166 Kings Highway Rezoning

Environmental Assessment Statement

CEQR Number: 23DCP163K

Prepared by:

Environmental Studies Corp.

Prepared for:

166 Plaza LLC

Lead Agency:

NYC Department of City Planning

November 2024

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* 166 Kings Highway Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
23DCP163K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
230378ZMK, N230379ZRK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Department of City Planning			166 Plaza LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shellooe, AICP, Director of Environmental Assessment and Review Division			Hiram A. Rothkrug, Environmental Studies Corp.		
ADDRESS 120 Broadway, 31st floor			ADDRESS 55 Water Mill Lane		
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5. *Project Description*

The Applicant, 166 Plaza LLC, seeks a zoning map amendment to rezone Block 6619, Lots 42,49, 50, 51 and Block 6620, Lot 46 in the East Bensonhurst neighborhood of Brooklyn Community District 11 (the "Project Area") from an R6B/C2-3 to an R7X/C2-4 zoning district; and a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing (MIH) area conterminous with the Project Area (the "Proposed Actions"). The Proposed Actions would facilitate the development of a 119,230 gross square foot (gsf) (103,678 zsf, 5.95 FAR), 10 stories, mixed-use development which would comprise 102,357 gsf of residential floor area (5.11 FAR) and 16,871 gsf of commercial floor area on the ground floor (0.84 FAR) (the "Proposed Development") on Block 6619, Lot 42 (the "Development Site") at 166 Kings Highway. The Proposed Development would provide 97 residential unit, 25-30% (25-30 units) of which would be affordable pursuant to MIH at an average of 60-80 percent Average Median Income (AMI) depending on the option selected. The Applicant intends to pursue Option 2. For the purpose of Early Childhood Programs analysis, 20% (20 units) of residential floor area is assumed to be affordable at or below 80% AMI.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 11	STREET ADDRESS 166 Kings Highway
TAX BLOCK(S) AND LOT(S) Block 6619, Lots 42, 49, 50, 51 and Block 6620 Lot 46.		ZIP CODE 11223

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Kings Hwy to the north, W11th St to the east, Quentin Rd to the south and West 13 Street to the west.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY	ZONING SECTIONAL MAP NUMBER 22d
R6B/C2-3	

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

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

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☒ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☒ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY	☐ DISPOSITION—REAL PROPERTY	☐ FRANCHISE

☐ HOUSING PLAN & PROJECT ☐ OTHER, explain:
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)
Total directly affected area (sq. ft.): 29,414
Roads, buildings, and other paved surfaces (sq. ft.): 29,414
Waterbody area (sq. ft) and type:
Other, describe (sq. ft.):

8. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)
SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 169,111
NUMBER OF BUILDINGS: 3
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 120,233; 11,978; 36,900
HEIGHT OF EACH BUILDING (ft.): 120; 24; 120
NUMBER OF STORIES OF EACH BUILDING: 12; 2; 12

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: 17,425
The total square feet not owned or controlled by the applicant: 11,989

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: sq. ft. (width x length)
VOLUME OF DISTURBANCE: 111,067 (9.91' depth) cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 11,200 sq. ft. (width x length)

Description of Proposed Uses (please complete the following information as appropriate)

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	135,543	33,568		
Type (*e.g.,* retail, office, school)	172 units	retail		

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 368 NUMBER OF ADDITIONAL WORKERS: 74

Provide a brief explanation of how these numbers were determined: Worker/employee calculations are as follows: Retail = 1/333 sf of commercial sf + 1 employee per 25 du(-exisitng). Residents: Average HH 2.94 (popfactfinder) (-existing)

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

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

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

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2026

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 20

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☐ YES ☒ NO IF MULTIPLE PHASES, HOW MANY? 1-3

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: For the purposes of a conservative analysis, additional soft sites are projected within the Project Acrea; Development Sites 1 estimated 12 months, Site 2 would be a renovation est. 8 months. Site 3 contains 3 separate lots that are each currenlty occupied, therefore assuming Site 3 would be estimated 18 months. .

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

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

Part II: TECHNICAL ANALYSIS

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

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

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

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

	YES	NO
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 6,779		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 17.2m		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☒	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☒
○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☒
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop, or Citywide Ferry Service landing?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality;	☒	☐

	YES	NO
Hazardous Materials; Noise?		

(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. The detailed analysis of this EAS does not identify significant unmitigated adverse impacts. Thus, an assessment of public health is not warranted.

18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21

(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐

(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. The Proposed Project does not have the potential to result in significant adverse impacts in any technical area and will not have moderate effects on several of the elements that define a neighborhood's character.

19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22

(a) Would the project's construction activities involve:

○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☒	☐
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒

(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.

Kings Highway is a major thoroughfare. Projected Development construction would result in temporary disruptions to the surrounding community and occasional noise and dust. Overall, these activities are typical of construction projects in urban areas, the effects would be temporary, and they are not considered significant.

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
Raya DerBedrossian, Environmental Studies Corp.	11/15,2024

SIGNATURE Danielle Gartenberg

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).

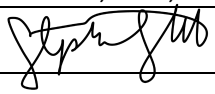
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. 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 on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe, AICP, Director	November 15, 2024

SIGNATURE



NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

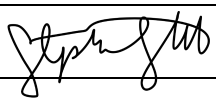
A detailed analysis of land use, zoning, and public policy is included in the EAS. The Applicant, 166 Plaza LLC, seeks a zoning map amendment to rezone Block 6619, Lots 42, 49, 50, and 51, and Block 6620, Lot 46 (collectively, the "Project Area") in the East Bensonhurst neighborhood of Brooklyn Community District 11 from an R6B/C2-3 to an R7X/C2-4 zoning district; and a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing (MIH) area conterminous with the Project Area (the "Proposed Actions"). The Proposed Actions would facilitate the development of the Proposed Development, a 119,230 gross square foot (gsf) (103,678 zoning square foot [zsf], 5.95 FAR), 10 story, mixed-use development which would comprise 102,357 gsf of residential floor area (5.11 FAR) and 16,871 gsf of commercial floor area on the ground floor (0.84 FAR) on Block 6619, Lot 42 (the "Development Site") at 166 Kings Highway. The Proposed Development would include 97 residential units, 25-30% (25-30 units) of which would be affordable pursuant to MIH at an average of 60-80% Average Median Income (AMI) depending on the option selected. In order to provide a conservative analysis, it is assumed that Block 6620, Lot 46 ("Projected Development Site 2") would be improved and expanded into a 24-foot-tall, 11,978 gsf (11,978 zsf with 2.0 FAR) two-story local retail and service establishment commercial building. Twelve cellar parking spaces would be required with curb cut access along the north side of Quentin Road. Block 6619, Lots 49, 50, and 51 ("Projected Development Site 3") would be merged into a combined 6,000 square foot lot, improved with a 120-foot-tall, 36,900 gsf, 12-story mixed-use commercial and residential building. It would include 6,000 gsf of local retail and service establishment commercial use on the first floor and 30,900 gsf of residential use on floors 2 through 12. The residential portion would include 44 dwelling units, 25%-30% (11-13 units) of which would be affordable pursuant to MIH at an average 60-80% AMI depending on the option selected.

