01 Linden Boulevard.
- The presence of historical urban fill materials of unknown origin at the subject property.
- The possible presence of one or more out-of-service petroleum storage tanks at the project site.

Based on the above, a Phase II Environmental Site Investigation was be prepared for the project site.

Environmental Studies Corporation (ESC) has performed this Phase II investigation to establish existing soil, soil vapor and ground water quality conditions and a comparison to relevant regulatory agency and standard practice guidelines and standards. A Phase II Environmental Investigation Work Plan and Health and Safety Plan (HASP) were prepared which outlined the means and methods of the subsurface investigation. All work was completed in accordance with ASTM E1903-97 Standard Guide for Environmental Site Assessments: Phase 2 Environmental Site Assessment Process. The scope of work was

implemented to determine whether the subsurface soil, water, and soil vapor quality conditions at the subject property.

There are no recommendations for additional testing or remedial action being made at this time. Urban fill and native soil exported offsite should be transported and disposed in accordance with New York State Department of Environmental Conservation (NYSDEC) Part 365 regulations. The new building construction should have an engineered polyethylene vapor barrier under occupied areas of the building. The vapor barrier should be a minimum thickness of 20 mils under the foundation slab and foundation sidewalls to prevent any potential vapor migration into the building structure. A Remedial Action Plan (RAP) detailing the installation of a vapor barrier and a Construction Health and Safety Plan (CHASP) was written describing the means and methods for the vapor barrier installation and excavation and disposal of impacted soils.

Following the recommendations of the RAP/CHASP prevents any significant impacts due to hazardous materials because of the Proposed Actions.

9. TRANSPORTATION

INTRODUCTION

Pursuant to the guidance of the *2021 City Environmental Quality Review (CEQR) Technical Manual*, this chapter examines the potential effects of the Proposed Actions on the Project Area's transportation systems. Specifically, it compares conditions in the future with the Proposed Actions (the With-Action condition) against conditions in the future without the Proposed Actions (the No-Action Condition). Based on the proposed mixed-use development increment trip generation (Level 1) and trip assignment (Level 2) screening analysis results, it was determined that the Proposed Actions would require a detailed vehicular traffic analysis as summarized below.

PROJECT AREA

The entire Proposed Rezoning Area would affect one tax and zoning lot (Block 11384, Lot 1) in the Lindenwood neighborhood of Queens, Community District 10. It is bounded by Linden Boulevard, a two-way eastbound/westbound roadway to the north; Sapphire Street, a one-way southbound roadway to the west; 149th Avenue, a one-way eastbound roadway to the south; and 79th Street, a one-way northbound roadway to the east.

PROJECTED DEVELOPMENT SITES

The transportation analysis is based on one (1) Projected Development Site, as described below:

- Block 11384, Lot 1: Will be developed as Projected Development Site 1 in the With-Action condition (owned by the applicant).

EXISTING CONDITIONS

The Projected Development Site 1 is currently improved with a one-story 22,040 gsf of local retail building, as well as an accessory parking lot with 36 spaces, as summarized in **Table 1.**

NO-ACTION SCENARIO

Absent the Proposed Actions, it is assumed that Projected Development Site 1 within the Project Area would remain the same as the existing condition, as summarized in **Table 1**.

WITH-ACTION SCENARIO

The Proposed Actions would result in a development comprised of 267 residential dwelling units (242,960 gsf) and 12,108 gsf of local retail space, as summarized in **Table 1**. The Proposed Actions would also provide 162 on-site accessory-parking spaces, accessed via curb cuts along the west side of 79th Street.

Table 1 – Existing, No-Action Scenario, With-Action Scenario, and Increment on Projected Development Site 1

Land Use	Existing	No-Action	With-Action	Increment
Residential d.u.	**0**	**0**	**267 d.u. (242,960 gsf)**	**267 d.u. (242,960 gsf)**
Local Retail (gsf)	**22,040 gsf**	**22,040 gsf**	**12,108 gsf**	**-9,932 gsf**
Accessory Parking	**36**	**36**	**162**	**126**

Source: Approved RWCDS.

ANALYSIS FRAMEWORK

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

INCREMENT

The Proposed Actions would result in a net increase of 267 residential dwelling units (242,960 gsf) and 126 accessory parking spaces, and a net decrease of 9,932 gsf of local retail space, as summarized in **Table 1**.

PRINCIPAL CONCLUSIONS

The following detailed trip generation (Level 1 Screening) and trip assignment (Level 2 Screening) analyses have been conducted for the project increment scenario, as are summarized in **Table 1**.

Based on the results of trip generation and trip assignments screening analyses, as summarized in **Tables 2 through 4 and Figures 1 through 3** (all tables and figures can be found in **Appendix D**), the Proposed Actions would generate fewer vehicular, transit (subway and bus) and pedestrian trips than the *2021 CEQR Technical Manual thresholds*. Therefore, in accordance with the threshold guidelines as detailed in the *2021 CEQR Technical Manual*, the Proposed Actions would not expect to result in significant adverse impacts related to vehicular traffic, transit (Subway and Bus) and pedestrian, and no detailed transportation analyses would be warranted, as detailed below.

Traffic and Parking

Based on the results of trip generation and trip assignment screening analyses, it is concluded that in the future with the Proposed Actions, none of the intersection in the study area during Weekday AM, Midday, PM and Saturday Midday peak hour would experience 50 or more peak hour vehicle trip-ends, as summarized in **Table 4** and shown in **Figures 1 through 3**. Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-ends per intersection threshold, no detailed assessment of vehicular traffic impact analysis would be required.

Parking

The Proposed Actions would provide 162 on-site accessory parking spaces on the Cellar and First Floor of the Proposed Building. The proposed off-street parking garage could be accessed via two curb cuts, one located on the west side of 79th Street and the other on the east side of Sapphire Street.

The Proposed Actions would screen for vehicular traffic as detailed below, and per the *CEQR Technical Manual*, no detailed parking assessment would be required.

Transit

Subway

Based on the results of the trip generation (Level 1) screening analysis, the Proposed Actions would generate fewer subway trips than 200 peak hour subway trip-ends, as summarized in **Table 3** for the Weekday AM, Midday, PM, and Saturday Midday peak hour periods. Therefore, in accordance with the *CEQR Technical Manual* 200 subway trip-ends threshold, the subway trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of subway impacts.

Bus

Based on the results of the trip generation (Level 1) screening analysis, the Proposed Actions would generate fewer bus trips than 50 peak hour bus trip-ends during any peak hour, as summarized in **Table 3** for the Weekday AM, Midday, PM, and Saturday Midday peak hour periods. Therefore, in accordance with the *CEQR Technical Manual* 200 bus trip-ends threshold/50 or more peak hour bus trip-ends in one direction along a bus route during any peak hour, the bus trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of bus impacts.

Pedestrian

Based on the results of the trip generation (Level 1) screening analysis, as summarized in **Table 3**, the Proposed Actions would generate fewer pedestrian trips than 200 peak hour pedestrian trip-ends for the Weekday AM, Midday, PM, and Saturday Midday peak hour periods. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold, a detailed assessment of pedestrian impacts would not be warranted.

BUILD YEAR

Based on an estimated 18-month pre-certification timeframe, a seven-month Uniform Land Use Review Process (ULURP), and a 28-month construction period, the analysis year for the Projected Development Site is 2027.

TRANSPORTATION PLANNING ASSUMPTIONS

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

Residential Development

The *2021 CEQR Technical Manual* Table 16-2 was utilized for trip generation rates, including truck trips, peak hour temporal distribution, and directional splits. The 2015-2019 American Community Survey (ACS) Journey-to Work (JTW) data for Census Tract #'s 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens, NY was used for modal split information and auto occupancy rate, as is estimated in **Exhibits A and B**, and summarized in **Table 2.**

The estimated modal split data for residential use found that approximately 47.0% would travel by car, 0.5% would travel by taxi, 10.0% would travel by bus, 37.3% would travel by subway, and 5.2% would travel by foot and other modes of travel, as shown and summarized in **Exhibit 1**. The auto occupancy rate is 1.09, based on the 2015-2019 ACS JTW data for Census Tract #'s 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens as summarized in **Exhibit 2**. The taxi occupancy rate is based on the *East New York Rezoning Proposal FEIS* (Table 13-8).

Local Commercial Retail Development

The *2021 CEQR Technical Manual* Table 16-2 was utilized for trip generation rates, peak hour temporal distribution, directional splits, and truck trip rates. Modal split information and vehicle occupancy rates are provided by NYCDOT based on the survey results for a similar local retail space, as is summarized in **Table 2.**

The estimated modal split results for local commercial retail use found that approximately 11% would travel by car, 0% would travel by taxi, 2% would travel by bus, 3% would travel by subway, and 84% would travel by foot and other modes of travel.

PRELIMINARY ANALYSIS METHODOLOGY AND SCREENING ASSESSMENTS

The *CEQR Technical Manual* recommends a two-tier screening procedure for the preparation of a "preliminary analysis" to determine if quantified analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation analysis

(Level 1) to estimate the volume of person and vehicle trip-ends attributable to the Proposed Actions. If the Proposed Actions are expected to result in fewer than 50 peak hour vehicle trip-ends and fewer than 200 peak hour transit or pedestrian trip-ends, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Level 2) are performed to estimate the incremental trip-ends at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the Proposed Actions would result in 50 or more peak hour vehicle trip-ends at an intersection, 200 or more peak hour subway trip-ends at a station, 50 or more peak hour bus trip-ends in one direction along a bus route, or 200 or more peak hour pedestrian trip-ends traversing a pedestrian element, then further quantified analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, and parking.

LEVEL 1 SCREENING ASSESSMENTS

A Level 1 trip generation screening assessment was conducted for the project increment, as summarized in **Table 1,** to estimate the numbers of person and vehicle trip-ends by mode generated by the Proposed Actions during the Weekday AM, Midday, PM, and Saturday Midday peak hours, as summarized in **Tables 3, and 4**. These trip estimates were then compared to the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or quantified operational analyses would be warranted.

The Proposed Actions would generate a total of 51, -136, -166, and -208 net person trip-ends, 78 (14 inbound and 64 outbound), 30 (15 inbound and 15 outbound), 50 (35 inbound and 15 outbound), and 51 (30 inbound and 21 outbound) net vehicle trip-ends; 73, 39, 60, and 65 net subway trip-ends; 18, 7, 12, and 13 net bus trip-ends; and -30, -167, -217, and -261 net pedestrian trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. Based on the results of trips generated by the Proposed Actions, as summarized in **Tables 3, and 4.** Level 2 screening analysis (trip assignment) would be required for vehicular traffic during Weekday AM, PM, and Saturday Midday peak hours, as described below.

LEVEL 2 SCREENING ASSESSMENTS

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

VEHICLE TRIPS

Vehicular Trip-Ends

The Proposed Actions would generate a total of 78 (14 inbound and 64 outbound), 30 (15 inbound and 15 outbound), 50 (35 inbound and 15 outbound), and 51 (30 inbound and 21 outbound) net vehicle trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday Peak hour periods, respectively. Auto trips are assigned to the proposed on-site parking garage accessed via both 79th Street and Sapphire Street. Taxi trips are assigned to the closest and most convenient pickup and drop-off spot on Linden Boulevard service road to the north of the Proposed Actions. No truck trips would be generated by the Proposed Actions according to Level 1 screening analysis, as is summarized in **Table 4**. Based on trip assignments, and as shown in **Figures 1 through 3** for Weekday AM, PM, and Saturday Midday peak hours**,** none of the intersections in the study area would experience 50 or more vehicle trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-end threshold, a detailed assessment of traffic impacts would not be required.

Parking

The Proposed Actions would provide 162 on-site accessory parking spaces on the Cellar and First Floor of the Proposed Building. The proposed off-street parking garage could be accessed via two curb cuts, one located on the west side of 79th Street and the other on the east side of Sapphire Street.

The Proposed Actions would screen for vehicular traffic as detailed above, and per the *CEQR Technical Manual*, no detailed parking assessment would be required.

TRANSIT

Bus Trip-Ends

The Proposed Actions would generate a total of 18, 7, 12, and 13 net bus trip ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour periods, respectively, as summarized in **Table 3.** Currently five bus lines serve the Project Area, including Bus Line B13, B15, B20 and BM5 which run eastbound/westbound along Linden Boulevard; and Bus line B14 which runs northbound/southbound along Eldert Lane and Drew Street. The Proposed Actions would generate less than 50 or more peak hour bus trip-ends in one direction along a bus route during any peak hour time period, and in accordance with the *CEQR Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of bus impacts.

Subway Trip-Ends

The Proposed Actions would generate a total of 73, 39, 60, and 65 net subway trip-ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Tables 3**. Currently there is no subway station located within a ¼ mile radius of the Project Area. The closest subway station to the Proposed Actions is the Grant Avenue station of Subway Line A, which is within 1 mile radius of the Proposed Actions. The

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

Pedestrian Trip-Ends

The Proposed Actions would generate a total of -30, -167, -217, and -261 net pedestrian trip-ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour periods, respectively. It is concluded that in the future with the Proposed Actions, none of the peak hour periods would experience 200 or more peak hour pedestrian trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold, a detailed assessment of pedestrian impacts would not be required.

CONCLUSION

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

10. AIR QUALITY

Ambient air quality, defined as pollutant levels in the surrounding environment to which the public has access, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. The pollutants of concern include six criteria pollutants and air toxics or toxic air pollutants known as noncriteria pollutants, which include hazardous air pollutants (HAPs) and many other pollutants. Under the City Environmental Review (CEQR), an air quality assessment determines both a proposed project's effects on ambient air quality and the quality of the ambient air at the project. The analysis framework followed the *2021 CEQR Technical Manual* methodology.

Project Description

The Project Area includes Queens Block 11384 Lot 1 in the Lindenwood neighborhood of Queens Community District 10. The Project Area is located within the block bounded by Linden Blvd to the north, 79th Street to the east, 149th Avenue to the south, and Sapphire Street to the west. The Proposed Actions would affect the applicant-controlled Projected Development Site 1 (Block 11384 Lot 1) and would not affect any other lots.

The Projected Development Site 1 is currently improved with a one-story 22,040 gross square feet (gsf) of local retail building, as well as an accessory parking lot with 36 spaces. Absent the Proposed Actions, it is assumed that Projected Development Site 1 within the Project Area would remain the same as the existing condition.

Under Future With-Action conditions, the Applicant-controlled Projected Development Site 1 would be developed with an eleven-story (the building would be a range of 8-11 stories) mixed-use building containing 242,960 gsf of residential space and 12,108 gsf of commercial space. The building would have a total height of 115 feet. The proposed project would include 154 parking spaces in the cellar and first-floor levels.

Air Quality Standards, Regulations, and Benchmarks

Criteria Pollutants

The US Environmental Protection Agency (EPA) has established national ambient air quality standards (NAAQS) for six of the most common air pollutants—known as "criteria" pollutants. The presence of these pollutants in ambient air is generally due to numerous diverse and widespread sources of emissions. The NAAQS primary standards are designed to protect public health with an adequate margin of safety. The NAAQS secondary standards are designed to protect the public welfare from adverse effects, including those related to effects on soils, water, vegetation, visibility, and other aspects. As required by the Clean Air Act, EPA

periodically conducts comprehensive reviews of the scientific literature on health and welfare effects associated with exposure to the criteria air pollutants. The NAAQS have been adopted as the ambient air quality standards for the State of New York.

Determination of significant impact related to criteria pollutants accounts for pollutants in the ambient air, including background concentrations. The New York State Department of Environmental Conservation (NYSDEC) measures air pollutant concentrations at more than 50 sites across the state. The primary NAAQS and background concentrations of the pollutants that a detailed analysis was required for from the nearest federally mandated monitoring station(s) are presented in **Table 10-1.**

Table 10-1: NAAQS and Background Concentration

Pollutant	Averaging Period	National and State Standards	Background Concentration (1)	Monitoring Station
CO	1-Hour	35 ppm	2.13 ppm	Queens College
	8-Hour	9 ppm	1.60 ppm	
$PM_{2.5}$	24-Hour	35 µg/m^3	17.7 µg/m^3	Queens College
	Annual	12 µg/m^3	7.0 µg/m^3	

Note:

1. NYSDEC. 2020. "New York State Ambient Air Quality Report for 2020." Accessed April 4, 2023. dec.ny.gov/docs/air_pdf/2020airqualreport.pdf.
2. µg/m^3 – microgram per meter cube; ppm – parts per million.

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

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

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

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

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

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

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

Non-Criteria Pollutants

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the NYSDEC has established guidelines for the maximum allowable concentration of noncriteria air contaminants, also referred to as toxic air contaminants, which are potentially toxic or carcinogenic pollutants. These include 188 hazardous air pollutants (HAPs), which the EPA also regulates. The maximum allowable guidelines set maximum 1-hour and annual averaging time concentrations published (February 12, 2021, publication) in the DAR-1 Annual and Short-term Guideline Concentration (AGC/SGC Table). In addition, DAR-1 also includes standards for pollutants cumulative risk assessment (acceptable residual risk).

NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic, or duration.

Mobile Source

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

Screening Assessment

Based on the projected traffic volumes (see Chapter "Transportation"), the maximum projected hourly incremental traffic volumes generated by the Proposed Actions would be 78, 30, 50, and 51 vehicle trips during the AM, midday, PM, and Saturday midday peak hours, respectively. Therefore, the projected traffic volumes would not exceed the carbon monoxide (CO) screening threshold defined in the 2021 *CEQR Technical Manual* (170 peak-hour vehicle trips at an intersection in the study area). However, the Proposed Actions would generate peak hour heavy-duty diesel vehicle (HDDV) traffic or its equivalent in vehicular emissions exceeding the 12 or more HDDV threshold for local roads with average daily traffic of fewer than 5,000 vehicles. Therefore, a detailed $PM_{2.5}$ analysis is required.

Heavy-duty diesel vehicles (HDDVs) screens were conducted for the project generated AM, PM, and Saturday Midday peak hour traffic increments (the peak hours that required a detailed transportation trip assignment (Level 2) analysis) at the most affected intersections. In the midday peak hour period, the low levels of project-generated traffic would likely not result in particulate matter (PM) exceeding the *de minimis* thresholds referenced in the *CEQR Technical Manual*. Using the New York City Department of Environmental Protection's ("DEP's") Equivalent Truck Calculation Matrix, the $PM_{2.5}$ vehicular emission screening threshold ranges from 12 to 23 HDDVs depending on the type of roadway. For analysis purposes, all autos were assumed to be LDGT1 class vehicles based on guidance from the DCP for similar projects. To account for both roadways in an intersection (HDDV screening assessment applies to a single roadway), based on DCP methodology for similar projects under CEQR, the ratios of the equivalent truck calculation to the HDDV threshold for each roadway were summed. If the aggregate ratio at an intersection (for all peak-hour periods) is less than 1, the intersection passes the HDDV screen. **Table 10-2** shows the AM, Midday, and Saturday Midday peak hours action-generated incremental traffic volumes by vehicle type at the most affected intersections and the *CEQR Technical Manual* Equivalent Truck Calculation Matrix results.

Table 10-2: Peak Period Incremental Vehicle Traffic by Vehicle Type and HDDVs Truck Calculation Matrix

Peak Hour	HDDV Threshold	Auto Per Hour	E-Truck	HDDV Threshold	Auto Per Hour	E-Truck	Combined E-Truck Ratio
	Intersection of 79th Street and 149th Avenue						
	79th Street			149th Street			
AM	12	3	1.45	12	28	13.50	**1.2**
PM	12	8	3.86	12	18	8.68	**1.01**
Sat Midday	12	7	3.37	12	19	9.16	**1.01**
	Intersection of 79th Street and Linden Blvd						
	79th Street			Linden Blvd			
AM	12	40	19.28	23	0	0.00	**1.55**
PM	12	10	4.82	23	0	0.00	0.39
Sat Midday	12	13	6.27	23	0	0.00	0.50

Table 10-2 shows that the HDDV equivalent truck to HDDV threshold aggregate ratio is greater than one (1) at both intersections. Therefore, both intersections fail the HDDV screen, and a detailed microscale analysis is required.

The proposed project would include 154 parking spaces in the cellar and first-floor levels accessible from 79th Street and Sapphire Street. Therefore, a detailed parking assessment is required.

Mobile Source Detailed Analysis

- **Intersection HDDVs Detailed Analysis**

Based on the HDDV screening (see **Table 10-2**), the Proposed Actions would most significantly affect the intersection of 79th Street and Linden Boulevard. Therefore, this intersection was selected for the detailed microscale analysis. Peak hour (AM, PM, and Saturday midday) project increment traffic volumes were prepared by the transportation analysis for this project.

Existing traffic volume and vehicle classification on 79th Street and Linden Boulevard were obtained from the New York State Department of Transportation (NYSDOT) datasets for Stations 054257 (northbound direction) and 020010, respectively. The 2021 *CEQR Technical Manual* annual background growth rate(s) was used to project the No-Action traffic from the existing traffic. The project-generated traffic was added to the No-Action traffic to project the With-Action traffic. A Tier 2 approach, using hourly traffic data, was used for the short-term analysis. The hourly project increment was prorated from the existing traffic count at the peak hour and the hourly traffic on the roadway. Annual average emission for each link (roadway segment) was derived from the annual average daily traffic (AADT) datasets.

The EPA's Mobile Vehicle Emission Simulator (MOVES3 version) was utilized to predict vehicular emissions. MOVES inputs of inspection/maintenance, fuel data, age distribution, and meteorology were obtained from NYSDEC. Queens County's projected vehicle population dataset, part of the MOVES3 database, was used to augment the vehicle classification in the NYSDOT database (e.g., intercity bus, transit bus, and school bus). The MOVES3 model was run for January (a winter month) and July (a summer month). Maximum emission was predicted during the summer month (similar mobile source analyses for projects under CEQR show that $PM_{2.5}$ emission peaks in the summer). In addition, $PM_{2.5}$ emissions of dust generated by vehicles traveling on paved roadways were added to estimate total particulate matter emissions for the short-term analysis (annual fugitive dust emission is negligible, based on similar types of analysis under CEQR). Fugitive dust emissions were calculated using the EPA's AP-42 manual methodology,[5] where a conservative assumption of "dry" road conditions (precipitation reduces silt loading) was used. Silt loading factors of 0.4 grams per meter square (g/m^2) for local roadways (79th Street) and 0.1 g/m^2 for arterial roadways (Linden Boulevard) were applied in the analysis based on values in the *CEQR Technical Manual*.

AERMOD was used to predict $PM_{2.5}$ concentration. Lakes Environmental, Inc. MPI version 22112 executable was used in the AERMOD detailed analysis. The MPI executable takes advantage of computers with multiple processors, reducing run time significantly. Lakes Environmental, Inc. adjusted the US EPA AERMOD source code and recompiled the model to parallelize the processing of receptors. The MPI executable (used in the analysis) modified EPA's AERMOD executable model version 22112. The AERMOD model incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources and simple and complex terrain. The model was run with the regulatory default option, where applicable. All analyses used five consecutive years of meteorological data (2017-2021) from the NYSDEC. Surface data used in

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

the analysis is from John F. Kennedy Airport, and upper air data is from Brookhaven station, New York. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the five years. Population in New York City, obtained from the DCP 2020 annual report, was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

AERMOD line area sources were used to model traffic emissions on the roadways. A vehicle height of 1.53 meters for cars and 4.0 meters for heavy-duty vehicles and the methodology outlined in the EPA's manual[6] were used to calculate the sources' dispersion parameters (release height and initial vertical dimension (also known as Sigma Z)). Receptors were placed in spaced intervals in the middle of the sidewalk for the short-term analysis and 15 meters from the curbside for the annual $PM_{2.5}$ analysis. Lakes Environmental, Inc.'s commercial application of AERMOD (AERMOD View) was used to spatially locate sources and receptors. Predicted concentrations were evaluated with the *de minimis* for mobile source. **Table 10-3** shows the dispersion analysis results for the $PM_{2.5}$ intersection analysis.

Table 10-3: $PM_{2.5}$ Dispersion Analysis Results - Monitor Street & Norman Avenue

Pollutant	No-Action Concentration (µg/m³)	With-Action Concentration (µg/m³)	Increment Concentration (µg/m³)	*de minimis* (µg/m³)
24-Hour $PM_{2.5}$		6.85	6.85	8.65 (1)
Annual $PM_{2.5}$	0.652	0.743	0.091	0.1

1. Background concentration of 17.7 µg/m³ was used to calculate the 24-hour *de minimis*.

Table 10-3 shows that the Proposed Actions' incremental $PM_{2.5}$ concentration would not exceed the *CEQR Technical Manual de minimis* criteria. Therefore, the Proposed Actions incremental traffic will not result in significant adverse air quality impact(s) at the local scale.

[6] EPA. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas – Appendix J. EPA-420-B-10-040, Transportation and Regional Programs Division, Office of Transportation and Air Quality, U. S. Environmental Protection Agency, December 2010.

- **Parking Facility Detailed Analysis**

The Proposed Actions would facilitate a 154-space parking garage on Projected Development Site 1. Based on the Site Plans provided by the building architect for this project, each floor level (cellar and first-floor levels) would accommodate 77 spaces, and the parking garage would be accessible from 79th Street and Sapphire Street. The garage would feature a ramp providing access between the floor levels. The garage dimensions were approximated from the site plans. While the Projected Development Site would remain in its existing condition in the No-Action scenario, accommodating 36 at-grade accessory parking spaces, the analysis assumed no parking facility in the No-Action condition (pollutant concentration from at-grade parking facilities usually has a minor contribution). The transportation analysis for this project derived the parking accumulation (ingress and egress).

Vehicles using the parking facility were assumed to be distributed evenly between the cellar and 1st-floor levels. Based on the *CEQR Technical Manual*, vehicles in the parking garage (incoming/outgoing vehicles) were assumed to travel half the width and two-thirds the length of the garage, and outgoing vehicles were assumed to idle for 1 minute before exiting the parking facility. Half the vehicles entering or exiting the garage were assumed to use the ramp between the floor levels. Emissions of vehicles traveling to or from the ramp and vehicle start (engine ignition) emissions were accounted for in the analysis, where all starting vehicles were assumed to soak for at least 720 minutes (as can be derived from the parking accumulation, it is impossible for all cars to soak for 8 hours or longer). The analysis included the on-street traffic on 79th Street.

The EPA's MOVES3 was utilized to predict vehicular emissions. The MOVES3 model and dataset are discussed in this chapter's Intersection HDDV Detailed Analysis section. However, a temperature of 45 degrees Fahrenheit in the garage was utilized in the MOVES3, based on the *CEQR Technical Manual*. The dust emission generated by vehicles traveling on 79th Street was added to estimate total particulate matter emissions for the short-term period dispersion analysis. The *CEQR Technical Manual Appendices* worksheet calculation was used to calculate the dispersion of a pollutant emitted at a rate of 1 gram per second. Sensitive receptors were placed at the adjacent sidewalk, on the sidewalk across the street, and 5 feet above the garage vent, simulating a window receptor. Pollutant concentrations at these nearby receptors were multiplied by the predicted emissions in the garage, yielding the predicted concentrations. A persistence factor of 0.9 was used to evaluate the 8-hour CO concentration, and persistence factors of 0.6 and 0.1 were used to assess the 24-hour and annual $PM_{2.5}$ concentrations, respectively. CO concentration corresponded with the maximum peak-hour outgoing traffic in the parking garage. Annual and 24-hour $PM_{2.5}$ concentrations corresponded with the daily average traffic and weekly average traffic in the parking garage.

Pollutant concentrations on the sidewalks resulting from the on-street traffic were modeled with AERMOD. The AERMOD modeling platform and its meteorology data are discussed in the Intersection HDDV Detailed Analysis section of this Chapter. A Tier 1 approach was used for the on-street 24-hour $PM_{2.5}$ contribution. The methodology discussed in this Chapter's

Intersection HDDV Detailed Analysis section was used to predict the annual $PM_{2.5}$ concentration.

Table 10-4 shows the Projected Development Site's predicted parking accumulation.

Table 10-4: Projected Development Site parking garage With-Actions condition

Time Ending	Weekday			Weekend		
	In	Out	Accumulation	In	Out	Accumulation
1:00 AM	6	2	221	15	4	228
2	3	2	222	2	1	229
3	1	1	223	5	1	232
4	1	1	223	13	6	240
5	1	3	221	2	1	241
6	2	10	213	1	1	241
7	5	37	180	2	10	233
8	12	71	122	20	21	232
9	25	71	76	19	26	226
10	14	37	53	22	43	205
11	17	26	44	47	45	206
12	68	70	42	60	63	203
1:00 PM	28	30	39	56	73	186
2	54	54	39	69	57	198
3	34	33	41	74	76	196
4	43	33	51	76	56	216
5	59	39	71	61	60	218
6	92	57	106	66	61	222
7	77	47	135	53	67	209
8	60	41	155	57	49	217
9	48	26	177	40	50	207
10	35	11	201	35	48	194
11	18	8	211	25	17	203
12	10	4	217	23	9	217

Table 10-5 shows the Projected Development Site parking garage dimensions and dispersion parameters applied in the analysis.

