HydroTech Environmental
ENGINEERING AND GEOLOGY, DPC

NYC Office
405 Lexington Ave, 8th Fl
New York, New York 10174

Long Island Office
77 Arkay Drive, Suite K
Hauppauge, New York 11788

Tel (631) 462-5866
Email: Info@ hydrotechenvironmental.com
WWW.HYDROTECHENVIRONMENTAL.COM

NEW YORK CITY ENVIRONMENTAL QUALITY REVIEW ENVIRONMENTAL ASSESSMENT STATEMENT AND SUPPLEMENTAL STUDIES

For

77-39 Vleigh Place Rezoning
Queens, NY
Block 6630, Lot 1 and part of Lot 15

CEQR #: 21DCP063Q
ULURP #: 210128ZMQ; N210129ZRQ

Lead Agency:

New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Prepared For:

VP Capital Holdings LLC
77-39 Vleigh Place Rezoning
Queens, NY

Prepared By:

HydroTech Environmental Engineering and Geology, DPC
405 Lexington Ave, 8th Floor
New York, NY 10174

January 14, 2022

Contents

EAS Short Form
1. Project Description 9
1.1 Introduction 9
1.2 Background 9
1.3 Description of the Surrounding Area 10
1.4 Description of the Affected Area 10
1.5 Description of the Proposed Development 11
1.6 Action(s) Necessary to Facilitate the Project 11
1.7 Purpose and Need 11
1.8 Analysis Framework 11
2. Environmental Review 16
2.1 Land Use, Zoning, and Public Policy 16
2.2 Open Space 21
2.3 Shadows 27
2.4 Historic and Cultural Resources 32
2.5 Urban Design and Visual Resources 34
2.6 Hazardous Materials 43
2.7 Air Quality 46
2.8 Noise 58

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

Please fill out and submit to the appropriate agency (see instructions)

Part I: GENERAL INFORMATION

PROJECT NAME 77-39 Vleigh Place Rezoning

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
21DCP063Q	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
210128ZMQ; N210129ZRQ	

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
Department of City Planning			VP Capital Holdings LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shellooe, Director, EARD			Tarek Z. Khouri		
ADDRESS 120 Broadway			ADDRESS 405 Lexington Ave, 8th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10174
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 631-462-5866	EMAIL tkhouri@hydrotechenvironmental.com	

3. *Action Classification and Type*

SEQRA Classification

☒ UNLISTED ☐ TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended):

Action Type (refer to Chapter 2, "Establishing the Analysis Framework" for guidance)

☐ LOCALIZED ACTION, SITE SPECIFIC ☒ LOCALIZED ACTION, SMALL AREA ☐ GENERIC ACTION

4. *Project Description*

The Applicant, VP Capital Holdings LLC, proposes a zoning map amendment to rezone 77-39 Vleigh Place and a portion of 141-33 78th Avenue (Block 6630, Lots 1 and p/o 15) ("Affected Area") by removing the C1-2 overrlay from the R3-2 district, rezoning a portion of the R3-2 district to an R6A, and replacing the previously existing C1-2 overlay with a C2-3 overlay. In addition, The Applicant proposes a zoning text amendment to the Zoning Resolution (ZR) Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (MIH) Areas for Queens Community District 8 to establish an MIH Area coterminous with the Affected Area. The Applicant proposes mapping MIH Option 2. Together, the zoning map amendment and zoning text amendment constitute the Proposed Actions.

The Proposed Actions would facilitate the development of 77-39 Vleigh Place (Block 6630, Lot 1) ("Development Site") with a new 8-story, 85-foot-tall, 189,418 gross-square-foot (gsf) mixed-use building. The structure 126 enclosed parking spaces at sub-cellar level, a physical and cultural establishment (PCE; subject to BSA approval) and childcare facility, ground floor commercial space, and floors two through eight residential space. There would be 119 total dwelling units, 36 of which would be permanently set aside at or below 80% AMI.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 8	STREET ADDRESS 77-39 Vleigh Place
TAX BLOCK(S) AND LOT(S) 6630, Lot 1, p/o Lot 15		ZIP CODE 11367

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS 77th Road to the north, Main Street to the east, 78th Avenue to the south, Vleigh Place to the west

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R3-2/C1-2	ZONING SECTIONAL MAP NUMBER 14c

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

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

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☒ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☒ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT

☐ SITE SELECTION—PUBLIC FACILITY ☐ DISPOSITION—REAL PROPERTY ☐ FRANCHISE
☐ HOUSING PLAN & PROJECT ☐ OTHER, explain:
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

6. *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.): 34,553
Roads, buildings, and other paved surfaces (sq. ft.): 45,750
Waterbody area (sq. ft.) and type:
Other, describe (sq. ft.):

7. *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): 189,418
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 189,418
HEIGHT OF EACH BUILDING (ft.): 85
NUMBER OF STORIES OF EACH BUILDING: 8

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: 30,253
The total square feet not owned or controlled by the applicant: 4,300

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 disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 30,055 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 300,055 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 30,055 sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2023

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: 18 months of construction

9. *Predominant Land Use in the Vicinity of the Project* (check all that apply)
☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Community Facility

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

The information requested in this table applies to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory control. The increment is the difference between the No-Action and the With-Action conditions.

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
LAND USE				
Residential	☐ YES ☒ NO	☐ YES ☒ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type of residential structures			one 8-story multi-family	
No. of dwelling units			119	119
No. of low- to moderate-income units			24	24
Gross floor area (sq. ft.)			118,599	118,599
Commercial	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type (retail, office, other)		Local Retail	Local Retail	
Gross floor area (sq. ft.)		21,552	24,922	3,370
Manufacturing/Industrial	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify:				
Community Facility	☐ YES ☒ NO	☒ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify the following:				
Type		UG 4 Medical	UG 4 Medical	
Gross floor area (sq. ft.)		20,130	10,557	-9,573
Vacant Land	☒ YES ☐ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	Unimproved lot			
Publicly Accessible Open Space	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):				
Other Land Uses	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
PARKING				
Garages	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces		0	0	
No. of accessory spaces		54	126	72
Operating hours		24/7	24/7	
Attended or non-attended		Non-attended	Attended	
Lots	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces				
Operating hours				
Other (includes street parking)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
POPULATION				
Residents	☐ YES ☒ NO	☐ YES ☒ NO	☒ YES ☐ NO	
If "yes," specify number:			338	338
Briefly explain how the number of residents was calculated:	Queens CD 8 average household size of 2.84 per 2017 ACS			

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Businesses	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. and type		4 medical offices; 10 local retail	1 medical office; 8 local retail	
No. and type of workers by business		125 workers	106 workers	-19 workers
No. and type of non-residents who are not workers		6,500	6,201	-299
Briefly explain how the number of businesses was calculated:	Medical 1 per 5,000 GSF; Local retail = 1 per 2,000 GSF			
Other (students, visitors, concert-goers, *etc.*)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				
ZONING				
Zoning classification	R3-2/C1-2	R3-2/C1-2	R6A/C2-3	
Maximum amount of floor area that can be developed	1.00	1.00	3.60	+2.60
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Land Use: Public facilities; multifamily residential. Zoning: R2, R3-2, R4, C1-2	Land Use: Public facilities; multifamily residential. Zoning: R2, R3-2, R4, C1-2	Land Use: Public facilities; multifamily residential. Zoning: R2, R3-2, R4, C1-2	
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

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 Full 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?	☐	☒
o If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
o If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of more than 200 residential units *or* 200,000 square feet of commercial space?	☐	☒
▪ If "yes," answer *both* questions 2(b)(ii) and 2(b)(iv) below.		
o Directly displace 500 or more residents?	☐	☒
▪ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
o Directly displace more than 100 employees?	☐	☒
▪ If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
o Affect conditions in a specific industry?	☐	☒
▪ If "yes," answer question 2(b)(v) below.		
(b) If "yes" to any of the above, attach supporting information to answer the relevant questions below. If "no" was checked for each category above, the remaining questions in this technical area do not need to be answered.		
i. Direct Residential Displacement		
o If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	☐	☐
o If "yes," is the average income of the directly displaced population markedly lower than the average income of the rest of the study area population?	☐	☐
ii. Indirect Residential Displacement		
o Would expected average incomes of the new population exceed the average incomes of study area populations?	☐	☐
o If "yes:"		
▪ Would the population of the primary study area increase by more than 10 percent?	☐	☐
▪ Would the population of the primary study area increase by more than 5 percent in an area where there is the potential to accelerate trends toward increasing rents?	☐	☐
o If "yes" to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	☐	☐
iii. Direct Business Displacement		
o Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	☐	☐
o Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve,	☐	☐

	YES	NO
enhance, or otherwise protect it?		
iv. Indirect Business Displacement		
o Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	☐	☐
o Would the project capture retail sales in a particular category of goods to the extent that the market for such goods would become saturated, potentially resulting in vacancies and disinvestment on neighborhood commercial streets?	☐	☐
v. Effects on Industry		
o Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	☐	☐
o Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?	☐	☐
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
i. Child Care Centers		
o 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)	☐	☒
o If "yes," would the project result in a collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent?	☐	☐
o If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
ii. Libraries		
o 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)	☐	☒
o If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	☐	☐
o If "yes," would the additional population impair the delivery of library services in the study area?	☐	☐
iii. Public Schools		
o 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)	☐	☒
o If "yes," would the project result in a collective utilization rate of the elementary and/or intermediate schools in the study area that is equal to or greater than 100 percent?	☐	☐
o If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
iv. Health Care Facilities		
o Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
o If "yes," would the project affect the operation of health care facilities in the area?	☐	☐
v. Fire and Police Protection		
o Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
o If "yes," would the project affect the operation of fire or police protection in the area?	☐	☐
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
(c) If "yes," would the project generate more than 50 additional residents or 125 additional employees?	☐	☐
(d) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
(e) If "yes," would the project generate more than 350 additional residents or 750 additional employees?	☐	☐
(f) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐
(g) If "yes" to questions (c), (e), or (f) above, attach supporting information to answer the following:		
o If in an under-served area, would the project result in a decrease in the open space ratio by more than 1 percent?	☐	☒
o If in an area that is not under-served, would the project result in a decrease in the open space ratio by more than 5	☐	☒

	YES	NO
percent?		
o If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:	☐	☐
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?	☒	☐
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year.		
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources.		
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?	☐	☒
(c) If "yes" to either of the above, please provide the information requested in Chapter 10.		
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?	☐	☒
o If "yes," list the resources and attach supporting information on whether the project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
o If "yes," complete the Jamaica Bay Watershed Form and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☐	☒
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☐	☒
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☐	☒
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☐	☒
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☒	☐
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☐	☒
o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☐	☐
(i) 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?	☐	☒

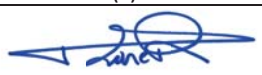
	YES	NO
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than that listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(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 contribute contaminated stormwater to a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
(i) If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation.		
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): (41 x 119) + (79 x 106) = 13,253		
o 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?	☐	☒
o If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	☐	☐
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): (216.3 x 35,479) + (126.7 x 119) = 7,689,184		
(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 appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
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.***	☐	☒
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway/rail trips per station or line?	☐	☐
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☒
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(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?	☐	☒
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation.		
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) Would the proposed project result in the development of 350,000 square feet or more?	☐	☒
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?	☐	☒

	YES	NO
o If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-803 of the Administrative Code of the City of New York). Please attach supporting documentation.	☐	☒
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(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?	☐	☒
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation.		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
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.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	☐	☒
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
o The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
o Closure of a community facility or disruption in its services?	☐	☒
o Activities within 400 feet of a historic or cultural resource?	☐	☒
o Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
o Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(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	SIGNATURE	DATE
Tarek Z. khouri, PE		January 14, 2022

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

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

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

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

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

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

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

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

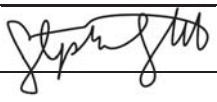
☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental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

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

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

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe	January 14, 2022

SIGNATURE 

NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The proposed actions are a Zoning Map Amendment to rezone the project area (Brooklyn Block 6630, Lot 1 and part of Lot 15) from an R3-2/C1-2 district to R6A/C2-3, and a Zoning Text Amendment to establish a Mandatory Inclusionary Housing area coterminous with the rezoning area in the Kew Gardens Hills neighborhood of Queens Community District 8. Land uses in the surrounding area are predominantly low- and mid-rise community facilities, and low-rise multi-family and one- and two-family residential buildings. Directly east of the project area along Main Street is a wider range of mixed residential, commercial, and community facility uses. The proposed actions would facilitate the development of a new 8-story mixed use building with 119 dwelling units, approximately 25,000 gsf of commercial retail, 10,560 gsf of community facility space, and 126 parking spaces on Lot 1. Zoning controls would also be modified on a small portion of Lot 15, but this is not expected to induce development as a result of the proposed actions. The proposed actions would increase residential and commercial density on Lot 1, however, the density and uses permitted by the proposed actions would be compatible with existing uses in the surrounding area, and in line with recent development trends according to Department of Buildings active construction permit records. As such, the proposed actions would not constitute a significant adverse impact to land use, zoning and public policy.

Air Quality and Noise

An (E) designation (E-657) related to air quality and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The air quality and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to air quality or noise.

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe	DATE January 14, 2022
SIGNATURE	

TITLE	
Chair, City Planning Commission	
NAME Anita Laremont	DATE January 18, 2022
SIGNATURE	

Project Name: 77-39 Vleigh Place Rezoning
CEQR # 21DCP063Q
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Queens	Block 6630, Lot 1

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to air quality and noise an (E) designation (**E-657**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

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

Air Quality

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

> ***Projected Development Site 1:*** *Any new residential, commercial, and/or community facility development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 88 feet above grade to avoid any potential significant adverse air quality impacts.*

Noise

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

> ***Projected Development Site 1:*** *In order to ensure an acceptable interior noise environment, future residential/community facility/ commercial office uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all facades in order to maintain an interior L10 noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office uses. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.*

Figure 1: Project Location Map

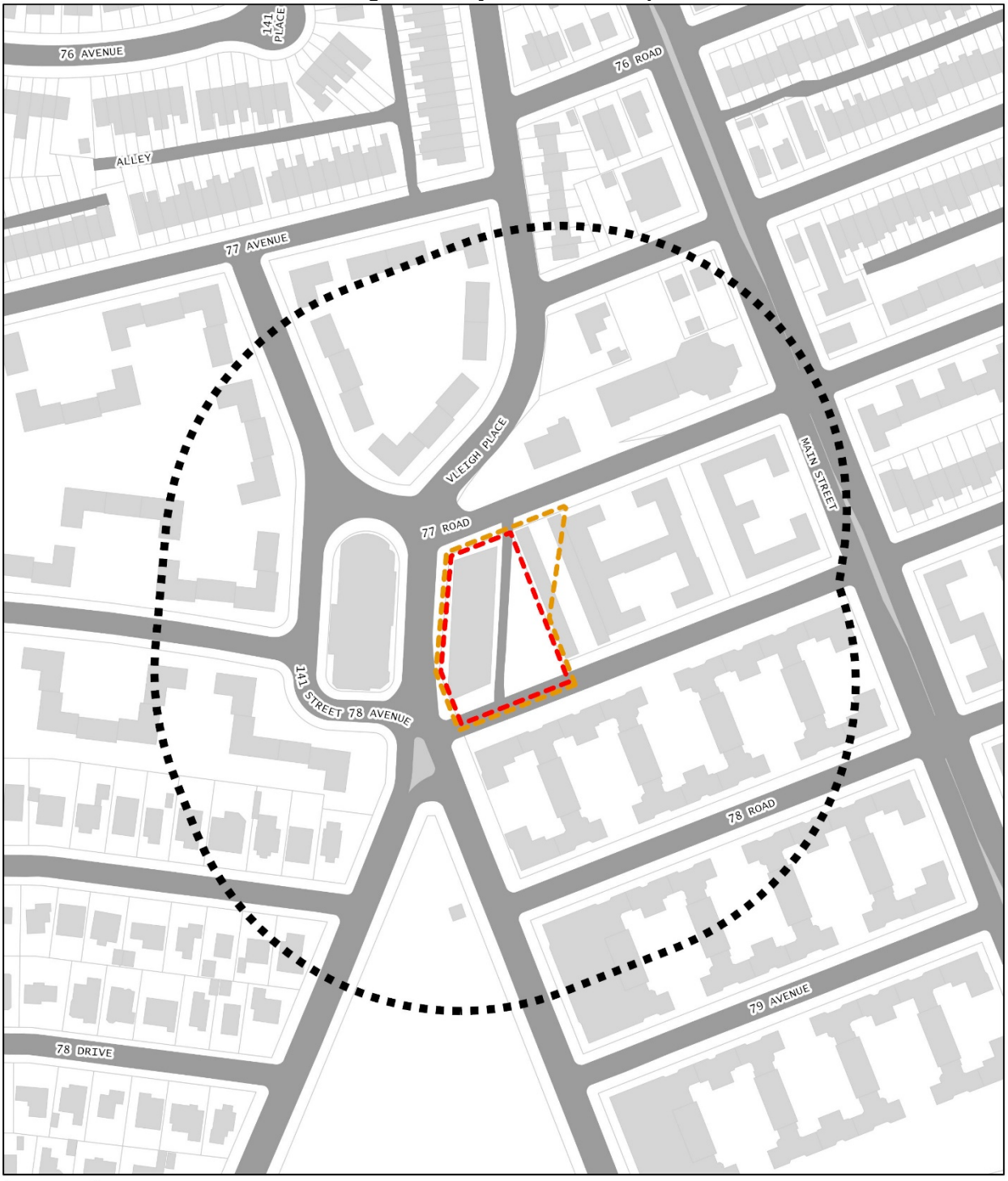


Figure 2: Land Use Map



Figure 3: Tax Map

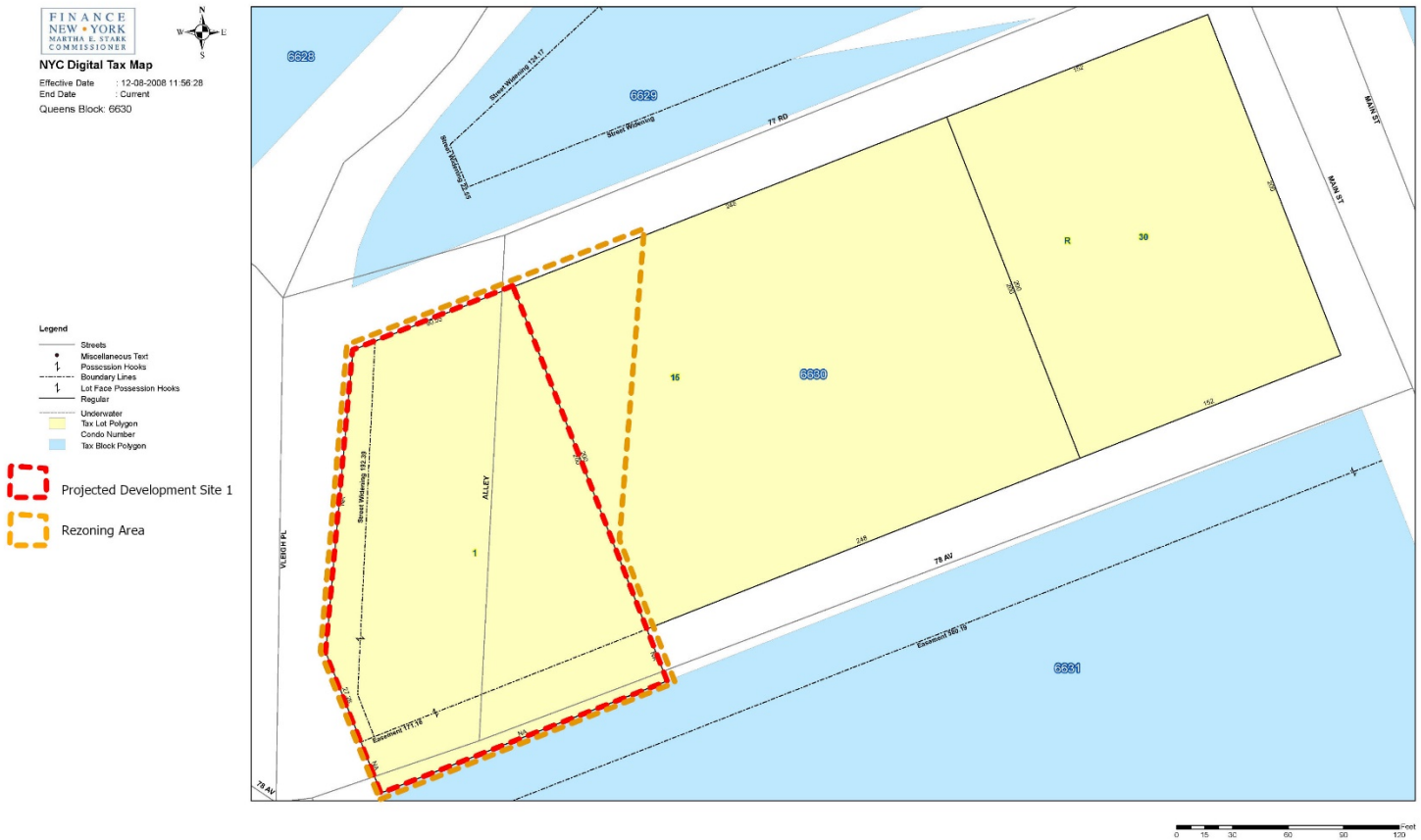
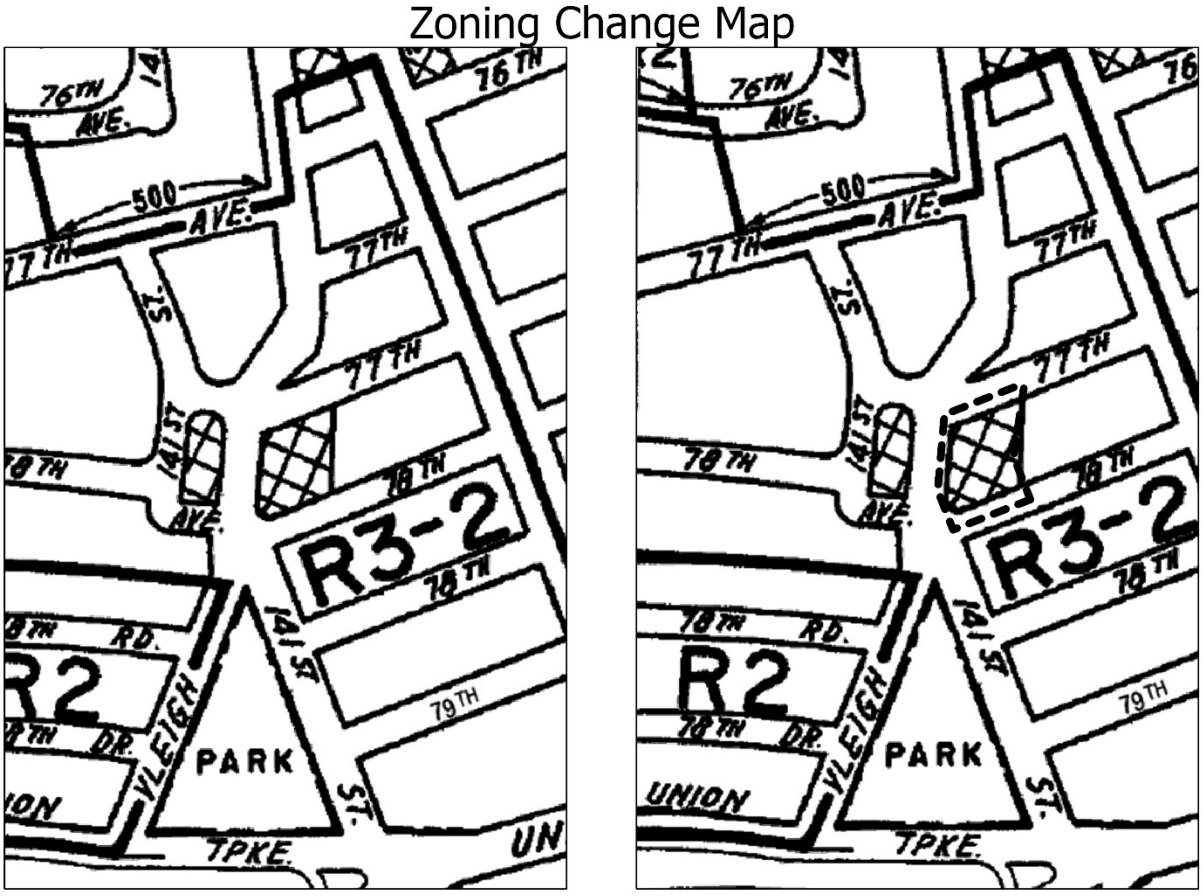


Figure 4: Zoning Change Map



Existing R3-2/C1-2 Zoning District **Proposed R6A/C2-3 Zoning District**

Figure 5: Zoning Map

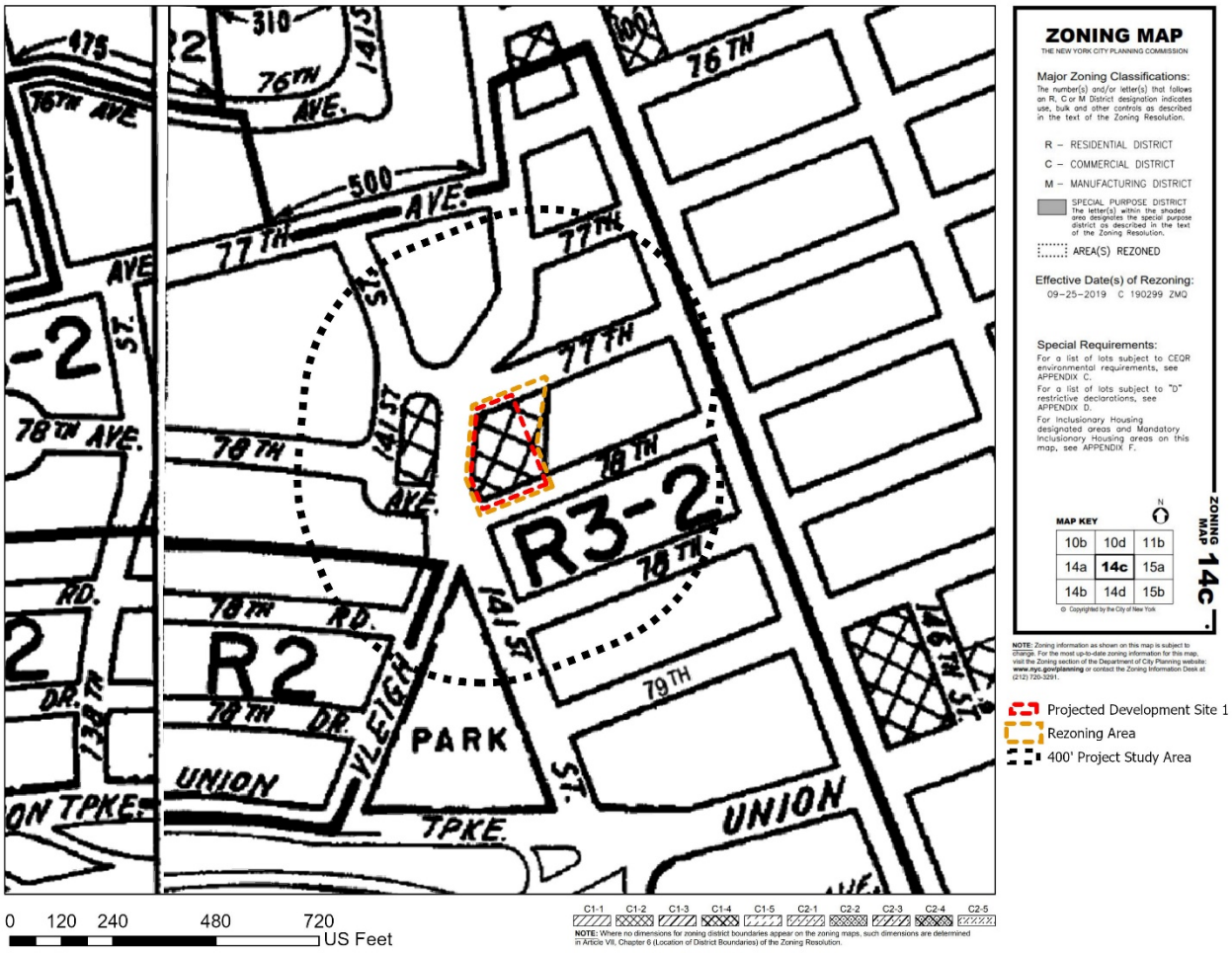


Figure 6: Photo Key



01 77th Road and Main Street Intersection



02 77th Road and Vleigh Place Intersection



03 78th Avenue and Vleigh Place Intersection



Photo Key

77-63 Vleigh Place
2/14/2020

1. Project Description

1.1 Introduction

The Applicant, VP Capital Holdings LLC, proposes a zoning map amendment to rezone 77-39 Vleigh Place and a portion of 141-33 78th Avenue (Block 6630, Lots 1 and p/o 15) ("Affected Area") by removing the C1-2 overrlay from the R3-2 district, rezoning a portion of the R3-2 district to an R6A, and replacing the previously existing C1-2 overlay with a C2-3 overlay. In addition, The Applicant proposes a zoning text amendment to the Zoning Resolution (ZR) Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (MIH) Areas for Queens Community District 8 to establish an MIH Area coterminous with the Affected Area. The Applicant proposes mapping MIH Option 2. Together, the zoning map amendment and zoning text amendment constitute the Proposed Actions.