The analysis finds that the Proposed Actions would not result in changes in land use and public policy, however, it would result in a change in zoning. The Proposed Actions would result in an R7X/C2-4 district and compared to the study area, which is mostly mapped R7A with C2-3 commercial overlay to the north and east with R6B/C2-3 to the west, the proposed R7X district would permit greater density (6.0 FAR) than what is allowed under existing R6B/C2-3 (2.0 FAR) and R7A/C2-3 (4.0 FAR) zoning districts along Kings Highway. However, the primary study area is well-suited for additional density given that the Project Area is near public transportation, Stillwell Avenue is considered a Major Street, and Kings Highway and Quentin Road are considered wide streets. The Proposed Actions would also support the policies and goals of the Transit Zone, Housing Our Neighbors, Housing New York and Where We Live NYC, and PlaNYC by creating new housing opportunities in areas with access to mass transit, reducing accessory parking requirements, and establishing an MIH area encompassing the primary study area, which would require future residential development to include permanently income-restricted units. The Proposed Actions would continue to permit commercial uses that serve the existing and future neighborhood residents but with fewer parking requirements, which aligns with the policies and goals of OneNYC 2050. Therefore, the Proposed Actions would not result in significant adverse impacts to land use, zoning or public policy, and no further analysis is warranted.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-753) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

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

TITLE Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE 11/15/2024
SIGNATURE 	
TITLE Chair, City Planning Commission	

Project Name: 166 Kings Highway rezoning
CEQR # 23DCP163K
SEQRA Classification: Unlisted

NAME	DATE
Daniel R. Garodnick	11/18/2024
SIGNATURE	

Project Name: 166 Kings Highway rezoning
CEQR # 23DCP163K
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	Brooklyn	Block 6619, Lot 42
Projected Development Site 2	Brooklyn	Block 6620, Lot 46
Projected Development Site 3	Brooklyn	Block 6619, Lots 49, 50, and 51

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-753**) would be established as part of approval of the proposed actions on **Projected Development Site 1, 2, and 3** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1 and 2	X	X	X
Projected Development Site 3	X	X	

Hazardous Materials

The (E) designation requirements applicable to **Projected Development Site 1, 2, and 3** for hazardous materials would apply as follows:

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse

impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

Air Quality

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

Projected Development Site 1: *Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating and air conditioning (HVAC) system and hot water equipment and must be fitted with low NOx (15 ppm) burners, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 108 feet above grade, and that the stack is located no more than 85 feet from the eastern lot line facing West 12th Street to avoid any potential significant adverse air quality impacts.*

Projected Development Site 2: *Any new commercial 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 building's highest level and at least 27 feet above grade to avoid any potential significant adverse air quality impacts.*

Projected Development Site 3: *Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating and air conditioning (HVAC) system and hot water equipment, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 126 feet above grade, and that the stack is located at least 30 feet from the eastern lot line facing West 12th Street and at least 30 feet from the northern lot line facing Kings Highway to avoid any potential significant adverse air quality impacts.*

Noise

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

Projected Development Site 1: *In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the northern facade facing Kings Highway, the eastern façade facing W 12th Street and the western facade facing W 13th Street within 50 feet of Kings Highway to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office use. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

Projected Development Site 2: *In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the northern facade facing Kings Highway, and the western façade facing W 12th Street within 30 feet of Kings Highway to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office use. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*



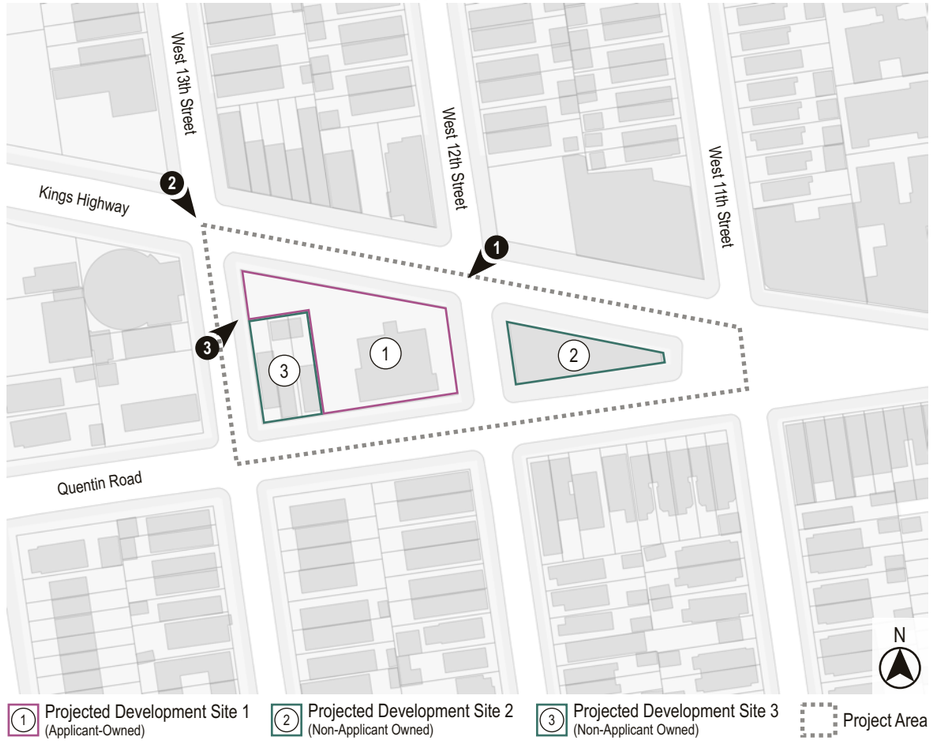
1. View of the Development Site facing southwest from the intersection of Kings Highway and West 12th Street.



2. View of the Development Site facing southeast from the intersection of Kings Highway and West 13th Street.



3. View of the Development Site facing northeast from West 13th Street.



Urban Cartographics

166 Kings Highway, Brooklyn

Photographs Taken on June 14, 2023



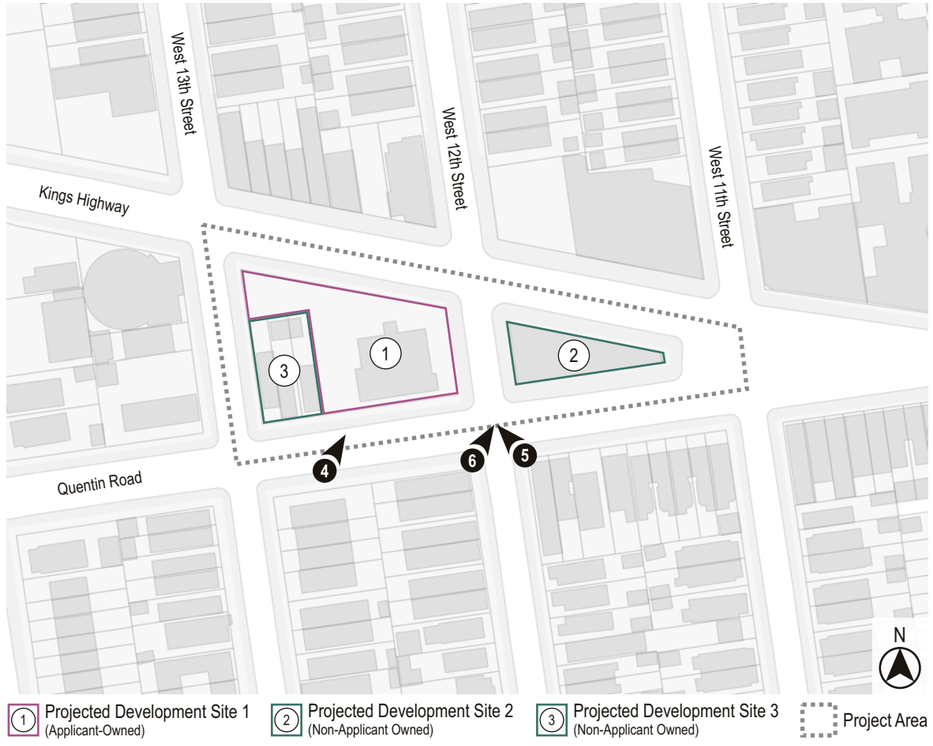
4. View of the Development Site facing northeast from Quentin Road.