Table 10-5: Projected Development Site parking garage parameters

Parameter	No.
No. Floors (No.)	2
Area (gsf)	54,258
Garage length (ft)	213
Ramp length (ft)	70
Car per floor distribution	50%
Idle time (min/veh)	1
Vent height above grade/sidewalk (ft)	12
Receptor height above sidewalk (ft)	6
Receptor height above vent (ft)	5
Nearby receptor distance to vent (ft)	6
Opposite sidewalk receptor distance (ft)	55
Number of vents	3
Vent ventilation rate (ft^3/min-ft^2)	1
Wind velocity (m/s)	1

Table 10-6 shows the parking garage dispersion analysis results, where the concentration increments were evaluated with the *CEQR Technical Manual de minimis*.

Table 10-6: Parking facility dispersion analysis results

Pollutant	Concentration			*de minimis* Design Value	Concentration Unit
	Adjacent	Across the Street	Window Above		
8-Hour CO	1.50	1.11	1.37	3.70	ppm
24-Hour $PM_{2.5}$	5.84	5.26	5.65	8.15	$\mu g/m^3$
Annual $PM_{2.5}$	0.298	0.230	0.276	0.3	$\mu g/m^3$

Tables 10-6 show that the 8-hour CO and $PM_{2.5}$ concentrations do not exceed the *de minims*. Therefore, no significant adverse impact is predicted from emissions associated with the Proposed Actions parking facility with at least three (3) vents utilized in the parking garage.

Stationary Source

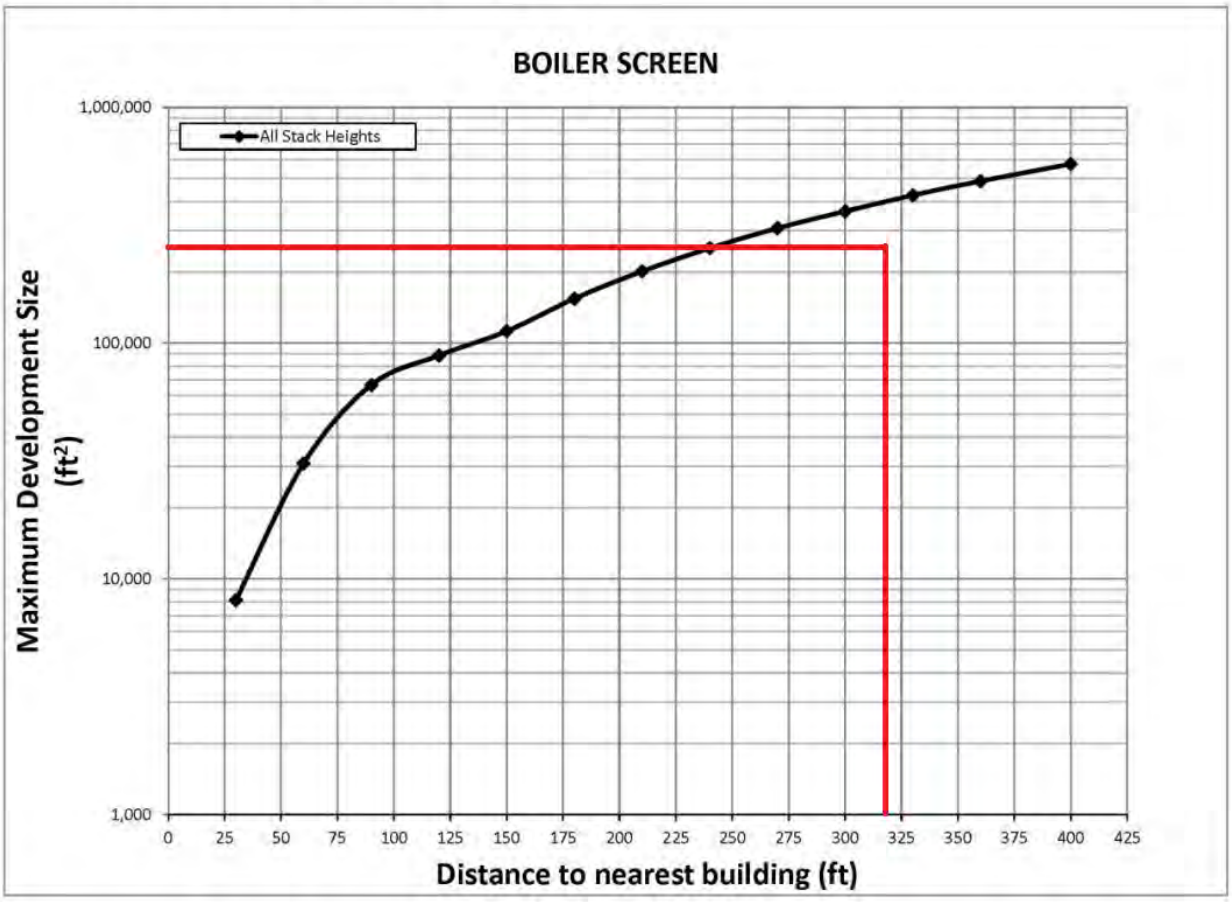
According to the *CEQR Technical Manual*, air quality analyses of stationary sources may be warranted if a project would (i) create new stationary sources of pollutants – such as emission stacks of industrial plants, hospitals, other large institutional uses, or even a building's boilers – that may affect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

Heating and Hot Water Systems

The heating/hot water, ventilation, and air conditioning (HVAC) systems analysis considered the potential for emissions from the HVAC system(s) of the Projected Development Site 1 to impact existing land uses (project-on-existing) significantly. Based on the *CEQR Technical Manual*, a preliminary screening assessment is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system(s) boiler emissions can be significant. A detailed analysis is required if the screening assessment fails.

The *CEQR Technical Manual* Figure 17-3 nomograph was used for the screening assessment. The nomograph depicts the size of the development versus the distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. Based on the methodology above, Projected Development Site 1 was analyzed as a 115-foot-tall building containing 242,960 gsf. The highest building within 400 feet of the Projected Development Site 1 is the 136-foot-tall building at 2858 Linden Blvd (Block 4496, Lot 7501). This building is located approximately 320 feet from the Projected Development Site 1. **Figure 10-1** shows the project-on-existing screening analysis.

Figure 10-1: Project on Existing – HVAC Screen



As seen in the screening analysis (see **Figure 10-1**), using the nomograph provided in the *CEQR Technical Manual*, the Projected Development Site 1 gsf would fall below the curve for a fossil fuel-fired HVAC system at a distance of 320 feet. Therefore, the Proposed Actions passes the HVAC screening analysis on existing land uses.

Existing Stationary Sources

Industrial Sources

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

the project. If warranted, an air dispersion analysis is conducted for any existing industrial source(s) in the study area.

Existing manufacturing uses with exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project were identified by reviewing the DEP online Clean Air Tracking System (CATS) database, the NYSDEC online database (DECinfo Locator[7]), and through a fieldwork study. The fieldwork study was conducted on April 4th, 2023.

The study area encompasses all or part of Blocks 11358, 11359, 11361, 11376, 11377, 11384, 11385, 11386, 11410, and 11411 in the Borough of Queens, and Blocks 4473, 4474, 4496, 4497, and 4519 in the Borough of Brooklyn. The study area includes properties along Linden Boulevard, Loring Avenue, 149th Avenue, Amber Street, Sapphire Street, 79th Street, and 80th Street. Land uses in the study area consist of a mix of residential uses, commercial/retail uses, professional office buildings, contractor storage yards, and vacant lots. There is one industrial manufacturing use identified in the study area.

The results of the study are as follows:

No facilities with DEP processing permits were found within the study area in a search of the DEP CATS database. There were no facilities identified in the study area that appear in the DECinfo Locator database. No potential sources of toxic air emissions were observed in the study area during the field survey. The one industrial manufacturing use, located at 137-25 Sapphire Street (Block 11384, Lot 45), is occupied by a contractor yard.

Major and Large Source

Per the 2021 *CEQR Technical Manual*, a project introducing new uses near a "major" source, "large" source, or odor-producing facility may result in potentially significant adverse air quality impact. The study area considers "major" sources, "large" sources, and odor-producing facilities within 1,000 feet of the proposed project. "Major" emission sources are identified as those located at Title V facilities; "large" emission sources are identified as sources located at facilities requiring an Air State Facility permit. Solid waste or medical waste incinerators, asphalt and concrete plants, power generating plants, large boilers of large public facilities, and large industrial facilities are typical types of facilities requiring these permits. Odor-producing facilities, such as solid waste management facilities and water pollution control plants (i.e., sewage treatment plants), are operations that have the potential to cause discomfort.

No existing "major" source, "large" source, or odor-producing facility was identified in the database (DECinfo Locator[7] online map application) within 1,000 feet of the proposed project. The nearest "major" or "large" source is the Title V facility Transcontinental Ultra Flex Inc. at

[7] New York State Department of Environmental Conservation. 2023. "DECinfo Locator." Accessed December 6, 2023. gisservices.dec.ny.gov/gis/dil/.

975 Essex Street and approximately a mile away. As such, no analysis is warranted, and no significant adverse air quality impact is predicted from these types of facilities.

Conclusion

Based on the analysis, conditions associated with the Proposed Actions require a detailed mobile source microscale analysis. The summary results of the analysis are as follows:

- The project-increment traffic associated with the Proposed Actions exceeds the HDDV screen, and therefore, a detailed mobile source microscale analysis was required. No significant adverse air quality impact was predicted in the HDDV detailed analysis. In addition, Project Development Site 1 would include a 154 spaces parking garage, which required a quantitative parking analysis. No significant adverse air quality impact was predicted in the parking garage detailed analysis, with the garage utilizing at least three (3) vents.

- No existing industrial source within 400 feet of the Project Area, "major"/" large" source or odor-producing facility within 1,000 feet of the Project Area were identified. Therefore, no significant adverse air quality impact is predicted from existing emission sources.

- No significant impact was predicted in the HVAC analysis with the Projected Development Site 1 HVAC stack(s) located at least 118 feet above grade.

11. NOISE

Introduction

This Noise Analysis was conducted to assess the potential for adverse noise impacts related to the proposed rezoning of the Project Site – 78-08 Linden Boulevard, Queens, New York (Block 11384, Lot 01) The Project Site is located within Queens Community District 10 is a rectangular-shaped lot located at the end of the block along Linden Boulevard between Sapphire Street and 79th Street.

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

Framework of Noise Analysis

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

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

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz) and are most sensitive to frequencies in the 1,000- to 5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common frequency weightings used are the A- and weightings. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighting is the most commonly used for environmental measurements, and sound levels measured using this weighting are denoted as dBA. The letter "A" indicates that the sound has been filtered to reduce the strength of very low and very high-frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high-frequency bands are significantly affected by C-weighting. **Table 11-1** notes the decibel levels of common noise sources.

Table 11-1: Noise Levels of Common Sources[8]

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

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

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

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

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

[8] Source: *2021 CEQR Technical Manual*

- L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity level. High noise levels during a measurement period will have a greater effect on the L_{eq} than low noise levels. L_{eq} has an advantage over other descriptors because L_{eq} values from various noise sources can be added and subtracted to determine cumulative noise levels.
- $L_{eq(24)}$ is the continuous equivalent sound level over a 24-hour time period.
- Lmax is the highest SPL measured during a given period of time. It is useful in evaluating Leqs for time periods that have an especially wide range of noise levels.
- L_{dn} is the day-night equivalent sound level, defined as a 24-hour continuous Leq with a 10 dB adjustment added to all hourly noise levels recorded between the hours of 10 PM and 7 AM. This 10 dB addition accounts for the extra sensitivity people have to noise during typical sleeping hours.
- DNL is the annual average day-night average sound level. Aircraft noise around airports is usually mapped out in terms of DNL, which are normally depicted as noise contours on a map.

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

Noise Standards and Guidelines

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the CEQR noise exposure guidelines for exterior noise levels. As shown in **Table 11-2** below, noise standards classify noise exposure into four categories based on noise level limits and land use, for vehicular traffic, rail, and aircraft noise sources: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable, Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior L_{10} noise levels of 45 dB(A) or below or interior Ldn noise levels of 40 dB(A) or below depending on the noise source, as shown below in **Table 11-3**.

Table 11-1: Noise Exposure Guidelines for Use in City Environmental Impact Review

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

Notes:

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

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

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

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

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

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

Table 11-3: Attenuation Values to Achieve Acceptable Interior Noise Levels

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

Note:

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

Initial Impact Screening

Stationary Sources

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

ventilating and air-conditioning units, loudspeakers, new loading docks, and other noise associated with building structures may also be considered in a stationary source noise analysis. Impacts may occur when a stationary noise source is near a sensitive receptor and is unenclosed.

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

Mobile Sources

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

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

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

Noise Monitoring Results

Measurement Location and Equipment

Because the predominant noise source in the area of the proposed project is vehicular traffic, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day for 20-minute periods. Noise Monitoring Location One (1) was located at the project frontage along Sapphire Street, Noise Monitoring Location Two (2) was located at the project frontage along Linden Boulevard, and Noise Monitoring Location Three

(3) was located at the Project frontage along 79th Street. Noise monitoring locations are shown in **Figure 11-1** to **Figure 11-4** below.

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

Figure 11-1: Noise Monitoring Locations



Figure 11-2: Location 1 – Noise Monitor Location Photo



Figure 11-3: Location 2 – Noise Monitor Location Photo



Figure 11-4: Location 3 – Noise Monitor Location Photo



Existing Conditions

Monitoring was conducted during typical midweek conditions, on Tuesday April 16, 2024. The weather was dry and wind speeds were moderate during all monitoring periods. **Table 11-4** through **Table 11-5** below contain the results for the measurements taken at Location 1 through Location 3.

Table 11-4: Noise Levels in dBA at Location 1

Tuesday, April 16, 2024			
Time	**7:35 am – 7:55 am**	**12:00 pm – 12:20 pm**	**4:32 pm – 4:52 pm**
L_{max}	77.0	79.5	80.7
L_{10}	61.5	60.0	62.5
L_{eq}	59.0	58.5	60.0
L_{50}	57.0	55.5	55.5
L_{90}	54.0	53.0	53.0
L_{min}	51.7	51.1	51.0

Table 11-5: Noise Levels in dBA at Location 2

Tuesday, April 16, 2024			
Time	**7:57 am – 8:17 am**	**12:22 pm – 12:42 pm**	**4:54 pm – 5:14 pm**
L_{max}	90.2	93.3	90.4
L_{10}	74.0	75.5	72.5
L_{eq}	71.7	72.5	69.7
L_{50}	68.0	67.0	66.5
L_{90}	63.0	62.0	59.0
L_{min}	58.4	56.0	54.2

Table 11-6: Noise Levels in dBA at Location 3

Tuesday, April 16, 2024			
Time	**8:18 am – 8:38 am**	**12:43 pm – 1:03 pm**	**5:15 pm – 5:35 pm**
L_{max}	85.3	82.8	83.0
L_{10}	68.0	66.0	64.5
L_{eq}	64.8	62.4	62.5
L_{50}	61.0	57.0	59.0
L_{90}	56.0	53.0	53.0
L_{min}	51.8	49.6	47.5

The traffic volumes (vehicle counts) and vehicle classifications collected during peak vehicular travel periods [morning (AM), noon (MD), and evening (PM)] concurrent with noise monitoring at Location 1 and Location 2 are shown below in **Table 1-7** through **Table 1-9.**

Table 11-7: Traffic Volumes and Vehicle Classifications Noise Location 1

	7:35 am – 7:55 am	**12:00 pm – 12:20 pm**	**4:32 pm – 4:52 pm**
Car/ Taxi	1	0	11
Van/Light Truck/SUV	1	0	13
Medium Truck	0	0	1
Heavy Truck	0	0	0
Bus	0	0	0

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

	7:57 am – 8:17 am	**12:22 pm – 12:42 pm**	**4:54 pm – 5:14 pm**
Car/ Taxi	14	19	26
Van/Light Truck/SUV	18	36	36
Medium Truck	1	2	5
Heavy Truck	2	1	0
Bus	4	0	4

Table 11-9: Traffic Volumes and Vehicle Classifications Noise Location 2

	8:18 am – 8:38 am	12:43 pm – 1:03 pm	5:15 pm – 5:35 pm
Car/ Taxi	13	15	11
Van/Light Truck/SUV	28	13	14
Medium Truck	4	1	0
Heavy Truck	0	0	0
Bus	3	1	0

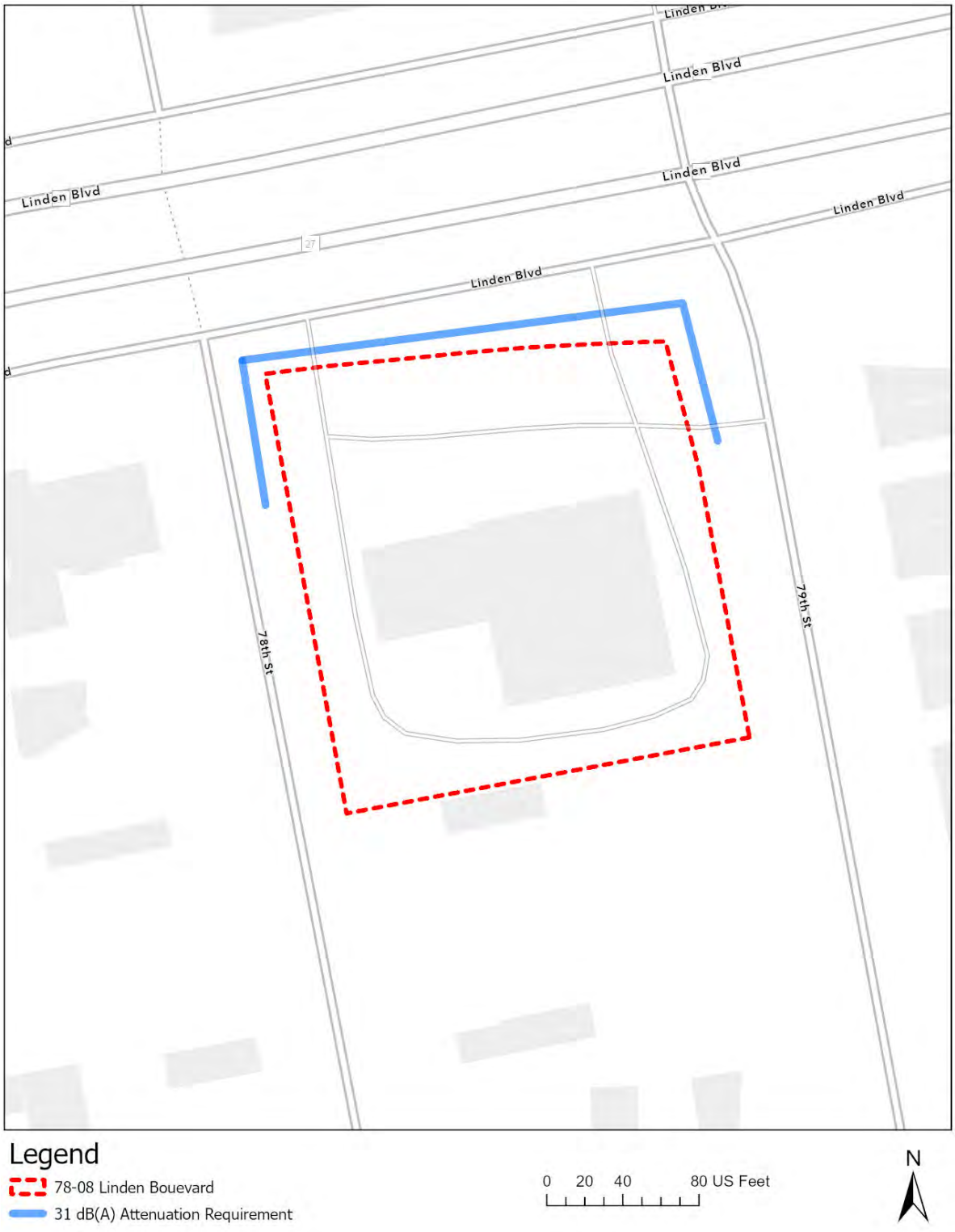
Conclusion

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

The highest recorded L_{10} at Location 1 was 62.5 dB(A) during the evening period. The highest recorded L_{10} at Location 2 was 75.5 dB(A) during the midday period. The highest recorded L_{10} at Location 3 was 68.0 dB(A) during the morning period.

Based on the noise readings, a window wall attenuation of 31 dB(A) would be required on facades facing Linden Boulevard and on the eastern and western facades for 50 feet from Linden Boulevard. No other facades would require attenuation. With this level of attenuation, there would be no significant adverse impacts related to noise. **Figure 11-4** below shows the attenuation requirements.

Figure 1-4: Attenuation Requirements



**Attenuation Requirements are for Residential/Community Facilities. Commercial uses can take a 5 dB(A) reduction.*

12. NEIGHBORHOOD CHARACTER

The project would not have the potential to result in any significant adverse impacts to the following analysis areas related to neighborhood character as further discussed below.

A. Land Use, Zoning, and Public Policy – As stated in the conclusion to this section above, the Proposed Actions would not result in significant adverse impacts related to land use, zoning or public policy. Although the Land Use, Zoning, and Public Policy technical area of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the project does not have the potential to result in any significant adverse Land Use, Zoning, or Public Policy impacts as further discussed below.

The Project Area and the surrounding 400-foot radius project study area consist of a mixture of commercial uses (mainly shopping centers and ground floor retail and office uses in residential buildings), residential uses (multi-family, mixed residential and commercial, and one-, two-, and three-family homes), open space, parking lots, and vacant parcels. As such, the project study area does not have a unified neighborhood character. The introduction of the proposed mixed-use residential and commercial development on Projected Development Site 1 would fit in well with the eclectic mix of uses in the surrounding project study area. The projected developments could alter existing development patterns in the future, especially of the underutilized parking and vacant parcels, by encouraging the development of new residential and mixed-use projects. However, this would be in compliance with City policies to encourage the development of new housing, especially affordable housing, in underutilized areas of the City.

The proposed Zoning Map and Zoning Text Amendments and the cancelation of a restrictive declaration in connection with a prior rezoning action would only apply to the Project Area and would not affect lots beyond this area. The Applicant believes that the Proposed Actions would not result in any significant impacts to zoning patterns in the area since the proposed R7D and R6A districts will allow a moderate increase in residential density at the intersection of wide streets near public transportation with building heights that are consistent with 8- and 12-story mixed-use buildings two blocks west of the Project Area. Allowable bulk in the two proposed residential districts fits within the context of taller buildings generally located to the west of the Project Area while being responsive to lower density buildings located to the east of the Project Area. The C2-4 overlay will provide opportunities for a wide range of local services along an active roadway that are similar to those in C2-4 and C2-2 overlays along Linden Boulevard to the west and north of the Project Area.

No impact to public policies would occur as a result of the Proposed Actions. The Applicant believes that the Proposed Actions would be an appropriate development in the Project Area and would be a positive contribution to Queens Community District 10 and to the surrounding neighborhood. The proposed project would meet the City's public policy goals as

well as similar State and national public policy goals related to the provision of affordable housing.

B. Socioeconomic Conditions – As stated in the conclusion to this section above, the Proposed Actions would not result in significant adverse impacts related to socioeconomic conditions. The Proposed Actions would not result in the direct or indirect displacement of residences or businesses in excess of the *CEQR Technical Manual* thresholds.

C. Community Facilities – As stated in the conclusion to this section above, the With-Action Scenario would not physically displace or alter a community facility or cause a change that could affect the service delivery of a community facility. As such, there would be no direct effects on community facilities and services.

A preliminary analysis of the indirect effects of the With-Action Scenario found that the applicable thresholds described in the *CEQR Technical Manual* for libraries, childcare, police/fire services, and health care centers were not exceeded. Therefore, detailed analyses were not required. The preliminary analysis of the indirect effects of the With-Action Scenario relative to public schools found that a detailed analysis was required. These detailed analyses concluded that there would be no significant adverse impact to school facilities in the With-Action Scenario.

D. Open Space - As stated in the conclusion to this section above, the Proposed Actions would not result in significant adverse impacts related to open space. The Proposed Actions would not result in direct impacts on any open space resources and relative to indirect open space impacts, would result in a negligible decrease in the open space ratio in the future with action condition.

E. Historic and Cultural Resources – As stated in the conclusion of this section above, the Proposed Actions would not result in a significant adverse impact to Historic or Cultural Resources. This is confirmed by the Landmarks Preservation Commissions letter included in the Historic and Cultural Resources **Appendix C**.

F. Urban Design and Visual Resources - As stated in the conclusion to this section above, the Proposed Actions would not result in a significant adverse impact to urban design and visual resources. Although the Urban Design and Visual Resources technical area of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the project does not have the potential to result in any significant adverse Urban Design and Visual Resources impacts as further discussed below.

The Proposed Actions would result in the development of residential and commercial uses and accessory parking on one Projected Development Site located in an area primarily characterized by a mixture of residential and commercial uses, open space, parking, and vacant land.

The Applicant believes that the Proposed Actions would result in new development that would be compatible with the urban design and visual character of other recent developments

in the surrounding area. The proposed R7D and R6A districts will allow a moderate increase in residential density at the intersection of wide streets near public transportation with building heights that are consistent with 8- and 12-story mixed-use buildings two blocks west of the Project Area. Allowable bulk in the two proposed residential districts fits within the context of taller buildings generally located to the west of the Project Area while being responsive to lower density buildings located to the east of the Project Area. The C2-4 overlay will provide opportunities for a wide range of local services along an active roadway that are similar to those in C2-4 and C2-2 overlays along Linden Boulevard to the west and north of the Project Area.

The With-Action Development Scenario would not result in any significant impacts to Gemini Fields, which is the only visual resource located in proximity to the Project Area located approximately 340 feet east of the Project Area at its closest point. The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. The Applicant believes that the development that would be facilitated by the Proposed Actions would represent a visual improvement to the area and would result in new development on the underdeveloped Projected Development Site that is believed to be more compatible with the urban design and visual character of recent new developments in the surrounding area. A detailed urban design analysis would not be required.

G. Shadows - As stated in the conclusion to this section above, the Proposed Actions would not result in any significant adverse shadows impacts. The building anticipated to be constructed on Projected Development Site 1 would not cast any significant adverse new shadows on shadow sensitive open space or historic resources. Therefore, the Proposed Actions would not result in any significant adverse shadows impacts.

H. Transportation - As discussed in this section above, the Proposed Actions would generate less than 50-bus trip-ends per direction during any peak hour time period, less than 200 subway trip-ends per subway station during the AM and PM peak hour time periods, and less than 200 pedestrian trip-ends during Weekday AM, Midday, PM, and Saturday Midday peak hour time periods. Therefore, in accordance with the *CEQR Technical Manual* criteria, the Proposed Actions would not result in any conditions that would typically trigger the need for a detailed assessment of bus, subway, or pedestrian impacts and no significant adverse impacts to mass transit (bus and subway) and pedestrian conditions would be anticipated. However, the Proposed Actions would add vehicle trips to the study area where one intersection in the study area would experience 50 or more peak hour vehicle trip-ends. A detailed assessment of vehicular traffic impact analysis and detailed parking availability in the Project Area is included in the transportation section. Based on this, the Proposed Actions would not result in any significant adverse transportation impacts.

I. Noise - As discussed in the noise section above, the Proposed Actions would not result in a doubling of Passenger Car Equivalent (PCE) noise levels along Linden Boulevard, and no mobile source impacts from the proposed development would be expected to occur. However,

the Proposed Actions required a detailed noise analysis due to ambient noise levels in the vicinity of the Project Area that could have a potentially adverse impact on future residents of the Projected Development Site. Based on a noise analysis conducted for a nearby site, the following E-designation is proposed for the Project Area/Projected Development Site 1.

> 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 for the windows along the Sapphire Street and 79th Street facades and a minimum of 33 dBA window/wall attenuation for windows along the Linden Boulevard façade to maintain an interior noise level of 45 dBA. To maintain a closed window condition, an alternate means of ventilation must also be provided.

With the implementation of the (E) designation, no significant adverse impacts related to noise would occur. In addition, no potential significant adverse stationary source noise impacts would be generated by the proposed project on the surrounding area. Therefore, the Proposed Actions would not result in any potentially significant adverse stationary or mobile source noise impacts.

13. CONSTRUCTION

Introduction

A preliminary construction analysis may be required because future development facilitated by the Proposed Actions could result in the following.

- Construction activities lasting longer than two years, and
- Construction activities would occur along an arterial or major thoroughfare.