The Proposed Actions would facilitate the development of 77-39 Vleigh Place (Block 6630, Lot 1) ("Development Site") with a new 8-story, 85-foot-tall, 189,418 gross-square-foot (gsf) mixed-use building. The structure would include 126 enclosed parking spaces at sub-cellar level, a physical and cultural establishment (PCE; subject to BSA approval) and childcare facility, ground floor commercial space, and floors two through eight residential space. There would be 119 total dwelling units, 36 of which would be permanently affordable at or below 80% AMI.

The Proposed Actions are discretionary actions subject to environmental review. The New York City (NYC) Department of City Planning (DCP) shall be the lead agency on behalf of the NYC City Planning Commission (CPC) for environmental review under CEQR.

1.2 Background

The Affected Area was zoned R3-2/C1-2 in the 1961 zoning ordinance.

According to Department of Buildings (DOB) records and historic aerials, Lot 1 was improved with a 1-story commercial building as early as 1951. The building burned down in 2016 and the site was cleared and excavated as part of a NYC Department of Environmental Protection (DEP) monitored cleanup. In late 2018 The Applicant filed plans for a 2.5-story building with commercial and community facility space, but the plans went unrealized.

In 1992, beginning two blocks north of the northern edge of the Affected Area, the City rezoned portions of an R3-2 zoning district to R4 and extended the C1-2 commercial overlay south along Main Street as part of the Kew Gardens Hills Rezoning (ULURP# 920065ZMQ). The rezoning sought to better reflect existing residential bulk and commercial uses.

In 2019, the city rezoned an R2 zoning district beginning one block south of the Affected Area to R2X as part of the Kew Gardens Hills Rezoning (ULURP# 190299ZMQ). The rezoning sought to allow for higher single-family residential bulk to better accommodate the neighborhood's growing families.

1.3 Description of the Surrounding Area

The Affected Area is located in Kew Garden Hills within Queens Community District 8. Main Street, to the east of the Affected Area, is a significant corridor in this neighborhood, and is developed with a wider range of uses than the surrounding area. Land uses within the 400-foot surrounding area are predominantly low- and mid-rise community facilities and low-rise multi-family and one- and two-family residential structures. The area also includes the Judge Moses Weinstein Playground to the south along Union Turnpike, the Steppingstone Day School immediately to the west, and North Queens Community High School immediately to the north of the Development Site.

The Affected Area is within an R3-2 zoning district that includes a C1-2 commercial overlay. A large R4 zoning district exists one block to the east and north. A small cluster of single-family homes to the southwest of the Development Site were recently rezoned to an R2X zoning district. C1-2 commercial overlays are generally mapped along Main Street to the north and Union Turnpike to the south.

The traffic grid is regular east of the Affected Area and irregular west and north of the Affected Area. Block 6608, Lot 2, the location of the Steppingstone Day School, is at the confluence of Vleigh Place, 141st Street, and 78th Avenue, and creates irregular blockfronts and disjointed roads. 78th Avenue ends in a cul-de-sac at a 174-unit co-op development on Block 6587, Lot 6.

The Affected Area is not within the Transit Zone. The closest subway station, Union Turnpike-Kew Gardens Station, is approximately 3,400 feet to the southwest with stops for the E and F trains. Bus service is provided by MTA along Main Street, with stops for the Q20A and Q20B, and along Union Turnpike, with stops for the Q46. Main Street is the primary thoroughfare in the area and includes many commercial uses. The Affected Area is also located near entrance ramps for Interstate 678 (Van Wyck Expressway) and Grand Central Parkway.

1.4 Description of the Affected Area

The Affected Area is shown above in **Figures 1 through 6**. The Affected Area is zoned R3-2/C1-2, which allows residential development up to .60 FAR, commercial development up to 1.00 FAR, and community facility development up to 1.00 FAR.

The Development Site is Block 6630, Lot 1, and is a 34,553-sf corner lot with 90 feet of frontage along 77th Road, 250 feet of frontage along Vleigh Place, and 170 feet of frontage along 78th Avenue. The southern lot line extends to the midpoint of 78th Avenue, and a right-of-way easement covers approximately 5,000 GSF of the lot. The lot was formerly improved with a one-story commercial building which burned down around 2016. The site has since been cleared and excavated in a coordinated clean-up with DEP.

The remaining lot in the Affected Area is Block 6630, Lot 15. Lot 15 is improved with a 45,750 GSF cooperatively owned multi-family building with 60 dwelling units. The building was originally constructed in 1949, and is a legally non-conforming and non-complying use. The through-lot includes 248 feet of frontage along 77th Road and 78th Avenue. As part of the proposed rezoning the boundary of the existing C1-2 commercial overlay would be removed from Lot 15.

1.5 Description of the Proposed Development

The Applicant proposes to develop an eight-story, 85-foot-tall, 189,418 GSF mixed-use building. The structure would include sub-cellar parking, cellar with a PCE (subject to BSA approval) and childcare facility, ground floor commercial space, and floors two through eight residential space. There would be 118,599 GSF of residential floor area (119 total dwelling units, 36 of which would be permanently set aside at or below 80% AMI), 24,922 GSF of commercial floor area (9,553 GSF of PCE and 15,369 GSF of local retail), and 10,557 GSF of community facility floor area (UG 3 childcare). The sub-cellar parking would include 126 total enclosed parking spaces.

1.6 Action(s) Necessary to Facilitate the Project

There are two actions necessary to facilitate the Proposed Development:

1. A Zoning Map Amendment to rezone an existing R3-2/C1-2 zoning district on Block 6630, Lot 1 to an R6A/C2-3 zoning district, and to remove the existing C1-2 commercial overlay from the portion of Lot 15.
2. A Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Community District 8, Queens, to establish Lot 1 as an MIH Area, Program Option 1 and 2.

Together, the Proposed Actions.

1.7 Purpose and Need

The Applicant is proposing a zoning map amendment to map the Affected Area as an R6A/C2-3 zoning district and a zoning text amendment to map MIH. The Applicant believes that the Proposed Actions would lead to the development of an underutilized, vacant lot, while introducing affordable housing to a community district with an above average rent burden (2012-2016 ACS). The proposed R6A/C2-3 zoning district would increase residential FAR from .50 to 3.60, would introduce Use Groups (UG) 7, 8, and 9, and would reduce the parking requirement for commercial uses from 1 space per 300 gsf to 1 space per 400 gsf. The proposed zoning district would induce development in line with nearby mid-rise multi-family buildings mostly along Main Street and 78th Avenue, and in an area experiencing increased development: DOB records indicate that the surrounding area has 39 active construction permits with 286,659 gsf of construction proposed, including 479 dwelling units.

1.8 Analysis Framework

Build Year

The analysis year for the Proposed Actions is 2023 based on an 18-month period for the environmental review and ULURP processes and an 18-month construction schedule for the Proposed Development. No other sites are expected to redevelop as a result of the Proposed Actions in the foreseeable future as discussed in detail below and as reflected by the analysis year.

The analysis which follows compares the difference between the future without the Proposed Actions (No-Action condition) and the future with the Proposed Actions (With-Action condition) for the 2022 analysis year.

This EAS studies the potential for individual and cumulative environmental impacts related to the Proposed Actions.

No-Action Condition

In the No-Action Condition the Applicant's filed and approved as-of-right plans (DOB job number 420664463) for a 2-story, 32-foot-tall, mixed-use commercial and community facility building would move forward. The 41,682 GSF building would have 21,552 GSF of commercial floor area (local retail) and 20,130 GSF of community facility floor area (UG 4 medical). 54 parking spaces would be required, and would be provided at sub-cellar level.

No other development would be expected to occur in the No-Action condition.

With-Action Condition

Projected Development Site 1 (Block 6630, Lot 1; 77-39 Vleigh Place)

The Development Site would be developed with a 189,418 GSF (124,380 ZSF; 3.60 FAR) 8-story, 85-foot-tall mixed-use building. The structure will include sub-cellar parking, cellar with local retail use and UG 4 medical office, ground floor commercial space (local retail), and floors two through eight residential space. There would be 118,599 GSF of residential floor area (119 total dwelling units, 24 of which would be permanently set aside at or below 80% AMI), 24,922 GSF of commercial floor area (local retail), and 10,557 GSF of community facility floor area (UG 4 medical facility). 126 total parking spaces would be provided.

As a corner lot within an R6A zoning district, the projected building can be built out to its lot lines with 100% lot coverage.

The Applicant is proposing to map the area with MIH Option 2, which sets aside 30% of residential floor area as affordable housing. Although The Applicant's proposed building will include 36 affordable dwelling units, CEQR mandates that a 20% set aside should be analyzed.

Other Affected Site

A portion of Lot 15 is included in the Affected Area and is not expected to redevelop. The rezoning would remove the existing C1-3 commercial overlay that currently exists on the portion of Lot 15, and the existing R3-2 zoning district will remain in place on the lot.

For purposes of a conservative analysis the RWCDS will assess the maximum permitted envelope for the urban design and shadows assessment. The shadows assessment will also take into account a reasonable bulkhead height for mechanical equipment.

The Projected Development Site is shown in **Figure 1.** The RWCDS Analysis Framework described above is shown below in **Table 1.8-1 and Table 1.8-2.**

Table 1.8-1: Existing, No-Action, and With-Action Conditions														
Site Info				Existing		No-Action Condition			With-Action Condition					
Site ID	Block	Lot	Lot Area (gsf)	Zoning	Built gsf	Zoning	CF (gsf)	Com. (gsf)	Zoning	Res. (gsf)	DU	Affordable DU	CF (gsf)	Com. (gsf)
Projected Site 1	6630	1	34,553	R3-2/C1-2	0	R3-2/C1-2	20,130	21,552	R6A/C2-3	118,599	119	24	10,557	24,922
Total			**34,553**		**0**		**20,130**	**21,552**		**118,599**	**119**	**24**	**10,557**	**24,922**

DU = Dwelling Units

CF = Community Facility

gsf = gross square feet

Res. = Residential

Com. = Commercial

Table 1.8-2: RWCDS Analysis Framework Table

Description of Existing and Proposed Conditions — **Part II - RWCDS Analysis Framework Table**

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Land Use				
Residential	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify the following:				
Describe type of residential structures	N/A	N/A	one 8-story multi-family	
No. of dwelling units	N/A	N/A	119	119
No. of low- to moderate-income units	N/A	N/A	24	24
Gross floor area (sq. ft.)	N/A	N/A	118,599	118,599
Commercial	☐ Yes ☑ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify the following:				
Describe type (retail, office, other)	N/A	Local Retail	Local Retail	
Gross floor area (sq. ft.)	N/A	21,552	24,922	3,370
Manufacturing/Industrial	N/A	N/A	N/A	
If "yes," specify the following:				
Type of Use	N/A	N/A	N/A	
Gross floor area (sq. ft.)	N/A	N/A	N/A	
Open storage area (sq. ft.)	N/A	N/A	N/A	
If any enclosed activities, specify:	N/A	N/A	N/A	
Community Facility	☐ Yes ☑ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify the following:				
Type of Use	N/A	UG4 Medical	UG4 Medical	
Gross floor area (sq. ft.)	N/A	20,130	10,557	-9,573
Vacant Land	☑ Yes ☐ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes", describe:	Unimproved Lot	N/A	N/A	
Publicly Accessible Open Space	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify type (mapped City, State, or Federal Parkland, wetland-mapped or otherwise known, other):	N/A	N/A	N/A	
Other Land Uses	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," describe:	N/A	N/A	N/A	
Parking				
Garages	☐ Yes ☑ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify the following:				
No. of public spaces	N/A	0	0	
No. of accessory spaces	N/A	54	116	62
Operating hours	N/A	24/7	24/7	
Attended or non-attended	N/A	Non-attended	Non-attended	
Lots	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	N/A	
No. of accessory spaces	N/A	N/A	N/A	
Operating hours	N/A	N/A	N/A	
Other (includes street parking)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," describe:	N/A	N/A	N/A	
Population				

Description of Existing and Proposed Conditions — **Part II - RWCDS Analysis Framework Table**

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Residents	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify number:	N/A	N/A	338	338
Briefly explain how the number of residents was calculated:	Queens CD 8 avg. household size of 2.84			
Businesses	☐ Yes ☑ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify the following:				
No. and type	N/A	4 medical offices; 10 local retail	1 medical office; 8 local retail	
No. and type of workers by business	N/A	125 workers	106 workers	-19 workers
No. and type of non-residents who are not workers	N/A	6,500	6,201	-299
Briefly explain how the number of businesses was calculated:	Medical = 1 per 5,000 GSF; Local Retail = 1 per 2,000 GSF			
Other (students, visitors, concert-goers, *etc*.)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If any, specify type and number:	N/A	N/A	N/A	
Briefly explain how the number was calculated:	3 employees/1,000 GSF of local retail/CF use per the Jerome Ave Rezoning EIS. 103.4 patrons per 1,000 GSF UG 4 medical office. 205 patrons per 1,000 GSF local retail use.			
Zoning				
Zoning classification	R3-2/C1-2	R3-2/C1-2	R6A/C2-3	
Maximum amount of floor area that can be developed	1.00	1.00	3.60	+2.60
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Land Use: Public facilities; multifamily residential. Zoning: R2, R3-2, R4, C1-2	Land Use: Public facilities; multifamily residential. Zoning: R2, R3-2, R4, C1-2	Land Use: Public facilities; multifamily residential. Zoning: R2, R3-2, R4, C1-2	
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

2. Environmental Review

2.1 Land Use, Zoning, and Public Policy

The CEQR Technical Manual recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the surrounding area. Land use, zoning and public policy are described in detail below. This section considers existing conditions, development trends, and zoning and other public policies in relation to the Projected Development Site and the area in which the Proposed Actions may have an effect. Because the Proposed Actions would permit development of uses (multiple family residential) that are not permitted as of right under the existing R3-2/C1-2 zoning, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

Methodology

Existing land uses were determined by reference to the New York City Zoning and Land Use (Zola) database and PLUTOTM 20v4 shapefiles. These uses were then confirmed through site visits. The evaluation of lots within the 400-foot Study Area were performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No-Action and Future With-Action Conditions. Public Policy research was performed through an evaluation of New York City Department of City Planning (NYCDCP) and other city agencies programs and documentation.

Land Use

The CEQR Technical Manual suggests that a land use, zoning and public policy study area should generally extend 400 feet from the perimeter of the affected area. Existing land uses within approximately 400 feet of the affected area are presented in Figure 2. The proposed zoning map amendment would affect the following lots: Block 6630, Lot 1 and part of Lot 15.

Existing Conditions

Land Use Study Area

As stated in **Section 1.3**, Main Street is a significant corridor in the area and is developed with a wider range of uses than the surrounding area. Land use in the area is generally mid-rise community facilities and low-rise multi-family and one- and two-family residential structures. Significant uses in the area include the Judge Moses Weinstein Playground to the south along Union Turnpike, the Steppingstone Day School immediately to the west, and North Queens Community High School immediately to the north of the Development Site.

Affected Area

A full breakdown of each lot within the Affected Area can be found in **Section 1.4**. The Development Site is Block 6630, Lot 1, and is a vacant corner lot with 34,553 sf. The site has been cleared and excavated as part of a coordinated clean-up with DEP.

The other lot in the Affected Area is a small portion of Block 6630, Lot 15. Lot 15 is improved with a 45,750 gsf cooperatively owned multi-family building that includes 60 dwelling units. The building, constructed in 1949, is a legally non-conforming and non-complying use and sits on an interior through-lot.

Analysis

Future No-Action Condition

The Applicant's filed and approved plans for a 2-story, 32-foot-tall, mixed-use commercial and community facility building would be implemented. The building would be 41,682 gsf, and would include 21,552 gsf of commercial floor area (local retail) and 20,130 gsf of community facility floor area (UG 4 medical). 54 parking spaces would be provided at sub-cellar level.

There is one active project within the surrounding area: a 23,283 gsf, 3-story community facility building located at 77-11 Main Street.

Future With-Action Condition

Land Use Study Area

Land use and development patterns in the land use study area are anticipated to remain unchanged in the future with the Proposed Actions with the exception of 77-11 Main Street. Any new development would be consistent with the existing low-density residential zoning districts surrounding the Affected Area, and the commercial overlays along Main Street.

Affected Area

Projected Development Site 1 (Block 6630, Lot 1; 77-39 Vleigh Place)

The site would be developed with a 189,418 GSF (124,380 ZSF; 3.60 FAR) 8-story, 85-foot-tall mixed-use building. The structure will include sub-cellar parking, cellar with local retail use and UG 4 medical, ground floor commercial space (local retail), and floors two through eight residential space. There would be 118,599 GSF of residential floor area (119 total dwelling units, 24 of which would be permanently set aside at or below 80% AMI), 24,922 GSF of commercial floor area (local retail), and 10,557 GSF of community facility floor area (UG 4 medical facility). 126 total parking spaces would be provided.

The density and uses permitted by the Proposed Actions would be consistent with nearby mid-rise multi-family buildings mostly along Main Street and 78th Avenue. The development would also continue the recent development trend in the area: DOB records indicate that there are 39 active construction permits with 286,659 gsf of construction proposed, including 479 dwelling units in the area.

Zoning

The CEQR Technical Manual suggests that a zoning study area should extend 400 feet from the affected area. Existing zoning districts within approximately 400 feet of the Project Site are presented in Figure 2.1-2. The proposed zoning map amendment would affect the following lots: Block 6630, Lot 1 and part of Lot 15.

Existing Conditions

Zoning Study Area

The zoning districts within 400 feet of the Affected Area are R3-2, R2X, R4, and C1-2 commercial overlays.

Table 2.1-1: Zoning Districts in the Surrounding Area

Zoning District	Type and Use Group (UG)	Floor Area Ratio (FAR)	Parking (Required Spaces)
R2X	Contextual Residential UGs 1-4	1.02 FAR - Residential .50 FAR- Community Facility	1 per DU
R3-2	Non-Contextual Residential UGs 1-4	.50 FAR – Residential 1.00 FAR – Community Facility	1 per DU; 50% of IRHU
R4	Non-Contextual Residential UGs 1-4	.90 FAR - Residential 2.00 FAR - Community Facility	1 per DU; 50% of IRHU
C1-2 Commercial Overlay	Local Retail UGs 1-6	1.00 FAR - Commercial (R1-R5B) 2.00 FAR - Commercial (R5B - R10X)	1 per 300 sf

Source: Zoning Handbook, New York City Department of City Planning, 2019

Existing zoning districts in the surrounding area include:

R2X

R2X districts allow large single-family detached houses on lots with a minimum width of 30 feet. R2X districts are mapped in Brooklyn in parts of Midwood within the Special Ocean Parkway District and part of Far Rockaway in Queens.

The higher FAR and permitted rear yard encroachment in R2X districts produce buildings with greater bulk than in any other single-family residence district. The 0.85 FAR is considerably higher than in other R2 districts and may be increased up to 1.02 by an attic allowance for the inclusion of space beneath a pitched roof. The perimeter wall may rise to 21 feet before sloping or being set back to a maximum building height of 35 feet. Although other residence districts require a 30-foot rear yard, houses in R2X districts may extend 10 feet into the rear yard. The amount of required open space on a lot is governed by yard requirements. As in other lower density districts, the R2X district requires one off-street parking space for each dwelling unit.

R3-2

R3-2 districts are general residence districts that allow a variety of housing types, including low-rise attached houses, small multi-family apartment houses, and detached and semi-detached one- and two-family residences. It is the lowest density zoning district in which multiple dwellings are permitted. Because of their flexibility, R3-2 districts are mapped widely in all boroughs except Manhattan.

The 0.5 FAR may be increased by an attic allowance of up to 20% for the inclusion of space beneath a pitched roof. The perimeter wall may rise to 21 feet before sloping or being set back to a maximum building height of 35 feet. Lots with detached homes must be at least 40 feet wide; if occupied by semi-detached and attached buildings, lots must be at least 18 feet wide. The maximum street wall length for a building on a zoning lot is 125 feet. The maximum lot coverage of any residence is 35%. Front yards must be at least 15 feet deep. Cars may park in the side or rear yard, in the garage or in the front yard within the side lot ribbon; parking is also allowed within the front yard when the lot is wider than 35 feet. One off-street parking space is required for each dwelling unit. However, requirements are lower for income-restricted housing units (IRHU) and are further modified within the Transit Zone.

R4

R4 districts allow all types of housing at a slightly higher density than permit-ted in R3-2 districts. The floor area ratio (FAR) of 0.75, plus an attic allowance of up to 20% for inclusion of space under the pitched roof common to these districts, usually produces buildings with three stories instead of the two-story homes characteristic of R3 districts. Much of the residential development in North Corona in Queens and Arden Heights in Staten Island is typical of R4 districts.

To accommodate a potential third floor beneath a pitched roof, the perimeter wall in R4 districts may rise to 25 feet before being set back to the maximum building height of 35 feet. Front yards must be 10 feet deep or, if deeper, a minimum of 18 feet to provide sufficient space for on-site parking. Cars may park in the side or rear yard, in the garage or in the front yard within the side lot ribbon; the driveway must be within the side lot ribbon unless the lot is wider than 35 feet. Detached houses must have two side yards that total at least 13 feet and each one must be at least five feet wide. Semi-detached buildings need one side yard with a minimum width of eight feet. The maximum street wall length for a building on a single zoning lot is 185 feet. One off-street parking space is required for each dwelling unit. However, requirements are lower for income-restricted housing units (IRHU) and are further modified within the Transit Zone.

C1-2 Commercial Overlay

C1-2 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. 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 floor area ratio (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.

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

Affected Area

The Affected Area is zoned R3-2/C1-2 which permits low-density non-contextual residential and community facility development, and also permits low-density local retail uses.

Analysis

Future No-Action Condition

Zoning Study Area and Affected Area

No changes to zoning would occur in the future without the Proposed Actions. Existing zoning patterns would remain. The Affected Area would continue to be subject to R3-2/C1-2 zoning regulations.

Future With-Action Condition

Zoning Study Area

No changes to zoning would occur in the surrounding area in the future with the Proposed Actions.

Affected Area – R6A/C2-3

The Applicant's lot, Lot 1, would be rezoned to an R6A/C2-3 zoning district, and a portion of the neighboring lot, Lot 15, would have the existing portion of the C1-2 commercial overlay removed.

Conclusion

The proposed zoning would induce development consistent with nearby mid-rise multi-family buildings along Main Street to the east and 78th Avenue to the west. The proposed zoning district is mapped between two wide streets appropriate for a higher density of residential and commercial uses, while maintaining the residential character of nearby side streets. The rezoning would not adversely affect surrounding land uses, nor would it be incompatible with those land uses. Therefore, no significant adverse impacts are anticipated to land use and zoning.

Public Policy

The project site is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The Proposed Action is also not a large publicly sponsored project, and as such, consistency with the City's PlaNYC 2030 for sustainability is not warranted. There are no applicable public policies within the Affected Area, and no significant adverse impacts are anticipated to public policies.

2.2 Open Space

Open space is defined as publicly or privately-owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment.

Pursuant to Chapter 7, Section 100 of the 2020 CEQR Technical Manual, Open Space Resources are defined as active and/or passive, and may include, but is not limited to, the following:

- Parks operated or managed by the City, State, or Federal governments and include neighborhood and regional parks, beaches, pools, golf courses, boardwalks, playgrounds, ballfields, and recreation centers that are available to the public at no cost or through a nominal fee, as in the case of recreation centers and golf courses;
- Open space designated through regulatory approvals (such as zoning), including large-scale permits that prescribe publicly accessible open space, such as public plazas;
- Outdoor schoolyards if available to the public during non-school hours;
- Publicly-accessible institutional campuses;
- Esplanades;
- Designated greenways, as shown on the City's Bike Map, and defined as multi-use pathways for non-motorized recreation and transportation along natural and manmade linear spaces such as rail and highway rights-of-way, river corridors, and waterfront spaces;
- Landscaped medians with seating;
- Housing complex grounds, if publicly accessible;
- Nature preserves, if publicly accessible;
- Gardens, if publicly accessible.