5. View of the Development Site facing northwest from the intersection of Quentin Road and West 12th Street.



6. View of the Project Area facing northeast from the intersection Quentin Road and West 12th Street.



166 Kings Highway, Brooklyn

Urban Cartographics

Photographs Taken on June 14, 2023



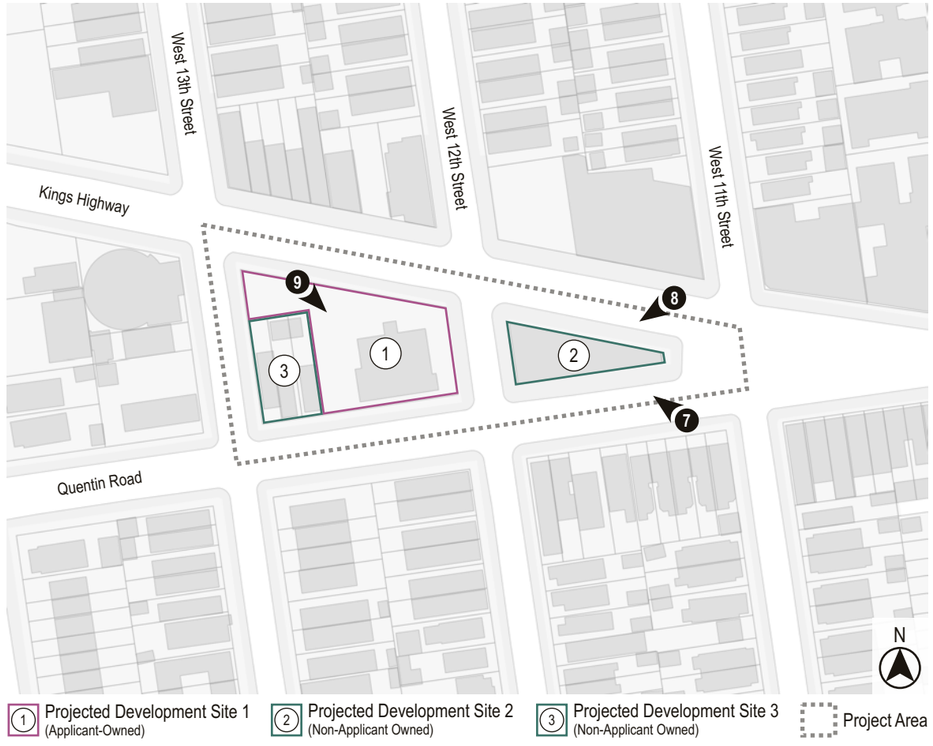
7. View of the Project Area facing northwest from Quentin Road.



8. View of the Project Area facing southwest from Kings Highway.



9. View of the Development Site facing southeast from the sidewalk along the south side of Kings Highway.



Urban Cartographics

166 Kings Highway, Brooklyn

Photographs Taken on June 14, 2023

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166 KINGS HIGHWAY, BROOKLYN, NY 11223

PROJECT DESCRIPTION

INTRODUCTION

The Applicant, 166 Plaza, LLC., seeks a zoning map amendment to zoning sectional map 22d to rezone Block 6619, Lots 42, 49, 50 & 51 and Block 6620, Lot 46 (the "Rezoning Area" also known as "the Project Area") from an R6B/C2-3 zoning district to an R7X/C2-4 zoning district; and a zoning text amendment to designate the Rezoning Area as a Mandatory Inclusionary Housing (MIH) area in the East Bensonhurst neighborhood of Brooklyn, Community District 11 (the " Proposed Actions").

The Proposed Actions would facilitate the development of a 119,230 gross square foot (gsf) (103,678 zsf, 5.95 FAR), 10 stories, mixed-use development which would comprise 102,357 gsf of residential floor area (5.11 FAR) and 16,871 gsf of commercial floor area on the ground floor (0.84 FAR) (the "Proposed Development") on Block 6619, Lot 42 (the "Development Site") at 166 Kings Highway. The Proposed Development would provide 97 residential units, 25-30% (25-30 units) of which would be affordable pursuant to MIH at an average of 60-80 percent Average Median Income (AMI) depending on the option selected. The Applicant intends to pursue Option 2. For the purpose of Early Childhood Programs analysis, 20% (20 units) of residential floor area is assumed to be affordable at or below 80% AMI. The Proposed Development would provide 48 accessory off-street parking spaces in the cellar.

PROPOSED ACTIONS

The Proposed Actions consist of a zoning map amendment from R6B/C2-3 to R7X/C2-4 and a zoning text amendment to Appendix F of the Zoning Resolution (Inclusionary Housing Designated Areas), which would establish a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area (the "Proposed Actions").

The R7X zoning district under MIH is a contextual district where quality housing regulations are mandatory. R7X districts allow for buildings up to 6.0 FAR and generally yield 12 to 14- story buildings. Maximum lot coverage is 70% for interior and through lots and 100% on corner lots. Above a base height of 60 to 105 feet, the building must set back to a depth of 10 feet on a wide street, before rising to a maximum of 140 feet or 145 feet with a Qualifying Ground Floor (QGF). Parking is required for 50% of all dwelling units and is reduced for MIH units and the residential requirement is waived where 15 or fewer spaces are required. The C2-4 district in R7X districts permits a maximum commercial FAR of 2.0 and permits a wide range of neighborhood commercial uses (Use Groups 5-9 & 14).

The proposed R7X district would result in an increase in permitted density for the Rezoning Area which is located between two wide avenues (Kings Highway and Quentin Road, 80 feet in width) and directly to the south of an R7A/C2-3 district across Kings Highway. The proposed C2-4

commercial overlay would permit the continuation of the mixed-use character of this segment of Kings Highway. The Proposed Actions would also establish the MIH area coterminous to the Rezoning Area, which would require 25-30% of the proposed new residential floor area to be made affordable to incomes averaging 60% - 80% AMI.

The NYC Department of City Planning is proposing a citywide zoning text amendment, the City of Yes for Housing Opportunity "CHO" (CEQR No. 24DCP033Y), to expand opportunities for housing within all zoning districts, and across all 59 of the City's Community Districts. These changes to the City's Zoning Resolution would enable more housing and a wider variety of housing types in every neighborhood, from the lowest- density districts to the highest, to address the housing shortage and high cost of housing in New York City. The maximum bulk and density regulation for the proposed R7X zoning district doesn't change under the proposal of CHO; therefore, it has been concluded that this project would not be affected by the proposals included in the text amendment.

PURPOSE AND NEED OF THE PROPOSED ACTIONS

The Proposed Actions would facilitate a new medium density apartment building and retail ground floor on a vacant and unutilized parcel of land that has languished under the current R6B/C2-3 zoning district. The Proposed R7X/C2-4 zoning would increase the allowable building height to 145 feet and maximum base height to 105 feet. The additional density would allow additional housing, including permanently affordable housing units in a transit rich neighborhood. The Project Area is between two wide avenues (Kings Highway and Quentin Road) and is less than a quarter mile from the Kings Highway N Train station at W8th St. There is east/west bus transit (B82) along Kings Highway immediate south of the Project Area as well as north/south bus transit (B4) 400 feet west of the Project Area along Stillwell Avenue.

The proposed zoning map amendment from R6B/C2-3 to R7X/C2-4 is necessary to facilitate a productive use on the Development Site, which currently sits vacant and promote development on lots that are underdeveloped.