Proposed Construction Schedule

Construction would occur on one Development Site, the Applicant-owned Site, as further described below.

It is assumed that the Proposed Actions would be approved by mid-2024 with a project build year of 2027. The project would be developed in a single phase. The estimated construction period is 23 months from mid-2024 until mid-2026.

See attached **Construction Timeline.**

Proposed Construction Activities

The site is a corner lot, bounded on three sides by streets: Sapphire Street on the west side, Linden Boulevard on the north side and 79th Street on the east side. Sapphire Street is 60 feet wide, two lane two-way street with parking access for the Lindenwood Diner on the adjacent corner.

The construction is estimated to last 23 months.

To prevent disrupting the parking at the business, Sapphire Street will be used exclusively for South bound traffic of arriving delivery trucks and construction equipment traveling East bound on Linden Boulevard for access to 79th Street. Linden Boulevard is 170 feet wide, six lane two-way arterial roadway with a service lane in each direction. The service lane is immediately adjacent to the site with a width large enough for large or multiple deliveries to occur and in an orderly manner. 79th Street is 80 feet wide, two lane one-way street with residences located along the East side of the entire block. To prevent disrupting the residences, 79th Street will be used exclusively for small load deliveries and North bound traffic of departing delivery trucks and construction equipment to travel either East or West bound on Linden Boulevard. While not expected, if curbside lane or sidewalk closures were necessary, they would be undertaken in accordance with detailed New York City Department

of Transportation Office of Construction Mitigation and Coordination-approved Maintenance and Protection of Traffic (MPT) Plans.

Although there are no schools, hospitals or other sensitive land uses in the area, the Proposed Action would be required to comply with applicable control measures for construction noise. Construction noise is regulated by the New York City Noise Control Code and by noise emission standards for construction equipment issued by the U.S. Environmental Protection Agency. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise standards; that, except under exceptional circumstances, construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction material be handled and transported in such a manner as to not create unnecessary noise.

Most of the construction-period worker and truck trips are expected to occur during non-peak hours; typical construction activities in New York City begin no earlier than 7 AM during the week, and workers typically arrive and begin to prepare work areas between 6 and 7 AM. The standard weekday construction workday ends by 3:30 PM with an occasional extended shift until 6 PM. In addition, these trips are not expected to be substantial enough to adversely affect area traffic conditions.

The site is 47,960 square feet and is approximately 235 feet x 213 feet. With this large lot size, there are ample areas for housing materials, tools, or other items during construction, specifically the rear court where there is to be no construction. There is also the opportunity to use multiple cranes for superstructure construction due to the available space.

The proposed building stands at its highest at 11-stories along Linden Boulevard, while gradually staggering down along 79th Street and Sapphire Street to reach as low as 4-stories. Since the proposal aims to be considerate of height limitations, there is an emphasis on the horizontality of the project rather than verticality, allowing for a more efficient progression of trades along the lower floors with larger footprints. Additionally, the court could be used to utilize two low-rise tower cranes to expedite the completion of the Superstructure along Sapphire Street and 79th Street.

The proposal is considerate of the neighboring property at the southernmost lot line by using an 8-foot offset from the lot line, providing sufficient space for shoring the be installed without disturbing the existing structure.

The construction will be of concrete plank and steel. The benefits of this method include the elimination of structural on-site casting/forming and reduced wet concrete, reducing construction time significantly for pouring and curing. Additionally, the planks are light-weight allowing for quick deliveries and able to be stored on-site as opposed to needing mixers to constantly be on-hand. The repetitiveness of the typical floor plates allows for us to assume that fabrication and production will be delivered in a timely manner and be done systematically.

The area of cellars and deep excavation will be limited and able to be modified to minimize the need for dewatering measures. In the event of the need for a system to be implemented, a proper permit application for temporary discharge of groundwater in the city sewer system will be filed in accordance with DEP regulations. Level of groundwater to be determined at time of borings report.

A majority of the building façade will be of brick. The portions that will be panel are to be fabricated off-site and delivered along Linden Boulevard due to its ability to accommodate a large flatbed.

The typical floor plates for this proposal range from 13,000-30,000 square feet. This allows for orderly site logistics. Multiple trade teams can work concurrently rather than separately, allowing for an efficient flow of work.

With the majority first floor and cellar being dedicated to parking and commercial use, the finishes applied to such spaces will typically be durable and inexpensive, allowing for them to be refurbished and able to be used for material lay-down or site offices during the construction period prior to being installed in the later months of the project timeline.

Conclusion

Like all construction projects, work at the project site would result in temporary disruptions to the surrounding community and occasional noise and dust. Overall, these activities are typical of construction projects in urban areas, the effects would be temporary, and they are not considered significant.

Appendix A
City of Yes for Housing Opportunity "CHO"

TECHNICAL MEMORANDUM
78-08 Linden Blvd Rezoning
April 2024

INTRODUCTION

Introduction

The applicant, Linden Canyon, LLC, (the "Applicant") seeks a Zoning Map Amendment to rezone Block 11384, Lot 1, (the "Project Area" and "Projected Development Site 1") from R4/C1-2 to R7D/C2-4 and R6A. The R7D and C2-4 overlay would cover the northern portion of the lot and the R6A district would be mapped on the southern portion of the lot. The Proposed Actions also include a Zoning Text Amendment to modify Zoning Resolution (ZR) Section 23-933, Appendix F to designate the newly mapped R7D/C2-4 and R6A districts as a Mandatory Inclusionary Housing (MIH) designated area. Finally, the Proposed Actions include the cancelation of a restrictive declaration recorded against the Project Area in connection with a prior rezoning action. If approved, the Proposed Actions would facilitate the construction of mixed-use building containing residential and commercial (local retail) uses (the "Proposed Development") at 78-08 Linden Boulevard in the Lindenwood neighborhood of Queens Community District 10 located within an R4/C1-2 zoning district.

The NYC Department of City Planning is proposing a citywide zoning text amendment, the City of Yes for Housing Opportunity "CHO" (CEQR No. 24DCP033Y) to expand opportunities for housing within all zoning districts, and across all 59 of the City's Community Districts. These changes to the City's Zoning Resolution would enable more housing and a wider variety of housing types in every neighborhood, from the lowest-density districts to the highest, to address the housing shortage and high cost of housing in New York City. It is anticipated that this proposed zoning text amendment would be referred into public review in Spring 2024.

It has been determined that this project may be affected by the proposals included in the text amendment, therefore a preliminary assessment of the effect of CHO on the Projected Development Site.

Existing Conditions

Projected Development Site 1 consists of 47,960 square foot (Block 11384, Lot 1) and is an irregularly shaped lot with 210 feet of frontage on Linden Boulevard, 235 feet of frontage on Sapphire Street, and 213 feet of frontage on 79th Street. The Project Area is situated at the intersection of Linden Boulevard, 79th Street and South Conduit Avenue. It is currently developed with a one-story, approximately 22,040 gsf (21,379 zoning square feet and 0.45 FAR) retail building containing a pharmacy, a dry cleaner, a liquor store, and a small restaurant, as well as approximately 36 at-grade accessory parking spaces.

Future No-Action Condition

Absent the Proposed Actions, Projected Development Site would remain in its existing conditions.

Proposed Development

The Proposed Actions coupled the proposed zoning text amendment (CHO) would change the Proposed Development. The R7D would not allow for any additional FAR increase for inclusionary housing but does allow a 10 foot maximum height increase. The R6A district allows for an additional .30 FAR increase for inclusionary housing and allows a 10 foot maximum height increase. See **Table 1**.

Table 1: Additional FAR with City of Yes Housing Opportunity

Zoning	Zoning Area	Max FAR	Permitted FAR	+CHO FAR	Max Height	+CHO Height
R7D	46.66%	5.6	2.61	2.61 (+0)	115'	125' (+10)
R6A	53.34%	3.6	1.9	2.22 (+0.3)	85'	95' (+10)

This would increase the maximum square footage permitted in the R6A district by additional 14,388 sf, bringing the total residential floor area to 89,000 (81,354 zsf with and FAR of 2.2), increasing the number of dwelling units by 21 for a total of 288, 86 of which would be affordable housing. The number of new residents as a result of the Proposed Actions plus CHO would be 865, an increase of 63 new residents. The required number of parking spaces would be 139, an increase in 17 spaces. The proposed number of parking spaces provided is 154. See **Table 2.**

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

Land Use	Existing	No-Action	With-Action	Increment
Projected Development Site 1				
Residential	--	--	288 du (257,348 gsf)	+288 du (+257,348 gsf)
Commercial	22,040 gsf	22,040 gsf	12,108 gsf	-9,932 gsf
Residents	0	0	865	+865
Accessory Parking	36	36	154	+118

LAND USE, ZONING, AND PUBLIC POLICY

Land Use

The Project Area and Projected Development Site 1 are coterminous and consist of approximately 40% of the area of Block 11384 in the Lindenwood neighborhood of Queens bounded by Linden Boulevard, 79th Street, Loring Avenue, and Sapphire Street. The Project Area is located immediately east of the Brooklyn Borough boundary line in the Lindenwood neighborhood of Queens, within Community Board 10. It is identified on the New York City Taz Maps as Block 11384, Lot 1 and contains approximately 47,960 square feet (sf) with 40.5 feet of frontage along Avenue S and 100 feet of frontage along East 8th Street.

The Premises is currently developed with an existing The 47,960 square foot Project Area/Projected Development Site 1 is developed with a one-story, approximately 22,040 gsf retail building containing a pharmacy, a dry cleaner, a liquor store, and a small restaurant, as well as approximately 36 at-grade accessory parking spaces.

In the future with the Proposed Actions, the land use would change from commercial to mixed-use commercial/residential. The application of the CHO guidelines to this scenario would not change the land use. This would not alter the conclusion that no potentially significant adverse impacts related to land use are expected to occur as a result of the Proposed Actions. Therefore, further analysis of land use is not warranted.

Zoning

The Proposed Actions coupled the proposed zoning text amendment (CHO) would change the Proposed Development. The R7D would not allow for any additional FAR increase for inclusionary housing but does allow a 10 foot maximum height increase. The R6A district allows for an additional .30 FAR increase for inclusionary housing and allows a 10 foot maximum height increase.

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

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

Public Policy

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

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

SOCIOECONEMIC CONDITIONS

As discussed in the EAS, there would be no potential significant adverse impacts to socioeconomic conditions due to the Proposed Actions. The proposed project would not lead to direct or indirect residential or business displacement more than the *CEQR Technical Manual* thresholds. The application of the CHO guidelines would add 63 new resident and neither add nor reduce commercial use. As such, there would not be an introduction of a substantial new population with incomes higher than the area average nor would there any changes that would adversely impact a specific industry.

Therefore, no further assessment of socioeconomic conditions is required.

COMMUNITY FACILITIES AND SERVICES

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

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

The preliminary analysis of the indirect effects of the With-Action Scenario relative to public schools found that with the addition of 46 primary school students a detailed analysis was not required. The primary school are already at 100 percent capacity, therefore an addition of 100 student or more would require a further analysis.

The application of the CHO guidelines would add 63 new residents resulting in approximately two additional primary school students. A total of 48 new primary students would be below the CEQR threshold of 100 students. Therefore, there would be no significant adverse impact to school facilities in the With-Action Scenario.

OPEN SPACE

As noted in the EAS, due to the absence of direct impacts on any open space resource and the minimal decrease in the future with the action open space ratio, as well as the provision of additional private open space to be provided on Projected Development Site 1 under the Proposed it is anticipated that the project would not have any potentially significant adverse open space impacts and further assessment is not warranted.

The application of the CHO guidelines would not have a direct impact on any open space resources. It would add 63 additional residents. The open space ratio would decrease from 2.257 to 2.251. An open space ration of 2.251 for the With-Action plus CHO as compared to the No-Action 2.322 would represent a decrease of 0.071 acres or 3.1 percent decrease.

Therefore, the community would continue to have an above average amount of open space compared to the City as a whole and would continue to be close to meeting DCP's open space planning goal. The project would not have any potentially significant adverse open space impacts and further assessment is not warranted.

SHADOWS

The application of the CHO guidelines would increase the proposed building height by 10 feet, resulting in the need for a shadow screening analysis.

As discussed in the EAS, the proposed building is anticipated to be constructed on Projected Development Site 1 would not cast any significant adverse new shadows on shadow sensitive open space or historic resources. Therefore, the Proposed Actions would not result in any significant adverse shadows impacts, and no further assessment is needed for the project.

Preliminary Screening Assessment

Tier 1 Screening Assessment

Gemini Fields, discussed in detail in the EAS is the one shadow sensitive open space resource in the vicinity of Projected Development Site 1 as shown on the Tier 1 Screening Assessment diagram (**Shadow Appendix**).

There are no historic resources in the vicinity of the Projected Development Site.

The longest shadows radius is calculated as 4.3 times the maximum proposed building height including rooftop bulkheads, as measured from curb level. The longest shadows cast by the two building heights on the Projected Development Site are as follows:

- Building at 11 stories: mechanical bulkhead roof: 120'-0" x 4.3 = 516.0'

- Building at 14 stories: mechanical bulkhead roof: 150'-0" x 4.3 = 645.0'

The longest shadow of 645.0 feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum building height of 150.0 feet including mechanical bulkheads on the roof of the 14-story section of the building.

Due to the proximity of the Projected Development Site to the Gemini Fields open space resource, potential shadow impacts could occur from the Proposed Actions.

Tier 2 Screening Assessment

The attached Figure 2, Tier 2 Screening Assessment diagram shows the area south of the Projected Development Site that cannot be shaded by the proposed project. As illustrated on the figure, no portion of Gemini Fields is located within the area that cannot be shaded by the project. Therefore, the entire area of Gemini Fields located within the maximum shadow radius could potentially experience new shadows from the project and further assessment is required.

Tier 3 Screening Assessment

A Tier 3 screening assessment has been performed as a portion of Gemini Fields lies within the area that could be shaded by the proposed project.

As shown on the attached Figures 3 through 6, Tier 3 Screening Assessment diagrams, shadows from the development could reach the northern portion of Gemini Fields on the December 21 analysis day and the southern portion of Gemini Fields on the March 21 analysis day. No new shadows would reach Gemini Fields on the May 6 or June 21 analysis days.

Conclusion

As detailed in the EAS, the incremental shadow coverage on Gemini Fields would not be considered significant on any of the analysis days. The proposed building anticipated to be constructed on Projected Development Site 1 would not cast any significant adverse new shadows on shadow sensitive open space or historic resources. Therefore, the Proposed Actions would not result in any significant adverse shadows impacts, and no further assessment is needed for the project.

HISTORIC AND CULTURAL RESOURCES

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

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

URBAN DESIGN AND VISUAL RESOURCES

According to the EAS, the With-Action Development Scenario would not result in any significant impacts to Gemini Fields, which is the only visual resource located in proximity to the Project Area located approximately 340 feet east of the Project Area at its closest point. The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. The Applicant believes that the development that would be facilitated by the rezoning would represent a visual improvement to the area and would result in new development on the underdeveloped Projected Development Site that is believed to be more compatible with the urban design and visual character of recent new developments in the surrounding area (**See Urban Design Appendix**).

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

HAZARDOUS MATERIALS

As stated in the EAS a Phase I and Phase II Environmental Site Investigation was conducted on the site and following the recommendations of the RAP/CHASP would prevent any significant impacts due to hazardous materials because of the Proposed Actions.

The application of the CHO guidelines would add residents and additional height but would not require any additional ground disturbance. Based on this and the previously conducted site investigations, no further assessment is warranted.

TRANSPORTATION

Pursuant to the guidance of the *2021 City Environmental Quality Review (CEQR) Technical Manual*, this chapter examines the potential effects of the application of the CHO guidelines of the Proposed Actions on the Project Area's transportation systems. Specifically, it compares conditions in the future with the Proposed Actions (the With-Action condition) against conditions in the future without the Proposed Actions (the No-Action Condition). Based on the proposed mixed-use development increment trip generation (Level 1) and trip assignment (Level 2) screening analysis results, it was determined that the application of the CHO guidelines would not result in significant adverse impacts on transportation, as detailed and summarized below.

PROJECT AREA

The entire Proposed Rezoning Area would affect one tax and zoning lot (Block 11384, Lot 1) in the Lindenwood neighborhood of Queens, Community District 10. It is bounded by Linden Boulevard, a two-way eastbound/westbound roadway to the north; Sapphire Street, a one-way southbound roadway to the west; 149th Avenue, a one-way eastbound roadway to the south; and 79th Street, a one-way northbound roadway to the east.

PROJECTED DEVELOPMENT SITES

The transportation analysis is based on one (1) Projected Development Site, as described below:

- Block 11384, Lot 1: Will be developed as Projected Development Site 1 in the With-Action condition (owned by the applicant).

EXISTING CONDITIONS

The Projected Development Site 1 is currently improved with a one-story 22,040 gsf of local retail building, as well as an accessory parking lot with 36 spaces, as summarized in **Table 1**.

NO-ACTION SCENARIO

Absent the Proposed Actions, it is assumed that Projected Development Site 1 within the Project Area would remain the same as the existing condition, as summarized in **Table 1**.

WITH-ACTION SCENARIO

The application of the CHO guidelines for the Proposed Actions would result in a development comprised of 288 residential dwelling units (257,348 gsf) and 12,108 gsf of local retail space, as summarized in **Table 1**. The Proposed Actions would also provide 154 on-site accessory-parking spaces, accessed via two curb cuts. One curb cut would be located on the west side of 79th Avenue, while the other would be located on the east side of Sapphire Street.

Table 1 – Existing, No-Action Scenario, With-Action Scenario, and Increment under CHO guidelines

Land Use	Existing	No-Action	With-Action	Increment
Residential d.u.	**0**	**0**	**288 d.u. (257,348 gsf)**	**288 d.u. (257,348 gsf)**
Local Retail (gsf)	**22,040 gsf**	**22,040 gsf**	**12,108 gsf**	**-9,932 gsf**
Accessory Parking	**36**	**36**	**154**	**118**

ANALYSIS FRAMEWORK

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

INCREMENT

The application of the CHO guidelines for the Proposed Actions would result in a net increase of 288 residential dwelling units (257,348 gsf) and 118 accessory parking spaces, and a net decrease of 9,932 gsf of local retail space, as summarized in **Table 1**.

PRINCIPAL CONCLUSIONS

The following detailed trip generation (Level 1 Screening) and trip assignment (Level 2 Screening) analyses have been conducted for the project increment scenario, as are summarized in **Table 1**.

Based on the results of trip generation and trip assignments screening analyses, as summarized in **Tables 2 through 4** and **Figures 1 through 3** (**Transportation Appendix**), the Proposed Actions would generate fewer vehicular, transit (subway and bus) and pedestrian trips than the *2021 CEQR Technical Manual* thresholds. Therefore, in accordance with the threshold guidelines as detailed in the *2021 CEQR Technical Manual*, the Proposed Actions would not expect to result in significant adverse impacts related to vehicular traffic, transit (Subway and Bus) and pedestrian, and no detailed transportation analyses would be warranted, as detailed below.

Traffic and Parking

Based on the results of trip generation and trip assignment screening analyses, it is concluded that in the future with the Proposed Actions, none of the intersection in the study area during Weekday AM, Midday, PM and Saturday Midday peak hour would experience 50 or more peak hour vehicle trip-ends, as summarized in **Table 4** (Transportation Appendix) and shown in **Figures 1 through 3** (Transportation Appendix). Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-ends per intersection threshold, no detailed assessment of vehicular traffic impact analysis would be required.

Parking

The Proposed Actions would provide 154 on-site accessory parking spaces on the Cellar and First Floor of the Proposed Building. The proposed off-street parking garage could be accessed via two curb cuts, one curb cut would be located on the west side of 79th Street and the other would be located on the east side of Sapphire Street.

The Proposed Actions would screen for vehicular traffic as detailed below, and per the *CEQR Technical Manual*, no detailed parking assessment would be required.

Transit

<u>Subway</u>

Based on the results of the trip generation (Level 1) screening analysis, the Proposed Actions would generate fewer subway trips than 200 peak hour subway trip-ends, as summarized in **Table 3** (Transportation Appendix) for the Weekday AM, Midday, PM, and Saturday Midday peak hour periods. Therefore, in accordance with the *CEQR Technical Manual* 200 subway trip-ends threshold, the subway trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of subway impacts.

<u>Bus</u>

Based on the results of the trip generation (Level 1) screening analysis, the Proposed Actions would generate fewer bus trips than 50 peak hour bus trip-ends during any peak hour, as summarized in **Table 3** (Transportation Appendix) for the Weekday AM, Midday, PM, and Saturday Midday peak hour periods. Therefore, in accordance with the *CEQR Technical Manual* 200 bus trip-ends threshold/50 or more peak hour bus trip-ends in one direction

along a bus route during any peak hour, the bus trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of bus impacts.

Pedestrian

Based on the results of the trip generation (Level 1) screening analysis, as summarized in **Table 3** (Transportation Appendix), the Proposed Actions would generate fewer pedestrian trips than 200 peak hour pedestrian trip-ends for the Weekday AM, Midday, PM, and Saturday Midday peak hour periods. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold, a detailed assessment of pedestrian impacts would not be warranted.

BUILD YEAR

Based on an estimated 18-month pre-certification timeframe, a seven-month Uniform Land Use Review Process (ULURP), and a 28-month construction period, the analysis year for the Projected Development Site is 2026.

TRANSPORTATION PLANNING ASSUMPTIONS

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

Residential Development

The *2021 CEQR Technical Manual Table 16-2* was utilized for trip generation rates, including truck trips, peak hour temporal distribution, and directional splits. The 2015-2019 American Community Survey (ACS) Journey-to Work (JTW) data for Census Tract #'s 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens, NY was used for modal split information and auto occupancy rate, as is estimated in **Exhibits A and B**, and summarized in **Table 2** (Transportation Appendix).

The estimated modal split data for residential use found that approximately 47.0% would travel by car, 0.5% would travel by taxi, 10.0% would travel by bus, 37.3% would travel by subway, and 5.2% would travel by foot and other modes of travel, as shown and summarized in **Exhibit 1**. The auto occupancy rate is 1.09, based on the 2015-2019 ACS JTW data for Census Tract #'s 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens as summarized in **Exhibit 2**. The taxi occupancy rate is based on the *East New York Rezoning Proposal FEIS (Table 13-8)*.

Local Commercial Retail Development

The *2021 CEQR Technical Manual Table 16-2* was utilized for trip generation rates, peak hour temporal distribution, directional splits, and truck trip rates. Modal split information and vehicle occupancy rates are provided by NYCDOT based on the survey results for a similar local retail space, as is summarized in **Table 2** (Transportation Appendix).

The estimated modal split results for local commercial retail use found that approximately 11% would travel by car, 0% would travel by taxi, 2% would travel by bus, 3% would travel by subway, and 84% would travel by foot and other modes of travel.

PRELIMINARY ANALYSIS METHODOLOGY AND SCREENING ASSESSMENTS

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

LEVEL 1 SCREENING ASSESSMENTS

A Level 1 trip generation screening assessment was conducted for the project increment, as summarized in **Table 1**, to estimate the numbers of person and vehicle trip-ends by mode generated by the Proposed Actions during the Weekday AM, Midday, PM, and Saturday Midday peak hours, as summarized in **Tables 3 and 4** (Transportation Appendix). These trip estimates were then compared to the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or quantified operational analyses would be warranted.

The Proposed Actions would generate a total of 62, -129, -156, and -196 net person trip-ends, 83 (15 inbound and 68 outbound), 32 (16 inbound and 16 outbound), 55 (38 inbound and 17 outbound), and 57 (33 inbound and 24 outbound) net vehicle trip-ends; 77, 41, 64, and 69 net subway trip-ends; 19, 8, 13, and 14 net bus trip-ends; and -24, -164, -212, and -255 net pedestrian trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. Based on the results of trips generated by the Proposed Actions, as summarized in **Tables 3 and 4** (Transportation Appendix), Level 2 screening analysis (trip assignment) would be required for vehicular traffic during Weekday AM, PM, and Saturday Midday peak hours, as described below.

LEVEL 2 SCREENING ASSESSMENTS

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

Vehicle Trips

Vehicular Trip-Ends

The Proposed Actions would generate a total of 83 (15 inbound and 68 outbound), 32 (16 inbound and 16 outbound), 55 (38 inbound and 17 outbound), and 57 (33 inbound and 24 outbound) net vehicle trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday Peak hour periods, respectively. Auto trips are assigned to the proposed on-site parking garage accessed via both 79th Street and Sapphire Street. Taxi trips are assigned to the closest and most convenient pickup and drop-off spot on Linden Boulevard service road to the north of the Proposed Actions. No truck trips would be generated by the Proposed Actions during the peak hour periods according to Level 1 screening analysis, as is summarized in **Table 4** (Transportation Appendix). Based on trip assignments, and as shown in **Figures 1 through 3** (Transportation Appendix) for Weekday AM, PM, and Saturday Midday peak hours, none of the intersections in the study area would experience 50 or more vehicle trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-end threshold, a detailed assessment of traffic impacts would not be required.

Parking

The Proposed Actions would provide 154 on-site accessory parking spaces on the Cellar and First Floor of the Proposed Building. The proposed off-street parking garage could be accessed via two curb cuts, one curb cut would be located on the west side of 79th Street and the other would be located on the east side of Sapphire Street.

The Proposed Actions would screen for vehicular traffic as detailed above, and per the *CEQR Technical Manual*, no detailed parking assessment would be required.

Transit Trips

Bus Trip-Ends

The Proposed Actions would generate a total of 19, 8, 13, and 14 net bus trip ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour periods, respectively, as summarized in **Table 3** (Transportation Appendix). Currently five bus lines serve the Project Area, including Bus Line B13, B15, B20 and BM5 which run eastbound/westbound along Linden Boulevard; and Bus line B14 which runs northbound/southbound along Eldert Lane and Drew Street. The Proposed Actions would generate less than 50 or more peak hour bus trip-ends in one direction along a bus route during any peak hour time period, and in accordance with the *CEQR Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of bus impacts.

Subway Trip-Ends

The Proposed Actions would generate a total of 77, 41, 64, and 69 net subway trip-ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Tables 3** (Transportation Appendix). Currently there is no subway station located within a ¼ mile radius of the Project Area. The closest subway station to the Proposed Actions is the Grant Avenue station of Subway Line A, which is within 1 mile radius of the Proposed Actions. The Proposed Actions would generate less than 200 subway trip-ends per

subway station during the Weekday AM, Midday, PM, and Saturday Midday peak hour time periods, and in accordance with *CEQR Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of subway impacts.

Pedestrian Trips

The Proposed Actions would generate a total of -24, -164, -212, and -255 net pedestrian trip-ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour periods, respectively. It is concluded that in the future with the Proposed Actions, none of the peak hour periods would experience 200 or more peak hour pedestrian trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold, a detailed assessment of pedestrian impacts would not be required.

CONCLUSION

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

AIR QUALITY

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

As presented in the EAS, a detailed analysis was required for the Proposed Actions' incremental $PM_{2.5}$ concentration associated with heavy-duty diesel vehicles (HDDVs), and no significant adverse air quality impact was predicted in the analysis. The application of the CHO guidelines for the Proposed Actions while increasing the project-generated traffic, the traffic increment is not likely to result in a $PM_{2.5}$ increment concentration exceeding the EAS conclusion.

For the parking garage analysis, applying the CHO guidelines for the Proposed Actions will result in a minimal traffic increment in and out of the garage compared with the EAS. **Table Air Quality - 1** shows the parking garage ingress/egress traffic for both the CHO application and the EAS.