The CEQR Technical Manual defines the need for an open space assessment if the proposed action would have a direct or indirect effect on open space resources. Direct effects would occur if the proposed action would result in the physical loss of a public open space; change of use of an open space so that it no longer serves the same user population; limit public access to an open space; or cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether temporary or permanent. Indirect effects would occur if the proposed action would result in an increase of population sufficiently large enough to noticeably diminish the ability of an area's open space to serve future population.

Direct effects to open space are addressed in the sections for those specific technical areas where warranted. Construction impacts to open space are not anticipated as there would be no physical loss of public open space, no change in existing open space so that it no longer serves the same user population, would not limit public access and would not increase noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness. An assessment of the effects of the Proposed Actions related to shadows on open space resources is provided in **Section 2.3**.

Methodology

According to the guidelines of the City's CEQR Technical Manual for analysis of residential development, census tracts with at least half of their geographic area within a one-half mile radius of the Affected Area

comprise the open space study area. Using current population figures, an open space ratio is calculated for both the future no-action and future with-action conditions, expressed as the amount of open space acreage per 1,000 user population. Typically, a comparison is made to the median open space ratio, which is 1.50 acres per 1,000 residents, and the city's planning goal of 2.50 acres per 1,000 residents. A reduction in the open space ratio increment of more than 5 percent over future no-action conditions generally warrants a more detailed analysis, unless the open space ratio is below the citywide average, in which case even a small reduction could be considered significant.

In addition to field surveys, information from the NYC Department of City Planning's Community District Needs Statements, NYC Parks Department website, and U.S. Census data were utilized in preparing the open space analysis.

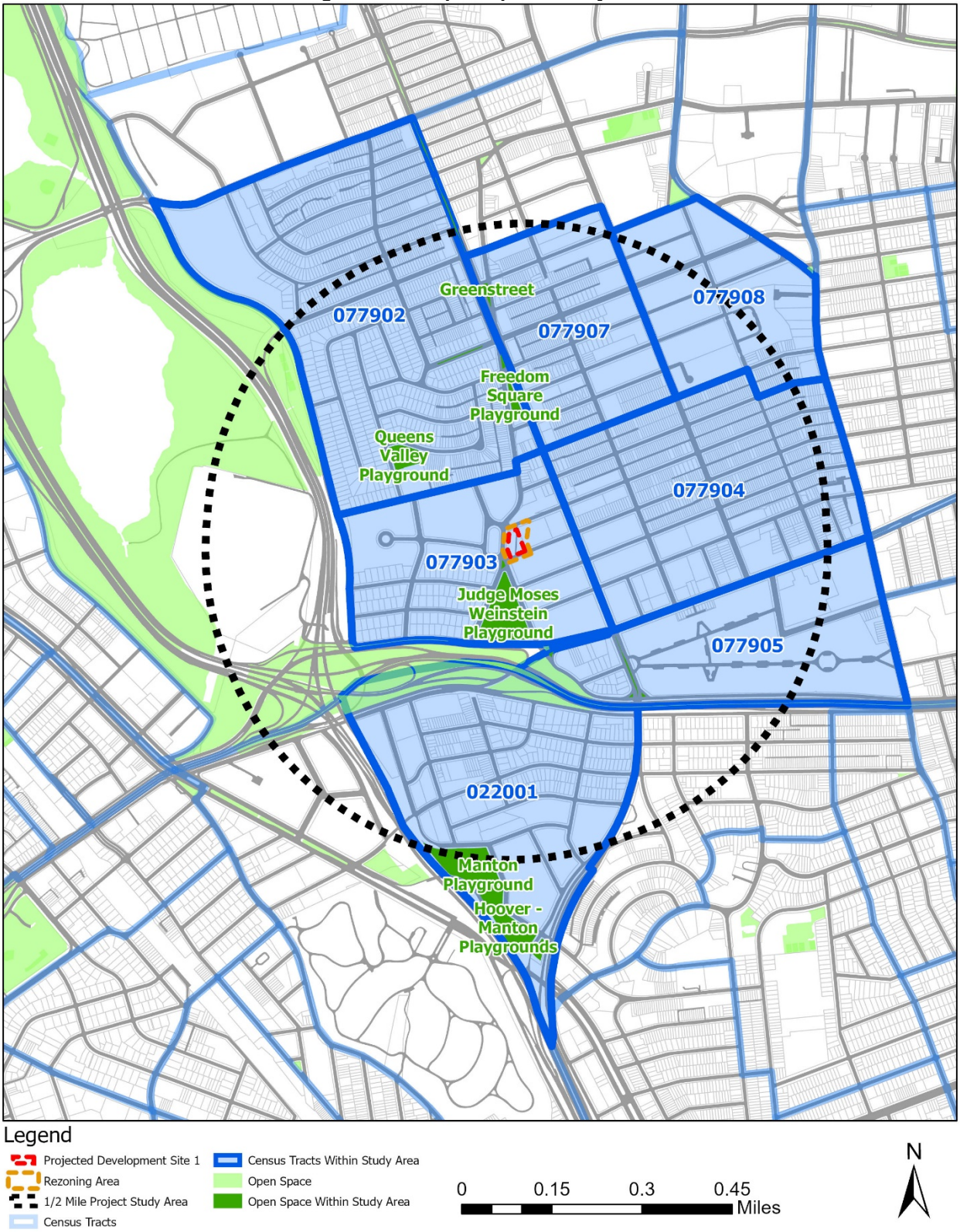
Preliminary Open Space Assessment

The Proposed Actions would result in a net increment of 189,418 GSF of development, including 118,599 GSF of residential floor area, a reduction of 9,573 GSF in community facility floor area, and an increase of 3,370 GSF of commercial floor area. The Proposed Actions are projected to result in the development of 119 dwelling units within the Affected Area. Assuming an average occupancy of 2.84 persons based on the average household size within Queens Community District 8 (2014-2018 ACS 5-Year Survey), population introduced as a result of the Proposed Actions would be approximately 338 residents. Adding together the increase in commercial floor area and the reduction in community facility floor area, there would be approximately 19 fewer workers as a result of the Proposed Actions. The Affected Area is within an area that is identified as neither underserved or well-served by open space, and therefore the threshold for assessment of the potential for indirect impacts is 200 new residents or 500 additional employees. Therefore, an assessment of indirect effects on public open space resources is warranted. The Proposed Actions would introduce fewer than 500 additional employees, as such the preliminary assessment addresses the residential population introduced by the Proposed Actions.

Study Area Definition

In accordance with the guidelines established in the City's 2020 CEQR Technical Manual, the open space study area is defined to analyze both the nearby open spaces and the population using those open space resources. It is generally defined by a reasonable walking distance that users would travel to reach local open spaces and recreational areas. Pursuant to the 2020 CEQR Technical Manual, the open space study area includes all U.S. Census Tracts that have 50 percent or more of their area within a half-mile radius of the Affected Area for residential users. As shown in **Figure 2.2-1**, the following Census Tracts that have 50% or more of their area within the ½ mile study area are 779.08, 779.04, 779.03, 779.02, 779.07, 779.05, and 220.01.

Figure 2.2-1: Open Space Study Area



Study Area Population

Based on the 2014-2018 ACS, the study area defined above, as of 2018, had a population of 30,588 residents.

No-Action Condition

No residential development would occur in the future without the Proposed Actions within the Affected Area. There are approximately 173 active permits within the study area, with 909 proposed new dwelling units. Using the same 2.84 residents per household figure as above, the no-action condition would have 2,582 new residents introduced to the study area by the 2023 build year. The no-action population would therefore be the existing population of 30,588 residents plus the 2,582 new residents introduced by the active construction projects, for a total no-action population of 33,170 residents.

With-Action Condition

The with-action population would be the no-action population of 33,170 residents described above plus the 338 residents anticipated as a result of the Proposed Actions. The with-action population would be 33,508 residents.

Table 2.2-1: Existing, No-Action, and With-Action Populations

Existing	No-Action	With-Action
30,588	33,170	33,508

Existing = 2014-2018 American Community Survey; No-Action = Existing plus 909 proposed dwelling units from active DOB permits; With-Action = No-Action plus 338 additional residents from the Projected Development Site 1

Open Space Resources

There are five open space resources within the study area identified in **Table 2.2-2**. There are 9.66 acres of open space resources in the Study Area—8.47 are considered active and 1.19 are considered passive based on field visits and a review of open space site plans. Additionally, Flushing Meadows Corona Park is also within walking distance of the Affected Area, but is not included in the analysis of open space resources because its census tract does not meet the requirements for inclusion. Flushing Meadows Corona Park is an 897.69 flagship park, and is considered one of the city's most iconic parks.

Table 2.2-2: Open Space Resources								
Name	Address	Ownership	Acreage	% Active	% Passive	Total Active	Total Passive	Features
Freedom Square Playground	Main St. and Vleigh Pl.	NYC DPR	0.33	50	50	0.17	0.17	SS, Pg, Be
Queens Valley Playground	137th St. between 76th Ave. and 76th Rd.	NYC DPR	0.88	80	20	0.70	0.18	BC, Pg, Ba, SS
Judge Moses Weinstein Playground	Union Tpk., Vleigh Pl. 141st St.	NYC DPR	3.25	90	10	2.93	0.33	BF, Ba, Pg, BC, Ea, SS
Hoover-Manton Playgrounds	Van Wyck Expy., Queens Blvd., 83rd Ave.	NYC DPR	5.20	90	10	4.68	0.52	BC, Ba, FE, HC, Pg, SS
Total			9.66			8.47	1.19	

SS = Spray Showers; Pg = Playgrounds; Be = Benches; BC = Basketball Courts; Ba = Bathrooms; BF = Baseball Fields; Ea = Eateries; FE = Fitness Equipment; HC = Handball Courts

Analysis

Existing Condition

The study area has 9.66 acres of open space and an existing residential population of 30,588. The open space ratio (OSR) under existing conditions is .3158 acres per thousand residents.

No-Action Condition

In the future without the Proposed Actions, the population for the Study Area in the 2023 build year is forecasted to be 33,170 and is projected to be served by the same 9.66 acres of open space as in the existing condition. With this population, the OSR would be .2912.

With-Action Condition

The Proposed Actions would result in an increase in the No-Action population by 338 residents by the 2023 build year. The total 2023 build year With-Action population would be 33,508. With this increase in population, the OSR would be .2883 acres per 1,000 residents, or a 0.9 percent reduction from the No-Action OSR.

Conclusion

Under the existing, No-Action, and With-Action conditions, the OSR in the area would be below 1.5 acres per thousand residents, which is the citywide average. In the event that a Study Area has a low open space ratio (i.e., below the citywide average of 1.5 acres per 1,000 residents), the CEQR Technical Manual recommends preparing a detailed analysis if the Proposed Action would reduce the OSR by more as little as one percent.

The Proposed Actions would reduce the OSR by 0.9 percent to .2883 acres per 1,000 residents. Additionally, Flushing Meadows Corona Park, an 897-acre park located within the ½-mile Study Area buffer, is an approximately 10-minute walk from the Affected Area, but is not included in the OSR calculations because its Census Tract does not fall within the threshold for inclusion. As the entrance to the park is within the ½-mile buffer, it is reasonable to assume that project-generated residents would utilize the open space, which would substantially increase the ability of the area's open space to serve area residents.

Therefore, based on the minimal change to the open space ratio as a result of the Proposed Actions and the availability of Flushing Meadows Corona Park as an open space resource, the Proposed Actions would not result in significant adverse impacts to open space resources.

2.3 Shadows

The CEQR Technical Manual defines a shadow as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space or feature. An incremental shadow is the additional or new shadow that a building or other built structure resulting from a proposed action would cast on a sunlight-sensitive resource during the year. The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. Shadows can have impacts on publicly accessible open spaces or natural features by adversely affecting their use and important landscaping and vegetation. In general, increases in shadow coverage make parks feel darker and colder, affecting the experience of park patrons. Shadows can also have impacts on historic resources whose features are sunlight-sensitive, such as stained-glass windows, by obscuring the features or details, which make the resources significant.

The duration and dimensions of shadows are determined by the geographic location of the area from which the shadow is cast and the time of day and season. Shadows cast during the morning and evening, when the sun is low in the sky, are longer, while midday shadows are shorter in length. Shadows in winter, when the sun arcs low across the southern sky, are also longer throughout the day than at corresponding times in spring and fall seasons. In summer, the high arc of the sun casts shorter shadows than at any other time of year, and early and late shadows during the summer are cast farther towards the south than shadows cast in early and late winter months.

The CEQR Technical Manual states that a shadow assessment considers projects that result in new shadows long enough to reach a sunlight-sensitive resource. Therefore, a shadow assessment is warranted only if the project would either result in: (a) new structures (or additions to existing structures including the addition of rooftop mechanical equipment) of 50 feet or more; or, (b) be located adjacent to, or across the street from, a sunlight-sensitive resource.

The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. In general, shadows on city streets and sidewalks or on other buildings are not considered significant. Some open spaces also contain facilities that are not sensitive to sunlight. These are usually paved such as handball or basketball courts, contain no seating areas and no vegetation, no unusual or historic plantings, or contain only unusual or historic plantings that are shade tolerant. These types of facilities do not need to be analyzed for shadow impacts. Additionally, it is generally not necessary to assess resources located to the south of projected development sites, as shadows cast by the action-generated development would not be cast in the direction of these resources. Furthermore, shadows occurring within one and one-half hour of sunrise or sunset generally are not considered significant in accordance with the CEQR Technical Manual.

Methodology

This preliminary analysis of shadows follows the guidelines set forth in the 2020 CEQR Technical Manual for a preliminary assessment (Section 310). According to the 2020 CEQR Technical Manual, a preliminary shadow assessment includes the development of a base map showing the site location in relationship to any sunlight-sensitive resources as per guidelines provided in the 2020 CEQR Technical Manual. Following these

guidelines, the longest shadow study area is determined, and a Tier 1 screening assessment is conducted to determine if any sunlight-sensitive resources fall within the study area. If no resources are identified, no further analysis would be required. If sunlight-sensitive resources lay within the longest shadow study area, the next tier of screening assessment should be conducted. This preliminary assessment includes a basic description of the proposed project that would be facilitated by the Proposed Actions in order to determine whether a more detailed assessment would be appropriate.

Analysis

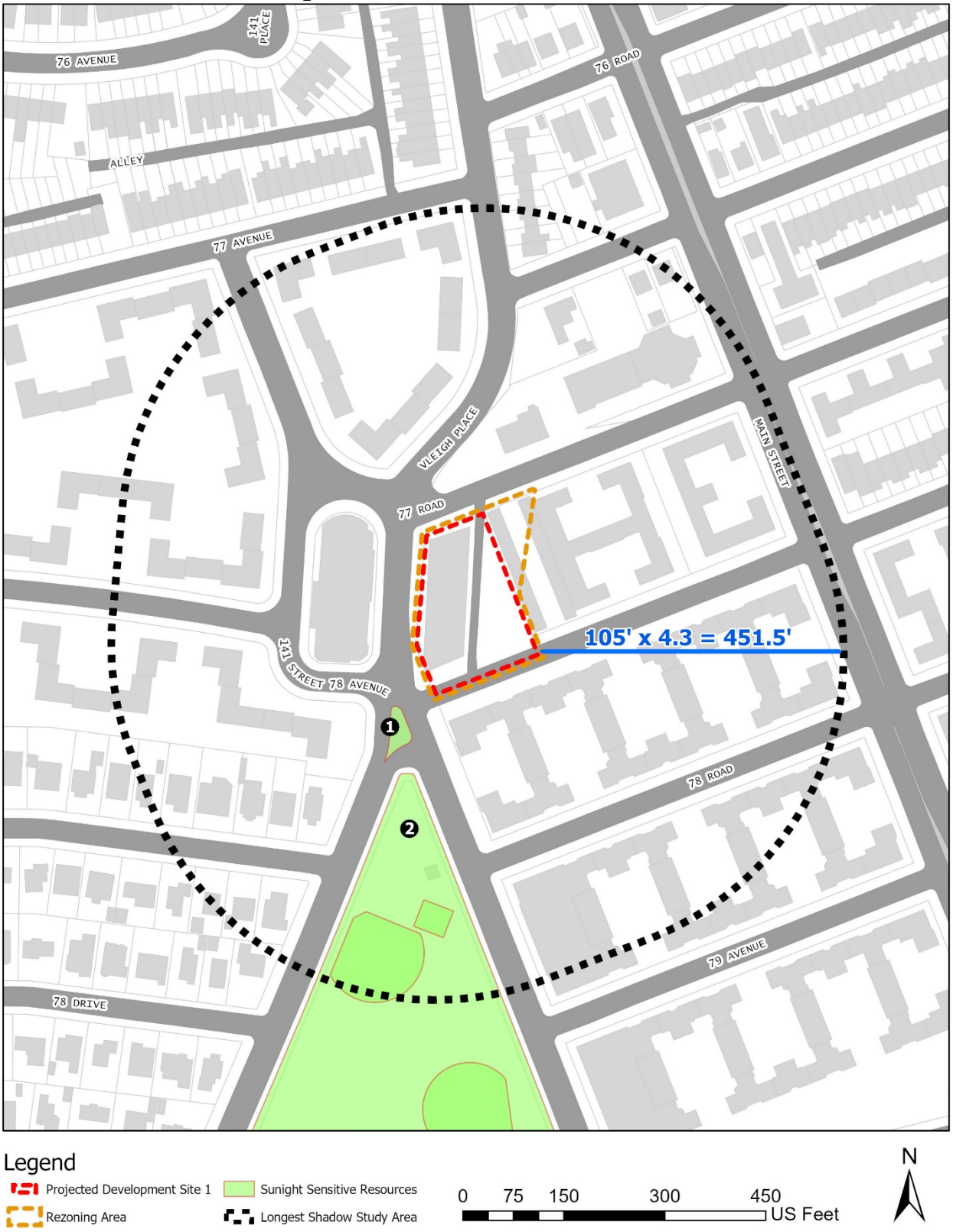
Projected Development Site 1 would be developed with a building 105 feet in height (85-foot building plus an additional 20 feet for mechanical bulkheads) in the proximity of sunlight sensitive resources. Accordingly, a preliminary assessment of shadows is warranted.

Tier 1 Shadow Screening Assessment

The shadow assessment begins with a preliminary screening assessment to ascertain whether a project's shadow may reach any sunlight-sensitive resources at any time of the year. If the screening assessment does not eliminate this possibility, a detailed shadow analysis may be warranted to determine the extent and duration of the net incremental shadow resulting from the project. The effects of shadows on a sunlight-sensitive resource are site-specific; therefore, as directed in the CEQR Technical Manual, the screening assessment was performed for the relevant Projected Development Site to determine whether it falls within the range of maximum possible shadow cast on potential sunlight sensitive resources as described above. To determine this, a Tier 1 Screening Assessment was performed in accordance with the CEQR Technical Manual. A base map is developed that illustrates the proposed site location in relationship to any sunlight-sensitive resources. The longest shadow study area is then determined, which encompasses the site of the proposed project and a perimeter around the site's boundary with a radius equal to the longest shadow that could be cast by the proposed structure, which is 4.3 times the height of the structure that occurs on December 21st, the winter solstice. A map as shown in **Figure 2.3-1** was prepared placing NYC Department of Parks Resources as well as Selected Facilities and Program Sites provided on NYC.gov Department of City Planning GIS portal, as well as a list of park and public spaces provided from NYC.gov DOITT- GIS and Mapping Portal, as well as a screen of SHPO and NYC Landmark Listed Properties. After this a buffer map was prepared to display the maximum possible shadow of 451.5 feet, which could be cast from the Projected Development Site in the proposed rezoning area. This shadow cast was derived by multiplying the height of 105 feet (the maximum possible height under the proposed rezoning with MIH bonus plus a 20-foot bulkhead) by 4.3 (the CEQR Technical Manual multiplier representing the maximum shadow cast from any object as being 4.3 times its height). The potentially impacted area of shadow from each projected site was then compared to those resources identified above to see if any fell within the shadow cast area.

Based on the Tier 1 analysis in **Figure 2.3-1**, it was determined that two open space resources are within reach of the longest possible shadow that could be cast from the Projected Development building associated with the requested rezoning within the Affected Area: 1) a green street at the intersection of Vleigh Place and 141st Street; and 2) Judge Moses Weinstein Playground. A Tier 2 Assessment is required.

Figure 2.3-1: Tier 1 Shadow Assessment

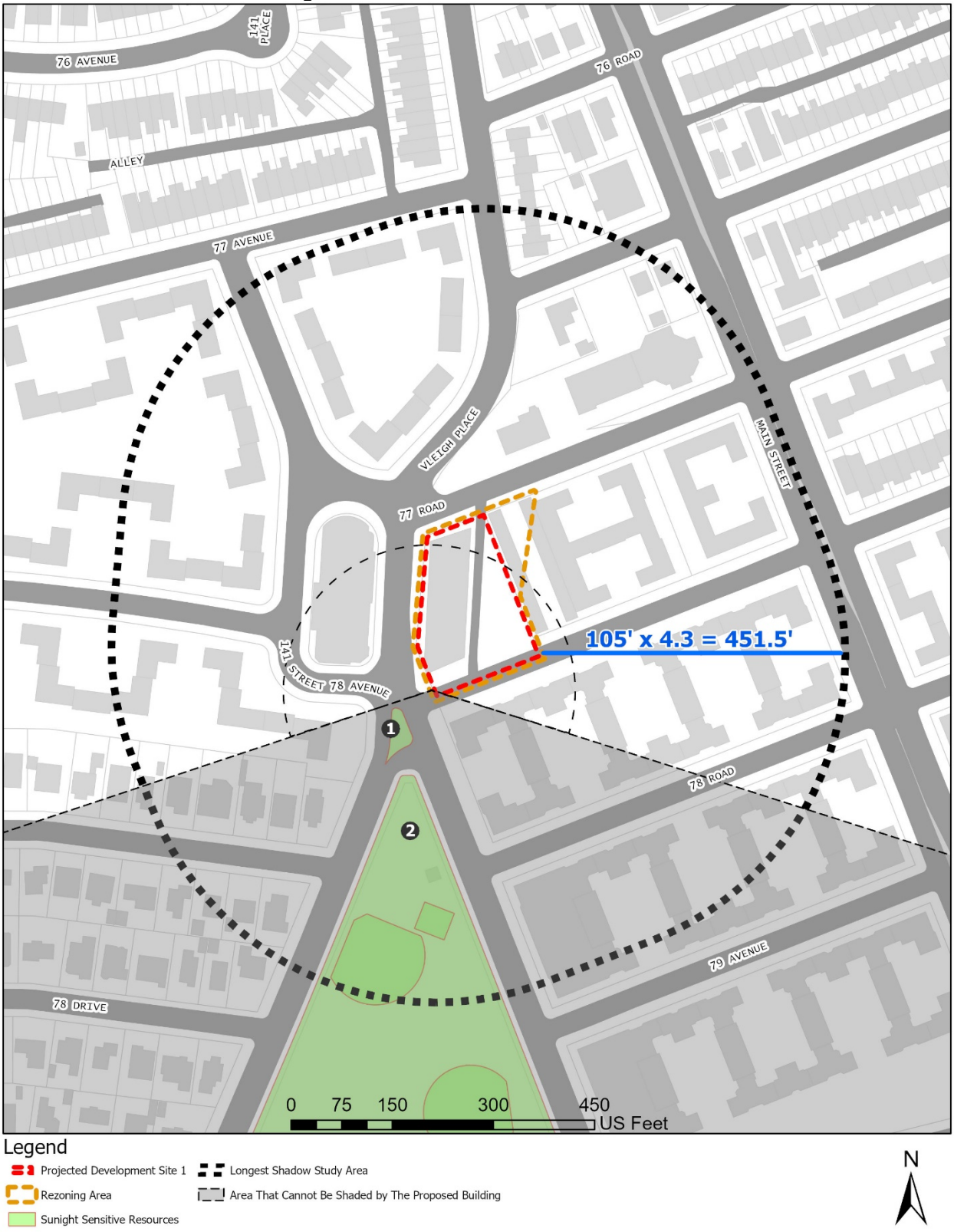


Tier 2 Shadow Screening Assessment

The CEQR Technical Manual states that if any portion of a sunlight-sensitive resource lies within the longest shadow study area, a Tier 2 screening assessment should be performed. Because of the path the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. For a Tier 2 screening assessment, sunlight-sensitive resources within the triangular area cannot be shaded by new development sites, and are screened out. The complementing portion to the north within the longest shadow study area is the area that can be shaded by the Projected Development building.

As shown in **Figure 2.3-2**, the Tier 2 screening assessment shows that no sunlight sensitive resources will be affected by the longest shadow generated by Projected Development Site 1, and therefore no adverse impacts from the Proposed Actions are anticipated. Further analysis is not required.

Figure 2.3-2: Tier 2 Shadow Assessment



2.4 Historic and Cultural Resources

An assessment of historic and cultural resources is usually necessary for projects that are located in close proximity to historic or landmark structures or districts, or for projects that require in-ground disturbance, unless such disturbance occurs in an area that has been formerly excavated, according to the CEQR Technical Manual.

The term "historic resources" defines districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, architectural and archaeological importance. In assessing both historic and cultural resources, the findings of the appropriate city, state, and federal agencies are consulted. Historic resources include: the New York City Landmarks Preservation Commission (LPC) designated landmarks, interior landmarks, scenic landmarks, and historic districts; locations being considered for landmark status by the LPC; properties/districts listed on, or formally determined eligible for, inclusion on the State and/or National Register (S/NR) of Historic Places; locations recommended by the New York State Board for Listings on the State and/or National Register of Historic Places and National Historic Landmarks.

Architectural Resources

Per CEQR Technical Manual guidelines, impacts on historic resources are considered on those sites affected by the proposed action and in the area surrounding identified development sites. The historic resources study area is therefore defined as the project site plus an approximately 400-foot radius around the Affected Area.

To determine whether the projected development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. No architectural resources were found in the project area that were considered historic or significant.

The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and by letter dated February 27, 2020, indicated that the 400-foot study area radius does not contain any sites of buildings of known architectural significance (see Appendix A). Therefore, significant adverse impacts to architectural resources are not expected because of the Proposed Actions, and further analysis is not warranted.

Cultural and Archaeological Resources

Unlike the architectural evaluation of a study area that extends beyond the footprint of a project's block and lot lines, the analysis of potential impacts to archaeological resources is controlled by the actual footprint of the limits of soil disturbance. Archeological resources are physical remains, usually subsurface, of the prehistoric and historic periods such as burials, foundations, artifacts, wells and privies. The CEQR Technical Manual requires a detailed evaluation of a project's potential effect on the archeological resources if it would potentially result in an in-ground disturbance to an area not previously excavated.