ANALYSIS FRAMEWORK

BUILD YEAR

The Proposed Development would be constructed in a single phase once the Proposed Actions are approved. Assuming approval of the Proposed Actions in 2024, construction of the Proposed Development on the Projected Development Site 1 is expected to take 12 months. After that, it is conservatively assumed that it would take 6 months for soft sites (Projected Development Sites 2 and 3) to react to the rezoning but still be constructed concurrently with the Proposed Development on the Projected Development Site. Therefore, the analysis year for the Project Area is 2026.

REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDS)

A Reasonable Worst Case Development Scenario is broadly defined as the potential development under both the future No-Action and With-Action conditions that is used to determine the potential effects of the Proposed Actions. The future No-Action and With-Action conditions by the Build Year of 2026 is used to determine the change in permitted development created by the Proposed Actions. The No-Action scenario estimates the projected development in the future without the Proposed Actions in 2026 (the No-Action Condition). The With-Action scenario estimates the projected development in the future with the Proposed Actions in 2026 (the With-Action Condition). The RWCDS analysis takes the existing observed condition and adds to it known or expected changes to arrive at a reasonable estimate of future conditions. After the baseline condition is established in the future without the project, the RWCDS for the project is established and compared to the No-Action condition for the environmental assessment.

Existing Conditions

The entire Proposed Rezoning Area (Project Area) consists of 29,414 square feet (sf) across five tax and zoning lots (Block 6619, Lots 42, 49, 50, 51 and Block 6620, Lot 46) in the East Bensonhurst neighborhood of Brooklyn, Community District 11. It is bounded by Kings Highway to the north and Quinten Road to the south, both of which are classified as a 'wide' street with a width of 80 feet. West 11th Street to the east and west 13 to the west, both of which are classified as a 'narrow' street with a width of 60 feet.

Block 6619, Lot 42 is an Applicant-owned approximately 17,425 sf corner lot with and is surrounded on three sides by street frontage with approximately 212 feet of frontage along Kings Highway, 82 feet along West 12th Street and 140 feet along Quentin Road and is currently vacant. The site was improved with a diner until 2016. In 2018 the Hebrew Language Academy 2 (charter school) retained a building permit for a charter school on the site, but the project was abandoned due to financing.

Block 6619, Lot 49 is privately owned 2,000 sf lot and is improved with a fully occupied two-story 1,408 gsf (1,367 zsf, 0.68 FAR) two-family home.

Block 6619, Lot 50 is privately owned 2,000 sf lot and is improved with a fully occupied two-story 1,472 gsf (1,429 zsf, 0.71 FAR) two-family home.

Block 6619, Lot 51 is privately owned 2,000 sf corner lot and is improved with a fully occupied two-story 1,840 gsf (1,786 zsf, 0.89 FAR) two-family home.

Block 6620, Lot 46 is privately owned, contains 5,989 sf of lot area, and is improved with a one-story 5,300 gsf (4,077 zsf, FAR 0.68) commercial building containing a discount shoe store.

The Proposed Rezoning Area is within an existing R6B/C2-3 district which permits a variety of residential housing (Use Groups 1 and 2) with a maximum FAR of 2.0 The maximum permitted community facility FAR is 2.0 and the maximum commercial FAR is also 2.0. Surrounding land uses are predominately residential (Use Groups 1 and 2) and mixed-use commercial/residential (Use Group 2 and 6) community facility uses (Use Group 3 and 4).

The Proposed Actions would affect all the properties located within the Rezoning Area. In additional to the Applicant-owned site (Block 6619, Lot 42, Projected Development Site 1), two additional sites are projected to be developed by the built year of 2026. It is assumed that the Block 6620, Lot 46 (Projected Development Site 2) would remain commercial use in No-Action condition and would expand to the full commercial FAR permitted with the Proposed Actions in With-Action condition. It is also assumed that three privately owned lots with the two-family homes (Block 6619, Lots 49,50 and 51) would be merged (Projected Development Site 3) into one development site which would be considered a soft site in With-Action Scenario. There have been discussions with the homeowners, and they are not interested in selling or moving, therefore they are not considered merged in the 2026 No-Action Scenario.

In summary, for purposes of a conservative analysis, the RWCDS has been established for the proposed Rezoning Area, which would include Block 6619, Lot 42, Block 6620, Lot 46, and Block 6619, Lots 49, 50 and 51, as shown in Table 1-1.

Table 1-1 Projected Development Sites

Projected Development Site No.	Block	Lot
Projected Development Site 1 (Applicant-Owned Site)	6619	42
Projected Development Site 2 (Non-Applicant-Owned Site)	6620	46
Projected Development Site 3 (Non-Applicant-Owned Site)	6619	49 + 50 + 51

Future No-Action Scenario

Absent the Proposed Actions, the Applicant-owned Projected Development Site 1 would be developed as-of-right with the full FAR permitted by the existing zoning (R6B/C2-3). Projected Development Sites 2 and 3 would remain the same as they are in the existing conditions.

Projected Development Site 1

Since this site is vacant, large (17,425 sf) and has direct access to and from Kings Highway, a broad commercial thoroughfare, it is expected that absent the Proposed Actions, Block 6619, Lot 42 would be developed as-of-right. The underlying zoning would allow for a 55-foot-tall, 35,896 gsf (34,850 zsf with 2.0 FAR) five-story mixed-use commercial/residential building. It would include 7,179 gsf (6,970 zsf with 0.2 FAR) of local retail and service establishment commercial use on the first floor and 28,716 gsf (27,880 zsf with 1.8 FAR) of residential use on floors two through five which includes 41 dwelling units and 39 cellar parking spaces with curb cut access on the north side of Quentin Road.

Projected Development Site 2

Block 6620, Lot 46 would remain in existing condition, continually being improved with a one-story 5,300 gsf (4,077 zsf with FAR 0.68) commercial building containing a discount shoe store, because the owner has no plans to sell or expand the business by the build year 2026.

Projected Development Site 3

Block 6619, Lots 49, 50 and 51 are expected to remain in existing condition, continuing being occupied by two-family homes with an average FAR of 0.75. Speaking with the homeowners located on Block 6619, Lots 49, 50 and 51, they are not interested in selling or moving, especially by the build year 2026. There are no plans to redevelop these sites absent the Proposed Actions.

There is one project within the study area currently under construction and would be completed by the Build Year 2026. 7616 Bay Parkway (Block 6241, Lot 43) would be developed with a 74-foot-tall, six-story, mixed-use community facility/residential building that includes 10 dwelling units.

Future With-Action Scenario

In the future with the Proposed Actions, the Projected Development Sites would be redeveloped based on full mixed-use FAR build out (Projected Development Sites 1 and 3) and full commercial FAR (Projected Development Site 2) permitted by the proposed rezoning (R7X/C2-4).

Projected Development Site 1

In the future with the Proposed Actions, Projected Development Site 1 (Block 6619, Lot 42) would include a 120-foot-tall, 120,233 gsf (104,550 zsf with 6.0 FAR) twelve story mixed-use commercial/residential building with 100% lot coverage. Although the maximum height permitted for Quality Housing within an MIH area is 14 stories and 145 feet, 120 feet is the height the building would reach if the FAR is maxed out at 6.0. (The Shadow analysis and Urban Design analysis use 145 feet for the RWCDS.) It would include 15,590 gsf (13,556 zsf with 0.78 FAR) of local retail and service establishment commercial use on floors one and two and 104,643 gsf (90,994 zsf with FAR 5.22) of residential use on floors three through twelve. The residential portion would include 128 dwelling units, 25%-30% (32-38 units) of which would be affordable pursuant to MIH at an average 60%-80% AMI depending on the option selected. The applicant intends to pursue Option 2 which would result 38 affordable units at an average of 80% AMI. Sixty-eight (68) cellar parking spaces would be required with curb cut access along the north side of Quentin Road.