Table Air Quality – 1: Difference in parking accumulation between the CHO application and the EAS

Parking Garage Traffic	EAS	CHO	Difference
Maximum 1-Hour Existing (car/hr)	75.9	76.6	Less than 1
Maximum 1-Hour Entering (car/hr)	74.1	74.7	Less than 1
Daily Average Existing (car/hr)	35.2	35.9	Less than 1
Daily Average Entering (car/hr)	35.2	35.9	Less than 1
Annual Average Existing (car/hr)	31.3	32.0	Less than 1
Annual Average Entering (car/hr)	31.3	32.0	Less than 1

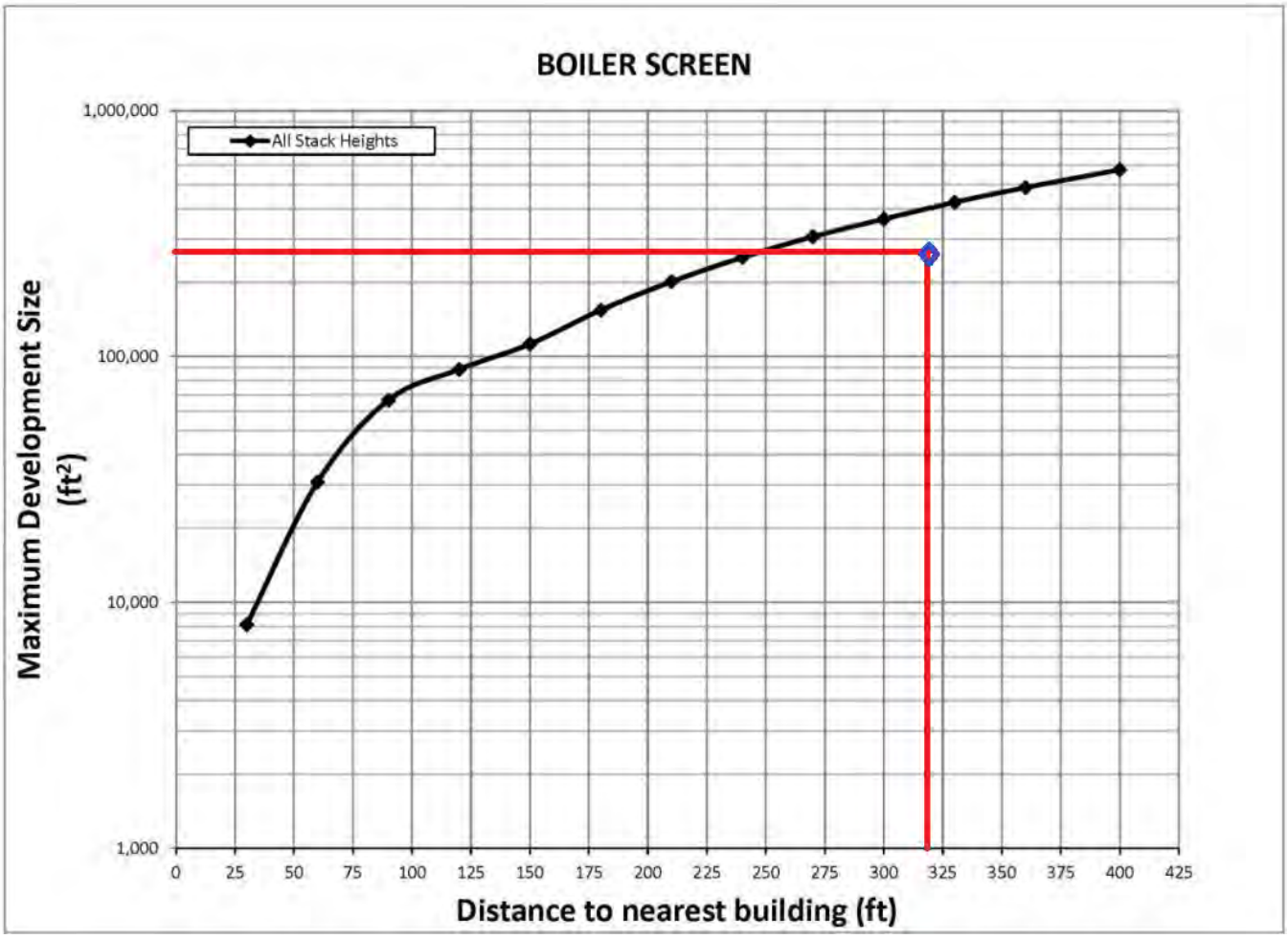
Table Air Quality -2 shows the Projected Development Site's predicted parking accumulation under the CHO application.

Table Air Quality -2: Projected Development Site parking garage With-Actions condition under CHO application

Time Ending	Weekday			Weekend		
	In	Out	Accumulation	In	Out	Accumulation
1:00 AM	6	2	233	16	5	240
2	3	2	234	2	1	241
3	1	1	235	5	1	245
4	1	1	235	13	6	253
5	1	3	233	2	1	254
6	2	10	225	1	1	254
7	5	39	190	2	11	246
8	13	74	128	21	22	245
9	26	74	80	20	27	237
10	15	38	56	23	46	215
11	17	27	47	47	47	215
12	66	69	44	61	64	212
1:00 PM	29	31	41	56	75	193
2	54	54	41	70	57	205
3	35	33	43	75	77	203
4	44	33	54	77	56	224
5	61	40	75	62	61	226
6	94	57	112	67	62	230
7	79	48	143	55	68	217
8	62	42	163	58	49	226
9	50	26	187	41	50	217
10	37	11	212	36	48	205
11	19	8	222	27	18	214
12	11	4	229	24	9	229

As indicated in the EAS, the nearest building of similar or greater height is 320 feet away from the Projected Development Site 1. The CHO requirement will facilitate the development of a 125-foot-tall, 269,456 gsf mixed-use commercial/residential building. Figure 1 shows the heating/hot water, ventilation, and air conditioning (HVAC) system screen using the *CEQR Technical Manual* Figure 17-3 nomograph. As seen in the screening analysis (see **Figure 1**), using the nomograph provided in the *CEQR Technical Manual*, the CHO requirement Projected Development Site 1 gsf intersects the distance between the buildings (320 feet) below the curve for a fossil fuel-fired HVAC system. Therefore, the Proposed Actions CHO requirement passes the HVAC screening analysis on existing land uses. As such, the application of the CHO guidelines for the Proposed Actions is not expected to result in significant adverse air quality impacts related to the Projected Development Site 1's HVAC system.

Figure Air Quality - 1: CHO Requirement - Project-on-Existing HVAC Screen



Therefore, changes to the EAS facilitated by CHO would not alter the findings of the EAS as the proposal with CHO would not result in any violations of the ambient air quality standards.

NOISE

Changes to the EAS facilitated by CHO would not alter the findings of the EAS as the proposal with CHO would only be altered slightly in terms of height and bulk and would not adversely impact the EAS's existing noise readings.

CONSTRUCTION

Changes to the EAS facilitated by CHO would not result in new analysis as the building with CHO would not involve construction activities with the following: construction 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; 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.

CONCLUSION

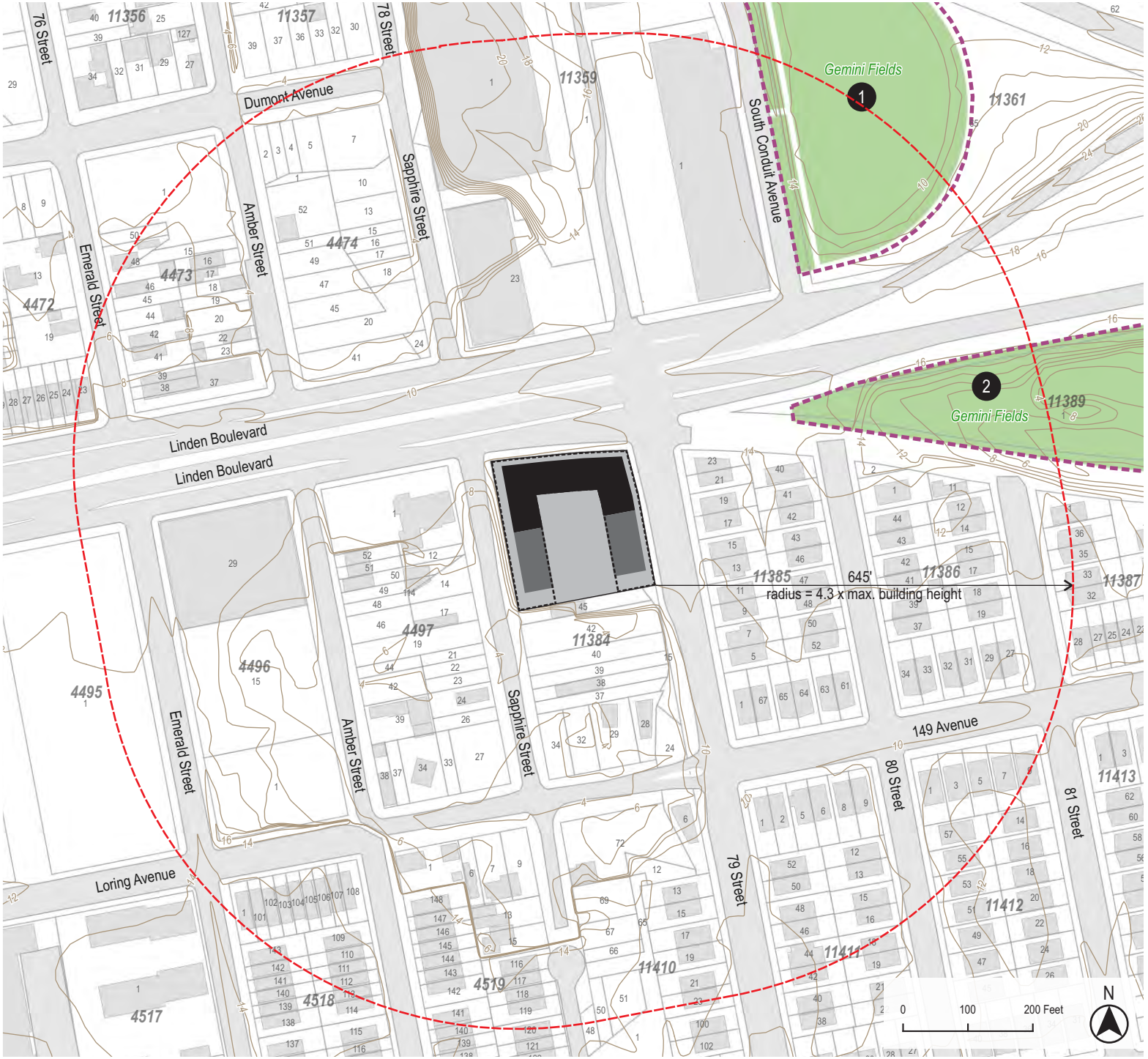
This technical memorandum concludes that the implementation of CHO does not alter the findings of this EAS and does not require additional analysis.

CHO Shadow Appendix

78-08 Linden Boulevard, Queens

Figure 1: Tier 1 Screening Assessment

- Project Site
- Projected Building Footprint
- Bulkhead Above 9th Floor (120')
- Bulkhead Above 12th Floor (150')
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

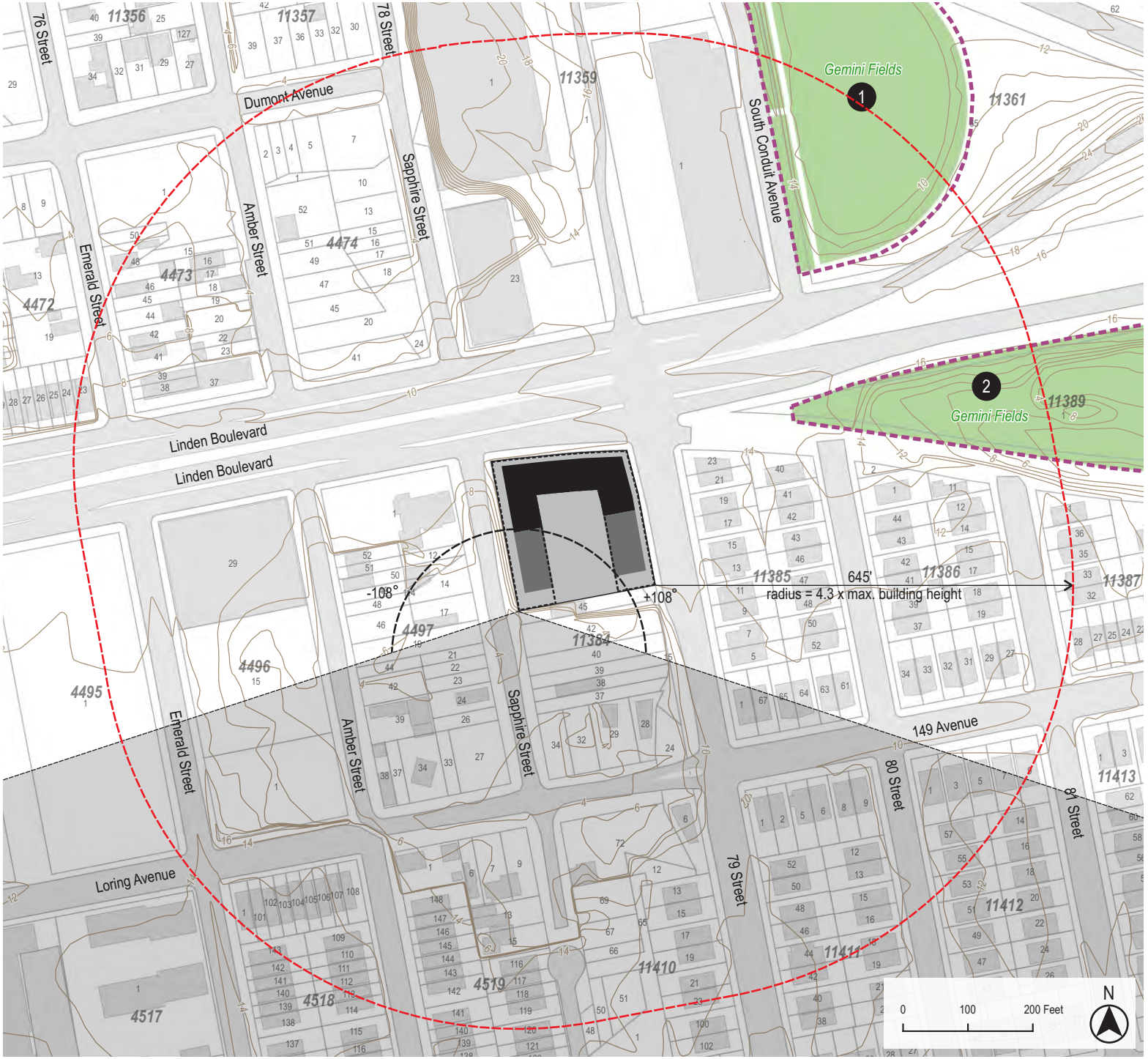


Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 2: Tier 2 Screening Assessment

- Project Site
- Projected Building Footprint
- Bulkhead Above 9th Floor (120')
- Bulkhead Above 12th Floor (150')
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource
- Area That Cannot Be Shaded by the Proposed Building

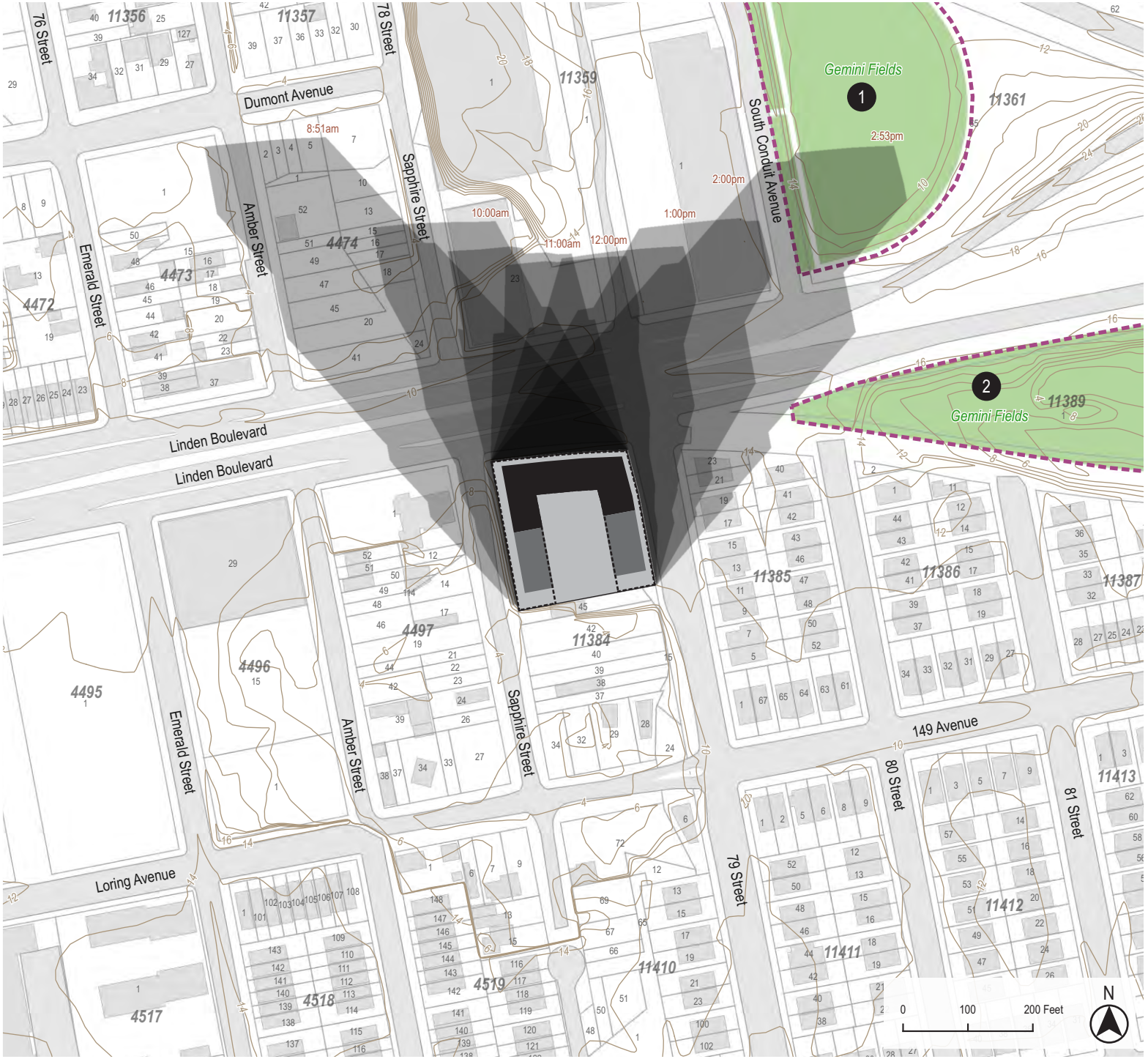


Urban Cartographics

78-08 Linden Boulevard, Queens

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

- Project Site
- Projected Building Footprint
- Bulkhead Above 9th Floor (120')
- Bulkhead Above 12th Floor (150')
- 8:51am — Shadow Cast/Analysis Time
- # — Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

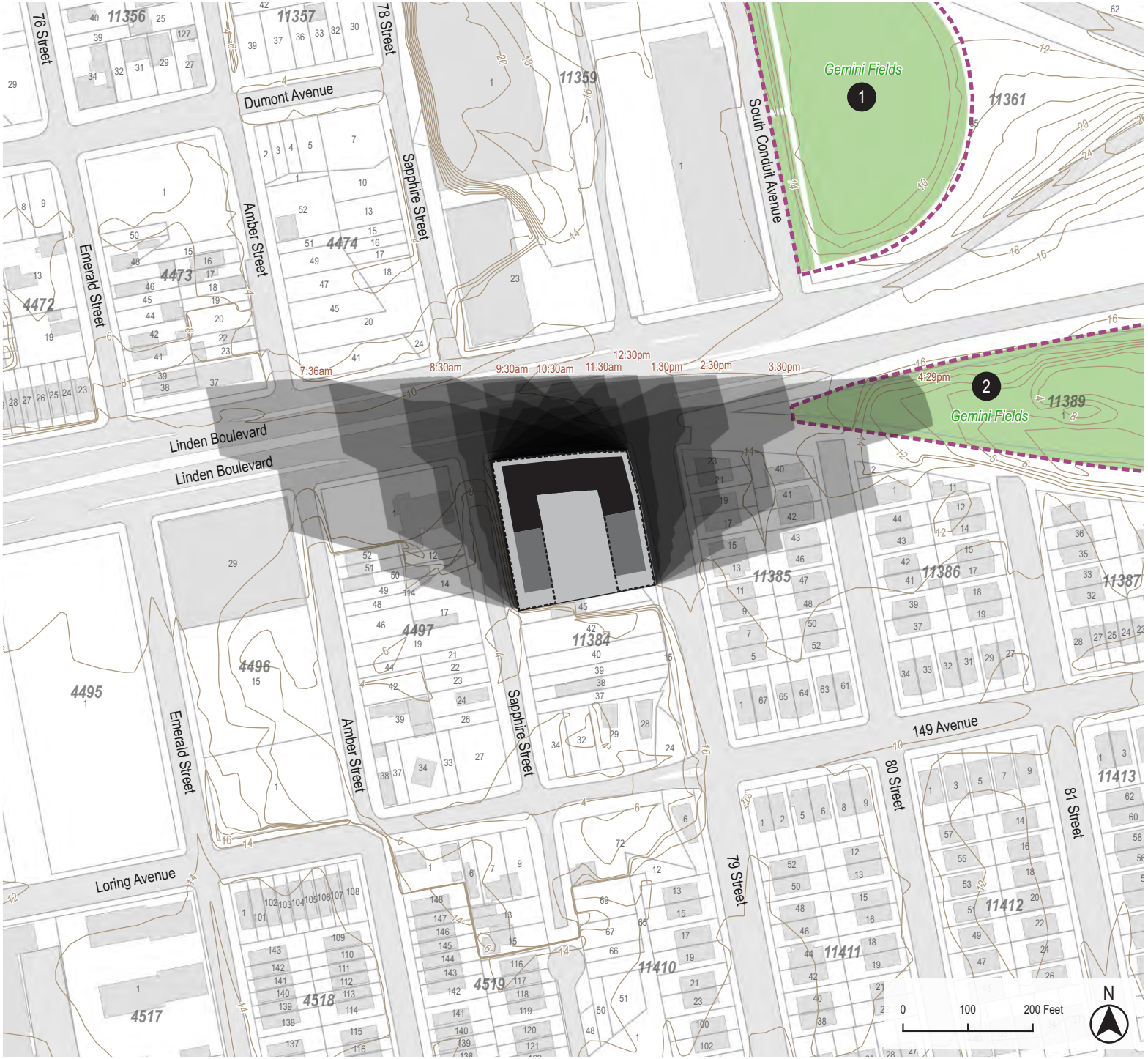


Urban Cartographics

78-08 Linden Boulevard, Queens

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

- Project Site
- Projected Building Footprint
- Bulkhead Above 9th Floor (120')
- Bulkhead Above 12th Floor (150')
- 8:51am — Shadow Cast/Analysis Time
- # — Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

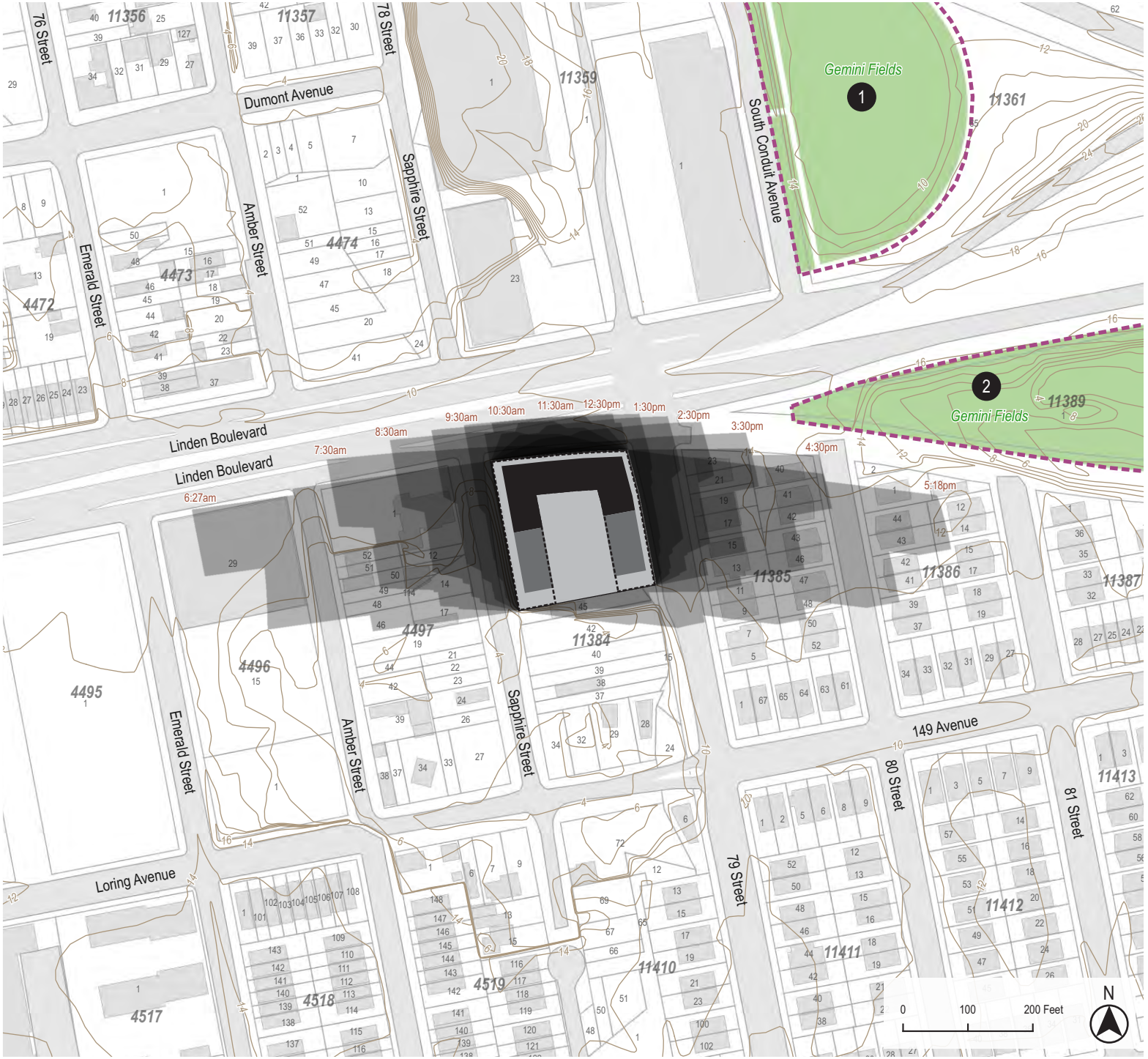


Urban Cartographics

78-08 Linden Boulevard, Queens

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

- Project Site
- Projected Building Footprint
- Bulkhead Above 9th Floor (120')
- Bulkhead Above 12th Floor (150')
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

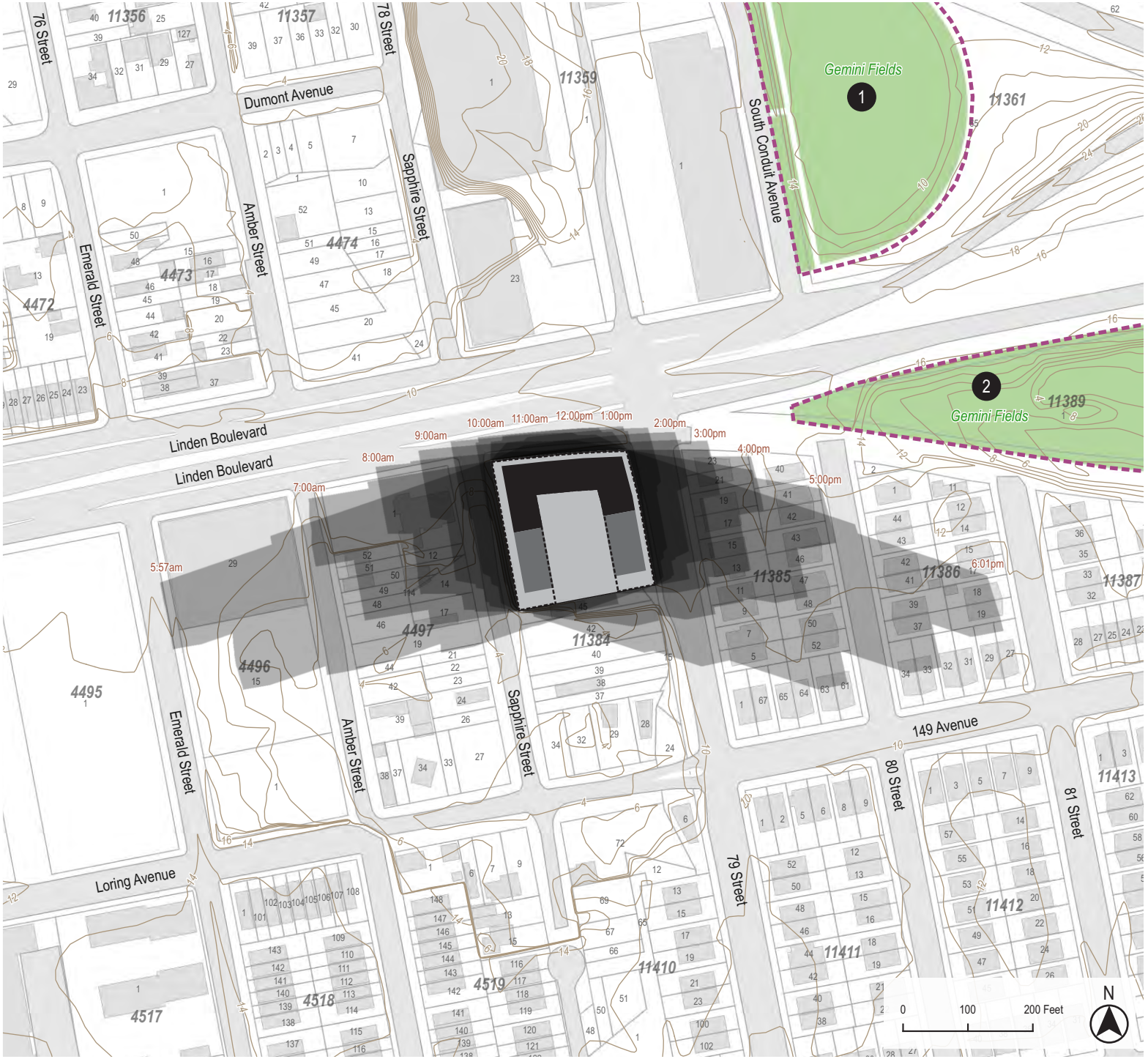


Urban Cartographics

78-08 Linden Boulevard, Queens

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

- Project Site
- Projected Building Footprint
- Bulkhead Above 9th Floor (120')
- Bulkhead Above 12th Floor (150')
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource



Urban Cartographics

CHO Urban Design Appendix

78-08 Linden Boulevard, Queens

Figure 1: Urban Design Diagram

No-Action Scenario

Linden Boulevard facing southwest (Site at left)



With-Action Scenario

Linden Boulevard facing southwest (Site at left)



Maximum Permitted Base Height (95'/65') | Maximum Permitted Building Height (115'/85') | Maximum Permitted Building Height (140'/110')

Proposed Base Height | Proposed Building Height | Proposed Bulkhead Height

Urban Cartographics

78-08 Linden Boulevard, Queens

Figure 2: Urban Design Diagram

No-Action Scenario

Linden Boulevard facing southeast (Site at right)



With-Action Scenario

Linden Boulevard facing southeast (Site at right)



Maximum Permitted Base Height (95'/65') | Maximum Permitted Building Height (115'/85') | Maximum Permitted Building Height (140'/110')

Proposed Base Height | Proposed Building Height | Proposed Bulkhead Height

Urban Cartographics

CHO Transportation Appendix

Population FactFinder

Selection Method | 78-08 LINDEN BOULEVA ✕ | Census Tract | Neighborhood Tabulation Area (NTA) | Community District Tabulation Area (CDTA) | Community District (CD) | More Geographies

Your Selection

9 Tracts selected

40,003
Population
(2020 Census)

15,082
Housing Units
(2020 Census)

Clear Selection | View Data ›

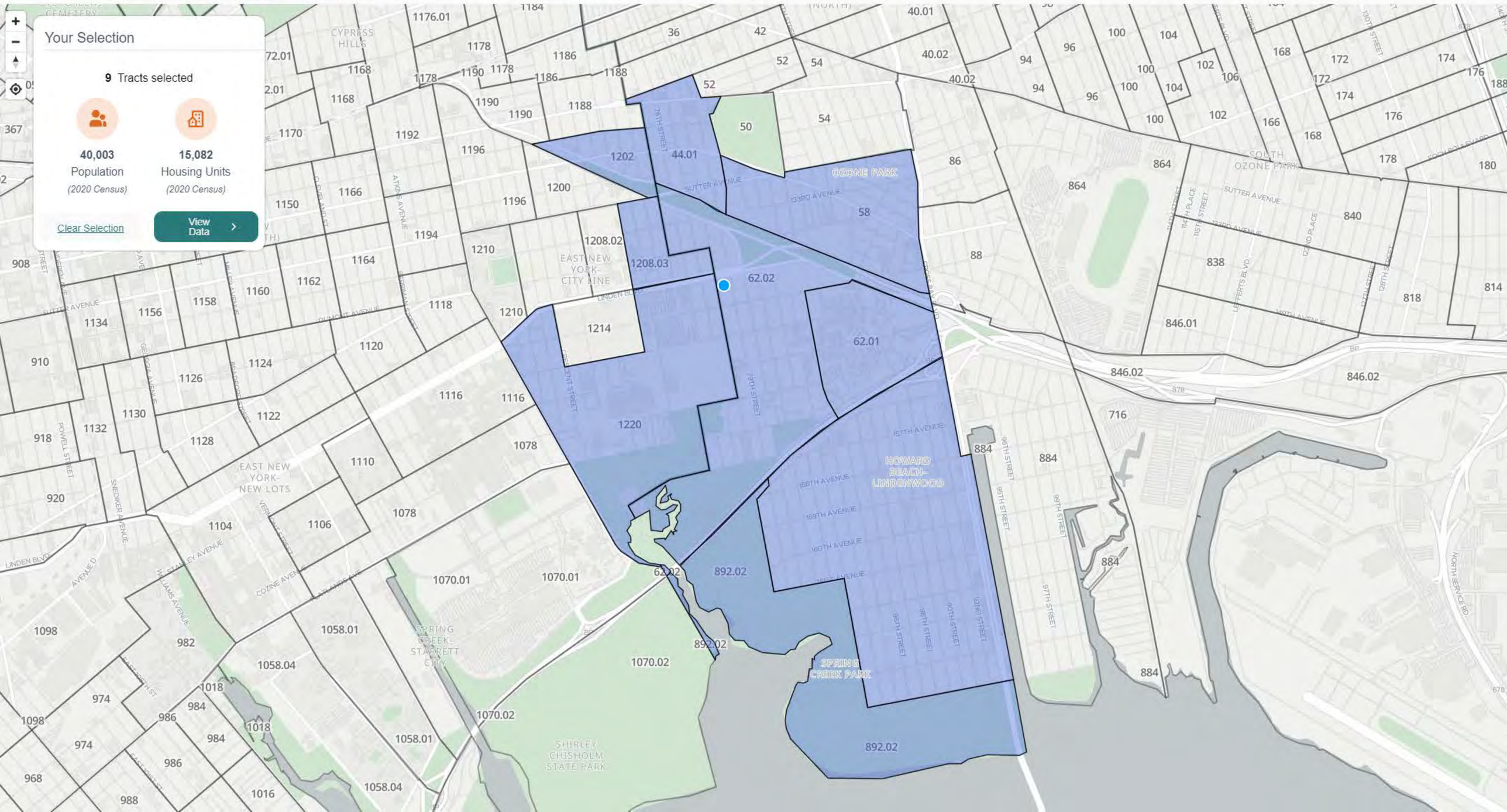


Exhibit 1

Modal Split Data

2015-2019 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens, NY

78-08 Linden Blvd, Queens NY

Census Tract	Total Workers	Car or Van Drive-Alone	Carpool	Bus	Street Car	Subway	R.R.	Ferry	Taxi	Motor cycle	Bicycle	Walked	Other Means	Worked @ Home	Total
1202	694	164	37	86	4	375	9	0	0	0	0	9	10	0	694
1208	3921	954	108	434	0	2094	0	0	15	0	0	159	53	104	3,921
1220	2401	795	241	169	0	1029	0	0	0	0	0	108	0	59	2,401
44.01	1539	537	30	47	0	687	10	0	35	0	0	64	32	97	1,539
58	2960	1173	274	228	0	1191	35	0	10	0	0	26	9	14	2,960
62.01	2512	1132	83	431	57	649	0	0	0	0	19	141	0	0	2,512
62.02	2826	1244	326	335	0	789	0	0	51	0	0	81	0	0	2,826
892	3815	2251	356	270	0	817	19	0	0	0	0	12	36	54	3,815
Total	20,668	8,250	1,455	2,000	61	7,631	73	0	111	0	19	600	140	328	20,668
%		***0.399***	***0.070***	***0.097***	***0.00***	***0.369***	***0.004***	***0.00***	***0.01***	***0.00***	***0.00***	***0.029***	***0.01***	***0.016***	***1.00***

Exhibit 2

Auto Occupancy Rate

2015-2019 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens, NY

Census Tract	Total	Drove alone	Total carpool	Carpool 2person	3 Person	4 Person	5 or 6 Persor	7 or more Person	Total
1202	201	164	37	37	0	0	0	0	37
1208	1062	954	108	108	0	0	0	0	108
1220	1036	795	241	224	17	0	0	0	241
44.01	567	537	30	30	0	0	0	0	30
58	1447	1173	274	207	53	0	0	14	274
62.01	1,215	1132	83	83	0	0	0	0	83
62.02	1570	1244	326	233	30	45	18	0	326
892	2607	2251	356	309	28	19	0	0	356
persons	9,705	8,250	1,455	1,231	128	64	18	14	1,455
cars		8250		616	43	16	3	2	8,929

Modal Split Data Summary

Auto	**47.0%**
Taxi	**0.5%**
Bus	**10.0%**
Subway	**37.3%**
Walk	**2.9%**
Other	**2.4%**
Total	**100%**

Auto Occupancy Rate: 1.09

Table 2 : Transportation Planning Factors

78-08 Linden Boulevard, Queens NY

Land Use:	***Residential***		***Local Retail***	
	d.u.		***gsf***	
Size/Units:	***288***		***-9,932***	
	(1)		**(1)**	
Trip Generation:				
Weekday	8.18		329	
Saturday	9.08		358	
	per d.u.		per 1,000 gsf	
Linked-Trip:	0%		0%	
Temporal Distribution:	**(1)**		**(1)**	
AM Peak Hour	9.3%		4.8%	
MD Peak Hour	5.6%		8%	
PM Peak Hour	8.5%		10.9%	
Saturday Midday Peak Hour	8.4%		11.7%	
	(2)		**(4)**	
Modal Split :	All Periods		All Periods	
Auto	47.0%		11%	
Taxi	0.5%		0%	
Subway	37.3%		3%	
Bus	10.0%		2%	
Walk & Other	5.2%		84%	
Total	100%		100%	
	(1)		**(1)**	
In/Out Splits:	In	Out	In	Out
AM Peak Hour	22%	78%	52%	48%
MD Peak Hour	50%	50%	50%	50%
PM Peak Hour	62%	38%	50%	50%
Saturday Midday Peak Hour	55%	45%	50%	50%
Vehicle Occupancy:	**(2 & 3)**		**(4)**	
Auto	1.09		1.2	
Taxi	1.3		1.2	
Truck Trip Generation:	**(1)**		**(1)**	
Weekday	0.06		0.35	
Saturday	0.02		0.04	
	per d.u.		per 1,000 gsf	
	(1)		**(1)**	
AM Peak Hour	12%		8%	
MD Peak Hour	9%		11%	
PM Peak Hour	2%		2%	
Saturday Midday Peak Hour	9%		11%	
Truck In/Out Splits:	In	Out	In	Out
AM/MD/PM/Sat.Midday	50%	50%	50%	50%

Sources:

(1)-2021 CEQR Technical Manual, Table 16-2.

(2)-2015-2019 American Community Survey (ACS) Journey-to-Work (JTW) Census Tract #'s 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens, NY

(3)-East New York Rezoning, Table 13-8.

(4)-Provided by NYCDOT.

Table 3 : Estimated Person Trips

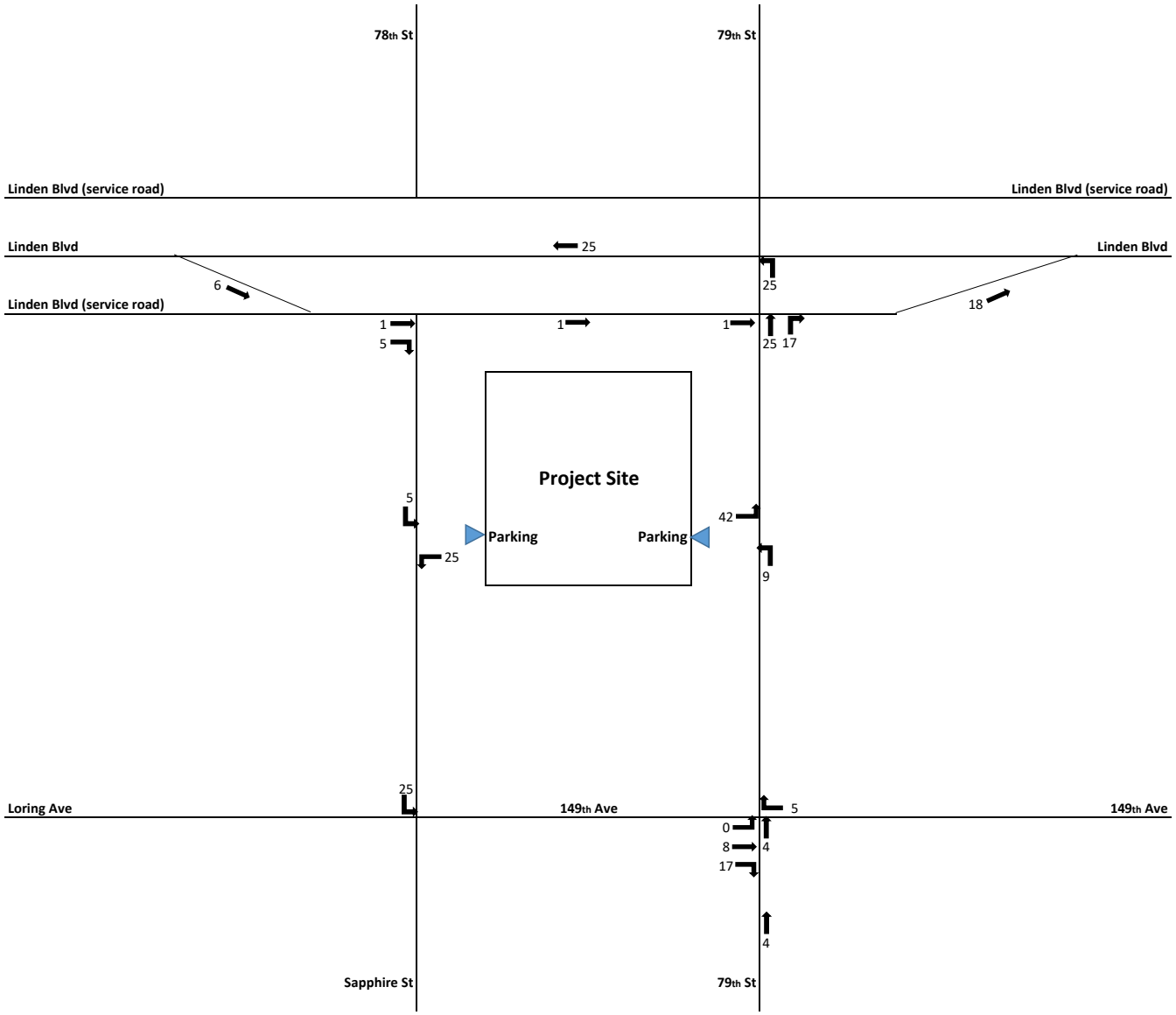
78-08 Linden Boulevard, Queens NY

Land Use:	*Residential*		*Local Retail*		**Total Net Demand**		**Subway**
	d.u.		*gsf*				**Bus**
Size/Units:	*288*		*-9,932*				**Walk**
							Pedestrian Trips
Peak hour Trips							
AM Peak Hour	219		-157		62		
Midday Peak Hour	132		-261		-129		
PM Peak Hour	200		-356		-156		
Saturday Midday Peak Hour	220		-416		-196		
Person Trips:							
AM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	23	80	-9	-8	14	72	
Taxi	0	1	0	0	0	1	
Subway	18	64	-2	-2	16	61	**77**
Bus	5	17	-2	-2	3	16	**19**
Walk & Other	3	9	-69	-63	-66	-54	**-120**
Total	48	171	-82	-75	-33	96	**-24**
Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	31	31	-14	-14	17	17	
Taxi	0	0	0	0	0	0	
Subway	25	25	-4	-4	21	21	**41**
Bus	7	7	-3	-3	4	4	**8**
Walk & Other	3	3	-110	-110	-106	-106	**-213**
Total	66	66	-131	-131	-65	-65	**-164**
PM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	58	36	-20	-20	39	16	
Taxi	1	0	0	0	1	0	
Subway	46	28	-5	-5	41	23	**64**
Bus	12	8	-4	-4	9	4	**13**
Walk & Other	6	4	-150	-150	-143	-146	**-289**
Total	124	76	-178	-178	-54	-102	**-212**
Saturday Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	57	46	-23	-23	34	24	
Taxi	1	0	0	0	1	0	
Subway	45	37	-6	-6	39	31	**69**
Bus	12	10	-4	-4	8	6	**14**
Walk & Other	6	5	-175	-175	-168	-170	**-338**
Total	121	99	-208	-208	-87	-109	**-255**

Table 4 : Estimated Vehicular Trips

78-08 Linden Boulevard, Queens NY

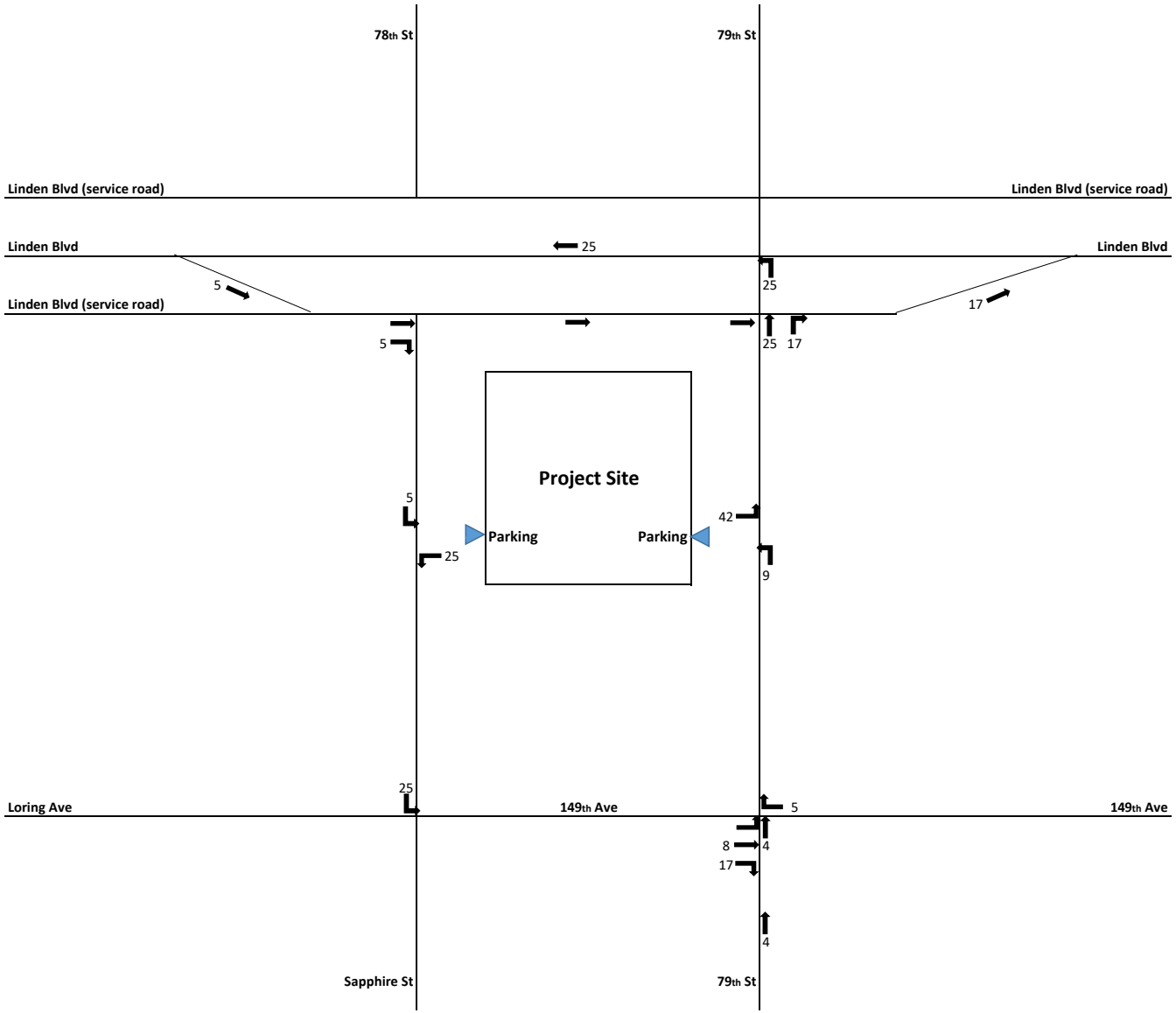
Land Use:	*Residential*		*Local Retail*		**Total Net Demand**		
	d.u.		*gsf*				
Size/Units:	*288*		*-9,932*				
Vehicular Trips							
AM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	**Total**
Auto (Total)	21	74	-7	-7	14	67	
Taxi	0	1	0	0	0	1	
Taxi (Balanced)	1	1	0	0	1	1	
Truck (Balanced)	0	0	0	0	0	0	
Total	22	75	-7	-7	**15**	**68**	**83**
Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	**Total**
Auto (Total)	28	28	-12	-12	16	16	
Taxi	0	0	0	0	0	0	
Taxi (Balanced)	0	0	0	0	0	0	
Truck (Balanced)	0	0	0	0	0	0	
Total	28	28	-12	-12	**16**	**16**	**32**
PM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	**Total**
Auto (Total)	54	33	-16	-16	38	17	
Taxi	0	0	0	0	0	0	
Taxi (Balanced)	0	0	0	0	0	0	
Truck (Balanced)	0	0	0	0	0	0	
Total	54	33	-16	-16	**38**	**17**	**55**
Saturay Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	**Total**
Auto (Total)	52	43	-19	-19	33	24	
Taxi	0	0	0	0	0	0	
Taxi (Balanced)	0	0	0	0	0	0	
Truck (Balanced)	0	0	0	0	0	0	
Total	52	43	-19	-19	**33**	**24**	**57**