The Proposed Actions would result in new in-ground excavation and construction on the Projected Development Sites. As noted, the LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received on February 27, 2020 (see Appendix A). The LPC has indicated that no cultural resource of archaeological significance is associated with the

Affected Area. Therefore, significant adverse impacts to archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

2.5 Urban Design and Visual Resources

According to the CEQR Technical Manual, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements that play an important role in the pedestrian's experience include streets, buildings, visual resources, open space, and natural features, as well as wind as it relates to channelization and downwash pressure from tall buildings. Pursuant to the 2020 CEQR Technical Manual, an assessment of Urban Design may be warranted when a Proposed Action may affect one or more of the elements that contribute to the pedestrian experience of an area, specifically the arrangement, appearance, and functionality of the built environment. As stated in the CEQR Technical Manual, the study area for urban design is the area where the project may influence land use patterns and the built environment, and is generally consistent with the study area used for the land use analysis (i.e., 400 feet around the project sites). For visual resources, existing publicly accessible view corridors within the study area should be identified. The purpose of the preliminary assessment is to determine whether any physical changes proposed by a project may raise the potential to significantly and adversely affect elements of urban design, which would warrant the need for a detailed urban design and visual resources assessment.

Within the study area there is one potential visual resource: the Judge Moses Weinstein Playground, a NYC Department of Parks and Recreation playground immediately south of the Affected Area.

Existing Conditions

Table 2.5-1: No-Action and With-Action Zoning

	No-Action	With-Action
Zoning	R3-2/C1-2	R6A/C2-3
Permitted Uses	Com., CF, Res.	Com., CF, Res.
Maximum FAR	Com. and CF: 1.00 Res.: .60	Com: 2.00 Res.: 3.60 CF: 3.00
Maximum Height	Front Wall: 21 Feet	Base Height: 40-65 feet
	Building Height: 35 feet	Building Height: 85 feet (w/QGF)
Lot Coverage (corner lot)	100%	100%

Com. = Commercial; CF = Community Facility; Res. = Residential; QGF = Qualifying Ground Floor

The Affected Area consists of one corner lot along Vleigh Place and a portion of an interior lot along 78th Avenue, and is described in detail in **Sections 1.4 and 2.1.**

The predominant land use in the study area is low-rise multi-family and one- and two-family residential structures, and also includes low- and mid-rise community facilities. Multi-family buildings are located along 78th Avenue, 78th Road, and 79th Avenue, with one- and two-family homes located southwest of the Affected Area and north of the Affected Area in areas mapped within R2X zoning districts. Community facility uses include the Stepping Stone Dayschool on an irregular-shaped lot between 141st Street, Vleigh Place, and 78th Avenue; and North Queens High School, immediately north of the Affected Area along 77th Road.

The traffic grid is regular east of the Affected Area and irregular west and north of the Affected Area. Block 6608, Lot 2, the location of the Steppingstone Day School, is at the confluence of Vleigh Place, 141st Street, and 78th Avenue, and creates irregular blockfronts and disjointed roads. 78th Avenue ends in a cul-de-sac at a 174-unit co-op development on Block 6587, Lot 6.

Sidewalks are in good repair with regular street plantings throughout the study area. The area is predominantly residential west of Main Street, and Main Street includes a number of commercial and community facility uses and wide sidewalks.

Figure 2.5-1 below shows an aerial view of the Affected Area and the study area (400' buffer around the Affected Area) and the two viewsheds used to compare the no-action and with-action urban design massings.

Figures 2.5-2 through 2.5-5 shows two separate viewpoints comparing no-action and with-action conditions within the Affected Area.

Figure 2.5-6 shows photos of the Affected Area and surrounding area.

Figure 2.5-1: Study Area

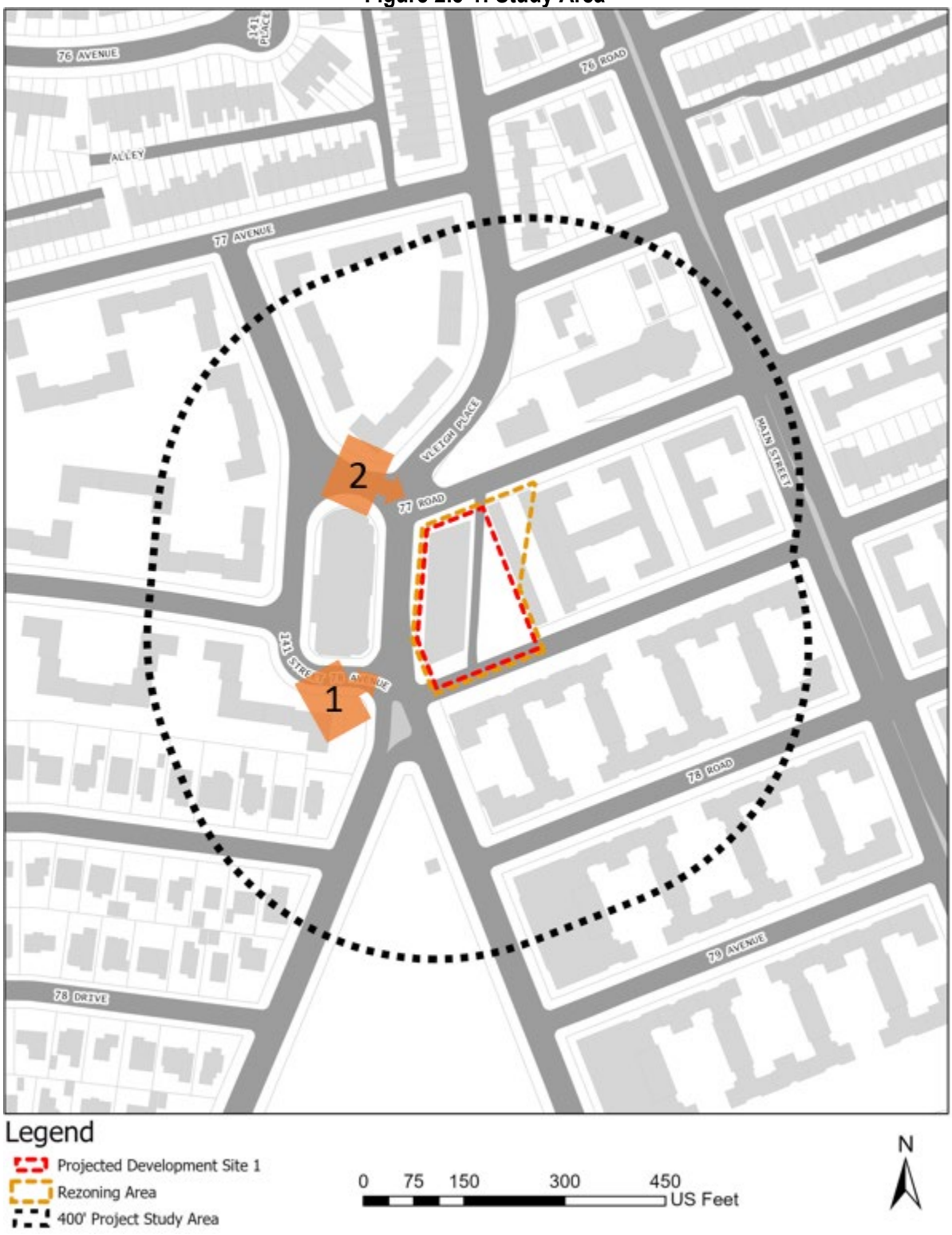


Figure 2.5-2: 78th Avenue and Vleigh Place No-Action



Figure 2.5-3: 78th Avenue and Vleigh Place With-Action



Figure 2.5-4: 77th Road and Vleigh Place No-Action



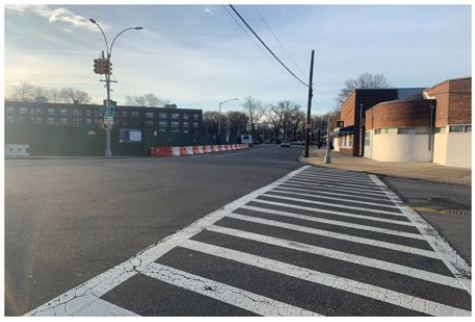
Figure 2.5-5: 77th Road and Vleigh Place With-Action



Figure 2.5-6: Photokey



01 77th Road and Main Street Intersection



02 77th Road and Vleigh Place Intersection



03 78th Avenue and Vleigh Place Intersection



Photo Key

77-63 Vleigh Place
2/14/2020

Analysis

Future No-Action Condition

The Applicant would proceed with previously filed plans to construct a 2-story, 32-foot-tall mixed-use commercial and community facility building with a total of 41,682 GSF on the Development Site.

Future With-Action Condition

The Development Site would be developed with a 189,418 GSF (124,380 ZSF; 3.60 FAR) 8-story, 85-foot-tall mixed-use building. The structure would include sub-cellar parking, cellar with local retail use and UG 4 medical offices, ground floor commercial space (local retail), and floors two through eight residential space. There would be 118,599 GSF of residential floor area (119 total dwelling units, 24 of which would be permanently set aside at or below 80% AMI), 24,922 GSF of commercial floor area (local retail), and 10,557 GSF of community facility floor area (UG 4 medical office).

The Proposed Actions would introduce development that is larger in scale than surrounding buildings but that is similar to surrounding uses. The development of an unimproved lot (currently a dirt pit) with ground floor commercial uses would activate the pedestrian experience and provide locally serving retail uses.

Conclusion

The development facilitated by the Proposed Actions would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood. It would not significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or the visual character of the area. The development of a former DEP monitored clean-up site with ground floor commercial uses would improve walkability and the visual character of the area, and would also provide locally serving retail uses. Therefore, the Proposed Actions would not result in any significant adverse impact to the constituent elements of Urban Design, and a detailed analysis is not warranted.

2.6 Hazardous Materials

Per the 2020 CEQR Technical Manual, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi- volatile organic compounds (VOCs and SVOCs), methane, polychlorinated biphenyls (PCBs), and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). Per the CEQR Technical Manual, the potential for significant impacts from hazardous materials can occur when: a) hazardous materials exist on a site; and b) action would increase pathways to their exposure; or c) an action would introduce new activities or processes using hazardous materials.

Pursuant to CEQR Technical Manual methodology, actions that would result in ground disturbance in an area where current or past uses on or near the site raise the potential for the presence of hazardous materials should be assessed for hazardous materials.

An existing building on the Project Site burned down in 2016, and the site was cleared and excavated as part of a NYC DEP monitored clean-up.

Aldrich Management Co., LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in April 2015, to investigate and remediate a 0.9-acre property (39,204 square feet) located in Flushing, Queens, New York (Site No. C241168). VP Capital Holdings LLC was then added to Brownfield Cleanup Agreement following a purchase transaction of the Site from Aldrich Management Co., LLC and pursuant to an amended BCA in July 2018. The Site acreage was then reduced to 0.66915 acres (29,148.17 square feet) pursuant to BCA amendment in July 2019 by excluding the New York City public road easements. The property was remediated to restricted residential use. A Final Engineering Report (FER) was submitted to NYSDEC on 20 December 2019 and the Certificate of Completion (COC) was issued on 24 December 2019.

Materials removed from the Site during the remediation project included construction and demolition debris from the former concrete building walls and slab, a UST, non-hazardous historic fill, non-hazardous (PCE and pesticide) contaminated soils, and native soils. The implemented remedial action at the Site in accordance with the approved Track 4 cleanup included the following:

- Installation of the SVE system as an interim measure to mitigate the soil vapor intrusion impact at a south-adjacent residential property pending remedial excavation. This interim SVE system was then decommissioned to allow for site excavation;
- Treatment of groundwater contamination via three rounds of ISCO injections and a round of 3DME injections for the groundwater remediation;
- Implementation of a post-injection groundwater monitoring and sampling program;
- Decommissioned on-site monitoring wells prior to Site remedial excavation;
- Excavation and removed remaining building sub-grade structures;
- Disposal of approximately 1,080 cubic yards of clean C&D waste from the removal of remaining structures of former building at a recycling facility and a disposal facility;
- Removal of an UST and disposal of the UST as scrap metal;
- Disposal of approximately 1,100 gallons of number 2 fuel oil from the closed and removed UST at Dale Transfer Corp;

- Disposal of a 55-gallon drum containing tank bottom removed during the cleaning of the UST at Dale Transfer Corp.
- Excavation of all soil/fill exceeding the restricted residential soil cleanup objectives (RRSCOS) listed in Table 1 and unrestricted soil cleanup objectives (UUSCOS) in Table 2 to a depth of approximately 27 grade throughout entire BCP site perimeter, which extended 9 feet into New City public road easement located in the western portion of the property along Vleigh Place;
- Disposal of approximately 48,830 cubic yards of non-hazardous contaminated soil and historic fill / native soil at eight different disposal facilities;
- Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
- Collection and analysis of forty (40) end-point samples from the base and sidewalls of site excavation;
- Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
- Import of materials for use as backfill and cover in compliance with: (1) chemical limits and other specifications included in Table 2, (2) all Federal, State and local rules and regulations for handling and transport of material;
- Installation of an interim off-site SVE system on the southeastern perimeter sidewalk to prevent the migration of residual soil vapors into neighboring properties to the south and east;
- Additional treatment of groundwater contamination via a third round of ISCO injection in the southeastern perimeter sidewalk.
- Implementation of a Site Management Plan (SMP) to ensure maintenance of the Engineering Controls; and
- Recording of an Environmental Easement against the Site to ensure implementation of the SMP.

After completion of the remedial work and issuance of the COC, some contamination was left at the Site, which is hereafter referred to as “remaining contamination”. Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC and recorded with the Office of the City Register of the City of New York (under recording number 2019000306865), requires compliance with this SMP and all ECs and ICs placed on the site.

A Site Management Plan (SMP) was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor’s successors and assigns.

Copies of the FER, SMP and COC are included in Appendix D.

The New York City Department of Environmental Protection (NYC DEP), Bureau of Sustainability (DEP) has reviewed the September 2020 Environmental Assessment Statement, the December 2019 Final Engineering Report and the December 2019 Site Management Plan prepared by HydroTech Environmental Engineering and Geology, DPC., on behalf of VP Capital Holdings LLC. As such, NYC DEP provided the following input:

> *The applicant entered into a Brownfield Cleanup Agreement (Index Number C241168-03-15) with the New York State Department of Environmental Conservation (NYSDEC) in July 2018 to participate*

in the Brownfield Cleanup Program (BCP) to investigate and remediate the development site and a Certificate of Completion was subsequently issued in December 2019. An Environmental Easement (CRFN 2019000306865) that was recorded requires that the NYSDEC approved site management plan for this property be adhered to and institutional and engineering controls were incorporated into the site remedy to ensure protection of public health and the environment. DEP concurs that the incorporation of all testing and remedial measures under the NYSDEC BCP requirements will ensure that there would be no potential for significant adverse hazardous materials impacts as a result of the proposed project.

2.7 Air Quality

When assessing the potential for air quality significant impacts, the CEQR Technical Manual seeks to determine a Proposed Action's effect on ambient air quality, or the quality of the surrounding air. Ambient air can be affected by motor vehicles, referred to as "mobile sources," or by fixed facilities, referred to as "stationary sources." This can occur during operation and/or construction of a project being proposed. The pollutants of most concern are carbon monoxide, lead, nitrogen dioxide, ozone, relatively coarse inhalable particulates (PM10), fine particulate matter (PM2.5), and sulfur dioxide. The CEQR Technical Manual generally recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., roadways, parking lots, garages). The CEQR Technical Manual generally recommends assessments when new stationary sources of pollutants are created, when a new use might be affected by existing stationary sources, or when stationary sources are added near existing sources and the combined dispersion of emissions would impact surrounding areas.

Mobile Sources

According to the CEQR Technical Manual, projects, whether site- specific or generic, may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic; create any other mobile sources of pollutants (such as diesel trains, helicopters etc.); or add new uses near mobile sources (roadways, garages, parking lots, etc.). Projects requiring further assessment include:

- Projects that would result in placement of operable windows, balconies, air intakes or intake vents generally within 200 feet of an atypical source of vehicular pollutants.
- Projects that would result in the creation of a fully or partially covered roadway, would exacerbate traffic conditions on such a roadway, or would add new uses near such a roadway.
- Projects that would generate peak hour auto traffic or divert existing peak hour traffic of 170 or more auto trips in this area of the City.
- Projects that would generate peak hour heavy- duty diesel vehicle traffic or its equivalent in vehicular emissions resulting from 12 or more heavy-duty diesel vehicles (HDDVs) for paved roads with average daily traffic of fewer than 5,000 vehicles, 19 or more HDDVs for collector roads, 23 or more HDDVs for principal and minor arterials, or 23 or more HDDVs for expressways and limited-access roads.
- Projects that would result in new sensitive uses (e.g., schools or hospitals) adjacent to large existing parking facilities or parking garage exhaust vents.
- Projects that would result in parking facilities or applications requesting the grant of a special permit or authorization for parking facilities; or projects that would result in a sizable number of other mobile sources of pollution (e.g., a heliport or a new railroad terminal).
- Projects that would substantially increase the vehicle miles traveled in a large area.

The Proposed Actions would not result in operable windows or air intakes within 200 feet of an atypical roadway. It would not result in creation of a covered roadway or affect any covered roadway. Peak hour trip generation is far below the 170-car threshold, as indicated in the below trip generation table. The project would not create a new sensitive receptor adjacent to large parking facilities. The project would result in the creation of a new parking facility and would provide an increment of 62 parking spaces, which is below the threshold of 85 spaces requiring further analysis. The project would not result in any other mobile sources of

pollution, and would not significantly increase vehicle miles traveled in a large area. Therefore, no further assessment of the potential for mobile source air quality impacts is warranted.

Table 2.7-1: Trip Generation

	Local Retail		Community Facility (Medical Office)		Residential	
Trip Generation	(1)		(5)		(1)	
Weekday	205		66.626x + 141.77 where x is the gsf per 1,000 sf.		8.075	
Saturday	231		62.1		9.6	
	per 1,000 sf		per 1,000 sf		per dwelling unit	
Linked-trip	25%					
Temporal Distribution	(1)		(2)		(1)	
AM	5.00%		4.00%		10.00%	
MD	6.00%		11.00%		5.00%	
PM	10.00%		12.00%		11.00%	
Sat MD	9.00%		11.00%		8.00%	
Modal Splits	(2)		(2)		(3)	
Auto	4%		30%		16%	
Taxi	3%		2%		2%	
Bus	5%		33%		14%	
Subway	5%		18%		61%	
Walk/Other	83%		17%		6%	
In/Out Splits	In (2)	Out (2)	In (2)	Out (2)	In (2)	Out (2)
AM	45%	55%	89%	11%	15%	85%
MD	46%	54%	51%	49%	50%	50%
PM	47%	53%	48%	52%	70%	30%
Sat MD	46%	54%	41%	59%	50%	50%
Vehicle Occupancy	(2)		AM/MD/PM (2)	SAT (2)	(3)	
Auto	1.65		1.50	2.60	1.05	
Taxi	1.40		1.50	2.60	1.05	
Truck Trip Generation	(1)		(2)		(1)	
Weekday	0.35		0.29		0.32	
Saturday	0.04		0.29		0.01	
Temporal Distribution	(1)		(2)		(1)	
AM	8.00%		3.00%		10.00%	
MD	11.00%		11.00%		11.00%	
PM	2.00%		1.00%		2.00%	
Saturday	11.00%		0.00%		11.00%	
In/Out Splits	In (2)	Out (2)	In (2)	Out (2)	In (2)	Out (2)
AM/MD/PM/Sat	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%

1 = 2020 CEQR Technical Manual

2 = East New York FEIS

3 = 5-year ACS Journey to Work (2015 - 2019) for Kings County 271, 299, 307, 309, 311, 343, 345, and 347

4 = Data provided by NYC DOT for Local Retail in Brooklyn

5 = Data provided by NYC DCP wherein trip generation for Community Facility is analyzed as a Medical office using the equation: 66.626x + 141.77 where x is the gsf per 1,000 sf.

Table 2.7-2: Vehicle Trips

Vehicle Trips								
AM	In	Out	In	Out	In	Out	In	Out
Auto	0	0	-4	0	2	12	-1	12
Taxi	0	0	0	0	0	2	0	2
Taxi Balanced	0	0	0	0	2	2	2	2
Truck	0	0	0	0	2	2	2	2
Total	1	1	-4	-1	6	17	3	17
MD	In	Out	In	Out	In	Out	In	Out
Auto	0	0	-6	-5	4	4	-2	-1
Taxi	0	0	0	0	1	1	0	1
Taxi Balanced	1	1	-1	-1	1	1	1	1
Truck	0	0	0	0	2	2	2	2
Total	1	1	-6	-6	7	7	1	2
PM	In	Out	In	Out	In	Out	In	Out
Auto	1	1	-6	-6	11	5	6	-1
Taxi	1	1	0	0	2	1	2	1
Taxi Balanced	1	1	-1	-1	2	2	3	3
Truck	0	0	0	0	0	0	0	0
Total	2	2	-6	-7	14	7	9	2
Saturday	In	Out	In	Out	In	Out	In	Out
Auto	1	1	0	0	7	7	8	8
Taxi	1	1	0	0	1	1	2	2
Taxi Balanced	1	1	0	0	2	2	3	3
Truck	0	0	0	0	0	0	0	0
Total	2	2	0	1	9	9	11	11

As seen above, the maximum trips generated by the Proposed Actions would be 22 vehicles during the Saturday peak period. Using the CEQR TM HDDV conversion table to convert automobiles to HDDVs results in 11 equivalent truck trips, as seen below in **Table 2.7-3**. With this level of trips generated there would be no significant adverse impacts related to project-generated vehicular trips, and detailed analysis is not required.

Table 2.7-3: Truck Equivalent Conversion

Table 2: Equivalent Truck Calculation			
Road Types	**Equ. truck**	**Screen value**	**PM2.5 Screen**
Paved road < 5000 veh/day	11	12	Pass Screen
Collector roads	4	19	Pass Screen
Principal and minor arterials	1	23	Pass Screen
Expressways and limited access roads	1	23	Pass Screen

Stationary Sources

According to the 2020 CEQR Technical Manual, projects may result in stationary source air quality impacts when one or more of the following occurs:

- New stationary sources of pollutants are created (e.g., emission stacks for industrial plants, hospitals, and other large institutional uses).
- Certain new uses near existing (or planned future) emissions stacks are introduced that may affect the use.
- Structures near such stacks are introduced so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected.
- Fossil fuels (fuel oil or natural gas) for heating/hot water, ventilation, and air conditioning systems are used.
- Large emission sources are created (e.g., solid waste or medical-waste incinerators, cogeneration facilities, asphalt/concrete plants, or power-generating plants, etc.).
- New sensitive uses are located near a large emission source.
- Medical, chemical, or research labs are created or result in new uses being located near them.
- Operation of manufacturing or processing facilities is created.
- New sensitive uses created within 400 feet of manufacturing or processing facilities.
- New uses created within 400 feet of a stack associated with commercial, institutional, or residential developments (and the height of the new structures would be similar to or greater than the height of the emission stack).
- Potentially significant odors are created.
- New uses near an odor-producing facility are created.
- “Non-point” sources that could result in fugitive dust are created.
- New uses near nonpoint sources are created.
- A generic or programmatic action is introduced that would change or create a stationary source or that would expose new populations to such a station

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered. The analysis frame work, as mandated by the State Environmental Review Act, follows the CEQR 2020 Technical Manual. The potential air quality impacts of the following emissions are estimated following the procedures and methodologies prescribed in the CEQR TM:

- The potential for changes in vehicular travel associated with proposed development activities to result in significant mobile source (vehicular related) air quality impacts.
- The potential for emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development to significantly impact nearby existing land uses.
- The potential for air toxic emissions released from existing industrial facilities to significantly impact the proposed development within 400 feet of the proposed development.
- The potential for significant air quality impacts from the emissions of existing HVAC systems with a 20 or more million Btu per hour (MMBtu/hr) design capacity to significantly impact the proposed development within 400 feet of the proposed development.

- The potential for significant air quality impacts from the emissions of facilities that require Prevention of Significant Deterioration permits (Title V), and facilities which require a state facility permit to significantly impact the proposed development within 1,000 feet of the proposed development.

Analysis Framework

The stationary source analysis studies the potential impacts of Projected Development Site 1's building on nearby receptors. Projected Development Site 1 is projected to be developed with a 189,418 GSF 8-story, 85-foot-tall plus cellar and sub-cellar mixed-use building. The building will include 118,599 GSF of residential floor area, 24,922 GSF of commercial floor area, and 10,557 GSF of community facility floor area.

Air Pollutants and Applicable Standards/Guidelines

National Air Quality Standards

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

- Carbon Monoxide (CO) is mainly produced by motor vehicles from the incomplete combustion of gasoline. The impact of CO on the ambient air is analyzed next to roadways, intersections, parking lots, and parking garages vents as these locations are the most affected.
- Nitrogen Dioxide (NO2) is a main concern related to the burning of natural gas. Emitted NOx from the burning of fossil fuel gradually convert to NO2 in a chemical reaction that is affected by ozone concentration and the presence of sunlight. In a micro scale analysis, buildings HVAC systems are analyzed for NO2 impact.
- Ozone (O3) is formed by chemical reaction between hydrocarbons and nitrogen oxides and its impact is analyzed on a regional scale by monitoring stations.
- Lead (Pb) in the ambient air is monitored on a regional level. In a project scale analysis, impact due to Lead concentration levels are analyzed if a new source, such as lead smelters, is introduced into the environment or if a project is located next to a lead emitter.
- Particulate Matter emissions are associated with both stationary sources and mobile sources. Two sizes of particulate matters are analyzed: Inhalable Particles (PM10) and Fine Particulate Matter (PM2.5), where the subscript number refers to the diameter of the particulate matter in micrometers.
- Sulfur Dioxide (SO2) emission is principally associated with stationary sources that burn oil or coal. These fuels contain sulfur that bond to oxygen atoms in the burning process.

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. The NO2 and PM2.5 standards together with their health-related averaging periods are presented in **Table 2.7-4**.

Table 2.7-4: National and New York State Ambient Air Quality		
Pollutant	**Averaging Period**	**National and State Standards**
NO_2	Maximum 1-Hour Concentration	0.10 ppm (188 µg/m^3)
	Annual Arithmetic Average	0.053 ppm (100 µg/m^3)
$PM_{2.5}$	24-Hour Concentration	35 µg/m^3
	Average of 3 Consecutive Annual Means	12 µg/m^3
SO_2	Maximum 1-Hour Concentration	75 ppb (196 µg/m^3)
	Annual Arithmetic Mean	30 ppb (80 µg/m^3)

NO_2 NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO_2, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The 1-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the 3-year average of the 98th percentile (8th Highest) of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's PVMRM module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model.