Projected Development Site 2

In the future with the Proposed Actions, Projected Development Site 2 (Block 6620, Lot 46) would be improved with a 24-foot -tall, 11,978 gsf (11,978 zsf with FAR 2.0) two-story local retail and

service establishment commercial building with 100% lot coverage. Twelve cellar parking spaces would be required with curb cut access along the north side of Quentin Rd.

Projected Development Site 3

In the future with the Proposed Actions, the three privately-owned adjacent lots (Block 6619, Lots 49, 50 and 51) would be merged and for a combined 6,000 sf lot improved with a 120-foot-tall, 36,900 gsf (36,000 zsf with FAR 6.0) twelve story mixed-use commercial/residential building with 100% lot coverage. Although the maximum height permitted for Quality Housing within an MIH area is 14 stories and 145 feet, 120 feet is the height the building would reach if the FAR is maxed out at 6.0. (The Shadow analysis and Urban Design analysis use 145 feet for conservative purposes.) It would include 6,000 gsf (6,000 zsf with FAR 1.0) of local retail and service establishment commercial use on the first floor and 30,900 gsf (30,000 zsf with FAR 5.0) of residential use on floors two through twelve. The residential portion would include 44 dwelling units, 25%-30% (11-13 units) of which would be affordable pursuant to MIH at an average 60%-80% AMI depending on the option selected. Assuming Option 2 is pursued it would result in 13 affordable units at an average of 80% AMI. Eighteen (18) cellar parking spaces would be required with curb cut access along the north side of Quentin Rd. **Table 1-2** below is a summary table of the RWCDS.

Table 1-2 No-Action / With-Action Increment

Scenario	**No-Action Conditions**			**With-Action Conditions**			**Increment**
Projected Development Site	**1**	**2**	**3**	**1**	**2**	**3**	**Total**
Land Use	Mixed-use Comm/Res	Commercial Retail	Residential	Mixed-use Comm/Res	Commercial Retail	Mixed-use Comm/Res	
Dwelling Units	41	0	6	128	0	44	125
Parking Spaces	39	0	4	68	12	18	55
Floor Area (GSF)							
Residential	28,716	0	4,720	104,643	0	30,900	102,107
Retail	7,179	5,300	0	15,590	11,987	6,000	21,098
Total	35,896	5,300	4,720	120,233	11,987	36,900	123,205
Stories	5	1	2	12	2	12	
Heights (feet)	55	12	22	120	24	120	
Residents	121	0	18	376	0	129	368
Employees	22	16	0	52	36	18	69

1. LAND USE, ZONING AND PUBLIC POLICY

INTRODUCTION

The analysis of land use, zoning and public policy characterizes the existing conditions of the Proposed Project Area (Block 6619, Lots 42, 49, 50, 51, and Block 6620, Lot 46) and the surrounding study area; anticipates and evaluates those changes in land use, zoning and public policy that are expected to occur independently of the Proposed Actions; and identifies and addresses any potential impacts related to land use, zoning and public policy resulting from the Proposed Actions. A comprehensive analysis of land use, zoning and public policy characteristics of the area has been prepared, including field surveys, studies of the neighborhood, census data, and land use and zoning maps.

To assess the potential for project related impacts, the land use study area has been defined as the area located within a 400-foot radius of the Project Area, which is an area within which the Proposed Actions have the potential to affect land use or land use trends. The 400-foot radius study area is bounded roughly by 120 feet north of Kings Highway to the north, 80 feet east of W11th Street to the east, 120 feet south of Quentin Road to the south and 90 feet west of W13th Street to the west.

See **Figure 1 – Site Location Map, Figure 2 - Tax Map** and **Figure 3 –Land Use Map**

ASSESSMENT

Existing Conditions

Land Use

Primary Study Area (Project Area)

The primary study area comprises Block 6619, Lots 42, 49, 50, and 51 and Block 6620, Lot 46, which is generally bounded by kings Highway, West 12 Street, Quentin Road, and West 13 street. As shown in Figure 3, the primary land use in the Project Area is residential/commercial. The Development Site (Block 6619, Lot 42) is an Applicant-owned approximately 17,425 sf corner lot and is surrounded on three sides by street frontage with approximately 212 feet of frontage along Kings Highway, 82 feet along West 12th Street and 140 feet along Quentin Road and is currently vacant. It was previously a one-story plus cellar 4,500 sf diner. Block 6620, Lot 46 is privately owned, contains 5,989 sf of lot area, and is improved with a one-story 5,300 gsf (4,077 zsf with FAR 0.68) commercial building containing a discount shoe store. Block 6619, Lot 49 is privately owned 2,000 sf lot and is improved with a fully occupied two-story 1,408 gsf two-family home. Block 6619, Lot 50 is privately owned 2,000 sf lot and is improved with a fully occupied two-story 1,472 gsf two-family home. Block 669, Lot 51 is a privately owned 2,000-square-foot corner lot. It is improved with a fully occupied two-story, 1,840-square-foot two-family home.

Secondary Study Area (400-Foot Radius)

The study area surrounding the Project Area is predominantly residential (Use Groups 1 and 2), commercial use (Use Group 6) and community facility uses (Use Group 3 and 4). It is primarily residential except along Kings Highway, where development is divided between commercial buildings and mixed-use buildings with commercial ground floors and residential upper floors. One- and two-family homes line W11th, W12th and W13th Streets; a mix of one- and two-family homes and walkup apartment buildings with up to four stories and 23 dwelling units predominates along W10th Street. Local retail and service establishments line the ground floors of Kings Highway, generally with one or two residential stories above them. The side streets are primarily residential, the only exceptions to this pattern are a few ground-floor commercial uses along Quentin Road. There are two community facility uses within the proposed rezoning study area; the Highlawn Branch of the New York City Library (Block 6618, Lot 34) and P.S./I.S. 686 Brooklyn School of Inquiry (Block 6618, Lot 1). There is also a newly completed 74-foot-tall, six-story, mixed-use community facility/residential building that includes 10 dwelling units located at 7616 Bay Parkway (Block 6241, Lot 43).

The Project Area is located five blocks east of the New York City Transit (NYCT) Subway Station at Kings Highway and West 8th Street with N Train service to Manhattan and Southern Brooklyn and NYCT bus service, the B82 and express B82-SBS travel along Kings Highway, connecting Bensonhurst, Flatlands and Spring Creek. The B4 travels along Stillwell Avenue connecting Bay Ridge with Sheepshead Bay.

Zoning

Primary Study Area (Project Area)

As shown in Figures 4a – 4b, the Project Area is currently in R6B/C2-3 zoning district. R6B zoning districts typically allow traditional row house districts, which preserve the scale and streetscape of neighborhoods with four-story attached buildings developed during the 19th century. The Floor Area Ratio (FAR) of 2.0 and the mandatory Quality Housing regulations also accommodate apartment buildings at a similar four- to five-story scale, with a maximum permitted height of 50 feet. Buildings must have interior amenities for the residents pursuant to the Quality Housing Program. Off-street parking is generally required for 50 percent of dwelling units.