Project Generated Vehicle Trips
Weekday AM Peak Hour

Figure 1

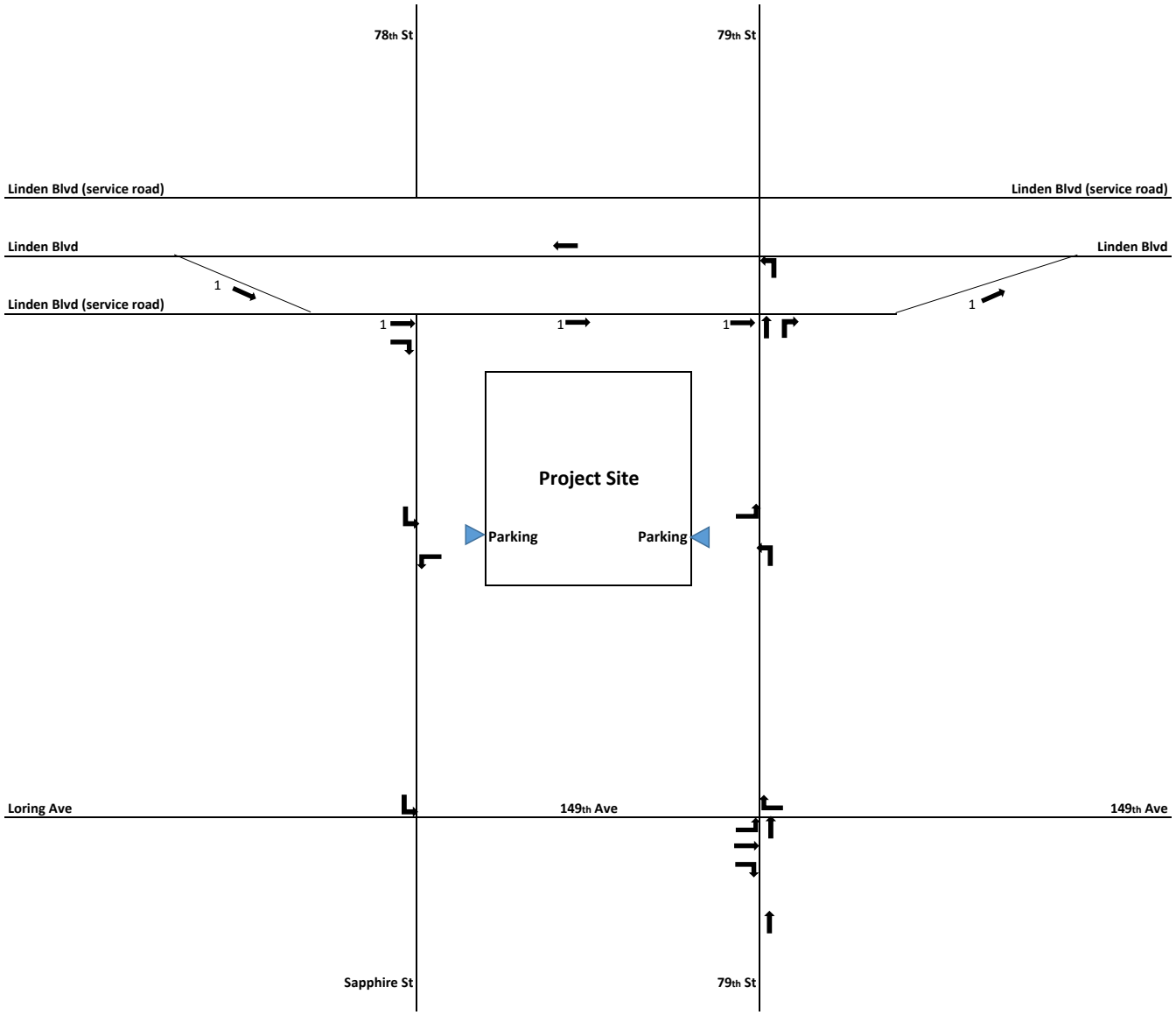
	in	out	Total
Vehicle Trips	15	68	83



Project Generated Auto Trips
Weekday AM Peak Hour

Figure 1a

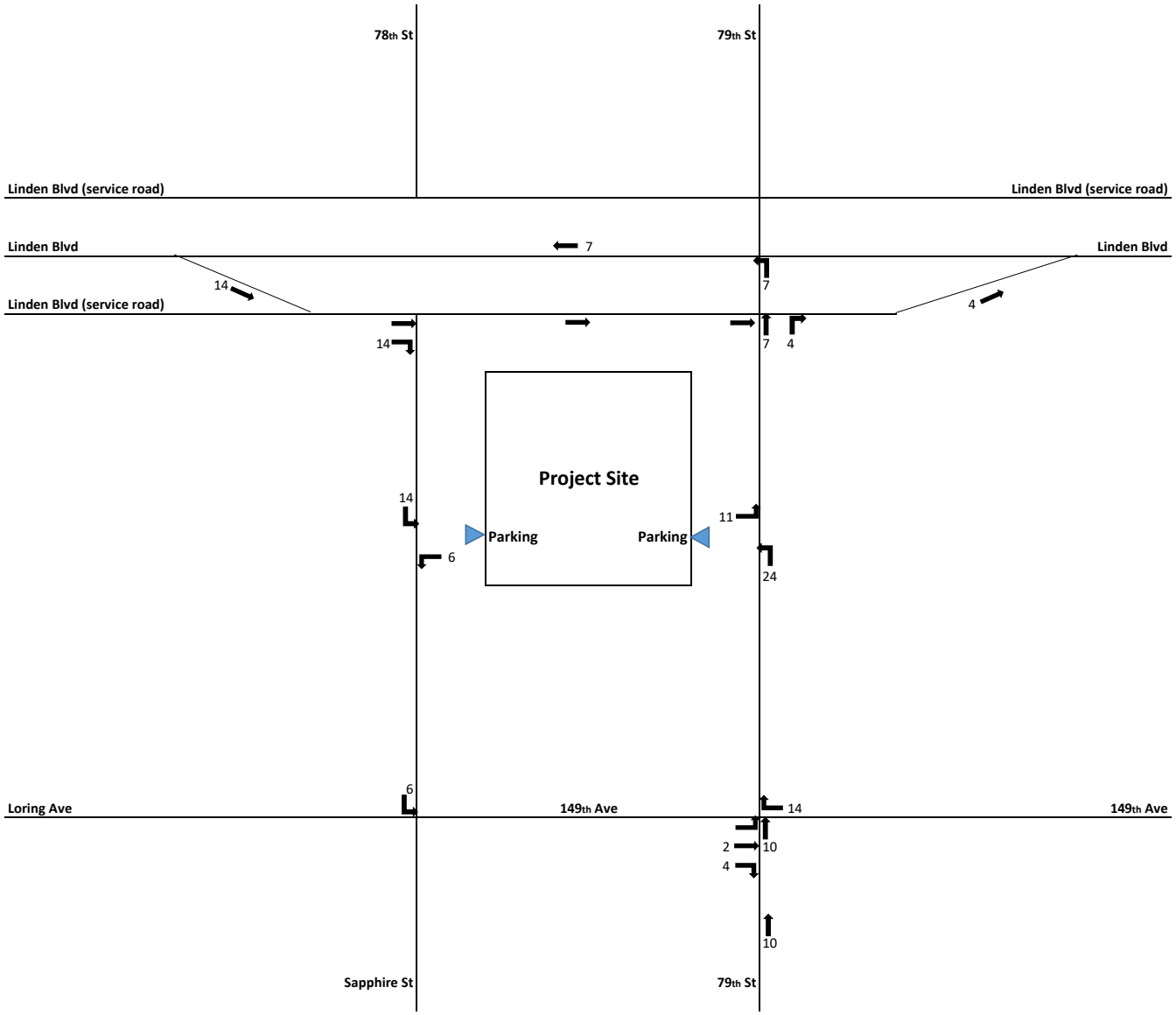
	in	out
Auto Trips	14	67



Project Generated Taxi Trips
Weekday AM Peak Hour

Figure 1b

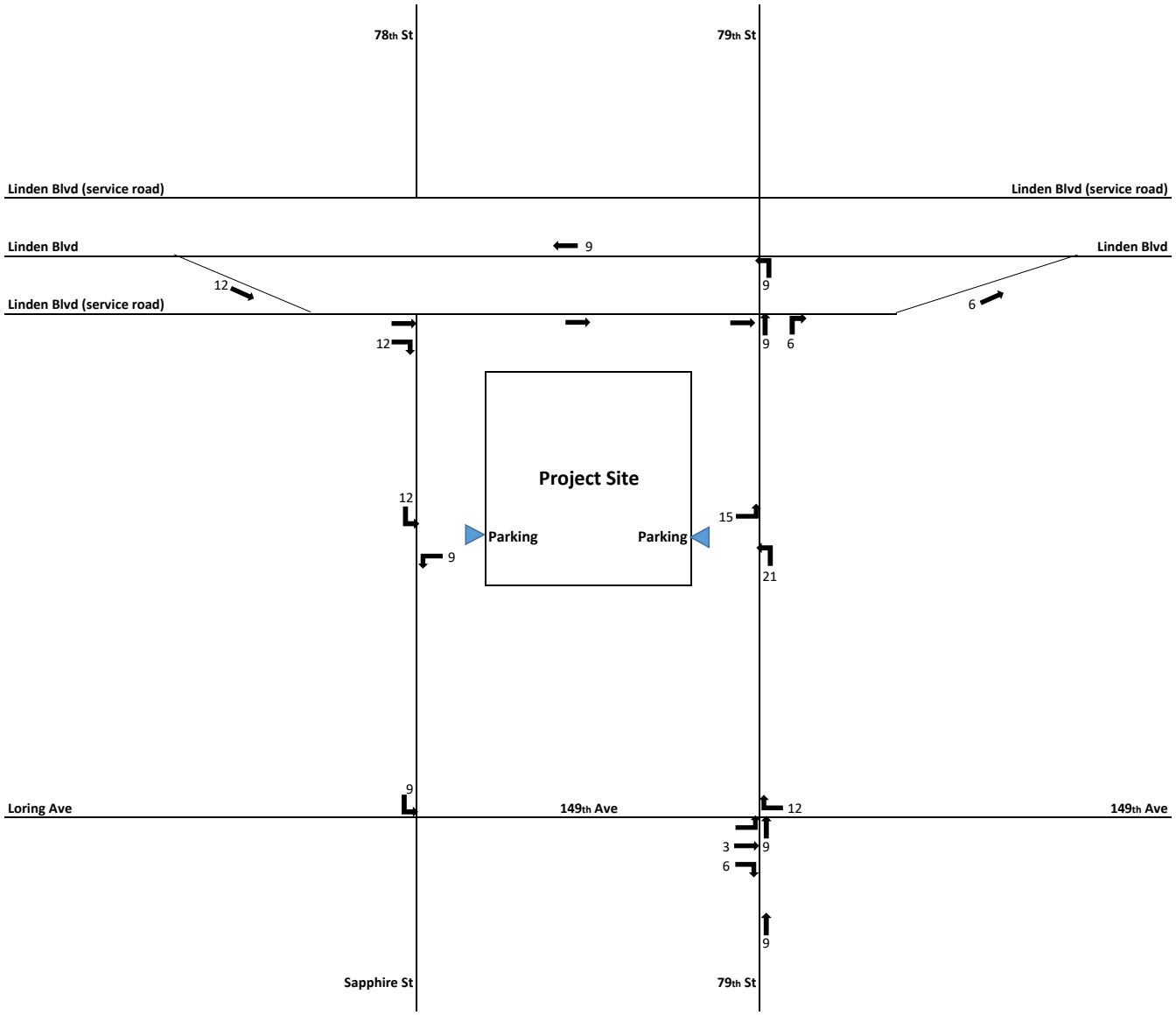
	in	out
Taxi Trips	1	1



Project Generated Vehicle Trips
Weekday PM Peak Hour

Figure 2

	in	out	Total
Vehicle Trips	38	17	55



Project Generated Vehicle Trips
Saturday MD Peak Hour

Figure 3

	in	out	Total
Vehicle Trips	33	24	57

Appendix B
Waterfront and Jamaica Bay

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: Linden Canyon LLC

Name of Applicant Representative: Brian Kintish of Environmental Studies Corp.

Address: Environmental Studies Corp.,55 Water Mill Lane, Great Neck, NY 11021

Telephone: 646-896-1873 Email: bkintish@environmentalstudiescorp.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The Applicant seeks a rezoning from R4-1/C1-2 to R7D/C2-4 to facilitate the redevelopment of a 47,960 sf parcel, now occupied by a one-story, approximately 22,040 gsf retail building and an accessory parking lot that, along with vehicular circulation space, occupies the rest of the lot. The proposed development is a 252,591 gsf building with approximately 273 dwelling units and 12,108 gsf of ground floor retail space. Parts of the building would be 8 and 11 stories tall, with an overall height of 115 feet. The building would have a cellar with 154 accessory parking spaces.

2. Purpose of activity

It is the Applicant's opinion that the Site is located at the edge of a mixed commercial and residential neighborhood where higher density development in accordance with proposed R7D/C2-4 District regulations is suitable. The proposed actions will support the productive use of underutilized land and address the need for affordable housing. The current zoning does not permit sufficient density, height allowance, or bulk to allow the site to be redeveloped with a mixed-use residential and commercial building.

C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): Block 11384, Lot 1

Street Address: 78-08 Linden Boulevard

Name of water body (if located on the waterfront): N/A

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☐ Yes ☐ No

☑	City Map Amendment	☐	Zoning Certification	☐	Concession
☑	Zoning Map Amendment	☐	Zoning Authorizations	☐	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: _____

Board of Standards and Appeals ☐ Yes ☐ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit

(if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

☐	Legislation	☐	Funding for Construction, specify: _____
☐	Rulemaking	☐	Policy or Plan, specify: _____
☐	Construction of Public Facilities	☐	Funding of Program, specify: _____
☐	384 (b) (4) Approval	☐	Permits, specify: _____
☐	Other, explain: _____		

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☐ No

E. LOCATION QUESTIONS

1.	Does the project require a waterfront site?	☐ Yes	☑ No
2.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?	☐ Yes	☑ No
3.	Is the project located on publicly owned land or receiving public assistance?	☐ Yes	☑ No
4.	Is the project located within a FEMA 1% annual chance floodplain? *(6.2)*	☐ Yes	☑ No
5.	Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)*	☑ Yes	☐ No
6.	Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).*	☐ Yes	☑ No

- ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)
- ☐ Special Natural Waterfront Area (SNWA) (*4.1*)
- ☐ Priority Maritime Activity Zone (PMAZ) (*3.5*)
- ☐ Recognized Ecological Complex (REC) (*4.4*)
- ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☑
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☐	☐	☑
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☑
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☑
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☐	☐	☑
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☑
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☑
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☑
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☑
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☑
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Brian Kintish of Environmental Studies Corp.

Address: Environmental Studies Corp.,55 Water Mill Lane, Great Neck, NY 11021

Telephone: 646-896-1873 Email: bkintish@environmentalstudiescorp.com

Applicant/Agent's Signature: Brian Kintish

Date: 4/3/24

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☑ Copy of original signed NYC Consistency Assessment Form
- ☑ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☑ Environmental Review documents
- ☑ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☑ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

Attachment to Consistency Assessment Form for 1008 Banner Ave, Brooklyn

Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

Although located in a Coastal Zone area, the project site is within Brighton Beach, a well-developed area that is served by sewers, municipal sanitation services, and police and fire protection services. The project site fronts on public streets. The Proposed Actions would therefore be consistent with Policy 1.3.

Policy 5.2 Protect the quality of New York City's water by managing activities that generate nonpoint source pollution.

The Proposed Action is anticipated to include a combination of post-construction stormwater management practices (SMPs) such as porous pavers and a detention tank to allow for the infiltration of stormwater into the underlying soils. The Proposed Action will not result in any impacts to stormwater as all stormwater falling on the Premises will be captured and treated in accordance with NYC Department of Buildings (DOB) and NYCDEP requirements.

Policy 6: Minimize loss of life, structures, infrastructures, and natural resources caused by flooding and erosion, the increase resilience to future conditions created by climate change.

Policy 6.1: Minimize losses from flooding and erosion by employing nonstructural and structural measures appropriate to the site, the use of the property to be protected and the surrounding area.

As shown in the New York City Flood Hazard Mapper, the Proposed Project is in the 1% annual chance flood hazard area as designated on FEMA's 2015 preliminary flood maps. Consistent with FEMA requirements, the New York City Building Code establishes minimum structural and programmatic requirements for all new and substantially improved buildings in Special Flood Hazard Area (SFHA), with requirements based on specific zones within the SFHA. The Base Flood Elevation (BFE) designated on FEMA flood maps serves as the standard to which flood-resistant construction requirements apply. Where the BFE exceeds the elevation of the building site, it is necessary to elevate or floodproof (where permitted) the first occupiable floor to ensure that buildings remain structurally sound and to protect building contents during the flood event. The development site has a BFE of 11.23'. The proposed development's first occupiable space would be 8.23' (at grade). Flood gates would be located at entries on the ground flood and mechanical equipment would be located above the Design Flood Elevation (DFE), with wet proofing materials used up to the DFE. See the attached **Sectional Plan with Projected Flood Levels**.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and the Coastal Storms*) into the planning and design of project in the city's Coastal Zone.

The project site is within the 100-year floodplain. The New York City Panel on Climate Change has projected that, relative to sea levels in the year 2000, sea levels at New York City will have risen 4 to 8 inches in the 2020s, 11 to 21 inches in the 2050s, 18 to 39 inches in the 2080s, and 22 to 50 inches by 2100. These changes will increase the frequency and severity of coastal flooding, expand existing flood zones, and increase base flood elevations at locations within existing flood zones. See the attached **Sectional Plan with Projected Flood Levels**.

The Proposed Actions would facilitate the development of a 11,083.68 gsf three-story community facility building and would rise to a maximum height of 43.3 feet (32.1 feet measured from the BFE). The ground floor elevation 8.23' would be for classrooms, offices parking, lobby, and elevator and mechanical space. The areas subjected to possible flooding would be the ground floor classrooms, offices parking, elevator, and mechanical space.

Occupied space and mechanical equipment on the ground floor would be protected by the floodproofing precautions taken for the lifespan of the building, including flood gates at ground floor entries and wet proofing material up to the DFE. See the attached **Sectional Plan with Projected Flood Levels**.

Going forward, the sea levels will continue to rise 11 to 21 inches in the 2050s, 18 to 39 inches in the 2080s, and 22 to 50 inches by 2100. The ground floor would not be subject daily high water due to sea level rise until the 2100's and would have a low elevation and a 1% chance of flooding for the lifetime of the building. Occupied space and mechanical equipment would be well above the base flood elevation for the lifespan of the building. At no time in the future projections is the second floor (or above) subject to any possibility of flooding due to sea level rise or the 1% chance of flooding. Accordingly, no future adaptive measures would be required.

In the event of a 100-year storm, the neighborhood would be evacuated, and would not be able to return until floodwaters had receded. The areas subjected to possible flooding would be the ground floor parking area, lobby, mechanical space and elevators, which could lead to property damage to cars and the interior lobby and classroom space and mechanical equipment but would not endanger the life or safety of the students or teachers. Flood gates would be located at entries on the ground floor and wet-proofing materials up to the DFE. Mechanical equipment would be above the DFE. As noted above, the mechanics will be located on the roof. Elevator cabs would be elevated to prevent damage from flooding and to ensure that elevator service was immediately available once floodwaters recede, and power is available.

Therefore, the Proposed Action would be consistent with Policy 6.

Policy 7.1: Manage solid waste, hazardous materials, toxic pollutants, substances hazardous to the environment and the unenclosed storage of industrial material to protect public health, control pollution and prevent degradation of coastal ecosystems.

Any solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials will be managed to protect public health, control pollution, and prevent degradation of coastal resources, including, but not limited to:

- Performance of all activities required for any remedial actions, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.
- Import of materials to be used for back fill and cover in accordance with applicable laws and regulations.
- Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
- No unenclosed storage of industrial materials.

Policy 7.2: Prevent and remediate discharge of petroleum product.

Removal of underground storage tanks, if encountered, and closure of petroleum spills would follow applicable local, State and Federal laws and regulations.

Policy 7.3: Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

Any transport or disposal of solid waste material, hazardous wastes, toxic pollutants, or substances hazardous to the environment will be performed in a manner that minimizes potential degradation of coastal resources. This includes transportation and off-site disposal to permitted facilities in accordance with applicable laws and

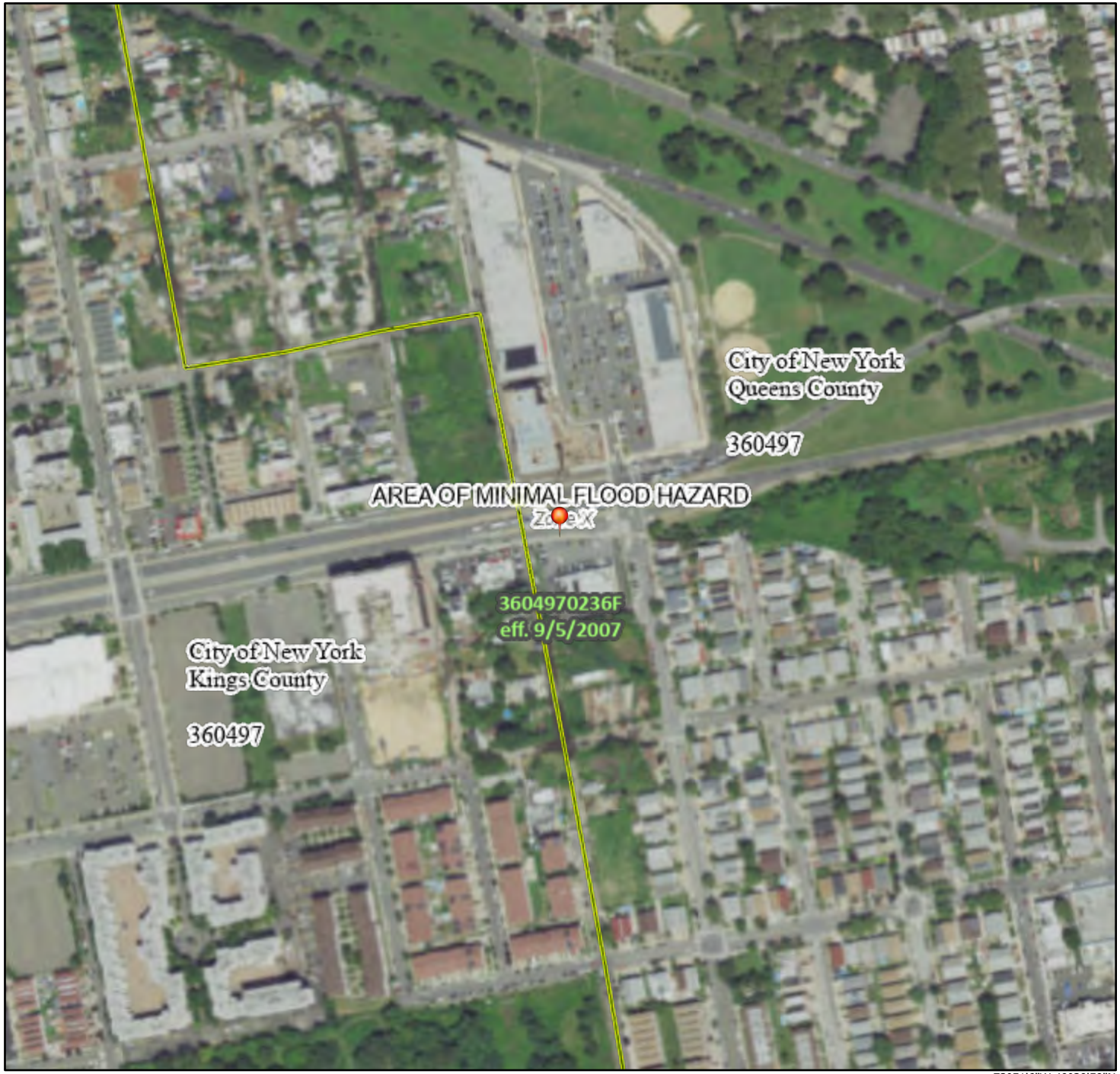
regulations for handling, transport, and disposal of applicable materials, and performing sampling and analysis of transported materials as required by disposal facilities.

Based on the above, the proposed project advances Policy 7.1, 7.2, and 7.3 by managing and transporting potential hazardous materials safely.

National Flood Hazard Layer FIRMette

FEMA

73°51'43"W 40°40'26"N



73°51'6"W 40°39'59"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

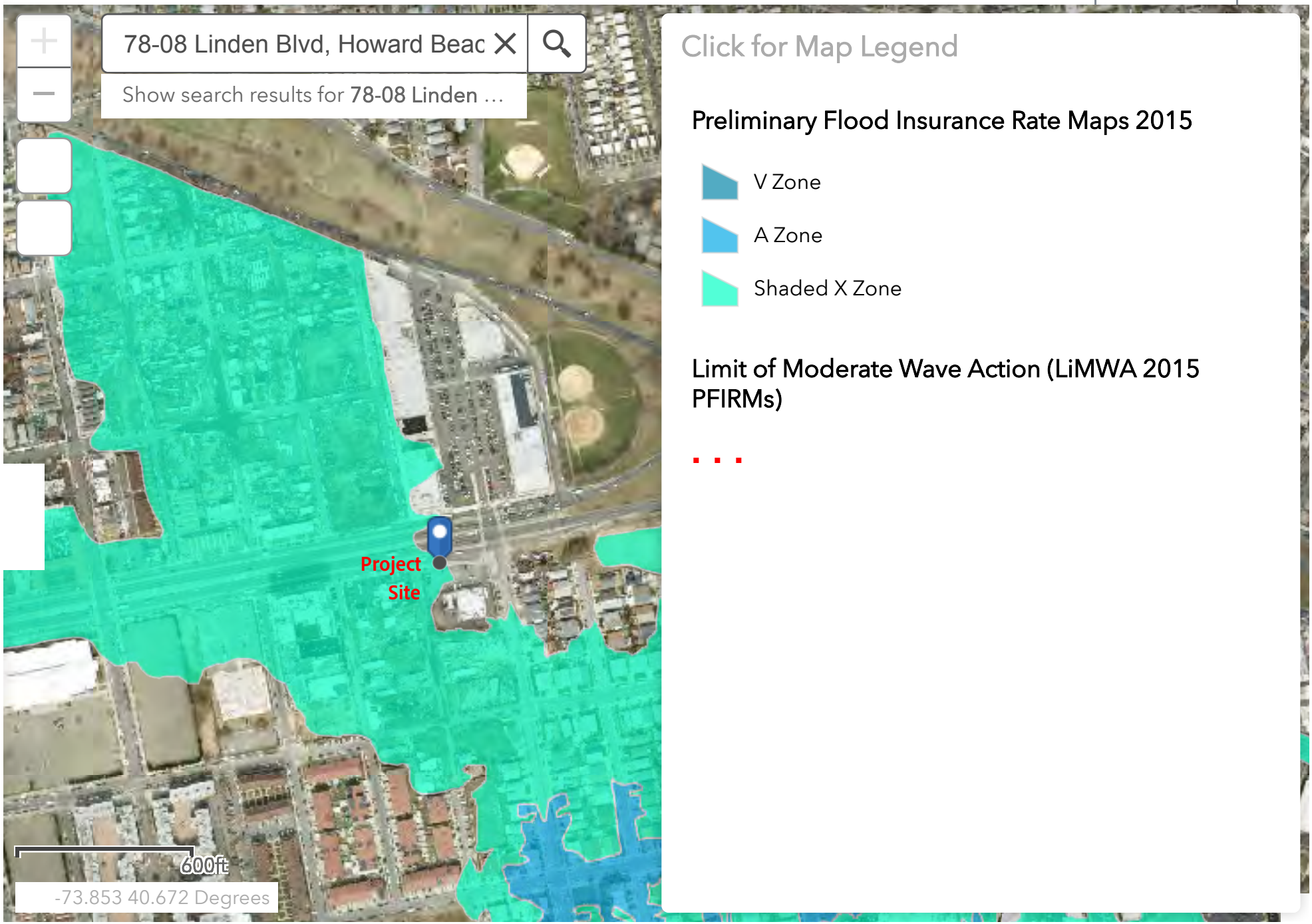
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/10/2023 at 1:42 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

NYC Flood Hazard Mapper

NYC Department of City



Click for Map Legend

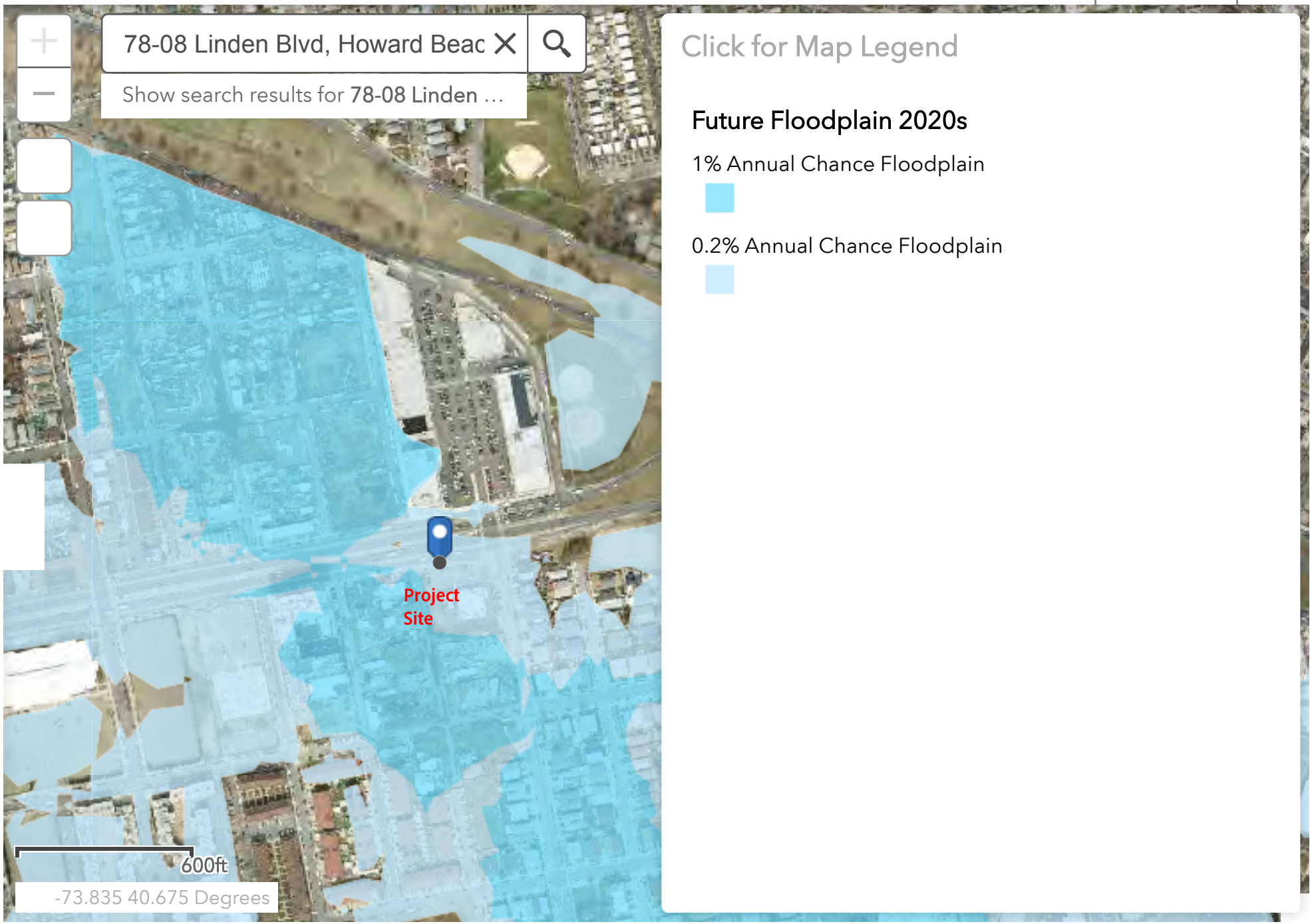
Preliminary Flood Insurance Rate Maps 2015

- V Zone
- A Zone
- Shaded X Zone

Limit of Moderate Wave Action (LiMWA 2015 PFIRMs)