Per the *CEQR TM*, a Tier 1 approach is initially applied, followed by a Tier 2 application of NOx/NO_2 ratio of 80% to the NOx modeled concentration to determine whether violation of the NAAQS is likely to occur. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO_2 NAAQS were estimated.

The annual NO_2 standard is 0.053 ppm (100 ug/m^3). In order to conservatively estimate annual NO_2 impacts, a NO_2 to NOx ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO_2 analysis, was applied.

New York State Standards

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the New York State Department of Environmental Conservation (NYSDEC) has established guidelines for maximum allowable concentration of "noncriteria pollutants," which are potentially toxic or carcinogenic pollutants. The maximum allowable guidelines set a maximum 1-hour and annual averaging time concentrations and are published in the DAR-1 AGC/SGC Table, where AGC/SGC refers to Annual and Short-term Guideline Concentrations. The most recent DAR-1 guidelines were created on July 14, 2016.

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

NYC Interim Guidelines

In addition to the NAAQS, the *CEQR TM* requires that projects subject to CEQR apply a $PM_{2.5}$ significant impact criteria (based on concentration increments). These criteria are called *de minimis* and they are more stringent than the NAAQS and the state standards as the criteria set a maximum increase of pollutant concentration that is below the national standard. If the estimated impacts of a proposed project are less than the *de minimis* criteria, the impacts are not considered to be significant. As outlined in the *CEQR TM,* $PM_{2.5}$ significant impacts are evaluated as follow:

- Predicted 24-hour maximum PM2.5 concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average PM2.5 concentration increments greater than 0.3 µg/m3 at any receptor location for stationary sources.

Background Concentrations

Determination of significant impact criteria is evaluated by adding the background concentrations at the nearest NYSDEC monitoring station to the concentrations of criteria pollutants in the ambient air of the project area.

Background concentrations of NO2, SO2, and PM2.5—the criteria pollutants relevant for HVAC system fueled by natural gas or fuel oil #2 analysis—were obtained from the NYSDEC's annual report for 2017 at the nearest monitoring stations (Project Area distances to JHS 45 and JHS 126 are equal). **Table 2.7-5** shows the background concentrations.

Table 2.7-5: Background Concentration at the Queens College Monitoring Station (NYSDEC 2017 Report)

Pollutant	Averaging Period	Background Concentration	Monitoring Station
NO_2	1-Hour Concentration	112.2 µg/m^3	Queens College s
	Annual Arithmetic Average	32.4 µg/m^3	
$PM_{2.5}$	24-Hour Concentration	19.4 µg/m^3	JHS 45
	Average of 3 Consecutive Annual Means	7.9 µg/m^3	
SO_2	1-Hour Concentration	6.93 ppb (18.1 µg/m^3)	Queens College s
	Annual Arithmetic Mean	0.75 ppb (2.00 µg/m^3)	

The *de minimis* criteria for $PM_{2.5}$ was evaluated as described in the NYC Interim Guidelines. The concentration increments are presented below:

- 24-hour $PM_{2.5}$ 7.80 µg/m^3
- Annual $PM_{2.5}$ 0.3 µg/m^3

Project HVAC Systems Analysis

Per the CEQR Technical Manual, the HVAC analysis considers the potential for emissions from the HVAC systems of the proposed development to significantly impact existing land uses (project-on-existing), and the potential of the Proposed Actions to significantly impact each other (project-on-project). As only one Projected Development Site is considered likely, no project-on-project analysis is required.

Screening Analysis

As outlined in the CEQR Technical Manual, the potential for stationary source emissions from heat and hot water systems to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used, the building's residential or non-residential use, the square footage of the development that would be served by the system, the height of the building served by the HVAC system and the distance to the nearest building whose height is at least as great as the building served by the HVAC system. The CEQR Technical Manual provides a screening analysis based on these factors, which was utilized to determine the potential for significant impacts from the projected building's HVAC system(s).

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

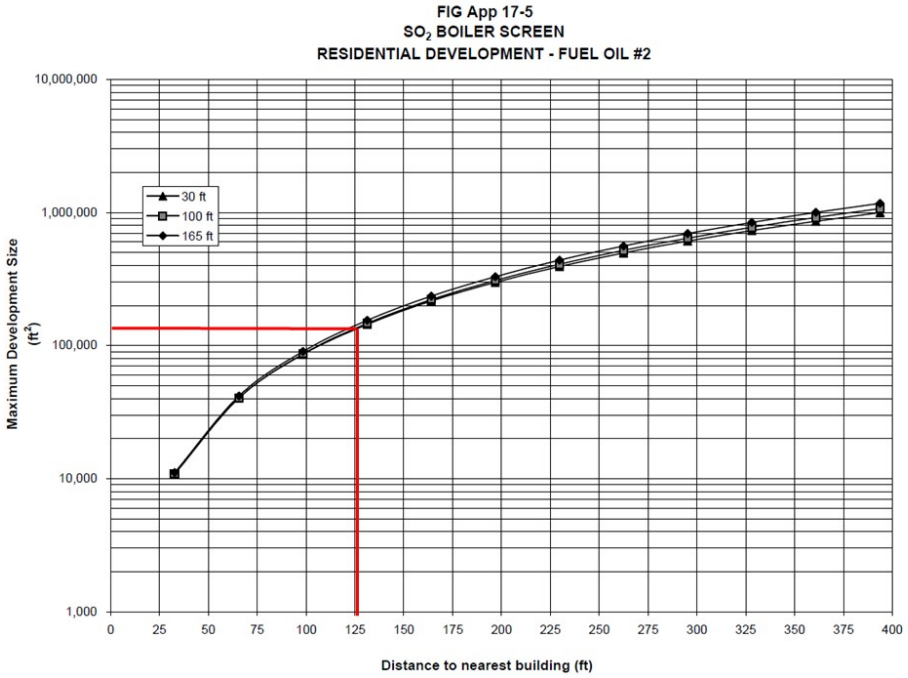
Per the CEQR Technical Manual, the CEQR nomographs depicted on Figure 17-5 of the CEQR Technical Manual Appendices was used. This stationary source screen is a generic screen that considers the type of fuel oil used in HVAC systems of residential buildings. According to 15 RCNY 2-15, no new boiler or burner installations may use No. 6 or No. 4 fuel oils. Therefore, the highest-emitting fuel that could be used is No. 2 fuel oil. This nomograph depicts the size of the development versus distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. In addition, the distance to nearest building of similar or greater height was assumed to be 400 feet if the actual distance is greater.

Figure 2.7-1 shows the screening analysis nomograph. The 26,756 GSF parking garage is not included in the square footage as it is not climate controlled; therefore, the 154,078 GSF area for commercial, community facility, and residential space will be analyzed. The results of the screening indicate that any building of equal or greater height than the 85-foot-tall Projected Development Site 1 building and at a distance of 125 feet or less may be impacted by the Proposed Actions. The nearest building of equal or greater height is the Rabbinical Seminary of America located at 147-06 76th Avenue (Block 6685, Lot 1), which is approximately 1,200 feet to the northwest of Projected Development Site 1. Therefore, there will be no adverse impacts from HVAC systems, and detailed analysis is not required.

E-Designation – E-657

Block 6630, Lot 1 (Projected Development Site 1): Any new residential, commercial, and/or community facility development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 88 feet above grade to avoid any potential significant adverse air quality impacts.

Figure 2.7-1: HVAC Screening Nomograph



Industrial Emissions

The Proposed Actions would introduce a sensitive land use into the area. Accordingly, a preliminary screening was conducted to determine if there are any potential sources of industrial process emissions that could affect project occupants. Industrial sources were identified through a site visit within a 400-foot study area and the DEP CATS search.

400-Foot Study Area

The Affected Area is located within a R3-2/C1-2 zoning district, and the surrounding area is primarily low- to medium-density residential uses and community facility uses. The 400-foot radius was screened for potential sources of industrial emissions and is shown below in **Figure 2.7-2.** Based on field observations and reviews of DCP land use maps, no such sources were identified

Figure 2.7-2: Industrial Emissions Screening



1,000-Foot Study Area

The surrounding area within a radius of 1,000 feet of the Affected Area was screened for potential large source industrial emissions. Based on field observations and reviews of DCP land use maps, no such sources were identified (see **Figure 2.7-2**).

Conclusion

As indicated above, there are no active industrial emissions permits or large industrial emission sources within the 400- or 1,000-foot study areas. Additionally, there is no evidence present to conclude that there are illegal unpermitted air emissions present in the study area. Therefore, there does not appear to be any potentially significant impact in terms of air toxics to project occupants.

2.8 Noise

Introduction

The Proposed Actions would create noise-sensitive residential development. Therefore, an assessment of the potential for adverse effects on project occupants from ambient noise is warranted. The projected development would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. Therefore, this noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development. The predominant noise source at the Affected Area is vehicular traffic on surrounding streets.

Framework of Noise Analysis

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

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

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

Table 2.8-1: Noise Levels of Common Sources

Sound Source	SPL (dB(A))
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Notes: A change in 3dB(A) is a just noticeable change in SPL. A change in 10 dB(A)Is perceived as a doubling or halving in SPL.	
Source: 2020 CEQR Technical Manual	

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

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

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

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

- L_{max} is the highest SPL measured during a given period of time. It is useful in evaluating L_{eq}s for time periods that have an especially wide range of noise levels.
- $L_{eq(24)}$ is the continuous equivalent sound level over a 24-hour time period.

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

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law (i.e., the SPL changes in inverse proportion to the square of the distance from the sound source).

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

Noise Standards and Guidelines

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Quality Review (CEQR) noise exposure guidelines for exterior noise levels. As shown in Table 2.8-2 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 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 dBA (*L_{10} or Ldn, depending on the source*) or below.

Table 2.8-2: 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	Ldn < 60 dBA						
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		55<L_{10}≤65 dBA	Ldn < 60 dBA	65<L_{10}≤80 dBA	Ldn < 60 dBA	L_{10}>80dBA	Ldn < 75 dBA
3. Residence, residential hotel or motel	7 am to 10 pm	$L_{10} \leq 65$dBA		65<L_{10}≤70 dBA		70<L_{10}≤80 dBA		L_{10}>80dBA	
	10 pm to 7 am	L10≤55dBA		55<L_{10}≤70 dBA		70<L_{10}≤80 dBA		L_{10}>80dBA	
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	

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

Notes:

(i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;

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

2 Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions

of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes.

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

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

Table 2.8-3 CEQR TM: Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise Level with Proposed Project	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation[1]	(i) 28 dB(A)	(ii) 31 dB(A)	(iii) 33 dB(A)	(iv) 35 dB(A)	$36 + (L_{10} - 80)^2$ dB(A)

Source: New York City of Environmental Protection

Notes:

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

2 Required attenuation values increase by 1 dB(A) increments for L_{10} values greater than 80 dBA.

It is assumed that the building mechanical systems (i.e., HVAC systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building mechanical equipment.

Measurement Location and Equipment

Because the predominant noise sources in the area of the proposed project consist of vehicular traffic, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day. Pursuant to CEQR Technical Manual Methodology, three (3) measurements were collected for 20-minute periods: Location One (1) was at the frontage of the Project Site along 77th Road; Location Two (2) was at the frontage of the Project Site along Vleigh Street; and Location Three (3) was at the frontage of the Project Site along 78th Avenue. The noise monitoring locations are shown in Figure 2.8-1 and Photo 2.8-1 through 2.8-3 below.

Noise monitoring was conducted using a using 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 traffic around the Project Area constitute a worst-case condition for noise. Noise meter calibration certification and back up data are provided in Appendix C.

Photo 2.8-1: ***Noise Monitoring Location One (1)***
77th Road



Photo 2.8-2: ***Noise Monitoring Location Two (2)***
Vleigh Street



Photo 2.8-3: ***Noise Monitoring Location Three (3)***
78th Avenue



Figure 2.8-1: Noise Monitoring Locations



Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Wednesday, February 12, 2020. The weather was dry and wind speeds were moderate during all monitoring periods. The sound meter was calibrated before and after each monitoring session.

Existing Conditions

Based on the noise measurements, the predominant source of noise is vehicular traffic.

Table 2.8-4 through 2.8-6 *below contains the results for the measurements taken at the Project Site:*

Table 2.8-4
Noise Levels (dB) at Location 1

Wednesday, February 12th, 2020

Time	7:30 am – 7:50 am	12:01 pm – 12:21 pm	4:30 pm – 4:50 pm
L_{max}	88.7	81.2	83.8
L_{10}	65.0	59.5	**70.5**
L_{eq}	65.2	61.6	67.1
L_{50}	57.0	51.5	58.0
L_{90}	53.5	50.5	53.5
L_{min}	52.3	46.4	43.9

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

Table 2.8-5
Noise Levels (dB) at Location 2

Wednesday, February 12th, 2020

Time	7:51 am – 8:11 am	12:22 pm – 12:42 pm	4:51 pm – 5:11 pm
L_{max}	84.4	78.6	82.9
L_{10}	**71.0**	62.5	**71.5**
L_{eq}	66.6	62.0	67.1
L_{50}	62.0	52.5	57.5
L_{90}	56.0	51.5	53.5
L_{min}	51.1	46.3	46.0

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

Table 2.8-6 *Noise Levels (dB) at Location 3*			
Wednesday, February 12th, 2020			
Time	**8:12 am – 8:32 am**	**12:42 pm – 1:02 pm**	**5:12 pm – 5:32 pm**
L_{max}	83.4	79.1	88.4
L_{10}	65.0	61.0	**72.5**
L_{eq}	61.9	60.4	68.4
L_{50}	55.0	53.0	59.0
L_{90}	52.5	52.0	51.5
L_{min}	49.6	48.2	33.8

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the CEQR Technical Manual
*Noise Field Technician Incorrectly wrote down time on field sheet. AM period time is correct in this table and noise readouts

Table 2.8-7 through 2.8-9 *below contains the traffic counts and vehicle classifications during each monitoring period for 20 minutes:*

Table 2.8-7 ***Location 1:*** *Traffic volumes and vehicle classifications*			
	7:30 am – 7:50 am	**12:01 pm – 12:21 pm**	**4:30 pm – 4:50 pm**
Car/ Taxi	11	9	10
Van/Light Truck/SUV	16	17	12
Medium Truck	0	0	0
Heavy Truck	0	0	0
Bus	1	0	0
Train	0	0	0

Table 2.8-8 ***Location 2:*** *Traffic volumes and vehicle classifications*			
	7:51 am – 8:11 am	**12:22 pm – 12:42 pm**	**4:51 pm – 5:11 pm**
Car/ Taxi	43	32	38
Van/Light Truck/SUV	62	40	51
Medium Truck	2	0	0
Heavy Truck	0	0	0
Bus	0	0	0
Train	0	0	0

Table 2.8-9 ***Location 3:*** *Traffic volumes and vehicle classifications*			
	8:12 am – 8:32 am	**12:42 pm – 1:02 pm**	**5:12 pm – 5:32 pm**
Car/ Taxi	15	13	16
Van/Light Truck/SUV	20	8	21
Medium Truck	0	0	0
Heavy Truck	0	0	0
Bus	0	0	0
Train	0	0	0

Determination of Impacts/Building Attenuation Requirements
The 2020 *CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the proposed action, an L_{10} of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An L_{10} of between 70 and 80 dB(A) is identified as marginally unacceptable general external exposure. The highest recorded L_{10} at Location One (1) of the subject property was 70.5 dB(A) during the Evening monitoring period. The highest recorded L_{10} at Location Two (2) of the subject property was 71.5 dB(A) during the Evening monitoring period. The highest recorded L_{10} at Location Three (3) of the subject property was 72.5 dB(A) during the Evening monitoring period.

Based on the results of the noise monitoring, a window-wall attenuation of 28 dB(A) is required for all building facades. With this level of attenuation, there would be no potential for adverse impacts related to ambient noise.

The text for the E-Designation (E-657) would be as follows:

Block 6630, Lot 1 (Projected Development Site 1): In order to ensure an acceptable interior noise environment, future residential/community facility/commercial office uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all facades in order to maintain an interior L10 noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office uses. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

Appendix A: Agency Correspondence

Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / ER.Q
Project: VLEIGH_PLACE
Date Received: 2/27/2020

Properties with no Architectural or Archaeological significance:
1) 77-39 VLEIGH PLACE, BBL: 4066300001
2) 141-33 78 AVENUE, BBL: 4066300015

Gina Santucci 2/27/2020

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 34833_FSO_DNP_02272020.docx

Appendix B: Architectural Plans

ZONING ANALYSIS

77-63 VLEIGH PLACE,, QUEENS, NEW YORK

BIN NUMBER:	
SITE DATA:	
BLOCK/LOT	6630 / 1
ZONING DISTRICT	R6A / C2-3 OVERLAY 150 FT OF VLEIGH PLACE
COMMERCIAL OVERLAY	
COMMUNITY BOARD	
ZONING MAP NUMBER	9B
LOT DIMENSION	LOT FRONTAGE: 180.159' X 190.22' X 100.46' (DEED) LOT DEPTH: 230.00' (DEED)
ZONING LOT AREA	34,553 SF

ZR SECTION	TITLE	PERMITTED/REQUIRED	REQUIRED/ALLOWED	PROPOSED	TOTAL
22-00, 32 00	USES	COMMUNITY FACILITIES - 3-4, RETAIL AND COMMERCIAL 5-6		UG 3 CF- CHILD CARE POE (SUBJECT TO BSA APPROVAL) 6 COMMERCIAL / MERCANTILE 2 - RESIDENTIAL	COMPLY
23-153 23-154 (b)	FLOOR AREA RATIO	BASE #FLOOR AREA RATIO# 3.6 FAR MAXIMUM #FLOOR AREA RATIO# 3.6 FAR	34,553 SQ FT X 3.6 = 124,391	124,380	COMPLY
23-03 AND 26-41	STREET TREE PLANTING	...ONE STREET TREE SHALL BE PROVIDED FOR EVERY 25 FEET OF STREET FRONTAGE	478 LF OF PROPERTY LINE / 25 FT = 19 TREES	19 TREES PROVIDED	COMPLY
23-153	LOT COVERAGE	65% LOT COVERAGE	34,553 SQ FT X 65% = 22,459	19,186 SQ FT	COMPLY
23-22	MAXIMUM NUMBER OF DWELLING UNITS	FACTOR: 680 SF PER DWELLING UNIT	118,599 SQ FT / 680 = 174	119 UNITS 118,599 / 119 = 997 SQ FT	COMPLY
	INCLUSIONARY HOUSING	30%	119 X 30% = 36 UNITS	36 UNITS	COMPLY
23-711	STANDARD MINIMUM DISTANCE BETWEEN BUILDINGS	BUILDING HEIGHT OVER 50 FEET ABOVE BASE PLANE	WALL TO WALL: 40 FT WALL TO WINDOW: 50 FT WINDOW TO WINDOW: 60 FT	60 FT	COMPLY
YARD AND BULK REGULATIONS					
33-25	SIDE YARD REQUIREMENTS	... NO #SIDE YARD# SHALL BE REQUIRED. IF AN OPEN AREA EXTENDING ALONG A #SIDE LOT LINE# IS PROVIDED AT ANY LEVEL, IT SHALL BE (a) AT LEAST EIGHT FEET WIDE AT EVERY POINT.	8 FEET SIDE YARD	8 FEET SIDE YARD PROVIDED ALONG FULL LENGTH OF SIDE LOT LINE	COMPLY
33-26	REAR YARD REQUIREMENTS	A #REAR YARD# WITH A DEPTH OF NOT LESS THAN 20 FEET SHALL BE PROVIDED AT EVERY #REAR LOT LINE# ON ANY #ZONING LOT# EXCEPT AS OTHERWISE PROVIDED IN SECTIONS 33-28. #REAR YARDS# SHALL ALSO BE PROVIDED ALONG PORTIONS OF #SIDE LOT LINES# AS SET FORTH IN SECTION 33-261.	SITE DOES NOT HAVE A REAR LOT LINE AND NO PORTION OF THE SIDE LOT LINE IS FURTHER THAN 100 FEET FROM THE STREET LINE	NO REAR YARD PROVIDED	COMPLY
33-121	MAXIMUM FLOOR AREA RATIO	FOR #ZONING LOTS# CONTAINING ONLY #COMMERCIAL USE# = 2.0 FOR #ZONING LOT S# CONTAINING BOTH #COMMERCIAL# AND #COMMUNITY FACILITY USES# = 3.0	2.0 X 34,553 SQ FT = 69,106	19,695 SF	COMPLY
HEIGHT AND SETBACK REGULATIONS					
23-22 23-661 (b)	MAX HEIGHT OF BUILDINGS AND SETBACK REGULATIONS	MIN BASE HEIGHT = 40 FT MAX BASE HEIGHT = 65 FT MAX BUILDING HEIGHT = 85 FT (8 STORIES) (b) FOR #QUALITY HOUSING BUILDINGS# MEETING THE CRITERIA OF PARAGRAPH (a) OF THIS SECTION, THE MAXIMUM BASE AND #BUILDING# HEIGHTS AND MAXIMUM NUMBER OF #STORIES# ESTABLISHED IN SECTION 23- 662 SHALL BE MODIFIED.		BASE HEIGHT = 58 FT BUILDING HEIGHT = 85 FT (8 STORIES)	COMPLY
23-662	MAXIMUM HEIGHT OF FRONT WALL AND REQUIRED FRONT SETBACKS	INITIAL SETBACK DISTANCE ON #NARROW STREET# 15 FEET ON #WIDE STREET# 10 FEET	ON #NARROW STREET# 15 FEET ON #WIDE STREET # 10 FEET	REQUIRED SETBACKS PROVIDED ABOVE THE MAX. BASE HEIGHT FLOOR	COMPLY
ACCESSORY OFF-STREET PARKING SPACES					
25-23	REQUIREMENTS WHERE GROUP PARKING FACILITIES ARE PROVIDED	QH = 50% OF DWELLING UNITS IH = 25% OF DWELLING UNITS	83 X 50% = 42 36 X 25% = 9	PROPOSED PARKING AREA: 32,198	COMPLY
25-31	COMMUNITY FACILITY	#MEDICAL OFFICE.: 1 PER 800 SQ. FT.	10,557 SQ FT/ 800 = 13		
36-21	COMMERCIAL PARKING	GENERAL RETAIL: 1 PER 400 SQ. FT. OF #FLOOR AREA#	24,922 SQ FT/ 400 = 62 TOTAL = 126		
36-522	LOCATION OF PARKING SPACES	(B) #MIXED BUILDING S#... SHALL BE LOCATED ONLY WITHIN A #BUILDING# OR IN ANY OPEN AREA ON THE #ZONING LOT# THAT IS NOT BETWEEN THE #STREET LIN E# AND THE #STREET WALL#, #BUILDING# OR ITS PROLONGATION.		ENCLOSED PARKING ON SUB-CELLAR LEVEL	
36-521	SIZE OF SPACES	[...200 SQUARE FEET]		32,198 SF / 126 SPACES = 256 SF PER SPACE ATTENDED PARKING	COMPLY
25-162	SIZE OF SPACES	[...300 SQUARE FEET]			
25-621	LOCATION OF PARKING SPACES	(b)#ACCESSORY# OFF-STREET PARKING SPACES SHALL BE LOCATED WITHIN OR TO THE SIDE OR REAR OF #BUILDINGS@ CONTAINING #RESIDENCES#.		PARKING LOCATED IN THE SUB-CELLAR WITH ACCESS VIA RAMP FROM GRADE	COMPLY
LOADING BETHS					
36-60	NUMBER OF LOADING BERTHS	#COMMERCIAL USES# IN 6A 24,922 SQ FT OF #FLOOR AREA# = 1, FIRST 8,000 SF: NONE, NEXT 17,000: 1.	1 REQUIRED	1 PROVIDED	COMPLY
36-681	SIZE OF LOADING BERTHS	#COMMERCIAL USES# IN 33'0" L X 12'0" W X 14'0" HIGH		33'0" L X 12'0" W X 14'0" HIGH	COMPLY
36-682	LOCATION OF LOADING BERTHS	NO OFF-STREET LOADING BERTH AND NO ENTRANCE OR EXIT THERETO SHALL BE LOCATED LESS THAN 50 FEET FROM THE INTERSECTION OF ANY TWO #STREET LINES#		140-6"	COMPLY
BICYCLE PARKING					
36-70 25-811, 25-811 (d)	ENCLOSED BICYCLE PARKING SPACES	COMMERCIAL USE GROUP 6: 1 PER 10,000 GROUP 2: 50% DWELLING UNITS	24,922 SQ FT = 3 50% OF 119 DWELLING UNITS = 60 TOTAL REQUIRED = 60	60 ENCLOSED BIKE PARKING SPACES AT CELLAR FLOOR LEVEL	COMPLY
QUALITY HOUSING PROGRAM BUILDING INTERIOR					
28-12	REFUSE STORAGE AND DISPOSAL	A REFUSE DISPOSAL ROOM OF NOT LESS THAN TWELVE SQUARE FEET WITH NO DIMENSION LESS THAN THREE FEET SHALL BE PROVIDED ON EACH #STORY# THAT HAS ENTRANCES TO #DWELLING UNITS#. OR #ROOMING UNITS#. WELVE SQUARE FEET OF SUCH REFUSE STORAGE ROOM SHALL BE EXCLUDED FROM THE DEFINITION OF #FLOOR AREA#.		33 SF AREA PROVIDED PER FLOOR	COMPLY
28-13	LAUNDRY FACILITIES	VOLUNTARY		LAUNDRY ROOM PROVIDED PER DWELLING UNIT	COMPLY
28-21, 28-22	RECREATION SPACE AND PLANTING AREAS	... NINE OR MORE DWELLING UNITS (ROOMING UNITS) = 3.3 PERCENT OF RESIDENTIAL FLOOR AREA	113,187 SF x 3.3% = 3,735 SF	2,067 SF LOCATED AT 2ND THRU 7TH FLOORS - INTERIOR 1,668 SF LOCATED AT 2ND COURTYARD TERRACE - EXTERIOR TOTAL = 3,735 SF	COMPLY
28-22	STANDARDS FOR RECREATION SPACE	(a) ACCESSIBLE FROM RESIDENTIAL PORTION OF THE BUILDING. (b) MIN. DIMENSION OF RECREATION SPACE SHALL BE 15 FT. MIN. SIZE OF OUTDOOR RECREATION SPACE SHALL BE 225 SQ FT., AND THE MIN. SIZE OF ANY INDOOR RECREATION SPACE SHALL BE 300 SQ FT. (c) OUTDOOR RECREATION AREA SHALL BE OPEN TO THE SKY...7 FEET IN DEPTH, MAY COVER UP TO 10 PERCENT OF THE OUTDOOR RECREATION SPACE...10 FEET ABOVE THE LEVEL OF THE OUTDOOR RECREATION SPACE. (d) ANY INDOOR RECREATION ROOM LOCATED IN A #STORY# SHALL HAVE AT LEAST ONE EXTERIOR WALL WITH WINDOWS... THAT MEASURES NOT LESS THAN 9.5 PERCENT OF THE TOTAL FLOOR SPACE OF THE ROOM.		(a) ACCESS FROM 2ND FLOOR RESIDENTIAL (b) - (c) - (d) -	COMPLY
SAFETY AND SECURITY					
28-23	PLANTING AREAS	AREA IF ZONING LOT BETWEEN ST. LINE AND STREET WALLS SHALL BE PLANTED AT GROUND LEVEL...SHALL NOT BE REQUIRED AT ENTRANCES AND EXITS, DRIVEWAYS, OR BWTWEEN NON-RESIDENTIAL USES AND THE STREET LINE		ALL AREAS BETWEEN STREET LINE AND STREET WALL AT GROUND LEVEL ARE RESIDENTIAL, ENTRANCE, PARKING ACCESS, OR COMMERCIAL USE.	