C2-3 commercial overlays are mapped within residence districts along streets that serve local retail needs, including neighborhood grocery stores, restaurants, and beauty parlors, as well as funeral homes and repair services. In mixed-use buildings, commercial uses are limited to one or two floors and must always be located below the residential use. When commercial overlays are mapped in R6- R10 districts, the maximum commercial FAR is 2.0. Commercial buildings are subject to commercial bulk rules. One accessory parking space per 400 sf of commercial space is required.

While the existing development within the Project Area is underbuilt, it still conforms with the underlying R6B/C2-3 zoning.

Secondary Study Area (400-Foot Radius)

The study area also includes R4-1 district to the north of Kings Highway and south of Quentin Road, R5 to the southwest of the Project Area, R5B south of Kings Highway and northeast of the Project Area along W10th Street, R6B west of the Project Area, and R7A along Avenue P and R7A /C2-3 along Kings Highway.

R7A districts permits medium- density buildings intended for wider avenues, often between seven- and eight-stories with a maximum FAR of 4.0. R7A This is consistent with the land uses in the area that typically include larger commercial and mixed-use commercial/residential along wider streets such as Kings Highway and Avenue P.

The mid-block areas between Kings Highway and Avenue P are predominantly lower-density residential, with semi-detached and attached residential buildings between two- and three-stories, pursuant to the underlying R5B along West 13th Street and West 10th Street and R4-1 districts along West 11th Street and West 12th Street.

Public Policy

Primary Study Area (Project Area)

The Food Retail Expansion to Support Health (FRESH)

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

PlaNYC

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

OneNYC

Growth, sustainability, and resiliency remain at the core of OneNYC, but with the poverty rate remaining high and income inequality continuing to grow, the de Blasio administration added equity as a guiding principle throughout the plan. In addition to the focuses of population growth, aging infrastructure, and global climate change, OneNYC brings new attention to ensuring the voices of all New Yorkers are heard and to cooperating and coordinating with regional counterparts. Climate change has become more real to New Yorkers in the wake of Hurricane Sandy's devastation in October 2012, shifting resilience from a long-term contingency to a near-term priority. The second was a focus on equity, which was integrated into all aspects of sustainability policy. The third was expanding the sustainability plan to a strategic plan for the entirety of City government. OneNYC 2050 includes long-term targets for the City's climate efforts. These include goals for building decarbonization codified in Local Law 97 of 2019, the 2021 ban on gas hookups in new buildings, the establishment of commercial waste zones, and Executive Order No. 99, which created a framework to decarbonize City operations. This plan centers environmental justice, while focusing on taking concrete actions towards achieving long-standing climate goals. Focus is essential for action and implementation targeting sustainability broadly defined as climate action, ambient air quality, water quality, and open space.

Where We Live NYC

Where We Live NYC is the City of New York's comprehensive fair housing planning process to fight discrimination, confront segregation, and take action to advance opportunity for all. It's goals; (1) Combat persistent, complex discrimination with expanded resources and protections; (2) Facilitate equitable housing development in New York City and the region; (3) Preserve affordable housing and prevent displacement of long-standing residents; (4) Enable more effective use of rental assistance benefits, especially in amenity-rich neighborhoods; (5) Create more independent and integrated living options for people with disabilities; and (6) Make equitable investments to address the neighborhood based legacy of discrimination, segregation, and concentrated poverty.

Housing New York

Housing New York is a five-borough, ten-year strategy to address the City's affordable housing crisis. The plan outlines more than 50 initiatives to support our goal of building or preserving 200,000 units of high-quality affordable housing to meet the needs or more than 500,000 people by fostering diverse, livable neighborhoods, preserving the affordability and quality of the existing housing stock, building new affordable housing for all New Yorkers, promoting homeless, senior, supportive, and accessible housing, refining City financing tools and expanding funding sources for affordable housing.

Housing Our Neighbors

Housing Our Neighbors' five guiding policies and principles are transforming public housing; improving shelter and services for New Yorkers experiencing homelessness; creating and preserving affordable housing; improving housing quality; and reducing the administrative burden regarding accessing housing services.

The Project Area is within the Bensonhurst Rezoning. Adopted in 2005, the Bensonhurst Rezoning is meant to preserve the existing neighborhood scale and character with lower density and contextual zoning districts, preventing new development inconsistent with that low-rise character and encourage residential development on selected wide streets with good access to mass transit and a character already defined by large apartment buildings, specifically Kings Highway. Along these corridors, the mid-density contextual zoning districts establish height limits consistent with neighboring apartment houses and would prevent development of overly large community facility and mixed-use residential/community facility buildings.

Secondary Study Area (400-Foot Radius)

Transit Zone

A Transit Zone is an area where special lower accessory parking requirements apply for various types of affordable housing. These are generally areas of the city beyond the Manhattan Core within one-half mile of a subway station where auto ownership rates are among the lowest in the city. The Project Area is well served by both subway and bus service. Although the Rezoning Area is not within a Transit Zone, the 400' study area includes a Transit Zone. The Development Site is located five blocks east of the New York City Transit (NYCT) Subway Station at Kings Highway and West 8th Street with N Train service to Manhattan and points south. In terms of NYCT bus service, the B4, B82 and express B82-SBS travel along Kings Highway, connecting Bensonhurst, Flatlands and Spring Creek.

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

Future No-Action

Land Use and Zoning

Primary Study Area (Project Area)

In the 2026 future without the Proposed Actions, the primary study area's existing R6B/C2-3 zoning district would remain. The Applicant-owned Projected Development Site 1 (Block 6619, Lot 42) would be developed with an as-of-right 35,896 gsf (34,850 zsf with 2.0 FAR), 55 foot tall, five-story mixed used commercial residential building, using full FAR permitted by the existing underlying zoning (R6B/C2-3). It would include 7,179 gsf of local retail and service establishment commercial use on the first floor and 28,716 gsf of residential use on floors two through five which

includes 41 dwelling units and 39 cellar parking spaces with curb cut access on the north side of Quentin Road.

Projected Development Sites 2 and 3 (Block 6620, Lot 46, and Lots 49, 50, and 51) would remain privately owned in the existing conditions by the project build year 2026. The one story, 5,300 gsf (4,077 zsf, FAR 0.68) commercial building containing a discount shoe store would continue operating on the Projected Development Site 2 (Block 6620, Lot 46). Three two-family homes on Block 6619, Lots 49, 50, and 51) would remain in existing conditions as well with an average FAR of 0.75 for each two-family home.

Secondary Study Area (400-Foot Radius)

Absent the Proposed Actions, land uses and zoning within the study area are expected to remain unchanged by the build year of 2026.

Public Policy

Primary Study Area (Project Area)

Absent the Proposed Actions, no new public policy initiatives or changes to existing initiatives are anticipated to affect the proposed Project Area by the build year of 2026.

Secondary Study Area (400-Foot Radius)

No new public policy initiatives or changes to existing initiatives are anticipated to affect the surrounding 400-foot study area by the build year of 2026.

With-Action Condition

Land Use and Zoning

Primary Study Area (Project Area)

In the 2026 future with the Proposed Actions, the proposed Project Area would be rezoned from R6B/C2-3 to an R7X/C2-4. The Proposed R7X regulation is exemplified by the 12- to 14-story apartment buildings in the R7X districts mapped along major thoroughfares allows residential and community facility uses (Use Groups 1, 2 3 and 4). The C2-4 commercial overlay includes the typical retail land uses which include neighborhood grocery stores, restaurants, and beauty parlors as well as a slightly wider range of uses, such as funeral homes and repair services.

In the future with the Proposed Actions, the Projected Development Sites would be redeveloped based on the maximum permitted FAR of the proposed rezoning (R7X/C2-4). The proposed R7X zoning district would permit a maximum FAR of 6.0 for residential development with inclusionary housing and a maximum FAR of 5.0 for community facility development. Off-street parking is generally required for 50 percent of dwelling units. When mapped in R7X districts, C2-4 allow a maximum commercial FAR is 2.0. One parking space per 1,000 sf of commercial space is required.