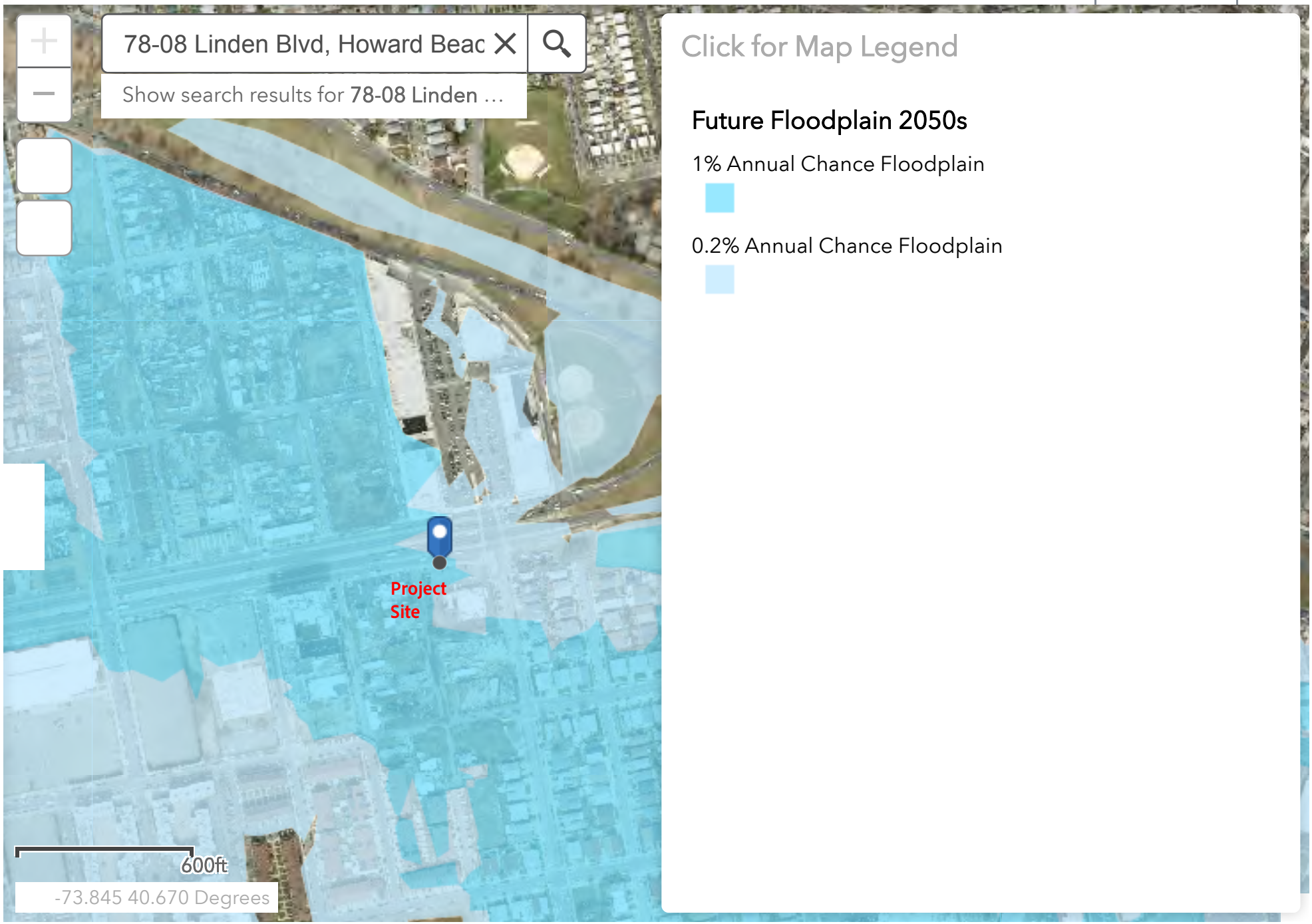
NYC Flood Hazard Mapper

NYC Department of City



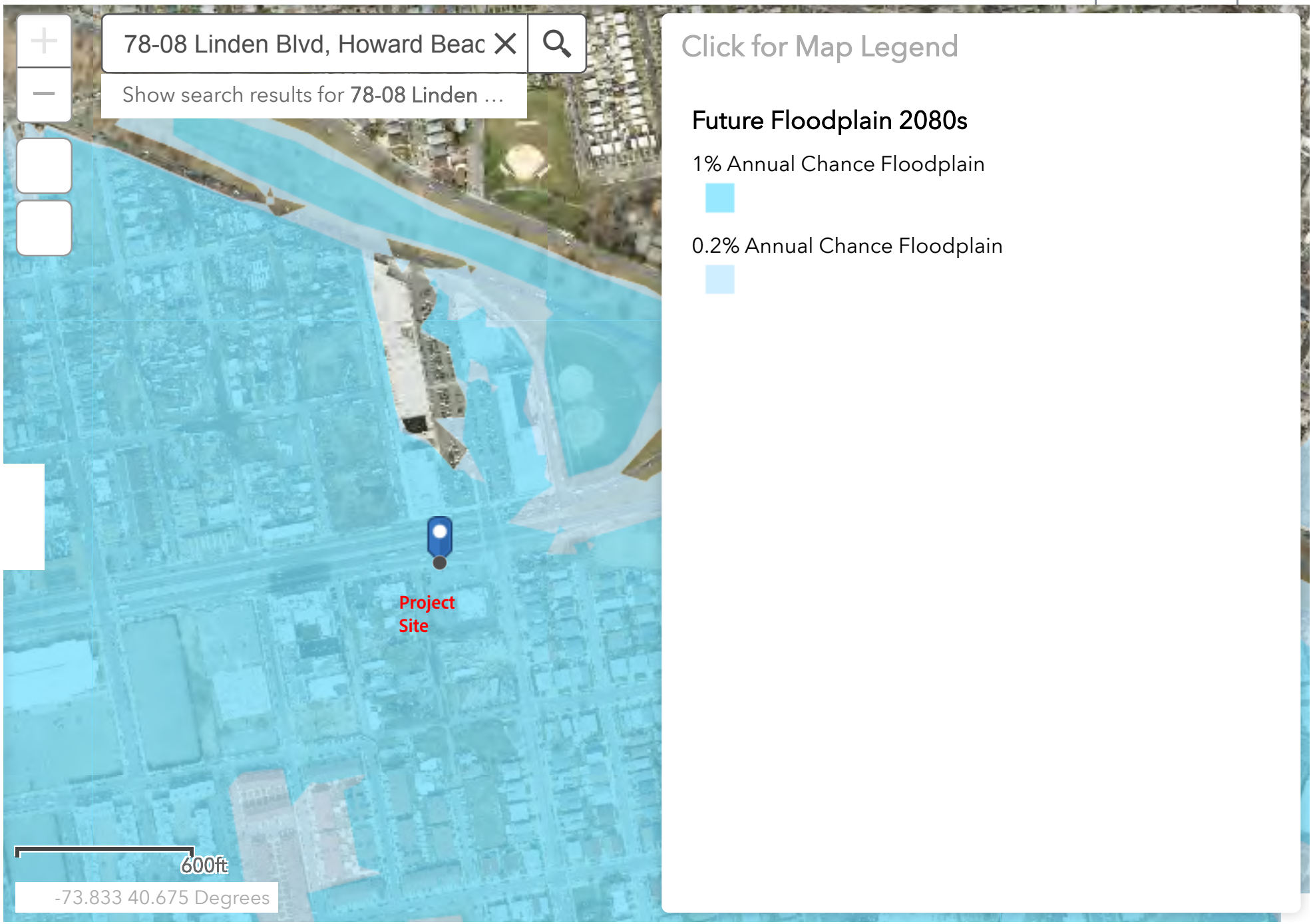
NYC Flood Hazard Mapper

NYC Department of City



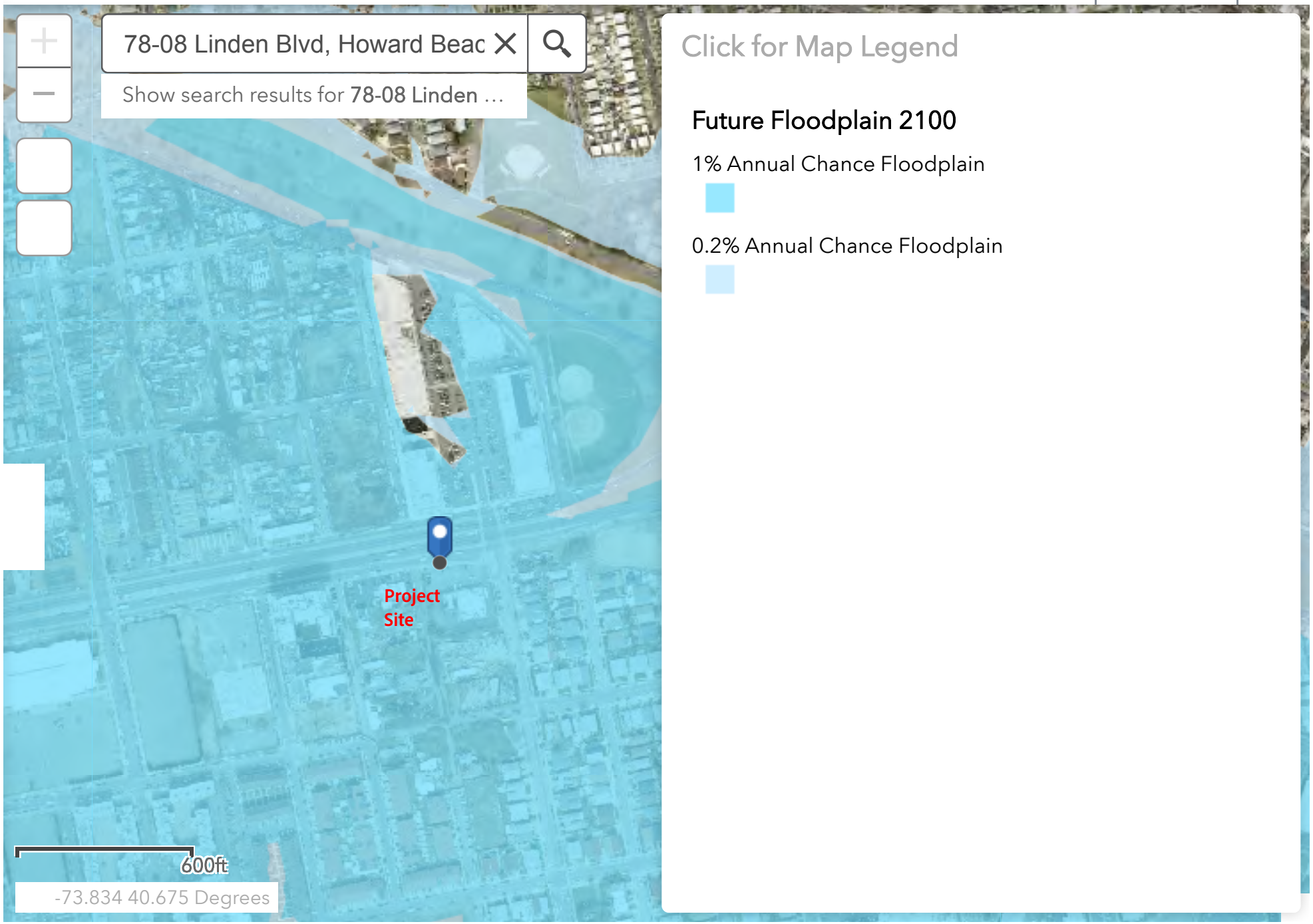
NYC Flood Hazard Mapper

NYC Department of City



NYC Flood Hazard Mapper

NYC Department of City



NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp

Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.

Background Information	
Project Name	78-08 Linden Boulevard
Location	Queens Block 11384, Lot 1
Type(s)	☑ Residential, Commercial, Community Facility ☐ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facilit ☐ Industrial Uses ☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Draina ☐ Coastal Protection
Description	The Applicant seeks a rezoning from R1/C1-2 to R7D/C2-4 to facilitate the redevelopment of a 47,960 sf parcel, now occupied by a one-story, approximately 22,040 gsf retail building and an accessory parking lot that, along with vehicular circulation space, occupies the remainder of the lot. The proposed redevelopment is a 252,591 gsf building with approximately 273 dwelling units and 12,108 gsf of ground floor retail space. Parts of the building would be 8 and 11 stories tall, with an overall height of 115 feet. The building would have a cellar, with 154 accessory parking spaces.
Planned Completion Date	2026
Expected Project Lifespan	80 years

The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.

For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."

Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	3.05	**3.05**	**NAVD88**	*NOAA Tides and Currents for North Channel*
1% flood height	10.00	**10.00**	**NAVD88**	*FEMA Flood Hazard Map Panel 3604970236G*
Design flood elevation	14.00	**14.00**	**NAVD88**	*Building plans and NYC Open Data: Building footprints*
As relevant:				
0.2% flood height	-->			

Data will be converted based on the following datums:

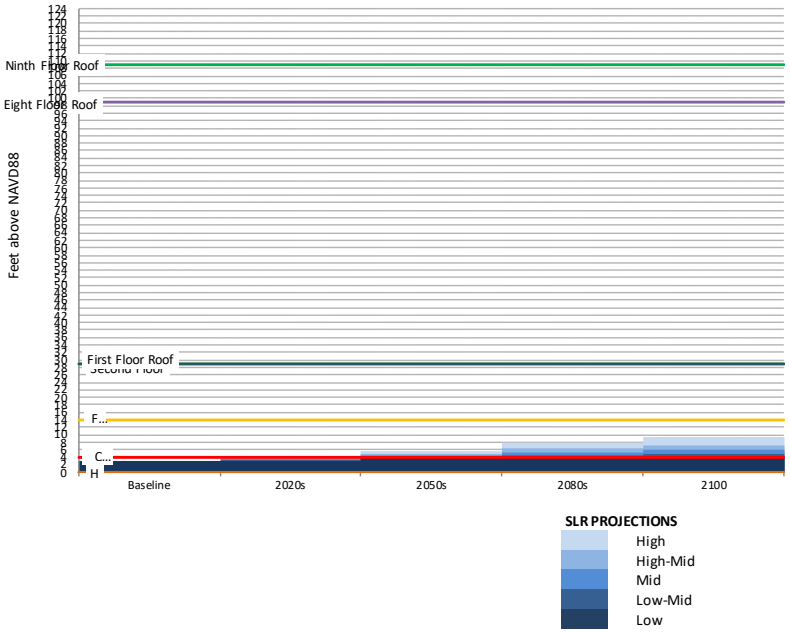
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

Describe key physical features of the project.

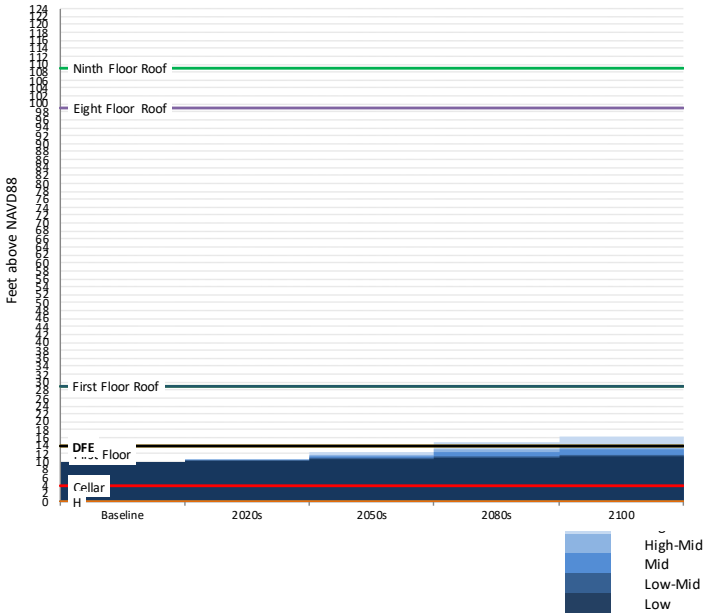
Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Cellar	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	80 years	4.0	Feet	NAVD88	*4.0*	*4.0*	*1.0*	*#VALUE!*
Car and bicycle parking and storage space.									
First Floor	☐ Vulnerable ☑ Critical ☐ Potentially Hazardous ☐ Other	80 years	14.0	Feet	NAVD88	*14.0*	*14.0*	*11.0*	*#VALUE!*
Parking, retail stores, residential lobby									
Second Floor	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	80 years	29.0	Feet	NAVD88	*29.0*	*29.0*	*26.0*	*#VALUE!*
Dwelling Units; the lowest residential floor									
First Floor Roof	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	80 years	29.0	Feet	NAVD88	*29.0*	*29.0*	*26.0*	*#VALUE!*
roof gardens, landscaping, outdoor recreational area									
Eight Floor Roof	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	80 years	99.0	Feet	NAVD88	*99.0*	*99.0*	*96.0*	*#VALUE!*
Roof Gardens									
Ninth Floor Roof	☐ Vulnerable ☑ Critical ☐ Potentially Hazardous ☐ Other		109.0	Feet	NAVD88	*109.0*	*109.0*	*106.0*	*#VALUE!*
Roof Gardens and mechanicals									
G	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
H	☐ Vulnerable ☐ Critical ☑ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									

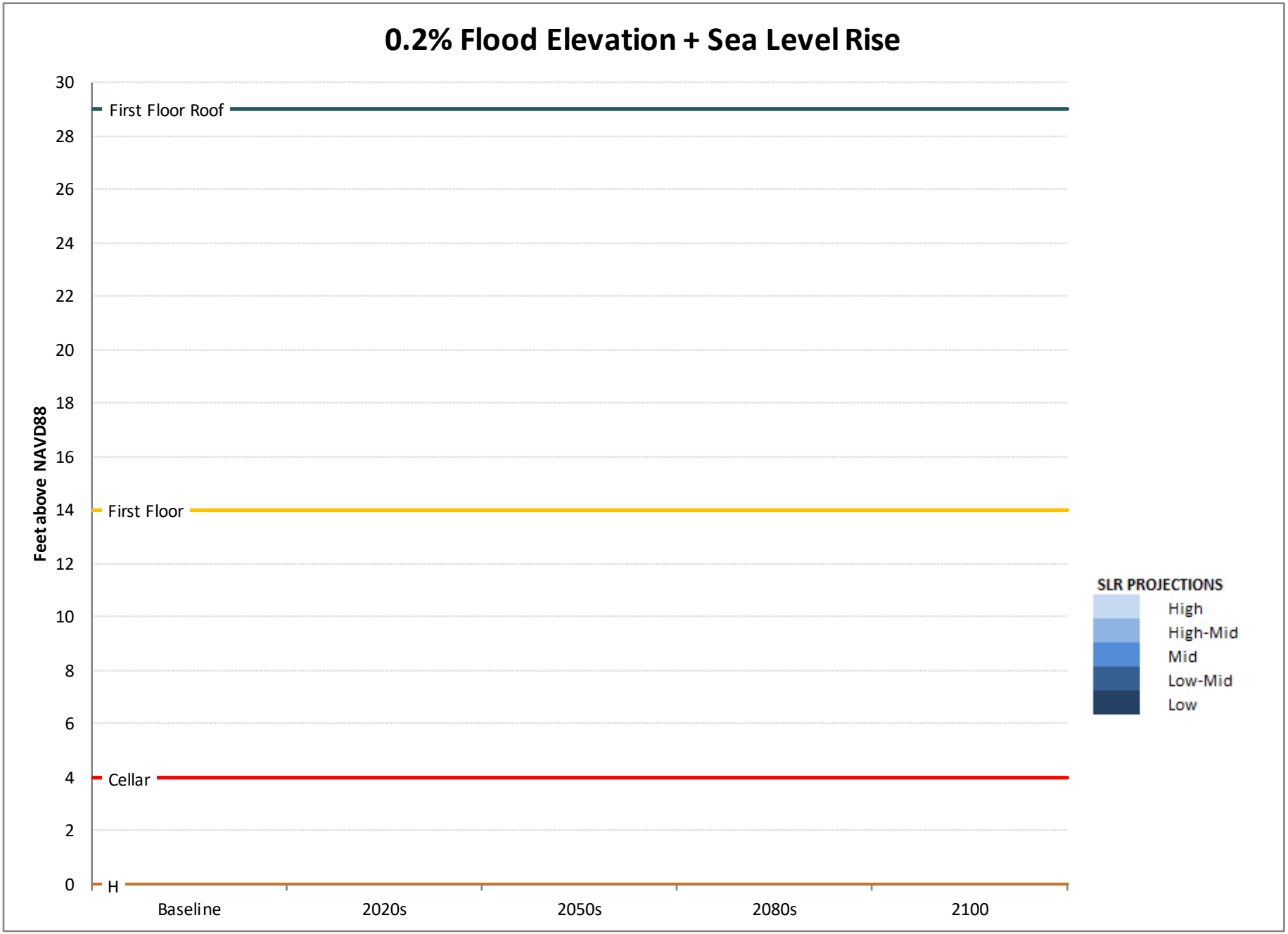
Assess project vulnerability over a range of sea level rise projections.

Mean Higher High Water + Sea Level Rise



1% Flood Elevation + Sea Level Rise




0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
First Floor Roof
First Floor
Cellar
H
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

SLR (ft)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	0.00	0.00	0.00	0.00	0.00
2020s	0.17	0.33	0.50	0.67	0.83
2050s	0.67	0.92	1.33	1.75	2.50
2080s	1.08	1.50	2.42	3.25	4.83
2100	1.25	1.83	3.00	4.17	6.25

MHHW+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	3.05	3.05	3.05	3.05	3.05
2020s	3.22	3.38	3.55	3.72	3.88
2050s	3.72	3.97	4.38	4.80	5.55
2080s	4.13	4.55	5.47	6.30	7.88
2100	4.30	4.88	6.05	7.22	9.30

1%+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	10.00	10.00	10.00	10.00	10.00
2020s	10.17	10.33	10.50	10.67	10.83
2050s	10.67	10.92	11.33	11.75	12.50
2080s	11.08	11.50	12.42	13.25	14.83
2100	11.25	11.83	13.00	14.17	16.25

0.2%+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2020s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2050s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2080s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2100	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

	0	1
Cellar	4	4
First Floor	14	14
Second Floor	29	29
First Floor Roof	29	29
Eight Floor Roof	99	99
Ninth Floor Roof	109	109
G	0	0
H	0	0
DFE	14.00	14.00

	SLR (in)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
2014	0	0	0	0	0
2020s	2	4	6	8	10
2050s	8	11	16	21	30
2080s	13	18	29	39	58
2100	15	22	36	50	75

NOAA Tide Station Data

(to be used only when a site survey is unavailable)

Station ID	*Station Name*	*Source MHHW (Feet, NAVD88)**	*Adjusted MHHW (Feet, NAVD88)**
8518687	Queensboro Bridge	2.27	2.60
8530095	Alpine	2.11	2.44
8516614	Glen Cove	3.72	4.05
8516990	Willets Point	3.72	4.05
8518639	Port Morris	3.33	3.66
8518699	Williamsburg Bridge	2.14	2.47
8518750	The Battery	2.28	2.61
8531680	Sandy Hook	2.41	2.74
8518490	New Rochelle	3.71	4.04
8531545	Keyport	2.66	2.99
8516891	Norton Point	2.08	2.41
8517201	North Channel	2.72	3.05
8517137	Beach Channel	2.10	2.43
8517756	Kingsborough	2.13	2.46
8519436	Great Kills	2.22	2.55
8531142	Port Reading	2.82	3.15
8519483	Bergen Point	2.56	2.89
8519050	USCG	2.28	2.61
8518902	Dyckman St	2.01	2.34
8517251	Worlds Fair Marina	3.59	3.92
8518668	Horns Hook	2.54	2.87
8518643	Randalls Island	2.60	2.93
8518526	Throggs Neck	3.68	4.01

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-20(

Source
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
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NOAA Tides and Currents

)1 tidal epoch.




Alpine
8530095
New
Rochelle
8518490
Dyckman St
8518902
Glen Cove
8516614
Randalls
Island
8518643
Port
Morris
8518639
Throggs
Neck
8518526
Willets
Point
8516990
Worlds Fair
Marina
8517251
Queensboro
Bridge
8518687
Horns Hook
8518668
Williamsburg
Bridge
8518699
The Battery
8518750
North
Channel
8507201
Norton
Point
8516891
CG
9050
Beach
Channel
8517137
Kingsborough
8517756
Sandy Hook
8531680

Print Form

Jamaica Bay Watershed Protection Plan
Project Tracking Form

The Jamaica Bay Watershed Protection Plan, developed pursuant to Local Law 71 of 2005, mandates that the New York City Department of Environmental Protection (DEP) work with the Mayor's Office of Environmental Coordination (MOEC) to review and track proposed development projects in the Jamaica Bay Watershed (http://www.nyc.gov/html/oec/downloads/pdf/ceqr/Jamaica_Bay_Watershed_Map.jpg) that are subject to CEQR in order to monitor growth and trends. If a project is located in the Jamaica Bay Watershed, (the applicant should complete this form and submit it to DEP and MOEC. This form must be updated with any project modifications and resubmitted to DEP and MOEC.

The information below will be used for tracking purposes only. It is not intended to indicate whether further CEQR analysis is needed to substitute for the guidance offered in the relevant chapters of the CEQR Technical Manual.

A. GENERAL PROJECT INFORMATION

1. CEQR Number: Pending 1a. Modification ☐
2. Project Name: 78-08 Linden Boulevard Rezoning
3. Project Description:

The proposed development is a 252,591 gsf building with approximately 273 dwelling units and 12,108 gsf of ground floor retail space, as well as 154 accessory parking spaces. Parts of the building would be 8 and 11 stories tall, and the building would have a cellar.

4. Project Sponsor: Linden Canyon LLC
5. Required approvals: Zoning Map Change and Text Change (to add an MIH area to Appendix F)
6. Project schedule (build year and construction schedule): 2026

B. PROJECT LOCATION:

1. Street address: 78-08 Linden Boulevard
2. Tax block(s): 11384 Tax Lot(s): 1
3. Identify existing land use and zoning on the project site: Retail stores; R4/C1-2
4. Identify proposed land use and zoning on the project site: Mixed residential/retail bldg; R7D/C2-4
5. Identify land use of adjacent sites (include any open space): a contractor's storage yard
6. Describe existing density on the project site and the proposed density:

Existing Condition	Proposed Condition
0.46 FAR	4.53 FAR

7. Is project within 100 or 500 year floodplain (specify)? ☐ **100 Year** ☒ **500 Year** ☐ **No**

C. GROUND AND GROUNDWATER

1. Total area of in-ground disturbance, if any (in square feet): 47,960
2. Will soil be removed (if so, what is the volume in cubic yards)? 53,290
3. Subsurface soil classification:
   (per the New York City Soil and Water Conservation Board): unconsolidated glacial deposits
4. If project would change site grade, provide land contours (**attach** map showing existing in 1' contours and proposed in 1' contours).
5. Will groundwater be used (list volumes/rates)? ☐ **Yes** ☒ **No**

   Volumes: Rates:
6. Will project involve dewatering (list volumes/rates)? ☐ **Yes** ☒ **No**

   Volumes: Rates:
7. Describe site elevation above seasonal high groundwater:

   The site has an elevation of 14 feet NAVD88. Depth to groundwater is approximately 8 to 11 feet.

D. HABITAT

1. Will vegetation be removed, particularly native vegetation? ☐ **Yes** ☒ **No**

   If YES,
   - **Attach** a detailed list (species, size and location on site) of vegetation to be removed (including trees >2" caliper, shrubs, understory planting and groundcover).
   - **List** species to remain on site.
   - **Provide** a detailed list (species and sizes) of proposed landscape restoration plan (including any wetland restoration plans).
2. Is the site used or inhabited by any rare, threatened or endangered species? ☐ **Yes** ☒ **No**
3. Will the project affect habitat characteristics? ☐ **Yes** ☒ **No**

   If YES, describe existing wildlife use and habitat classification using "Ecological Communities of New York State." at http://www.dec.ny.gov/animals/29392.html.
4. Will pesticides, rodenticides or herbicides be used during construction? ☐ **Yes** ☒ **No**

   If YES, estimate quantity, area and duration of application.
5. Will additional lighting be installed? ☐ **Yes** ☒ **No**

   If YES and near existing open space or natural areas, what measures would be taken to reduce light penetration into these areas?

E. SURFACE COVERAGE AND CHARACTERISTICS

(describe the following for both the existing and proposed condition):

	Existing Condition	Proposed Condition
1. ***Surface area:***		
Roof:	22,040 sf	31,960 sf
Pavement/walkway:	25,920	0
Grass/softscape:	0	16,000
Other (describe):	0	0
2. ***Wetland*** (regulated or non-regulated) area and classification:	None	None
3. ***Water surface area:***	None	None

4. ***Stormwater management*** (describe):

Existing – how is the site drained?

Storm drains are located within the accessory parking lot.