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 ONDER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP
ARCHITECTS & ENGINEERS
JASMINE AGUIOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CIRILLO, AIA
GERARD P. DEGANO, PE
FREDERICK KNOAD, AIA
KAROLINA KOPCZAK, AIA
DAVID J. MEGRIAN, PP
MICHAEL D. SAN BUENAVENTURA, P.E
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-63 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: Author	Approved By: MBJ

Drawing Name:
ZONING ANALYSIS

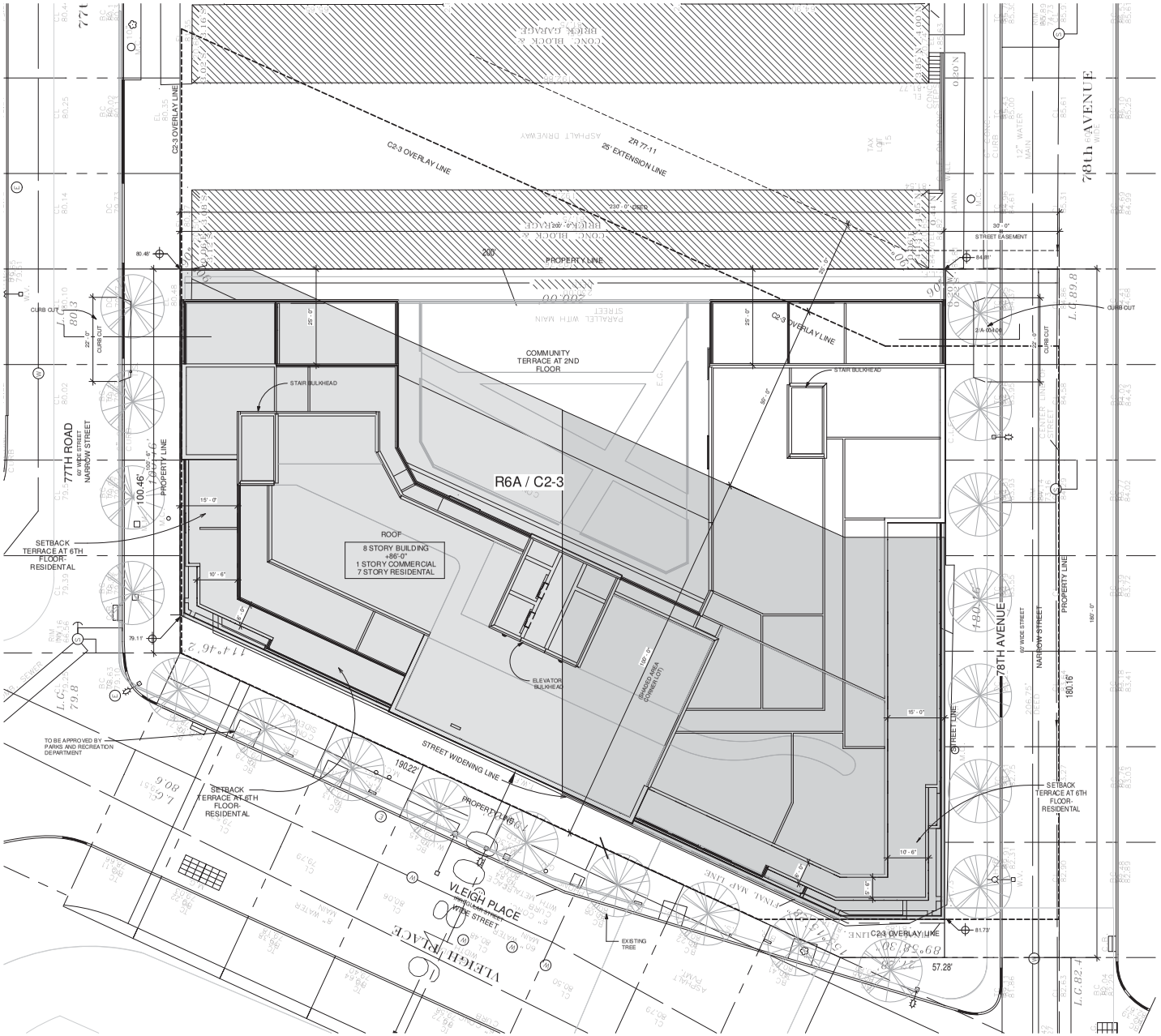
Drawing Number:
A-001.00
1 OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver

12/2/2019 10:40:57 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHNX.rvt



1 SITE PLAN
3/32" = 1'-0"

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JEANNE AGUIDE, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. DEGANO, PE
FREDERICK KNOAD, AIA
MARZENA KOPCZAK, AIA
DAVID J. MEEHAN, AIA
MICHAEL D. VAN BUSKIRK R.(RA, PE
CHERYL SOMMERDER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: Author	Approved By: MBJ

Drawing Name:
SITE PLAN

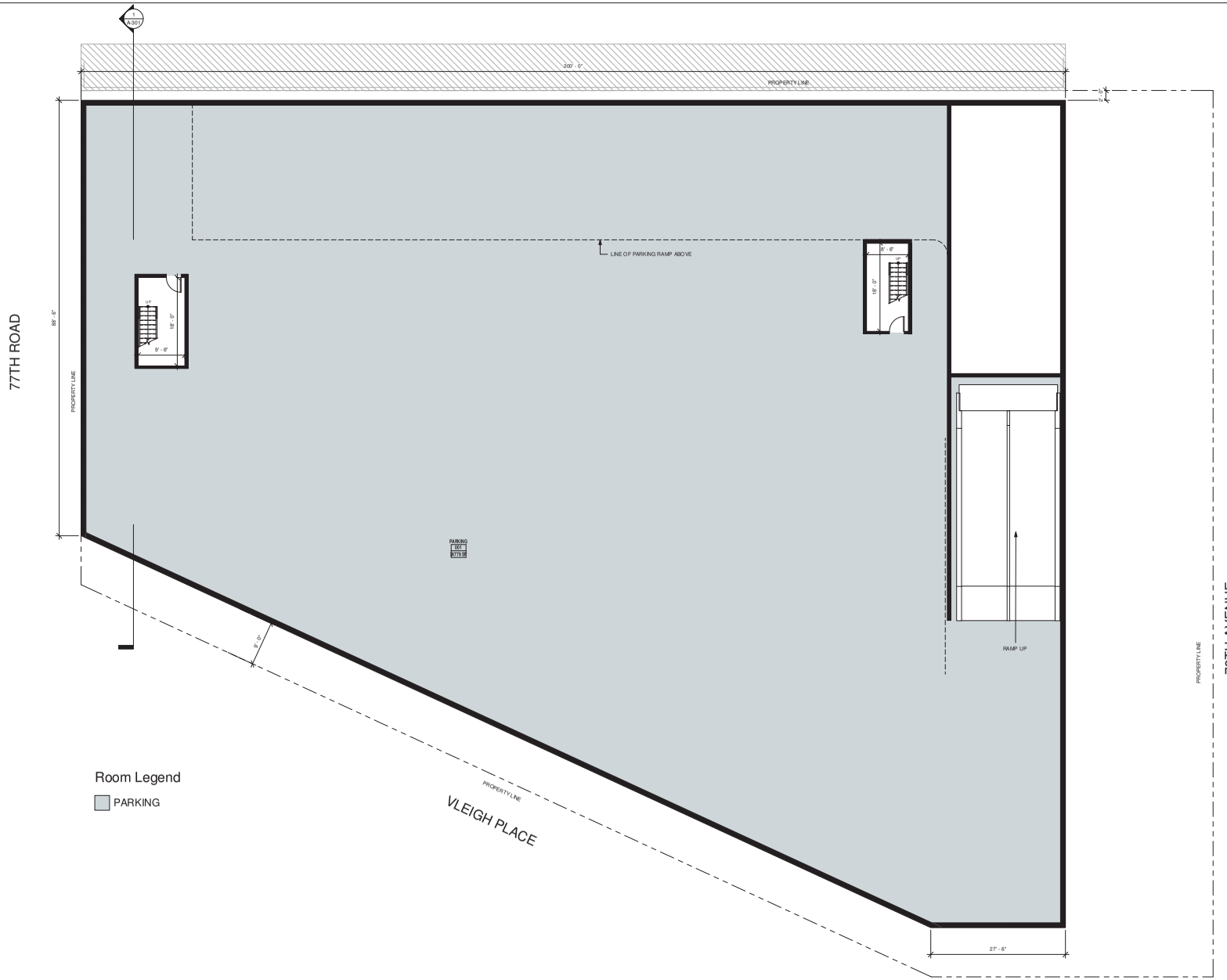
Drawing Number:
A-002
OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver

12/2/2019 10:41:04 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHNXE.rvt



12/2/2019 10:41:04 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHWE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR
NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JEANNE AGUIOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. GIEDRAITIS, PE
FREDERICK KNOAD, AIA
KAROLINA KOPCZYNSKI, AIA
DAVID J. KUCHAR, AIA
MARK S. LIEBERMAN, PE
MICHAEL D. SAN BUENAVENTURA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAVICH, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: Author	Approved By: MBJ

Drawing Name:
SUB-CELLAR LEVEL

Drawing Number:
A-100
OF 90

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



1 CELLAR
1/8" = 1'-0"

12/2/2019 10:41:05 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHNXE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP
ARCHITECTS & ENGINEERS
JEANNE AGUIAR, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. DEGIANO, PE
FREDERICK KNOAD, AIA
MARCUM HOPSONG, AIA
DAVID J. NEUMAN, PE
MICHAEL D. SAN BUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAVEZ, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

Drawing Name:
CELLAR LEVEL

Drawing Number:
A-101
OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



Room Legend

- CHILDCARE LOBBY
- COMMERCIAL 1
- COMMERCIAL 2
- COMMERCIAL 3
- LOBBY
- LOCAL RETAIL
- MEDICAL OFFICE
- MEDICAL OFFICE LOBBY
- OFFICE
- PARKING RAMP
- RECIEVING
- RESTROOM
- VALET

1 1ST FLOOR PLAN
1/8" = 1'-0"

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD D. JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JEANNE AGUILOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. DEGIANO, PE
FREDERICK KNOAD, AIA
MARCUM HOPKINS, AIA
DAVID J. MEURER, AIA
MICHAEL D. VAN BUSKIRK IV, AIA, PE
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

Drawing Name:
1ST FLOOR

Drawing Number:
A-102
OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver

12/2/2019 10:41:07 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHWE.rvt



PROJECT FLOOR AREA, UNIT AND PARKING COUNT SUMMARY

ELEVATION	LEVEL	BUILDING SECTION DIAGRAM	AREA							RESIDENTIAL UNIT AND PARKING COUNT				
			FLOOR AREA	UNIT AREA	EFFICIENCY	COMMERCIAL	COMM. FACILITY	PARKING	RESIDENTIAL	UNIT MIX (COUNT)				
			GBF	GSF	%	GSF	GSF	GBF	GSF	1 BED (600-650 GSF)	2 BED (900-950 GSF)	3 BED (1,150-1,200 GSF)	TOTAL	
94'-0"	ROOF	GREEN ROOF/ TERRACE	-	-	-					-	-	-	-	
86'-0"	8TH FLOOR	RESIDENTIAL/MECHANICAL/ TERRACE	5,970	5,777	97%				5,970	5	1	-	6	
66'-0"	7TH FLOOR	RESIDENTIAL	14,947	12,178	81%				14,947	9	6	-	15	
56'-0"	6TH FLOOR	RESIDENTIAL	14,947	12,178	81%				14,947	9	6	-	15	
46'-0"	5TH FLOOR	RESIDENTIAL	17,572	14,824	84%				17,572	10	5	3	18	
36'-6"	4TH FLOOR	RESIDENTIAL	19,435	16,222	83%				19,435	17	4	1	22	
27'-0"	3RD FLOOR	RESIDENTIAL	19,435	16,222	83%				19,435	18	3	1	22	
17'-6"	2ND FLOOR	RESIDENTIAL / ROOF TERRACE	19,186	15,469	81%				19,186	17	3	1	21	
VARIES	1ST FLOOR	PARKING/RESIDENTIAL LOBBY / COMMERCIAL	24,414	-	-	16,288	2,035	3,589	2,479					
-15'-0"	CELLAR FLOOR	COMM FACILITY/RESIDENTIAL/ UTILITIES/ PARKING	26,776			8,639	8,522	4,066	4,628 (UTILITIES)					
-27'-0"	SUB-CELLAR FLOOR	PARKING	26,776					24,900						
	TOTAL:		169,418	92,890		24,932	10,557	33,415	119,559	85 (71%)	28 (24%)	6 (5%)	119	

NOTE UNIT AREA IS MEASURED FROM THE OUTSIDE LINE OF THE EXTERIOR WALL AND CORRIDOR WALL

Room Legend

- 1 BR
- 2 BR
- 3 BR
- AMMENITIES
- BALCONY
- COMMUNITY TERRACE
- MECHANICAL
- TRASH ROOM

1 2ND FLOOR PLAN
1/8" = 1'-0"

N

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JASMINE AGUILOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPOBIANCO
GERARD P. DEGIANO, PE
FREDERICK KNOAD, AIA
KAROLINA KOPCZKO, AIA
DAVID J. MEURER, PE
MICHAEL D. SAN BUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAVEZ, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

Drawing Name:
2ND FLOOR PLAN

Drawing Number:
A-103
OF 90

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver

12/2/2019 10:41:11 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHKXE.rvt

Jarmel Kizel
ARCHITECTURE & PLANNING, P.C.
42 OKER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL 973.994.4666
FAX 973.994.4669
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT.

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT.

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW J. KIZEL, AIA, NCARB
RICHARD J. JARMEL, PE
BRIAN A. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
ANDREW J. ALTMAN, AIA
NICHOLAS A. CHEN, PE
FREDERICK FOGEL, AIA
FREDERICK FOGEL, PE
STEVEN A. KAHN, AIA
STEVEN A. KAHN, PE
MICHAEL J. KOWALSKI, AIA
MICHAEL J. KOWALSKI, PE
SEUNG J. KWAHAR, AIA

Project: MIXED USE DEVELOPMENT
Client: 77 BEVERLY ROAD
KEW GARDENS
QUEENS, NY 11415

Project Number: 2016
MATATO-S-17-192

Scale: AS NOTED

Drawn by: KK

Approved by: MBJ

Drawing Name: 3RD FLOOR PLANS

Drawing Number: A-104
of 16

Issue Date: 2018-04-15

DESIGN PROFESSIONAL OF RECORD

Approved

78TH AVENUE

77TH ROAD

PROPERTY LINE

VLEIGH PLACE

PROPERTY LINE

PROPERTY LINE

157' - 0"

58' - 6"

69' - 6"

29' - 6"

3' - 0"

34' - 4"

18' - 6"

3' - 0"

18' - 6"

3' - 0"

36' - 6"

1' - 4"

70' - 6"

3' - 0"

37' - 6"

3' - 0"

70' - 6"

20' - 0"

BALCONY

OPEN TO BELOW

MECHANICAL ROOM

MECHANICAL 322 252 SF

1 BR 301 694 SF

2 BR 304 715 SF

1 BR 305 545 SF

1 BR 306 748 SF

1 BR 307 665 SF

1 BR 308 665 SF

1 BR 309 574 SF

1 BR 310 765 SF

1 BR 311 1123 SF

1 BR 312 565 SF

1 BR 313 656 SF

1 BR 314 613 SF

1 BR 315 671 SF

1 BR 316 678 SF

1 BR 317 777 SF

2 BR 318 686 SF

1 BR 319 644 SF

1 BR 320 700 SF

1 BR 321 741 SF

1 BR 322 728 SF

1 BR 323 611 SF

1 BR 324 542 SF

Room Legend
1 BR
2 BR
3 BR
BALCONY
MECHANICAL

N

1 3RD FLOOR PLAN
1/8" = 1'-0"

File Path: C:\Users\kkopicz\Documents\Vleigh Place Residence-R64A_1_kkopicz0EHHXE.rvt
12/3/2019 10:41:14 AM



Room Legend

- 1 BR
- 2 BR
- 3 BR
- BALCONY
- LAUNDRY ROOM
- MECHANICAL

1 4TH FLOOR PLAN
1/8" = 1'-0"

N

12/2/2019 10:41:16 AM
File Path: C:\Users\kkopicka\Documents\Veligh Place Residence-R4A_I_kkopicka@HHXE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JASMINE AGUILOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPOBIANCO
GERARD P. DEGANO, PE
FREDERICK KNOAD, AIA
MARZENA KOPCZYNSKI, AIA
DAVID J. MEEHAN, AIA
MICHAEL D. SAN BUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

Drawing Name:
4TH FLOOR PLAN

Drawing Number:
A-105
OF 90

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



1 5TH FLOOR PLAN
1/8" = 1'-0"

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD JARMEL, PE
IRWIN H. KIZEL, AIA, PP
ARCHITECTS & ENGINEERS
JEANNE AGUIAR, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPPELLO, PE
GERARD P. DEGIANO, PE
FREDERICK KNOAD, AIA
MARCUM HOPKINS, AIA
DAVID J. MEURER, PE
MICHAEL D. SAN SUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAND, A.I.A.

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: Author	Approved By: MBJ

Drawing Name:
5TH FLOOR PLAN

Drawing Number:
A-106
OF 90

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver

12/2/2019 10:41:20 AM
File Path: C:\Users\kkopicka\Documents\Vleigh Place Residence-R4A_I_kkopicka@HHXE.rvt



1 6TH FLOOR PLAN
1/8" = 1'-0"

12/2/2019 10:41:23 AM
File Path: C:\Users\kkopicka\Documents\Vleigh Place Residence-R4A_I_kkopicka@HHKE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS P.C.
42 CRICKER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP
ARCHITECTS & ENGINEERS
JEANNE AGUIAR, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPOBIANCO
GERARD P. DEGRADO, PE
FREDERICK KNOAD, AIA
KAROLINA KOPCZYNSKI, AIA
DAVID J. MEURER, PE
MICHAEL D. SAN BUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAVEZ, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

Drawing Name:
6TH FLOOR PLANS

Drawing Number:
A-107
OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



1 7TH FLOOR PLAN
1/8" = 1'-0"

12/2/2019 10:41:25 AM
File Path: C:\Users\kkopicka\Documents\Vleigh Place Residence-R4A_I_kkopicka@EHKE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS P.C.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP
ARCHITECTS & ENGINEERS
JEANNE AGUIAR, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. DEDIANO, PE
FREDERICK KNOAD, AIA
MARZENA KOPCZYNSKI, AIA
DAVID J. MEURER, PE
MICHAEL D. VAN BUSKIRK IV, PA, PE
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: Author	Approved By: MBJ

Drawing Name:
7TH FLOOR PLAN

Drawing Number:
A-108
OF 90

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



1 8TH FLOOR PLAN
1/8" = 1'-0"

N

12/2/2019 10:41:28 AM
File Path: C:\Users\kkopicka\Documents\Vleigh Place Residence-R4A_I_kkopicka@HHKE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD D. JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JEANNE AGUIAR, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. DEGIANO, PE
FREDERICK KNOAD, AIA
KAROLINA KOPCZYNSKI, AIA
DAVID J. MEURER, PE
MICHAEL D. VAN BUSKIRK FUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAVICH, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-03 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: Author	Approved By: MBJ

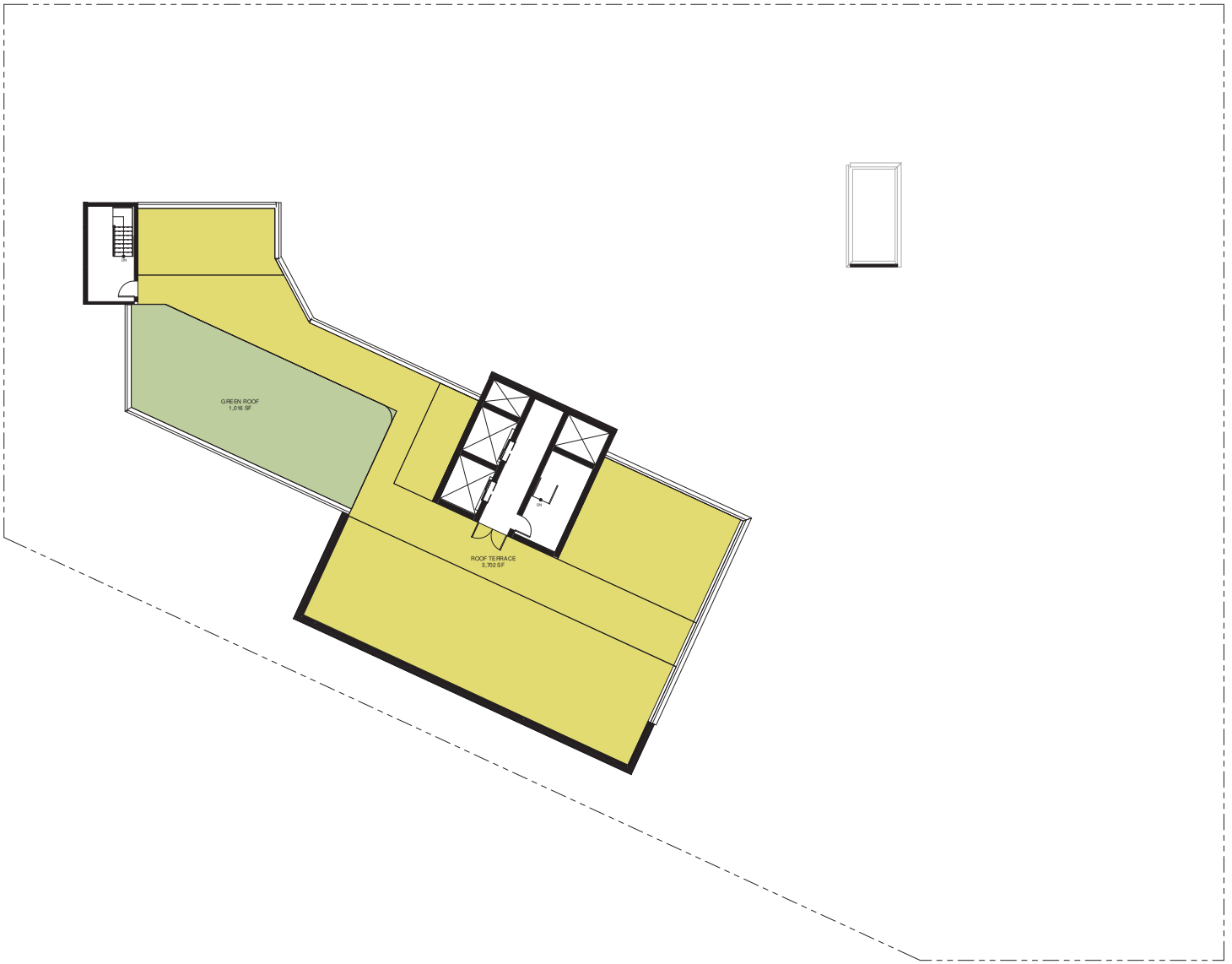
Drawing Name:
8TH FLOOR PLAN

Drawing Number:
A-109
OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



1 ROOF
1/8" = 1'-0"

N

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR
NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JASMINE ALDAVE, AIA
RONALD A. BRICKENSHIRE, PE
JEROME L. KIZEL, AIA
GERARD P. GESANO, PE
FREDERICK KINDAD, AIA
KAROLINA KOPCZYC, AIA
DAVID L. LESSER, AIA
STACY MULLINA, AIA
MICHAEL D. SAN BUENAVENTURA, PE
CHERYL SCHWEIKER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-63 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