The With-Action scenario would increase the maximum FAR from 2.0 to 6.0 and the maximum building height from 55 feet to 145 feet.

Projected Development Site 1 would be developed with a 120 feet tall, 120,233 gsf twelve story mixed-use commercial/residential building with 100% lot coverage pursuant to the proposed zoning district R7X/C2-4. It would include local retail and service establishment commercial use on floors one and two and residential use on floors three through twelve. The residential portion would include 128 dwelling units, 38 of which would be affordable units. 25%-30% (32-38 units) of which would be affordable pursuant to MIH at an average 60%-80% AMI depending on the option selected. The applicant intends to pursue Option 2 which would result 38 affordable units at an average of 80% AMI. 68 cellar parking spaces would be required with curb cut access along the north side of Quentin Road.

Privately owned Projected Development Site 2 (Block 6620, Lot 46) would be improved with a 24 feet tall, 11,978 gsf two-story local retail and service establishment commercial building with 100% lot coverage (11,978 zsf with FAR 2.0). Twelve cellar parking spaces would be required with curb cut access along the north side of Quentin Rd.

The three privately-owned adjacent lots (Block 6619, Lots 49, 50 and 51) that make up Projected Development Site 3 would be merged and for a combined 6,000 sf lot improved with a 120 ft, 36,900 gsf (36,000 zsf with FAR 6.0) twelve story mixed-use commercial/residential building with 100% lot coverage. It would include 6,000 gsf (6,000 zsf with FAR 1.0) of local retail and service establishment commercial use on the first floor and 30,900 gsf (30,000 zsf with FAR 5.0) of residential use on floors two through twelve. The residential portion would include 44 dwelling units, 25%-30% (11-13 units) of which would be affordable pursuant to MIH at an average 60%-80% AMI depending on the option selected. Assuming Option 2 is pursued it would result in 13 affordable units at an average of 80% AMI. 18 cellar parking spaces would be required with curb cut access along the north side of Quentin Rd.

Secondary Study Area (400-Foot Radius)

With the Proposed Actions, the land uses in the study area would remain unchanged. Mixed-Use commercial/residential and commercial uses are typical along Kings Highway and Quentin Road. The Proposed Actions would not introduce any new land uses into the study area. In addition to the zoning map amendment, a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) would be required to make the Rezoning Area applicable as a Mandatory Inclusionary Housing Area (MIH). MIH would require any future residential development on these sites to include permanent affordable dwelling units, a demonstrated city-wide need. No changes are anticipated to the zoning districts or zoning regulations relating to the surrounding study area by the project build year of 2026.

Public Policy

Primary Study Area (Project Area)

The future with the Proposed Actions would rezone the Project Area from the existing R6B/C2-3 zoning to a R7A/C2-4 zoning district. The proposed zoning text amendment would establish an MIH area coterminous with the Project Area. Together, the Proposed Actions would facilitate the proposed development in the Project Area.

The Proposed Actions would support the policies and goals of Transit Zone, *Housing Our Neighbors, Housing New York* and *Where We Live NYC,* and *PlaNYC* by creating new housing opportunities in areas with access to mass transit, reducing accessory parking requirements, and establishing an MIH area encompassing the primary study area, which would require future residential development to include permanent income-restricted units. The Proposed Actions would continue to permit commercial uses that serve the existing and future neighborhood residents but with less parking requirements, which align with the policies and goals of *OneNYC 2050*.

Under the RWCDS established for the Proposed Actions, the With-Action condition would include ground floor commercial uses at Projected Development Sites 1 and 3 and expend the commercial FAR at Projected Development Site 2, which would be tenanted subject to market conditions. The Proposed Actions would not preclude participation in the FRESH Program and would create new commercial space that could be used by a supermarket or grocery store operator in the future.

The Proposed Actions meets the Bensonhurst Rezoning's policy goal of encouraging residential development on selected wide streets with good access to mass transit, a character already defined by large apartment buildings, specifically along Kings Highway.

Secondary Study Area (400-Foot Radius)

No additional public policy initiatives or changes to existing initiatives are anticipated to affect the surrounding 400-foot study area by the build year of 2026.

CONCLUSION

Land Use

In the 2026 future with the Proposed Actions, the proposed zoning map amendment and zoning text amendment would continually allow residential, commercial and community facility uses within the primary study area and would not result in any new land uses that are significantly different from surrounding uses. Under the RWCDS established for the Proposed Actions, Projected Development Site 1 and 3 would be redeveloped with two new mixed-se buildings that would accommodate additional commercial uses and residential uses. The retail stores on the Projected Development Site 2 would expand to its full commercial FAR allowed in the proposed R7A/C2-4 zoning district. The land use in the study area includes residential, commercial and community facility uses, including an library and public school nearby. Therefore, the Proposed Actions would not be generate land uses that would be incompatible with the land uses in the study area and would not adversely affect the viability of conforming uses on nearby properties. No significant adverse impacts would occur within the secondary study area in accordance with the criteria set forth in the 2021 CEQR Technical Manual.

In the 2026 future with the Proposed Actions, the proposed zoning map amendment and zoning text amendment would result in changes to zoning within the primary study area. The proposed zoning district and commercial overlay-- R7X/C2-4 would continue to permit residential, community facility, and commercial uses which are compatible with the uses in the Study Area's existing zoning districts. East and north of the Project Area is an R7A contextual district with C2-3 commercial overlay. Compared to the R7A district, the proposed R7X district would allow higher residential and community facility densities within the primary study area while the proposed C2-4 commercial overlay would reduce the parking requirements compared to the parking required under C2-3 zoning district. The R7A district would be contextual residential zoning district that would mandate Quality Housing height and setback regulations. The contextual requirements of the proposed R7A district would require new development to be built to the street line and limit building height to 95 feet. Although the Proposed Actions would permit greater density than what is allowed under existing R6B/C2-3 zoning district along Kings Highway, the primary study area is well-suited for additional density given that Project Area is near public transportation and Stillwell Avenue is considered a Major Street, Kings Highway and Quentin Road are considered wide streets. In addition, no non-confirming uses would be created by the Proposed Actions.

Public Policy

The Proposed Actions would facilitate future citywide goals of building new housing and increasing the availability of income restricted housing units and ground floor retail commercial development that serve the community within Transit Zones. The proposed zoning text amendment would mandate the provision of income restricted housing within the primary study area in the 2026 future with the Proposed Action. The Proposed Actions would only apply to the primary study area and would not affect properties in the surrounding study area. Therefore, no potential significant adverse impacts related to public policy are anticipated to occur within the study area because of the Proposed Actions, and further assessment of public policy is not warranted. For these reasons, the Proposed Actions would not result in any adverse impacts related to land use, zoning, or public policy.