Proposed – describe, including any infrastructure improvements necessary off-site:

Parts of the rooftop will have gardens to absorb rainwater. Total roof garden area will be approximately 16,000 sf

Appendix C
Historic and Cultural Resources

NYC Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: LA-CEQR-Q (DEPARTMENT OF CITY PLANNING)
Project:
Address: 78-08 LINDEN BOULEVARD BBL: 4113840001
Date Received: 4/20/2023

[X**] No architectural significance**

[X**] No archaeological significance**

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

Gina Santucci 5/2/2023

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 37056_FSO_DNP_05022023.docx

Appendix D
Transportation

Population FactFinder

Selection Method | 78-08 LINDEN BOULEVA ✕ | Census Tract | Neighborhood Tabulation Area (NTA) | Community District Tabulation Area (CDTA) | Community District (CD) | More Geographies

Your Selection

9 Tracts selected

40,003
Population
(2020 Census)

15,082
Housing Units
(2020 Census)

Clear Selection | View Data ›

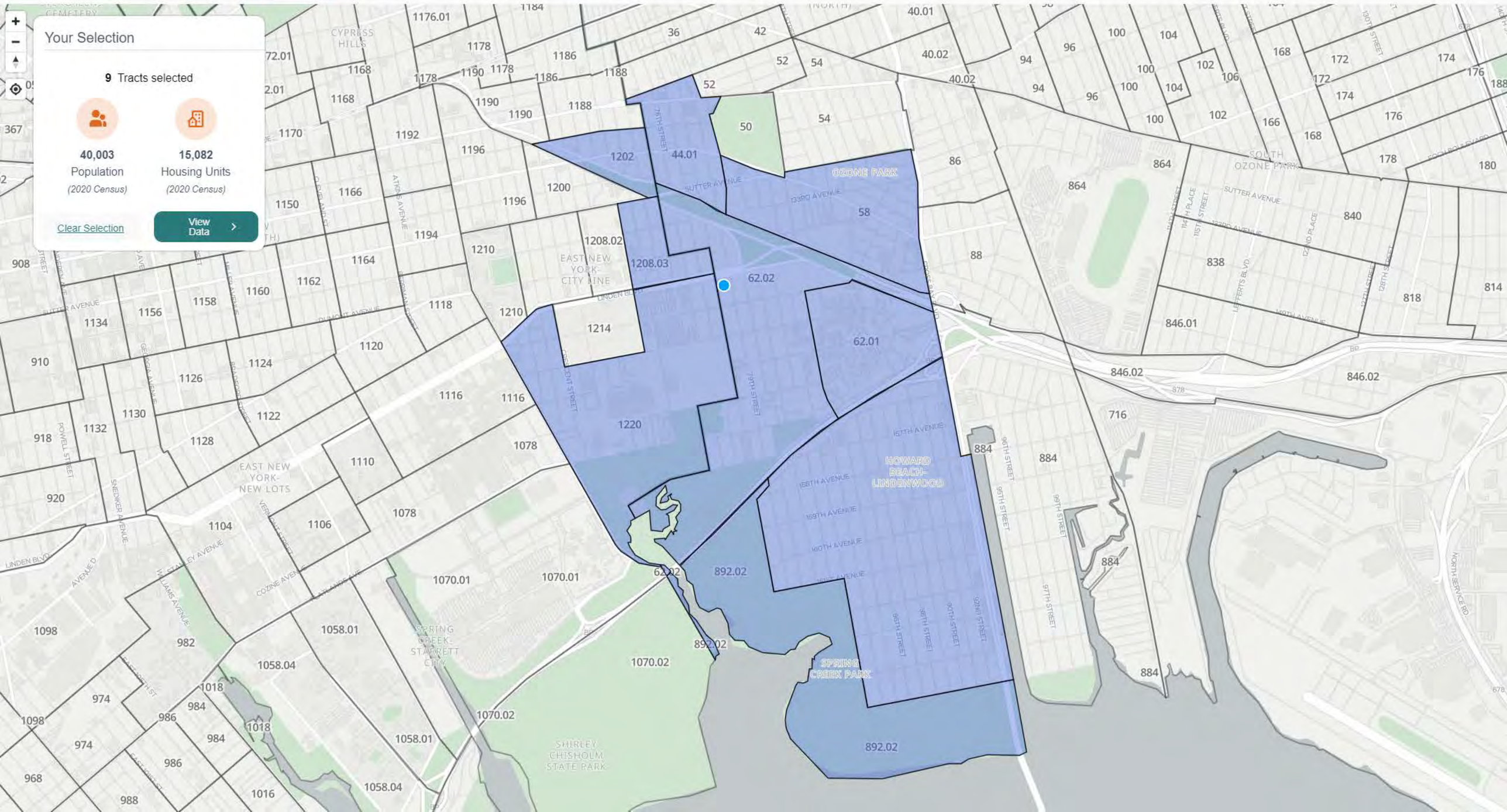


Exhibit 1

Modal Split Data

2015-2019 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens, NY

78-08 Linden Blvd, Queens NY

Census Tract	Total Workers	Car or Van Drive-Alone	Carpool	Bus	Street Car	Subway	R.R.	Ferry	Taxi	Motor cycle	Bicycle	Walked	Other Means	Worked @ Home	Total
1202	694	164	37	86	4	375	9	0	0	0	0	9	10	0	694
1208	3921	954	108	434	0	2094	0	0	15	0	0	159	53	104	3,921
1220	2401	795	241	169	0	1029	0	0	0	0	0	108	0	59	2,401
44.01	1539	537	30	47	0	687	10	0	35	0	0	64	32	97	1,539
58	2960	1173	274	228	0	1191	35	0	10	0	0	26	9	14	2,960
62.01	2512	1132	83	431	57	649	0	0	0	0	19	141	0	0	2,512
62.02	2826	1244	326	335	0	789	0	0	51	0	0	81	0	0	2,826
892	3815	2251	356	270	0	817	19	0	0	0	0	12	36	54	3,815
Total	20,668	8,250	1,455	2,000	61	7,631	73	0	111	0	19	600	140	328	20,668
%		***0.399***	***0.070***	***0.097***	***0.00***	***0.369***	***0.004***	***0.00***	***0.01***	***0.00***	***0.00***	***0.029***	***0.01***	***0.016***	***1.00***

Exhibit 2

Auto Occupancy Rate

2015-2019 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens, NY

Census Tract	Total	Drove alone	Total carpool	Carpool 2person	3 Person	4 Person	5 or 6 Persor	7 or more Person	Total
1202	201	164	37	37	0	0	0	0	37
1208	1062	954	108	108	0	0	0	0	108
1220	1036	795	241	224	17	0	0	0	241
44.01	567	537	30	30	0	0	0	0	30
58	1447	1173	274	207	53	0	0	14	274
62.01	1,215	1132	83	83	0	0	0	0	83
62.02	1570	1244	326	233	30	45	18	0	326
892	2607	2251	356	309	28	19	0	0	356
persons	9,705	8,250	1,455	1,231	128	64	18	14	1,455
cars		8250		616	43	16	3	2	8,929

Modal Split Data Summary

Auto	**47.0%**
Taxi	**0.5%**
Bus	**10.0%**
Subway	**37.3%**
Walk	**2.9%**
Other	**2.4%**
Total	**100%**

Auto Occupancy Rate: 1.09

Table 2 : Transportation Planning Factors

78-08 Linden Boulevard, Queens NY

Land Use:	***Residential***		***Local Retail***	
	d.u.		***gsf***	
Size/Units:	***273***		***-9,932***	
	(1)		**(1)**	
Trip Generation:				
Weekday	8.18		329	
Saturday	9.08		358	
	per d.u.		per 1,000 gsf	
Linked-Trip:	0%		0%	
Temporal Distribution:	**(1)**		**(1)**	
AM Peak Hour	9.3%		4.8%	
MD Peak Hour	5.6%		8%	
PM Peak Hour	8.5%		10.9%	
Saturday Midday Peak Hour	8.4%		11.7%	
	(2)		**(4)**	
Modal Split :	All Periods		All Periods	
Auto	47.0%		11%	
Taxi	0.5%		0%	
Subway	37.3%		3%	
Bus	10.0%		2%	
Walk & Other	5.2%		84%	
Total	100%		100%	
	(1)		**(1)**	
In/Out Splits:	In	Out	In	Out
AM Peak Hour	22%	78%	52%	48%
MD Peak Hour	50%	50%	50%	50%
PM Peak Hour	62%	38%	50%	50%
Saturday Midday Peak Hour	55%	45%	50%	50%
Vehicle Occupancy:	**(2 & 3)**		**(4)**	
Auto	1.09		1.2	
Taxi	1.3		1.2	
Truck Trip Generation:	**(1)**		**(1)**	
Weekday	0.06		0.35	
Saturday	0.02		0.04	
	per d.u.		per 1,000 gsf	
	(1)		**(1)**	
AM Peak Hour	12%		8%	
MD Peak Hour	9%		11%	
PM Peak Hour	2%		2%	
Saturday Midday Peak Hour	9%		11%	
Truck In/Out Splits:	In	Out	In	Out
AM/MD/PM/Sat.Midday	50%	50%	50%	50%

Sources:

(1)-2021 CEQR Technical Manual, Table 16-2.

(2)-2015-2019 American Community Survey (ACS) Journey-to-Work (JTW) Census Tract #'s 1202, 1208, and 1220 in Brooklyn NY; and 44.01, 58, 62.01, 62.02, and 892 in Queens, NY

(3)-East New York Rezoning, Table 13-8.

(4)-Provided by NYCDOT.

Table 3 : Estimated Person Trips

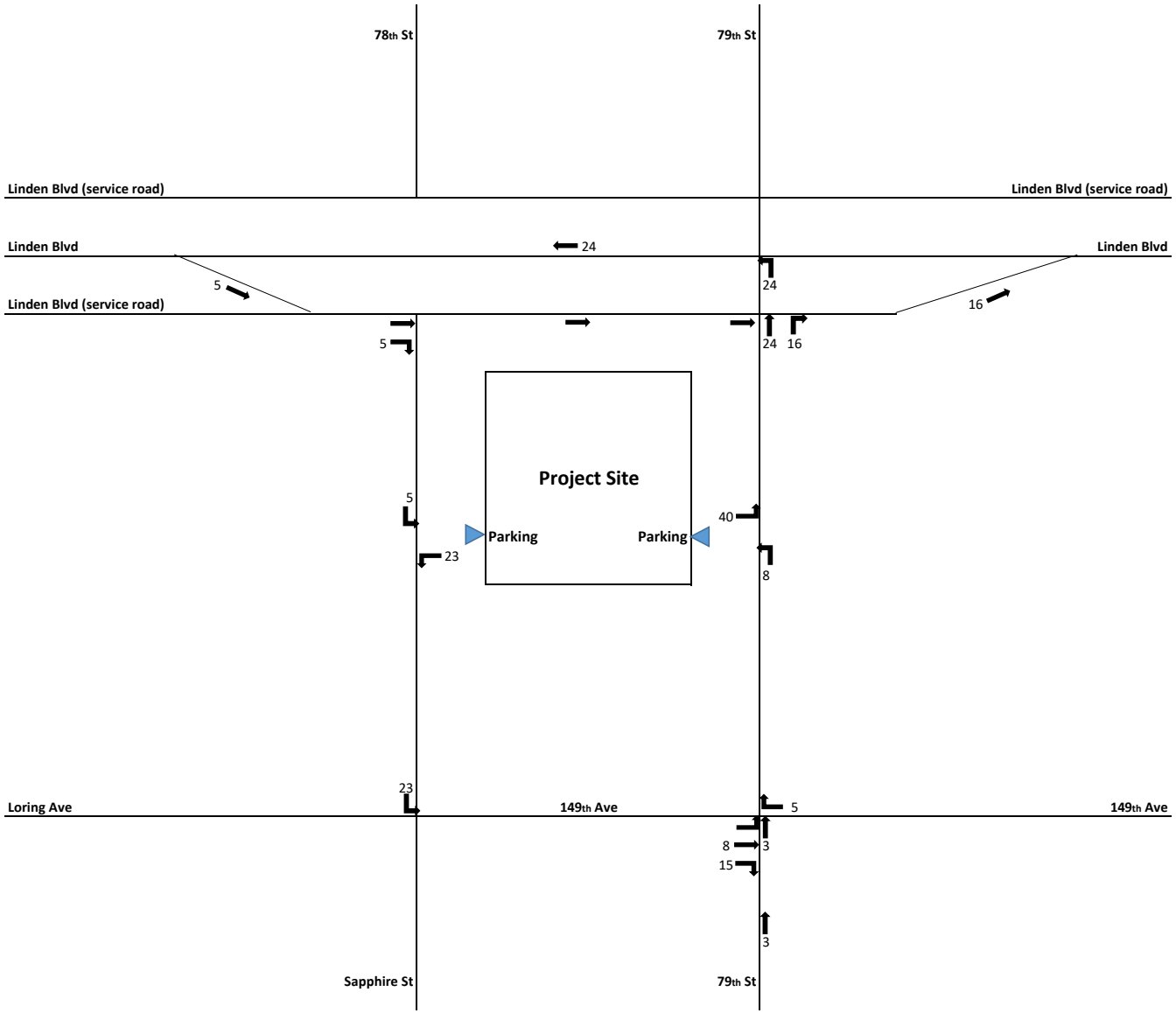
78-08 Linden Boulevard, Queens NY

Land Use:	*Residential*		*Local Retail*		**Total Net Demand**		**Subway**
	d.u.		*gsf*				**Bus**
Size/Units:	*273*		*-9,932*				**Walk**
							Pedestrian Trips
Peak hour Trips							
AM Peak Hour	208		-157		51		
Midday Peak Hour	125		-261		-136		
PM Peak Hour	190		-356		-166		
Saturday Midday Peak Hour	208		-416		-208		
Person Trips:							
AM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	21	76	-9	-8	13	68	
Taxi	0	1	0	0	0	1	
Subway	17	60	-2	-2	15	58	**73**
Bus	5	16	-2	-2	3	15	**18**
Walk & Other	2	8	-69	-63	-66	-55	**-121**
Total	46	162	-82	-75	-36	87	**-30**
Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	29	29	-14	-14	15	15	
Taxi	0	0	0	0	0	0	
Subway	23	23	-4	-4	19	19	**39**
Bus	6	6	-3	-3	4	4	**7**
Walk & Other	3	3	-110	-110	-107	-107	**-213**
Total	63	63	-131	-131	-68	-68	**-167**
PM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	55	34	-20	-20	36	14	
Taxi	1	0	0	0	1	0	
Subway	44	27	-5	-5	39	22	**60**
Bus	12	7	-4	-4	8	4	**12**
Walk & Other	6	4	-150	-150	-143	-146	**-289**
Total	118	72	-178	-178	-60	-106	**-217**
Saturday Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	54	44	-23	-23	31	21	
Taxi	1	0	0	0	1	0	
Subway	43	35	-6	-6	36	29	**65**
Bus	11	9	-4	-4	7	5	**13**
Walk & Other	6	5	-175	-175	-169	-170	**-339**
Total	115	94	-208	-208	-93	-114	**-261**

Table 4 : Estimated Vehicular Trips

78-08 Linden Boulevard, Queens NY

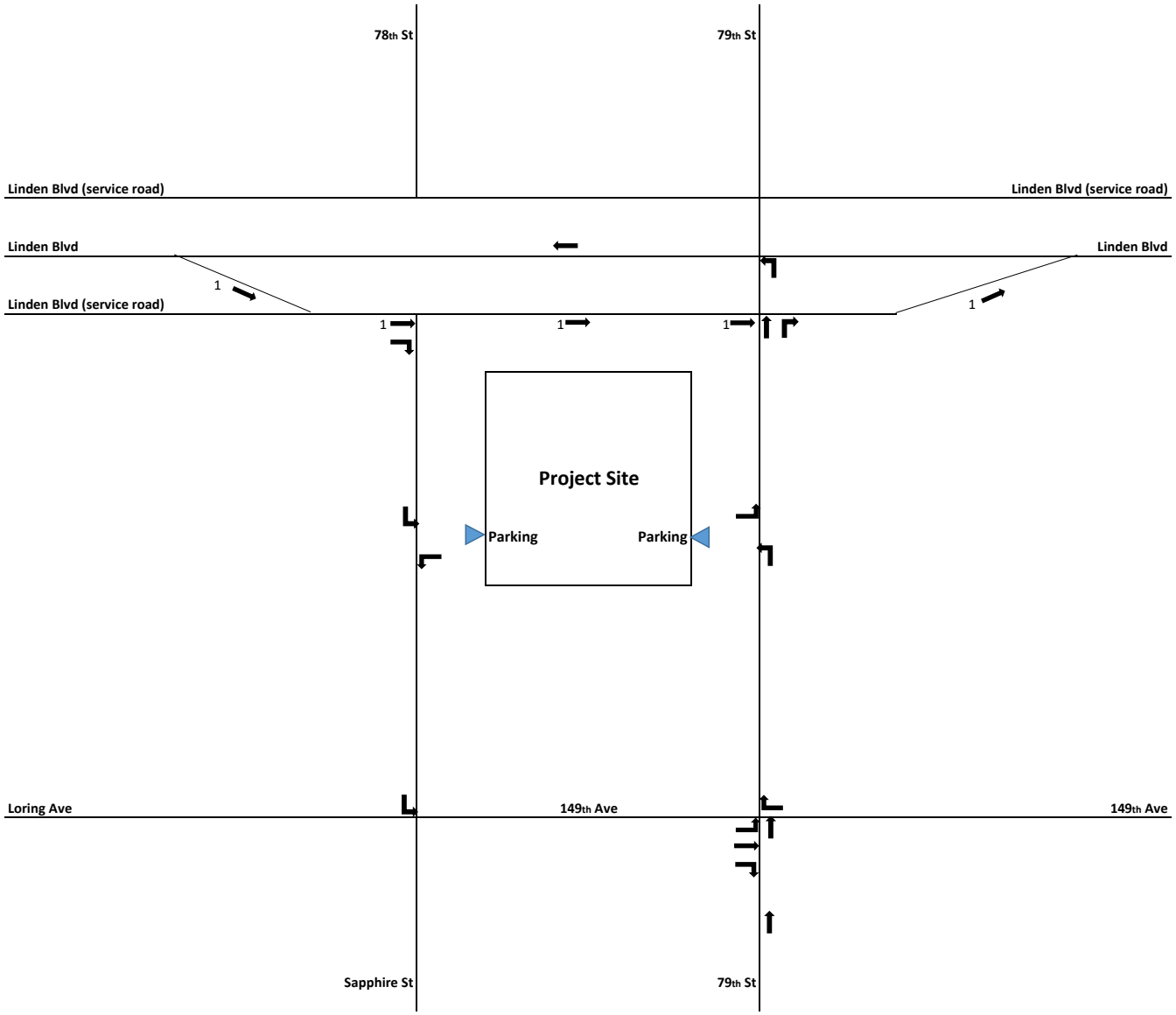
Land Use:	*Residential*		*Local Retail*		**Total Net Demand**		
	d.u.		*gsf*				
Size/Units:	*273*		*-9,932*				
Vehicular Trips							
AM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	**Total**
Auto (Total)	20	70	-7	-7	13	63	
Taxi	0	1	0	0	0	1	
Taxi (Balanced)	1	1	0	0	1	1	
Truck (Balanced)	0	0	0	0	0	0	
Total	21	71	-7	-7	**14**	**64**	**78**
Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	**Total**
Auto (Total)	27	27	-12	-12	15	15	
Taxi	0	0	0	0	0	0	
Taxi (Balanced)	0	0	0	0	0	0	
Truck (Balanced)	0	0	0	0	0	0	
Total	27	27	-12	-12	**15**	**15**	**30**
PM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	**Total**
Auto (Total)	51	31	-16	-16	35	15	
Taxi	0	0	0	0	0	0	
Taxi (Balanced)	0	0	0	0	0	0	
Truck (Balanced)	0	0	0	0	0	0	
Total	51	31	-16	-16	**35**	**15**	**50**
Saturay Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	**Total**
Auto (Total)	49	40	-19	-19	30	21	
Taxi	0	0	0	0	0	0	
Taxi (Balanced)	0	0	0	0	0	0	
Truck (Balanced)	0	0	0	0	0	0	
Total	49	40	-19	-19	**30**	**21**	**51**



Project Generated Auto Trips
Weekday AM Peak Hour

Figure 1a

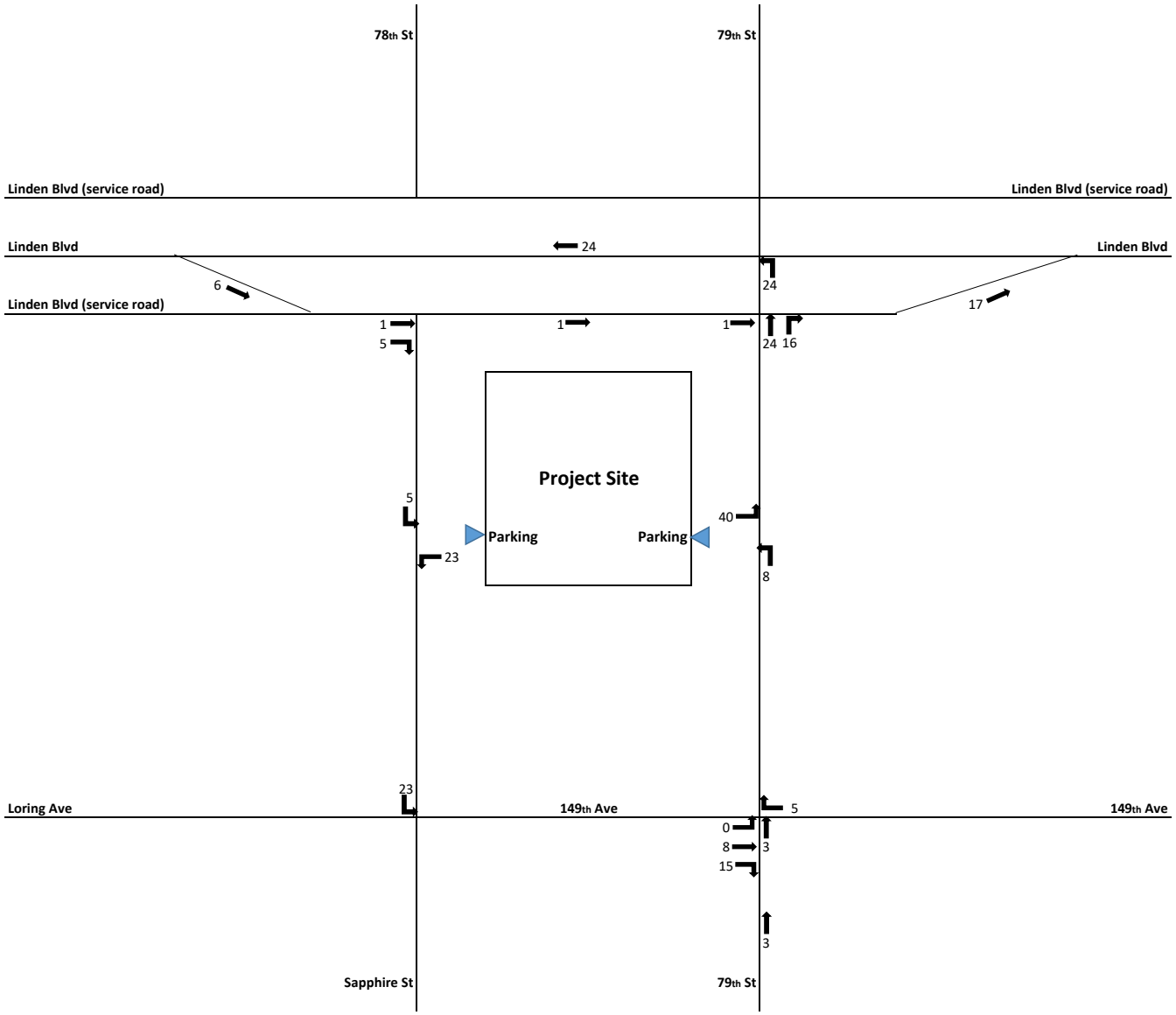
	in	out
Auto Trips	13	63



Project Generated Taxi Trips
Weekday AM Peak Hour

Figure 1b

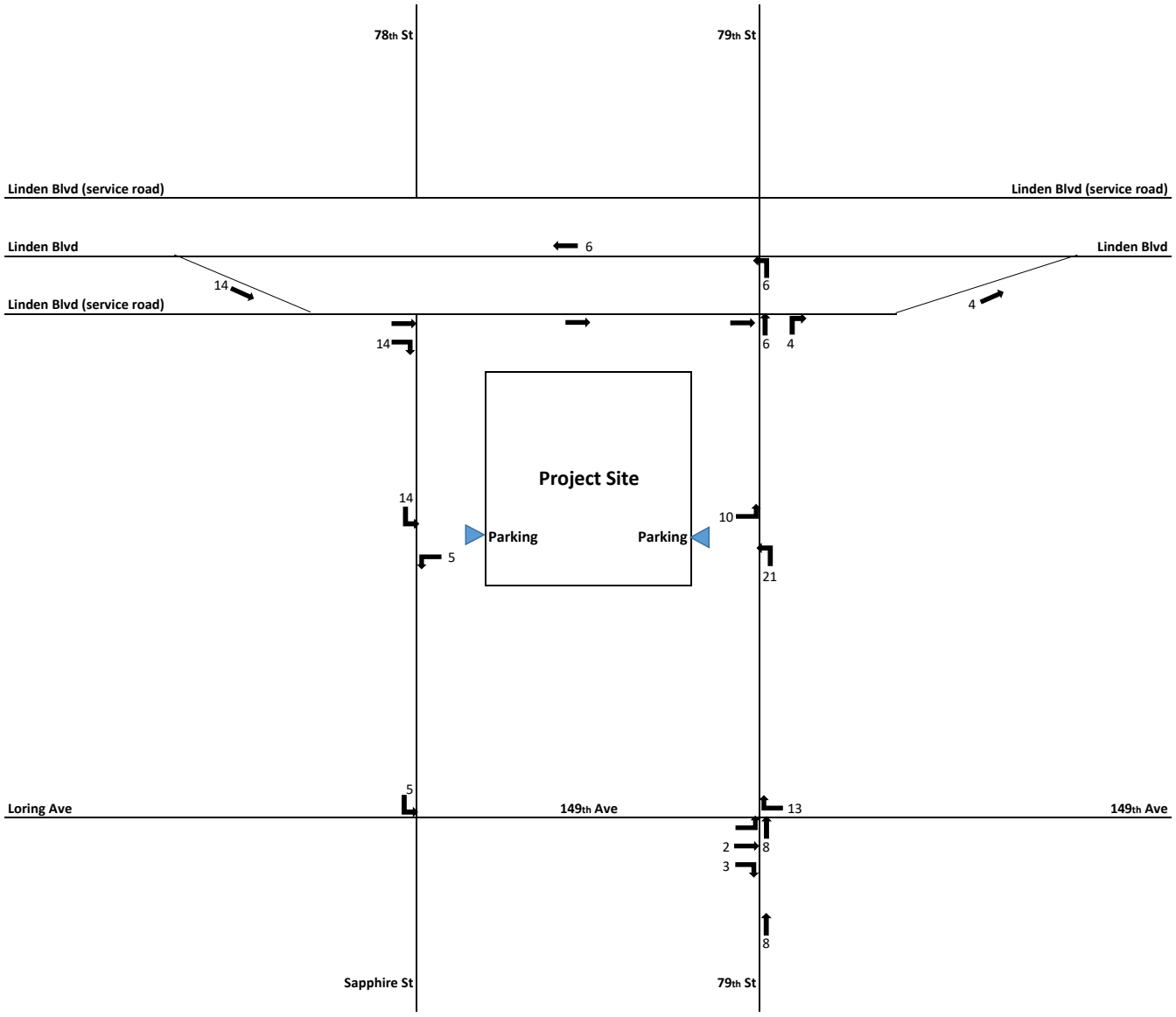
	in	out
Taxi Trips	1	1



Project Generated Vehicle Trips
Weekday AM Peak Hour

Figure 1

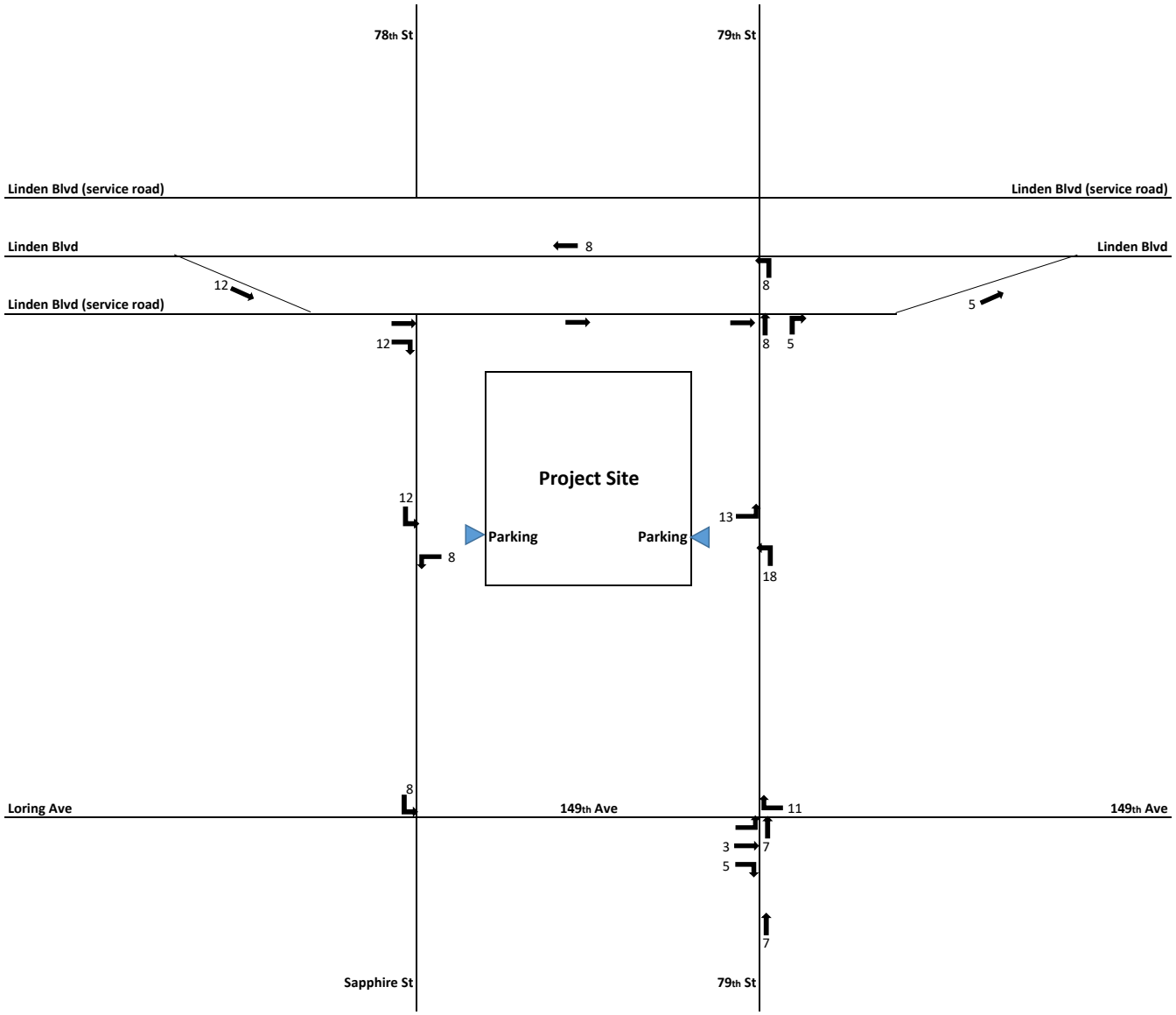
	in	out
Vehicle Trips	14	64



Project Generated Vehicle Trips
Weekday PM Peak Hour

Figure 2

	in	out
Vehicle Trips	35	15



Project Generated Vehicle Trips
Saturday MD Peak Hour

Figure 3

	in	out
Vehicle Trips	30	21