Drawing Name:
ROOF PLAN

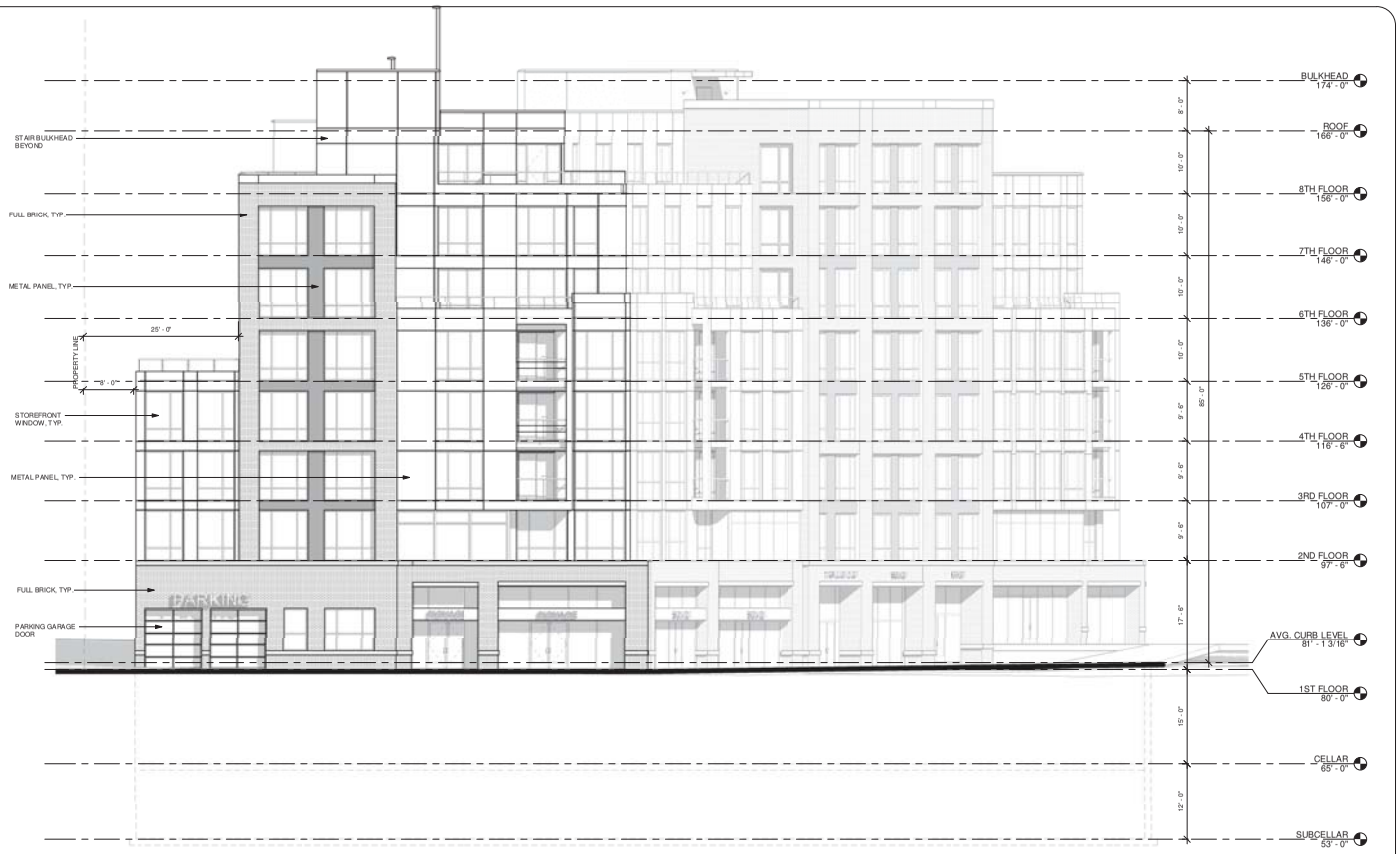
Drawing Number:
A-110
OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver

12/3/2019 10:41:28 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R&A_1_kkopiczkoEHHXE.rvt



1 NORTH ELEVATION
1/8" = 1'-0"

Jarmel Kizel
ARCHITECTS AND ENGINEERS P.C.
42 CRAINER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD D. JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JASMINE AGUILOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. DEGANO, PE
FREDERICK KNOAD, AIA
KAROLINA KOPCZYK, AIA
DAVID J. LEVERSON, AIA
MICHAEL D. SAN SUENAGA, PE
MICHAEL D. SAN SUENAGA TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: Author	Approved By: MBJ

Drawing Name:
BUILDING ELEVATIONS 1 OF 4

Drawing Number:
A-200
OF 90

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver

12/2/2019 10:41:42 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHNXE.rvt



1 EAST ELEVATION
1/8" = 1'-0"

12/2/2019 10:41:57 AM
File Path: C:\Users\kkopicka\Documents\Vleigh Place Residence-R4A_I_kkopicka@HHKE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS P.C.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP
ARCHITECTS & ENGINEERS
JEANNE AGUIDE, AIA
RONALD A. BROKENSHIRE, PE
DAVID J. DEGRANDI, AIA
GERARD P. DEGRANDI, PE
FREDERICK KNOAD, AIA
KAROLINA KOPCZYNO, AIA
DAVID J. MEARNS, PE
MARK L. SILVERMAN, AIA
MICHAEL D. VAN BUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAVICH, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

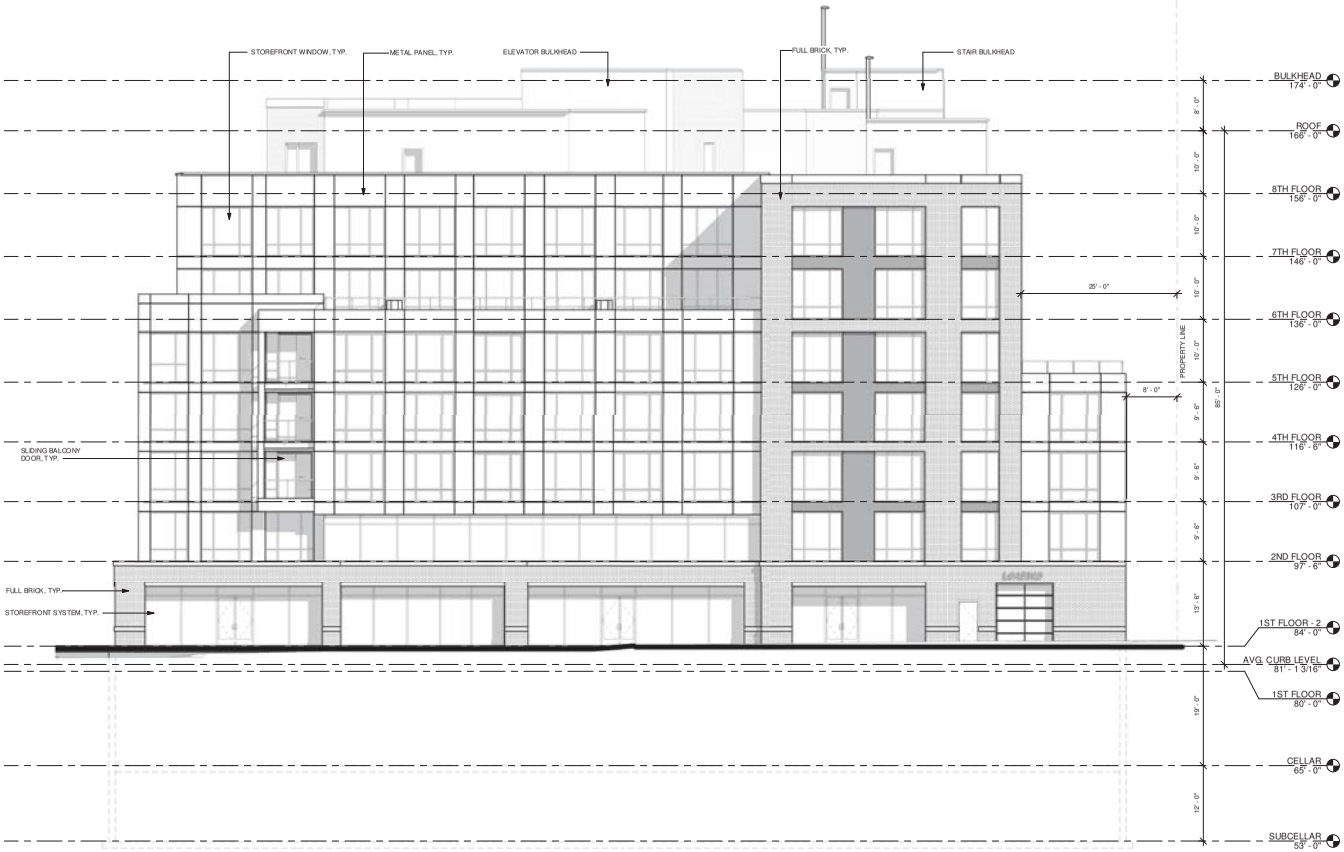
Drawing Name:
BUILDING ELEVATIONS 2 OF 4

Drawing Number:
A-201
OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



1 SOUTH ELEVATION
1/8" = 1'-0"

12/2/2019 10:42:11 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHWE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS P.C.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD D. JARMEL, PE
IRWIN H. KIZEL, AIA, PP

ARCHITECTS & ENGINEERS
JASMINE AGUILOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. DEGANO, PE
FREDERICK KNOAD, AIA
KAROLINA KOPCZKO, AIA
DAVID J. MEGERIAN, AIA
MICHAEL D. SAN BUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MONIKA J. VORWALD, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

Drawing Name:
BUILDING ELEVATIONS 3 OF 4

Drawing Number:
A-202
OF 90

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



1 WEST ELEVATION
1/8" = 1'-0"

12/2/2019 10:42:25 AM
File Path: C:\Users\kkopicka\Documents\Veligh Place Residence-RAA_I_kkopicka@HKE.rvt

Jarmel Kizel
ARCHITECTS AND ENGINEERS P.C.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD JARMEL, PE
IRWIN H. KIZEL, AIA, PP
ARCHITECTS & ENGINEERS
JASMINE AGUILOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPUTO, AIA
GERARD P. DESIANO, PE
FREDERICK KNOAD, AIA
KARZUMA KOPCZYNSKI, AIA
DAVID J. MEEHAN, AIA
MICHAEL D. SAN BUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VLEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

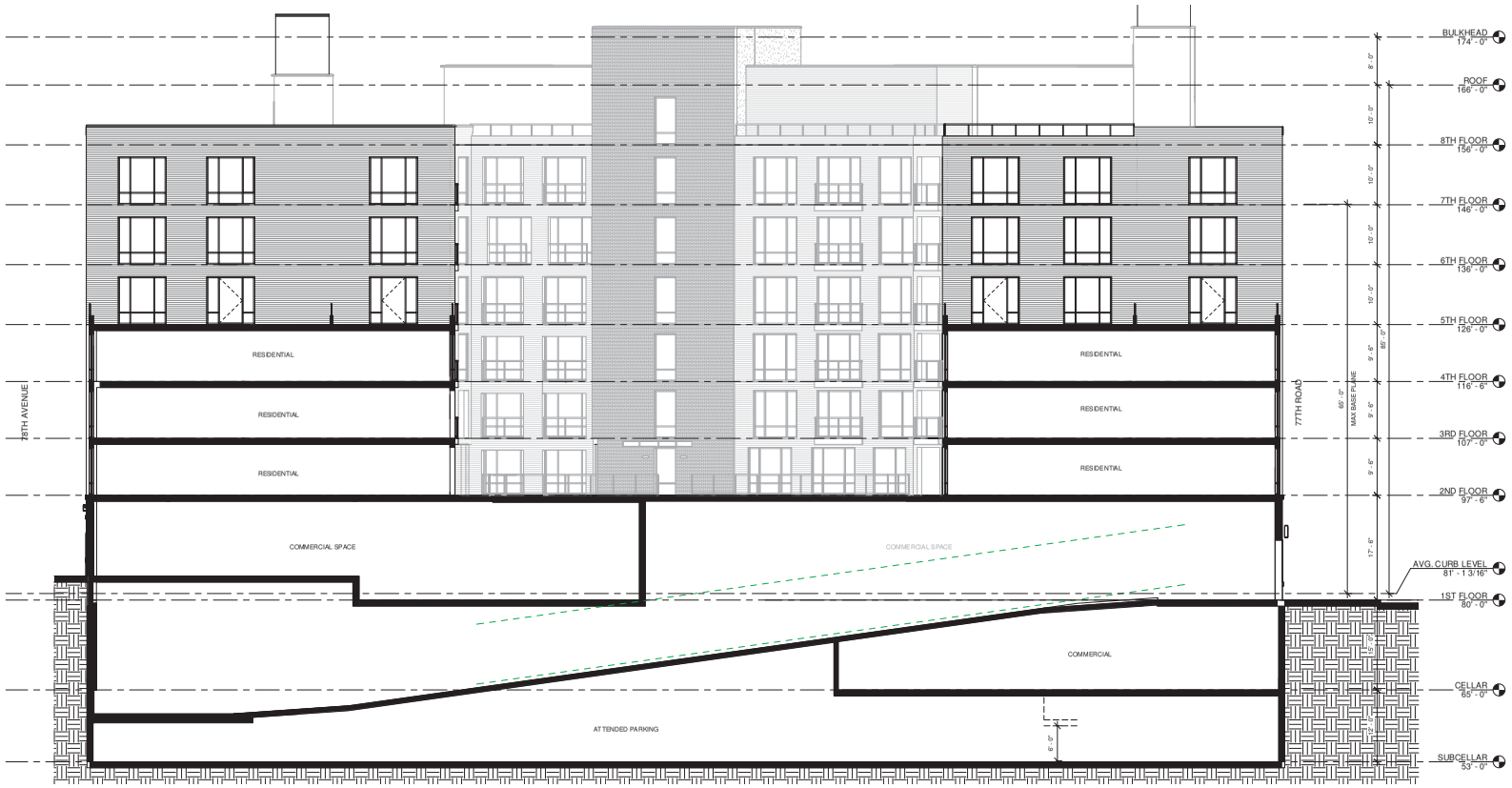
Drawing Name:
BUILDING ELEVATIONS 4 OF 4

Drawing Number:
A-203
OF 90

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver



1 BUILDING SECTION-1
1/8" = 1'-0"

Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX:973-994-4069
www.jarmelkizel.com

Architecture
Engineering
Interior Design
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT

REVISION (PAA)

NO.	DATE	DESCRIPTION	INT

RESERVED FOR NYC BAR SCAN

PRINCIPALS
MATTHEW B. JARMEL, AIA, MBA
RICHARD J. JARMEL, PE
IRWIN H. KIZEL, AIA, PP
ARCHITECTS & ENGINEERS
JEANNE AGUILOS, AIA
RONALD A. BROKENSHIRE, PE
ANTHONY J. CAPOBIANCO
GERARD P. DEGANO, PE
FREDERICK KNOAD, AIA
MARZENA KOPCZYNSKI, AIA
DAVID J. MEURER, PE
MICHAEL D. SAN BUENAVEN TUNA, P.E.
CHERYL SCHNEIDER, AIA
MICHAEL J. VORLAND, AIA

Project:
MIXED USE DEVELOPMENT
CLIENT
77-43 VILEIGH PLACE
KEW GARDENS
QUEENS, NY 11415

Project Number:	Scale:
MATATO-S-17-192	AS NOTED
Drawn By: KK	Approved By: MBJ

Drawing Name:
BUILDING SECTION 1 OF 2

Drawing Number:
A-300
OF 50

Initial Date: 2019-04-15

DESIGN PROFESSIONAL OF RECORD

Approver

12/2/2019 10:42:28 AM
File Path: C:\Users\kkopiczko\Documents\Vleigh Place Residence-R4A_I_kkopiczkoEHWE.rvt

Appendix C: Noise Back-Up

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	70.5 dB	Result
LASmax	83.8 dB	LAS 50%	58 dB	
LASmin	43.9 dB	LAS 90%	53.5 dB	
Start Date & Time	2/12/2020 4:30:44 PM	Calibration (Before) Date	2/12/2020 4:30:32 PM	
Duration	00:20:04 HH:MM:SS	Calibration (After) Date	2/12/2020 4:51:07 PM	
LAeq	67.1 dB	Calibration Drift	0.3 dB	
End Date & Time	2/12/2020 4:50:48 PM	Battery Low	No	

Notes

.

.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	65 dB	Result
LASmax	88.7 dB	LAS 50%	57 dB	
LASmin	52.3 dB	LAS 90%	53.5 dB	
Start Date & Time	2/12/2020 7:30:45 AM	Calibration (Before) Date	2/12/2020 7:30:02 AM	
Duration	00:20:02 HH:MM:SS	Calibration (After) Date	2/12/2020 7:51:06 AM	
LAeq	65.2 dB	Calibration Drift	0.3 dB	
End Date & Time	2/12/2020 7:50:47 AM	Battery Low	No	

Notes

.

.

Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	59.5 dB	Result
LASmax	81.2 dB	LAS 50%	51.5 dB	
LASmin	46.4 dB	LAS 90%	50.5 dB	
Start Date & Time	2/12/2020 12:01:17 PM	Calibration (Before) Date	2/12/2020 12:01:12 PM	
Duration	00:20:01 HH:MM:SS	Calibration (After) Date	2/12/2020 12:21:51 PM	
LAeq	61.6 dB	Calibration Drift	0.3 dB	
End Date & Time	2/12/2020 12:21:18 PM	Battery Low	No	

Notes

.

.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	62.5 dB	Result
LASmax	78.6 dB	LAS 50%	52.5 dB	
LASmin	46.3 dB	LAS 90%	51.5 dB	
Start Date & Time	2/12/2020 12:22:12 PM	Calibration (Before) Date	2/12/2020 12:22:07 PM	
Duration	00:20:02 HH:MM:SS	Calibration (After) Date	2/12/2020 12:42:30 PM	
LAeq	62 dB	Calibration Drift	0.3 dB	
End Date & Time	2/12/2020 12:42:14 PM	Battery Low	No	

Notes

.

.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	71 dB	Result
LASmax	84.4 dB	LAS 50%	62 dB	
LASmin	51.1 dB	LAS 90%	56 dB	
Start Date & Time	2/12/2020 7:51:30 AM	Calibration (Before) Date	2/12/2020 7:51:20 AM	
Duration	00:20:04 HH:MM:SS	Calibration (After) Date	2/12/2020 8:11:47 AM	
LAeq	66.6 dB	Calibration Drift	-0.2 dB	
End Date & Time	2/12/2020 8:11:34 AM	Battery Low	No	

Notes

.

.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	71.5 dB	Result
LASmax	82.9 dB	LAS 50%	57.5 dB	
LASmin	46 dB	LAS 90%	53.5 dB	
Start Date & Time	2/12/2020 4:51:22 PM	Calibration (Before) Date	2/12/2020 4:51:16 PM	
Duration	00:20:09 HH:MM:SS	Calibration (After) Date	2/12/2020 5:11:54 PM	
LAeq	67.1 dB	Calibration Drift	-0.1 dB	
End Date & Time	2/12/2020 5:11:31 PM	Battery Low	No	

Notes

.

.

Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	61 dB	Result
LASmax	79.1 dB	LAS 50%	53 dB	
LASmin	48.2 dB	LAS 90%	52 dB	
Start Date & Time	2/12/2020 12:42:48 PM	Calibration (Before) Date	2/12/2020 12:42:39 PM	
Duration	00:20:04 HH:MM:SS	Calibration (After) Date	2/12/2020 1:03:11 PM	
LAeq	60.4 dB	Calibration Drift	-0.2 dB	
End Date & Time	2/12/2020 1:02:52 PM	Battery Low	No	

Notes

.

.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	72.5 dB	Result
LASmax	88.4 dB	LAS 50%	59 dB	
LASmin	33.8 dB	LAS 90%	51.5 dB	
Start Date & Time	2/12/2020 5:12:12 PM	Calibration (Before) Date	2/12/2020 5:12:05 PM	
Duration	00:20:14 HH:MM:SS	Calibration (After) Date	2/12/2020 5:32:42 PM	
LAeq	68.4 dB	Calibration Drift	0.0 dB	
End Date & Time	2/12/2020 5:32:26 PM	Battery Low	No	

Notes

.

.

Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	65 dB	Result
LASmax	83.4 dB	LAS 50%	55 dB	
LASmin	49.6 dB	LAS 90%	52.5 dB	
Start Date & Time	2/12/2020 8:12:02 AM	Calibration (Before) Date	2/12/2020 8:11:56 AM	
Duration	00:20:02 HH:MM:SS	Calibration (After) Date	2/12/2020 8:32:21 AM	
LAeq	61.9 dB	Calibration Drift	0.1 dB	
End Date & Time	2/12/2020 8:32:04 AM	Battery Low	No	

Notes

.

.

Noise Job Field Sheet

Name of Project: 77-63 Vleigh Place - 2019068

Project Address: 77-63 Vleigh Place Queens, NY

Date(s) of Field Work: 2/12/20

Personnel: Zach Landis

Project Specific Scope of Work:

3 x 20-minute locations AM, Midday, PM
Discuss EAS Photos W/ Rob before going out

Maximum Billable Hours for the Day: 15

I. Start of Noise Monitoring Day

Departure Time: 05:45 Arrival Time: 07:00

Weather Conditions (temp, wind speed, precipitation): Cloudy, 40, Light wind

Meter Type: Casella Meter Serial #: 5086866 Meter Location: 1, 2, 3
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
*If more locations are needed for a project use a second Field Sheet

Calibrator Serial #: 109099 Meters used on: 1, 2, 3
Calibrator Serial #: _____ Meters used on: _____
Calibrator Serial #: _____ Meters used on: _____
Were Photos Taken of Each Location? (Y) N *Discuss specific photo instructions w/ Project Manager

**On a separate sheet of paper (field book) make a sketch of the noise meter locations and the distances to nearest wall, fence, building, or other solid surfaces.*

II. Morning Session 7:30 AM – 9:00 AM

Before Measurement:

1 Meter Serial #: 5086866 Time: 7:29 Calibration Passed at 114 dB? (Y) / N
2 Meter Serial #: 5086866 Time: 7:50 Calibration Passed at 114 dB? (Y) / N
3 Meter Serial #: 5086866 Time: 8:11 Calibration Passed at 114 dB? (Y) / N

After Measurement:

1 Meter Serial #: 5086866 Time: 7:50 Calibration Passed at 114 dB? (Y) / N
2 Meter Serial #: 5086866 Time: 8:11 Calibration Passed at 114 dB? (Y) / N
3 Meter Serial #: 5086866 Time: 8:21 Calibration Passed at 114 dB? (Y) / N

*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
1	7:30	7:50
2	7:50	8:10
3	8:11	8:21

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
1	11	16	0	0	1	0
2	43	62	2	0	0	0
3	15	20	0	0	0	0

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):

Siren @ 7:30 (Loc 1)

Church Bells @ 8:00 (Loc 2)

Please place noise meters in their respective cases between sessions to avoid damage.

III. Midday Session 12:00 PM – 1:30 PM

Before Measurement:

1 Meter Serial #: 5086866 Time: 11:59 Calibration Passed at 114 dB? (Y) / N
2 Meter Serial #: 5086866 Time: 12:21 Calibration Passed at 114 dB? (Y) / N
3 Meter Serial #: 5086866 Time: 12:42 Calibration Passed at 114 dB? (Y) / N

After Measurement:

1 Meter Serial #: 5086866 Time: 12:20 Calibration Passed at 114 dB? (Y) / N
2 Meter Serial #: 5086866 Time: 12:41 Calibration Passed at 114 dB? (Y) / N
3 Meter Serial #: 5086866 Time: 1302 Calibration Passed at 114 dB? (Y) / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
1	12:00	12:20
2	12:21	12:41
3	12:42	13:02

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
1	9	17	0	0	0	0
2	32	40	0	0	0	0
3	13	8	0	0	0	0

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):

Please place noise meters in their respective cases between sessions to avoid damage.

IV. Evening Session 4:30 PM – 6:00 PM

Before Measurement:

1 Meter Serial #: 5086866 Time: 16:29 Calibration Passed at 114 dB? (Y) / N
2 Meter Serial #: 5086866 Time: 16:50 Calibration Passed at 114 dB? (Y) / N
3 Meter Serial #: 5086866 Time: 17:11 Calibration Passed at 114 dB? (Y) / N

After Measurement:

1 Meter Serial #: 5086866 Time: 16:50 Calibration Passed at 114 dB? (Y) / N
2 Meter Serial #: 5086866 Time: 17:11 Calibration Passed at 114 dB? (Y) / N
3 Meter Serial #: 5086866 Time: 17:31 Calibration Passed at 114 dB? (Y) / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
1	16:30	16:50
2	16:50	17:10
3	17:11	17:31

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
1	10	12	0	0	0	0
2	38	51	0	0	0	0
3	16	21	0	0	0	0

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):

Please place noise meters in their respective cases between sessions to avoid damage.

V. End of Noise Monitoring Day

- Please return all noise meters to their cases.
- Do not return dead batteries to the cases, throw them out.
- Did you take photos? (Y) / N
- Did you complete the site sketch? (Y) / N
- If a meter(s) was rented, please scan in calibration documents.

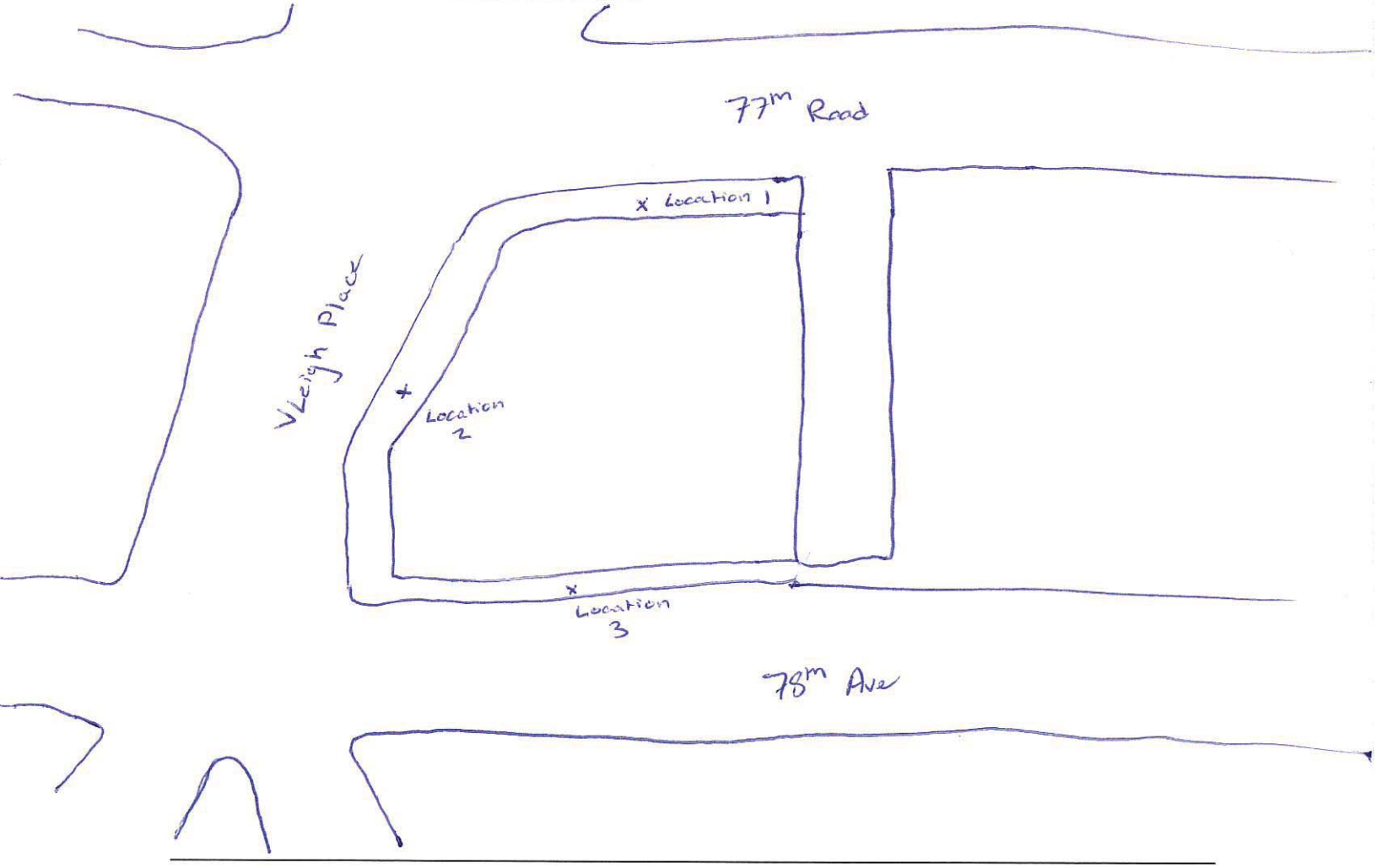
Anything of note/concern for the day: _____

_____

_____

Departure Time: 17:45 Arrival Time: 19:15

Total Time to Be Billed: _____





Legend

- Projected Development Site 1
- Rezoning Area
- Noise Monitoring Locations

0 20 40 80 120 US Feet

N

Certificate of Conformity and Calibration



Instrument Type:-	**CEL-633C**		
Serial Number	5086866		
Firmware revision	V006-03		
Microphone Type:-	CEL-251	Preamplifier Type:-	CEL-495
Serial Number	83127	Serial Number	004744
Instrument Class/Type:-	1		

Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	19 °C	Test Engineer:-	Stephen Potten
	37 %RH	Date of Issue:-	July 23, 2019
	1015 mBar		

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

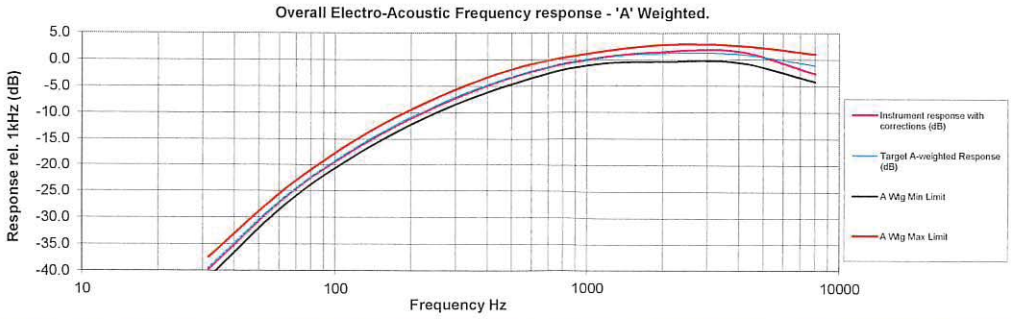
Test Summary:-

Self Generated Noise Test	**All Tests Pass**
Electrical Signal Test Of Frequency Weightings	**All Tests Pass**
Frequency & Time Weightings At 1 kHz	**All Tests Pass**
Level Linearity On The Reference Level Range	**All Tests Pass**
Toneburst Response Test	**All Tests Pass**
C-peak Sound Levels	**All Tests Pass**
Overload Indication	**All Tests Pass**
Acoustic Tests	**All Tests Pass**

Combined Electro-Acoustic Frequency Response - *A Weighted*

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



Casella CEL (U.K.)
Regent House, Wolseley Road,
Kempston, Bedford
MK42 7JY

Phone: +44(0) 1234 844100
Fax: +44(0) 1234 841490
E-mail: info@casellameasurement.com
Web: www.casellameasurement.com

Casella CEL
415 Lawrence Bell Drive
Unit 4
Buffalo, NY 14221

Toll Free: (800) 366 2966
TEL: (716) 276-3040 Fax: (716) 276-3043
E-mail: info@casellausa.com
Web: www.casellausa.com

Tested to CEL-63X test sheet TP444 revision 01-00

Appendix D: Hazardous Material Back-Up

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Office of the Director
625 Broadway, 12th Floor, Albany, New York 12233-7011
P: (518) 402-9706 | F: (518) 402-9020
www.dec.ny.gov

DEC 24 2019

VP Capital Holdings LLC
Attn: Avi Matatov
62 West 47th Street, Suite 603
New York, NY 10036

Aldrich Management Co., LLC
Attn: Denis Rodger
1975 Hempstead Turnpike, Suite 309
East Meadow, NY 11554

Re: Certificate of Completion
Site Name: 77-57 Vleigh Place
77-39/63 Vleigh Pl., Queens County, C241168

Dear Mr. Matatov and Mr. Rodger:

Congratulations on having satisfactorily completed the remedial program at the 77-57 Vleigh Place site. Enclosed please find an original, signed Certificate of Completion (COC). The New York State Department of Environmental Conservation (Department) is pleased to inform you that the Final Engineering Report is hereby approved, allowing the COC to be issued for the above-referenced site.

Please note that you are required to perform the following tasks:

- If you are the site owner, you must record a notice of the COC in the recording office for the county (or counties) where any portion of the site is located within 30 days of issuance of the COC; or if you are a prospective purchaser of the site, you must record a notice of the COC within 30 days of the date that you acquire the site. A copy of the recorded notice should be provided to the Department's project manager. If you are a non-owner, you must work with the owner to assure the notice of COC is recorded within the time frame specified. A standard notice form is attached to this letter. Please return the proof of recording to:

  Chief, Site Control Section
  New York State Department of Environmental Conservation
  Division of Environmental Remediation

625 Broadway
Albany, NY 12233-7020

- Provide the notice of the COC to the Document Repositories within 10 days of issuance of the COC. The Department will develop a fact sheet announcing the issuance of the COC and describing the institutional and engineering controls (IC/ECs), if any, that are required at the site and distribute it to the County Listserv within 10 days;

- Implement the Department-approved Site Management Plan (SMP) which details the activities necessary to assure the performance, effectiveness, and protectiveness of the remedial program; and you must report the results of these activities to the Department in a Periodic Review Report (PRR) which also includes any required IC/EC Certifications. The site IC/ECs are identified on the attached Site Management Form. The first PRR including the certification of the IC/ECs is due to the Department in April 2021.

If you have any questions regarding any of these items, please contact Daniel McNally at (518) 402-9767.

Sincerely,

Michael J. Ryan, P.E.
Director
Division of Environmental Remediation

Enclosure

ec w/ enclosure:
A. Matatov, avi@qblvdh.com
T. Khouri, tkhouri@hydrotechenvironmental.com
P. Matli, pmatli@hydrotechenvironmental.com
G. Duke, gduke@bdflegal.com
D. Rodger, denisrodger@upcli.com
C. Vooris, christine.vooris@health.ny.gov
J. Deming, justin.deming@health.ny.gov
S. Mclaughlin, scarlett.mclaughlin@health.ny.gov
D. Hettrick, dawn.hettrick@health.ny.gov
M. Gokey, matthew.gokey@tax.ny.gov
P. Takac, paul.takac@tax.ny.gov

ec w/o enc.:

D. McNally, daniel.mcnally@dec.ny.gov
M. Komoroske, michael.komoroske@dec.ny.gov
J. O'Connell, jane.oconnell@dec.ny.gov
G. Burke, gerard.burke@dec.ny.gov
L. Schmidt, leia.schmidt@dec.ny.gov
K. Lewandowski, Kelly.lewandowski@dec.ny.gov

NYSDEC BROWNFIELD CLEANUP PROGRAM (BCP)

CERTIFICATE OF COMPLETION

CERTIFICATE HOLDER(S):

Name	**Address**
Aldrich Management Co., LLC	1975 Hempstead Tpke., Suite 309, East Meadow, NY 11554
VP Capital Holdings LLC	62 West 47th Street, Suite 603, New York, NY 10036

BROWNFIELD CLEANUP AGREEMENT:

Application Approval: 3/17/15 **Agreement Execution:** 4/6/15

Agreement Index No.: C241168-03-15

Application Approval Amendment: 7/10/18 **Agreement Execution Amendment:** 7/10/18

Application Approval Amendment: 7/29/19 **Agreement Execution Amendment:** 7/29/19

SITE INFORMATION:

Site No.: C241168 **Site Name:** 77-57 Vleigh Place

Site Owner: VP Capital Holdings LLC

Street Address: 77-39/63 Vleigh Place

Municipality: Flushing **County:** Queens **DEC Region:** 2

Site Size: 0.669 Acres

Tax Map Identification Number(s): 30-6630-1 (portion of)

Percentage of site located in an EnZone: 0 - 49%

A description of the property subject to this Certificate is attached as Exhibit A and a site survey is attached as Exhibit B.

CERTIFICATE ISSUANCE

This Certificate of Completion, hereinafter referred to as the "Certificate," is issued pursuant to Article 27, Title 14 of the New York State Environmental Conservation Law ("ECL").

This Certificate has been issued upon satisfaction of the Commissioner, following review by the Department of the final engineering report and data submitted pursuant to the Brownfield Site Cleanup Agreement, as well as any other relevant information regarding the Site, that the applicable remediation requirements set forth in the ECL have been or will be achieved in accordance with the time frames, if any, established in the remedial work plan.

The remedial program for the Site has achieved a cleanup level that would be consistent with the following categories of uses (actual site use is subject to local zoning requirements):

Allowable Uses under the BCP: Restricted-Residential, Commercial, and Industrial
Cleanup Track: Track 4: Restricted use with site-specific soil cleanup objectives

Tax Credit Provisions for Entities Taxable Under Article 9, 9-A, 32, and 33:
Site Preparation and On-Site Groundwater Remediation Credit Component Rate is 28%.
Tangible Property Credit Component Rate is 12%.

Tax Credit Provisions for Entities Taxable Under Article 22 & S Corporations:
Site Preparation and On-Site Groundwater Remediation Credit Component Rate is 28%.
Tangible Property Credit Component Rate is 10%.

The Remedial Program includes use restrictions or reliance on the long term employment of institutional or engineering controls which are contained in the approved Site Management Plan and an Environmental Easement granted pursuant to ECL Article 71, Title 36 which has been duly recorded in the Recording Office for Queens County as 2019000306865.

LIABILITY LIMITATION

Upon issuance of this Certificate of Completion, and subject to the terms and conditions set forth herein, the Certificate holder(s) shall be entitled to the liability limitation provided in ECL Section 27-1421. The liability limitation shall run with the land, extending to the Certificate holder's successors or assigns through acquisition of title to the Site and to a person who develops or otherwise occupies the Site, subject to certain limitations as set forth in ECL Section 27-1421. The liability limitation shall be subject to all rights reserved to the State by ECL Section 27-1421.2 and any other applicable provision of law.

CERTIFICATE TRANSFERABILITY

This Certificate may be transferred to the Certificate holder's successors or assigns upon transfer or sale of the Site as provided by ECL Section 27-1419.5 and 6NYCRR Part 375-1.9.

CERTIFICATE MODIFICATION/REVOCATION

This Certificate of Completion may be modified or revoked by the Commissioner following notice and an opportunity for a hearing in accordance with ECL Section 27-1419 and 6NYCRR Part 375-1.9(e) upon a finding that:

(1) either the Applicant or the Applicant's successors or assigns have failed to comply with the terms and conditions of the Brownfield Site Cleanup Agreement;

(2) the Applicant made a misrepresentation of a material fact tending to demonstrate that it was qualified as a Volunteer;

(3) either the Applicant or the Applicant's successors or assigns made a misrepresentation of a material fact tending to demonstrate that the cleanup levels identified in the Brownfield Site Cleanup Agreement were reached;

(4) there is good cause for such modification or revocation;

(5) either the Applicant or the Applicant's successors or assigns failed to manage the controls or monitoring in full compliance with the terms of the remedial program;

(6) the terms and conditions of the environmental easement have been intentionally violated or found to be not protective or enforceable.

The Certificate holder(s) (including its successors or assigns) shall have thirty (30) days within which to cure any deficiency or to seek a hearing. If the deficiency is not cured or a request for a hearing is not received within such 30-day period, the Certificate shall be deemed modified or vacated on the 31st day after the Department's notice.

Basil Seggos
Commissioner
New York State Department of Environmental Conservation

By: _____ Date: 12/24/19

Michael J. Ryan, P.E., Director
Division of Environmental Remediation

NOTICE OF CERTIFICATE OF COMPLETION
Brownfield Cleanup Program
6 NYCRR Part 375-1.9(d)

77-57 Vleigh Place, Site ID No.: C241168
77-39/63 Vleigh Place, Flushing, NY, 11367
Flushing, Queens County, Tax Map Identification Numbers: 30-6630-1 (portion of)

PLEASE TAKE NOTICE, the New York State Department of Environmental Conservation (Department) has issued a Certificate of Completion (Certificate) pursuant to Article 27, Title 14 of the New York State Environmental Conservation Law (ECL) to Aldrich Management Co., LLC and VP Capital Holdings LLC for a parcel approximately 0.669 acres located at 77-39/63 Vleigh Place in Flushing, Queens County.

PLEASE TAKE NOTICE, the Certificate was issued upon satisfaction of the Commissioner, following review by the Department of the final engineering report and data submitted pursuant to the Brownfield Site Cleanup Agreement, as well as any other relevant information regarding the Site, that the remediation requirements set forth in ECL Article 27, Title 14 have been or will be achieved in accordance with the time frames, if any, established in the remedial work plan.

PLEASE TAKE NOTICE, the remedial program for the Site has achieved a cleanup level that would be consistent with the following categories of uses (actual site use is subject to local zoning requirements):

- ☐ Unrestricted Use, as set forth in 6 NYCRR 375-1.8(g)(1)i
- ☐ Residential Use, as set forth in 6 NYCRR 375-1.8(g)(2)i.
- ☒ Restricted Residential Use, as set forth in 6 NYCRR 375-1.8(g)(2)ii.
- ☒ Commercial Use, as set forth in 6 NYCRR 375-1.8(g)(2)iii.
- ☒ Industrial Use, as set forth in 6 NYCRR 375-1.8(g)(2)iv.

Further, the use of groundwater is restricted and may not be used, unless treated in accordance with the requirements provided by the New York State Department of Health, or a local County Health Department with jurisdiction in such matters and such is approved by the Department as not inconsistent with the remedy.

PLEASE TAKE NOTICE, since the remedial program relies upon use restrictions or the long term employment of institutional or engineering controls; such institutional or engineering controls are contained in an Environmental Easement granted pursuant to ECL Article 71, Title 36 which has been duly recorded in the Recording Office for Queens County as 2019000306865.

PLEASE TAKE NOTICE, the Environmental Easement requires that the approved site management plan (SMP) for this property be adhered to. The SMP, which may be amended from time to time, may include sampling, monitoring, and/or operating a treatment system on the property, providing certified reports to the NYSDEC, and generally provides for the management of any and all plans and limitations on the property. A copy of the SMP is available upon request by writing to the Department's Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, New York 12233.

PLEASE TAKE NOTICE, provided that the Environmental Easement, SMP and Certificate are complied with, the Certificate holder(s) shall be entitled to the liability limitation provided in ECL Section 27-1421. The liability limitation shall run with the land, extending to the Certificate holder's successors or assigns through acquisition of title to the Site and to a person who develops or otherwise occupies the Site, subject to certain limitations as set forth in ECL Section 27-1421. The liability

limitation shall be subject to all rights reserved to the State by ECL Section 27-1421.2 and any other applicable provision of law.

PLEASE TAKE NOTICE, any change of use of the site, as defined in 6 NYCRR 375, must be preceded by notice to the Department in accordance with 6 NYCRR 375-1.11(d). A transfer of any or all of the property constitutes a change of use.

PLEASE TAKE NOTICE, the Certificate may be revoked if the Environmental Easement as implemented, if applicable, is not protective or enforceable.

PLEASE TAKE NOTICE, the Certificate may entitle the Certificate holder(s) to tax credits in accordance with Tax Law Sections 21, 22 and 23.

PLEASE TAKE NOTICE, the Certificate may only be transferred to the Certificate holder's successors or assigns upon transfer or sale of the Site as provided by ECL Section 27-1419.5 and 6 NYCRR Part 375-1.9. Failure to comply with the regulatory requirements for transfer **WILL** bar the successors and assigns from the benefits of the Certificate.

PLEASE TAKE NOTICE, the Certificate may be modified or revoked by the Commissioner as set forth in the applicable regulations.

PLEASE TAKE NOTICE, a copy of the Certificate can be reviewed at the NYSDEC's Region 2 office located at 1 Hunters Point Plaza, 47-40 21st Street, Long Island City, NY 11101-5401, by contacting the Regional Environmental Remediation Engineer.

WHEREFORE, the undersigned has signed this Notice of Certificate

VP Capital Holdings LLC

By: _____

Title: _____

Date: _____

STATE OF NEW YORK) SS:
COUNTY OF)

On the _____ day of _____, in the year 20__, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Signature and Office of individual
taking acknowledgment

Please record and return to:
VP Capital Holdings LLC
Attn: Avi Matatov
62 West 47th Street, Suite 603
New York, NY 10036

Exhibit A

Site Description

SCHEDULE "A" PROPERTY DESCRIPTION

ENVIRONMENTAL EASEMENT DESCRIPTION

ALL that certain plot piece or parcel of land situate lying and being in the Borough and County of Queens, City and State of New York bounded and described as follows:

BEGINNING at point on the northerly side of 78th Avenue (60 feet wide), distant 400.00 feet westerly from the corner formed by the intersection of the westerly side of Main Street (100 feet wide) with the northerly line of 78th Avenue;

RUNNING THENCE westerly along the northerly side of 78th Avenue, 180.16 feet to the easterly side of Vleigh Place as shown on present City Final Map;

RUNNING THENCE northerly along the easterly side of Vleigh Place, 27.28 feet to an angle point;

RUNNING THENCE continuing northerly along the easterly side of Vleigh Place (70 feet wide), 190.22 feet to the southerly side of 77th Road (60 feet wide);

RUNNING THENCE easterly along the southerly side of 77th Road, 100.46 feet to a point;

RUNNING THENCE southerly at right angles to the southerly side of 77th Road, 200 feet to the northerly side of 78th Avenue the point or place of BEGINNING.

The above described parcel has an area of 29,148 square feet or 0.66915 Acres.

Exhibit B

Site Survey

TITLE NO. CLS 4611

SURVEY NO. 66447-2



VICINITY MAP
NOT TO SCALE

LEGAL DESCRIPTION

ENTIRE PROPERTY

ALL that certain plot, piece or parcel of land, situate, lying and being in the Borough and County of Queens, City and State of New York, bounded and described as follows:

BEGINNING at a point on the northerly side of 78th Avenue, distant 409.30 feet westerly from the corner formed by the intersection of the westerly side of Main Street with the northerly side of 78th Avenue;

RUNNING THENCE southerly, parallel to Main Street, a distance of 70.00 feet to a point in the center line of 78th Avenue, as laid out and shown on the Final Topographical Map of Old City of New York;

RUNNING THENCE westerly at right angles along the center line of 78th Avenue, 208.75 feet to the easterly side of Vleigh Place, as shown on Alteration Map Number 1676 of the Topographical Bureau of the City of New York;

RUNNING THENCE northerly along the easterly side of Vleigh Place, a distance of 253.30 feet to its point of intersection with the southerly side of 77th Road, 60 feet wide, as laid out by the City of New York;

RUNNING THENCE easterly along the southerly side of 77th Road, 180.46 feet;

RUNNING THENCE southerly at right angles to the last mentioned course and parallel with Main Street, 200.00 feet to the point or place of BEGINNING.

EXCEPTING THEREFROM the triangular piece of land at the southeast corner of the premises measuring 27.28 feet, 25.82 feet, 52.76 feet.

Subject to a 30 foot easement for street purposes (78th Avenue) along the southerly 30 feet of premises.

Excepting therefrom as much as taken for the widening of Vleigh Place.

The above described parcel has an area of 34,543 square feet or 0.7930 Acre.

FOR INFORMATION ONLY:
Block 6630 Lot 1

SCHEDULE B ITEMS

4. Covenants, conditions, easements, leases, agreements of record, etc. none fully set forth in Schedule B herein.

5. Sewer Agreement in Liber 4152 cp 388

7. Rights of others over and across and in and to so much of the subject premises as may be used as an alley and easement as set forth on the Tax Map for the subject premises.

8. A portion of the subject premises described in Schedule A lands up to the rear of Vleigh Place as the same is laid out on the official map of the City of New York. That portion of the land is subject to the said regulated and limitations imposed by the provisions of Section 35 of the Sanitary City Law.

12. Vacation Indenture - Tax Map and Accurate Description

NOTES

1. BELOW GRADE ENCROACHMENTS AND WALLS IF ANY NOT LOCATED
2. THERE WAS NO OBSERVABLE WHEELS OR HAT PASSAGES
3. THE PREMISES IS SERVED BY GAS, WATER, ELECTRICITY, TELEPHONE AND SEWER WITH DRAINAGE PROVIDED BY PUBLIC ASSESSMENT
4. THE PREMISES HAS DIRECT ACCESS TO 78th AVENUE, A DULY DEDICATED PUBLIC STREET
5. THERE IS EVIDENCE OF CONSTRUCTION OR EARTH - MOVING
6. NO EVIDENCE OF WETLANDS OBSERVED
7. NO EVIDENCE OF CEMETERIES OR BURIAL GROUNDS FOUND
8. THE PROPERTY DESCRIBED HEREIN IS THE SAME PROPERTY DESCRIBED IN COASTAL LAND SERVICES, INC. AS AGENT FOR OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY COMMITMENT NO. CLS 4611 WITH AN EFFECTIVE DATE OF 06.15.2016
9. THE ENTIRETY AND PORTION OF THE SUBJECT PROPERTY A/K/A 78-34 VLEIGH PLACE, QUEENS, NY

ENVIRONMENTAL EASEMENT DESCRIPTION

ALL that certain plot piece or parcel of land situate lying and being in the Borough and County of Queens, City and State of New York bounded and described as follows:

BEGINNING at point on the northerly side of 78th Avenue (80 feet wide), distant 409.30 feet westerly from the corner formed by the intersection of the westerly side of Main Street (100 feet wide) with the northerly line of 78th Avenue;

RUNNING THENCE westerly along the northerly side of 78th Avenue 180.16 feet to the easterly side of Vleigh Place as shown on Consent Civil Price Map;

to another THENCE northerly along the easterly side of Vleigh Place, 27.28 feet to an angle point;

RUNNING THENCE continuing northerly along the easterly side of Vleigh Place (73 feet wide), 180.22 feet to the southerly side of 77th Road (60 feet wide);

RUNNING THENCE easterly along the southerly side of 77th Road, 100.46 feet to a point;

RUNNING THENCE southerly at right angles to the southerly side 77th Road, 200 feet to the northerly side of 78th Avenue the point or place of BEGINNING.

The above described parcel has an area of 28,149 square feet or 0.6691S Acres

THE PROPERTY IS COVERED BY BCP SITE # C241168

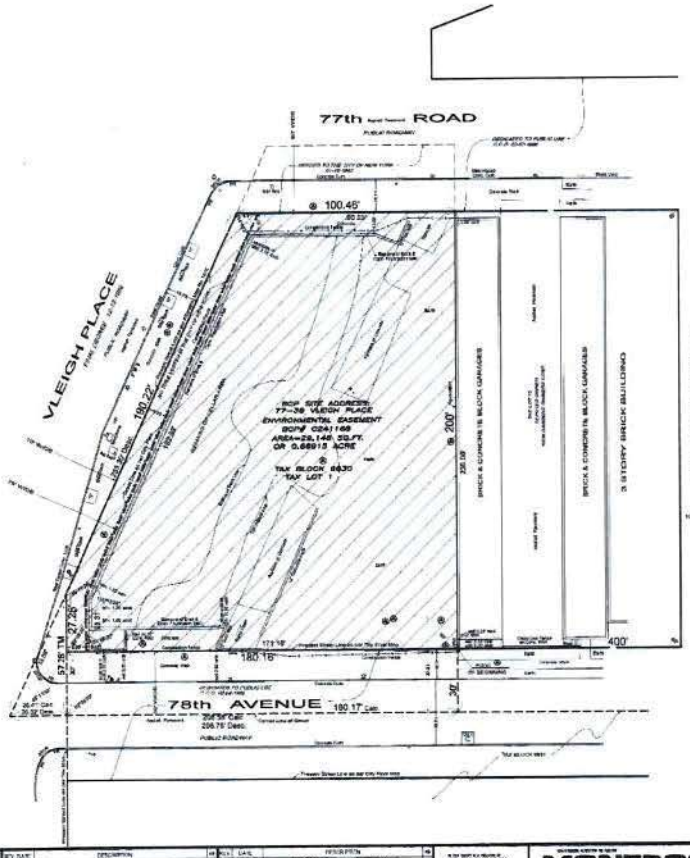
ENVIRONMENTAL EASEMENT AREA ACCESS

THE DEC OR THEIR AGENT MAY ACCESS THE ENVIRONMENTAL EASEMENT AREA AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS/EGRESS ACCESS POINT

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law

THE ENGINEERING AND INSTITUTIONAL CONTROLS for the Easement are set forth in more detail in the Site Management Plan ("SMP"). A copy of the SMP must be obtained by any party with an interest in the property. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@gw.dec.state.ny.us

BROWNFIELD SITE & ENVIRONMENTAL EASEMENT AREA



REV.	DATE	DESCRIPTION
	06.21.16	ENVIRONMENTAL EASEMENT SURVEY
A	- - - -	ENVIRONMENTAL EASEMENT BOUNDARY REVISED

MONTROSE
SURVEYING CO., LLP.
CITY & LAND SURVEYORS

CITY OF NEW YORK
COUNTY QUEENS
TAX BLOCK 6630
TAX LOT 1
SCALE: 1" = 20'

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Form
12/19/2019

SITE DESCRIPTION

SITE NO. **C241168**

SITE NAME 77-57 Vleigh Place

SITE ADDRESS: 77-39/63 Vleigh Place ZIP CODE: 11367

CITY/TOWN: Flushing

COUNTY: Queens

ALLOWABLE USE: Restricted-Residential, Commercial, and Industrial

SITE MANAGEMENT DESCRIPTION

SITE MANAGEMENT PLAN INCLUDES:	YES	NO
IC/EC Certification Plan	■	□
Monitoring Plan	■	□
Operation and Maintenance (O&M) Plan	■	□

Periodic Review Frequency: once a year

Periodic Review Report Submitted Date: 04/30/2021

Description of Institutional Control

VP Capital Holdings LLC
62 West 47th Street, Suite 603
77-39/63 Vleigh Place
Environmental Easement
Block: 6630
Lot: 1
Sublot:
Section: 30
Subsection:
S_B_L Image: 30-6630-1
Ground Water Use Restriction

IC/EC Plan

Landuse Restriction

Monitoring Plan

O&M Plan

Site Management Plan

Description of Engineering Control

VP Capital Holdings LLC
62 West 47th Street, Suite 603
77-39/63 Vleigh Place
Environmental Easement
Block: 6630
Lot: 1
Sublot:
Section: 30
Subsection:
S_B_L Image: 30-6630-1

Air Sparging/Soil Vapor Extraction

Cover System

Groundwater Treatment System

Vapor Mitigation