166 Kings Highway, Brooklyn

Figure 1: Site Location

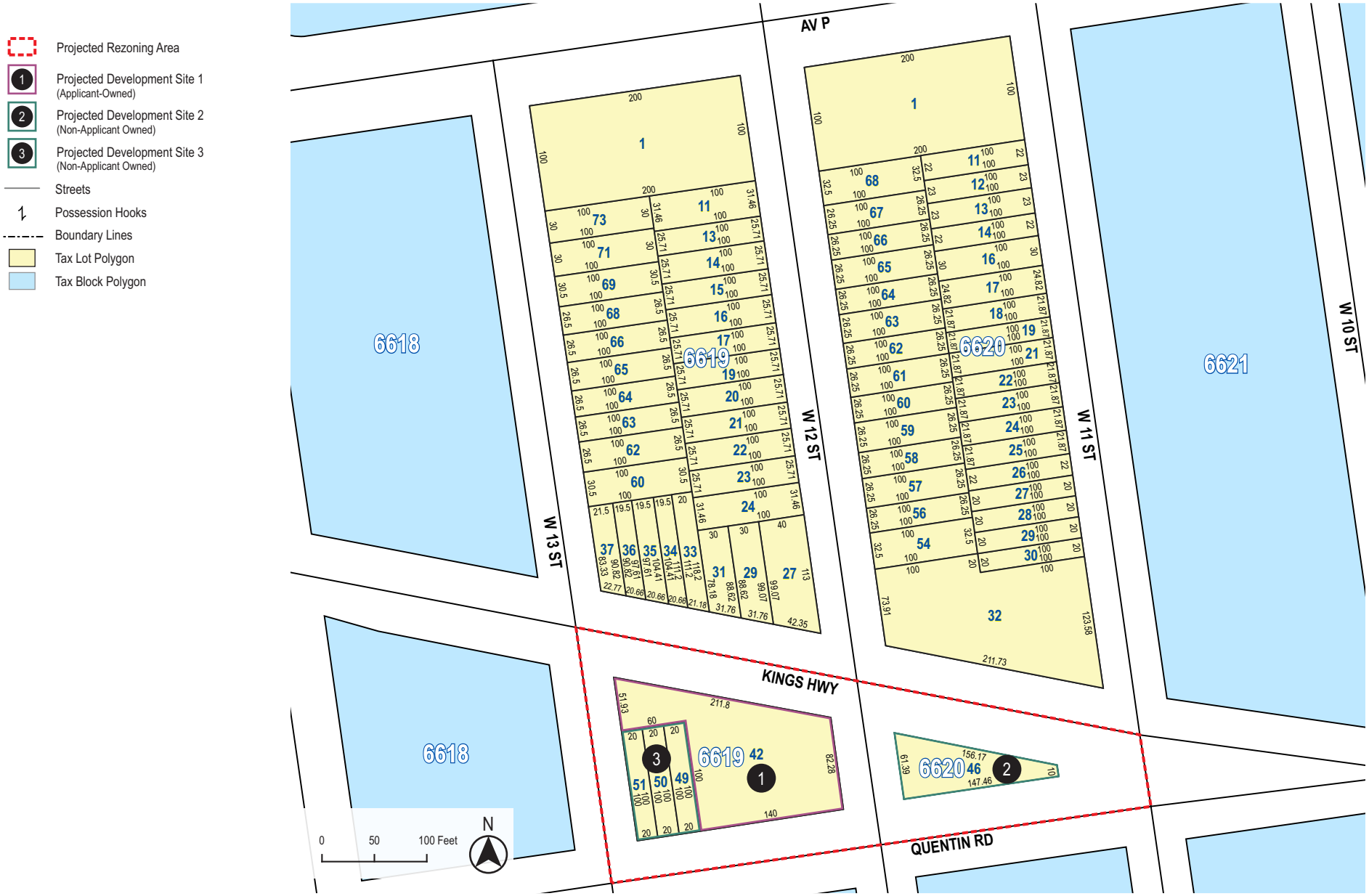


Data Source: NYC DOF Digital Tax Map 3/1/23

Urban Cartographics

166 Kings Highway, Brooklyn

Figure 2: Tax Map

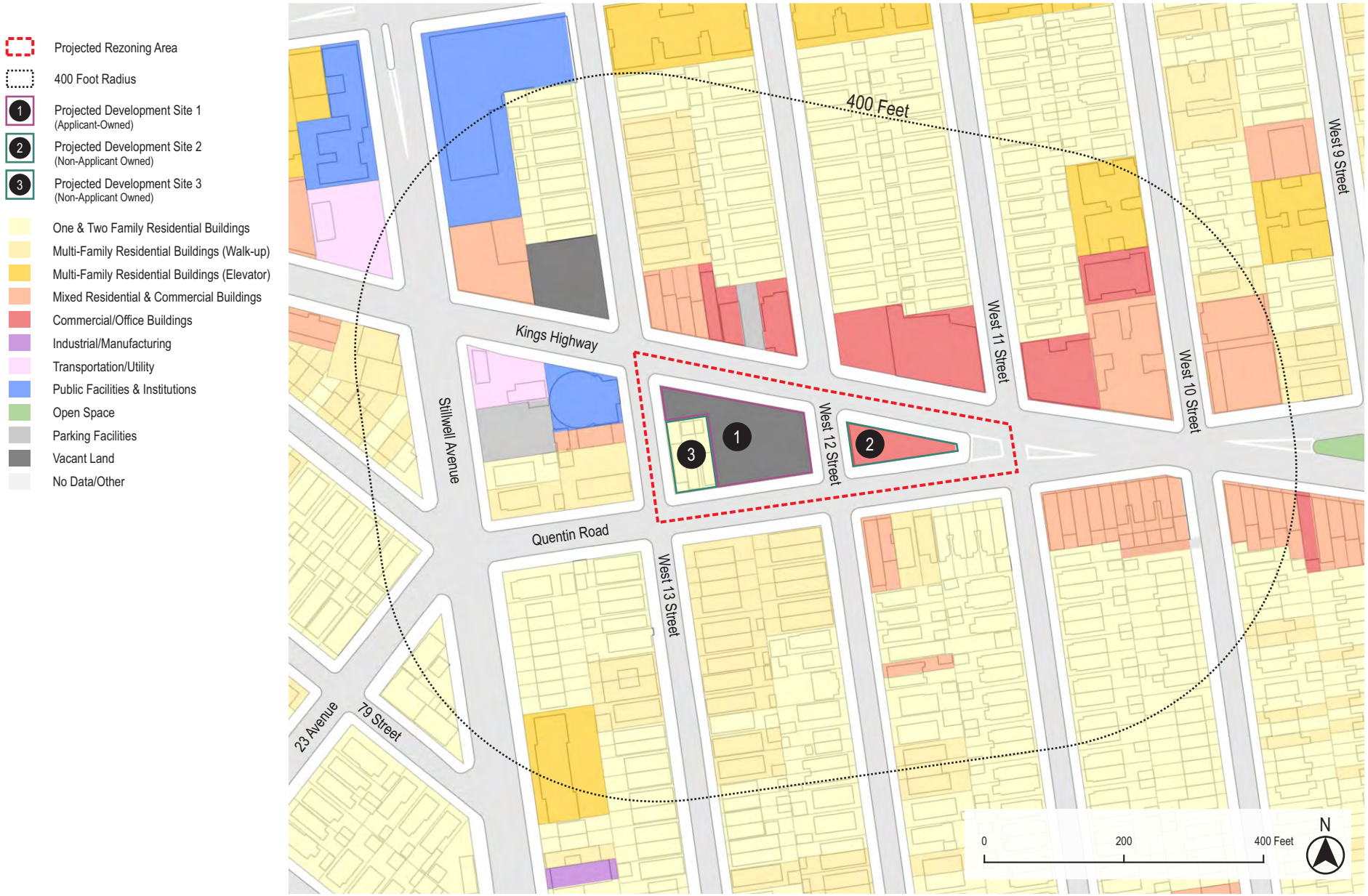


Data Source: MapPLUTO 2023v1, NYC DOF Digital Tax Map 3/1/23

Urban Cartographics

166 Kings Highway, Brooklyn

Figure 3: Land Use Map



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

Urban Cartographics

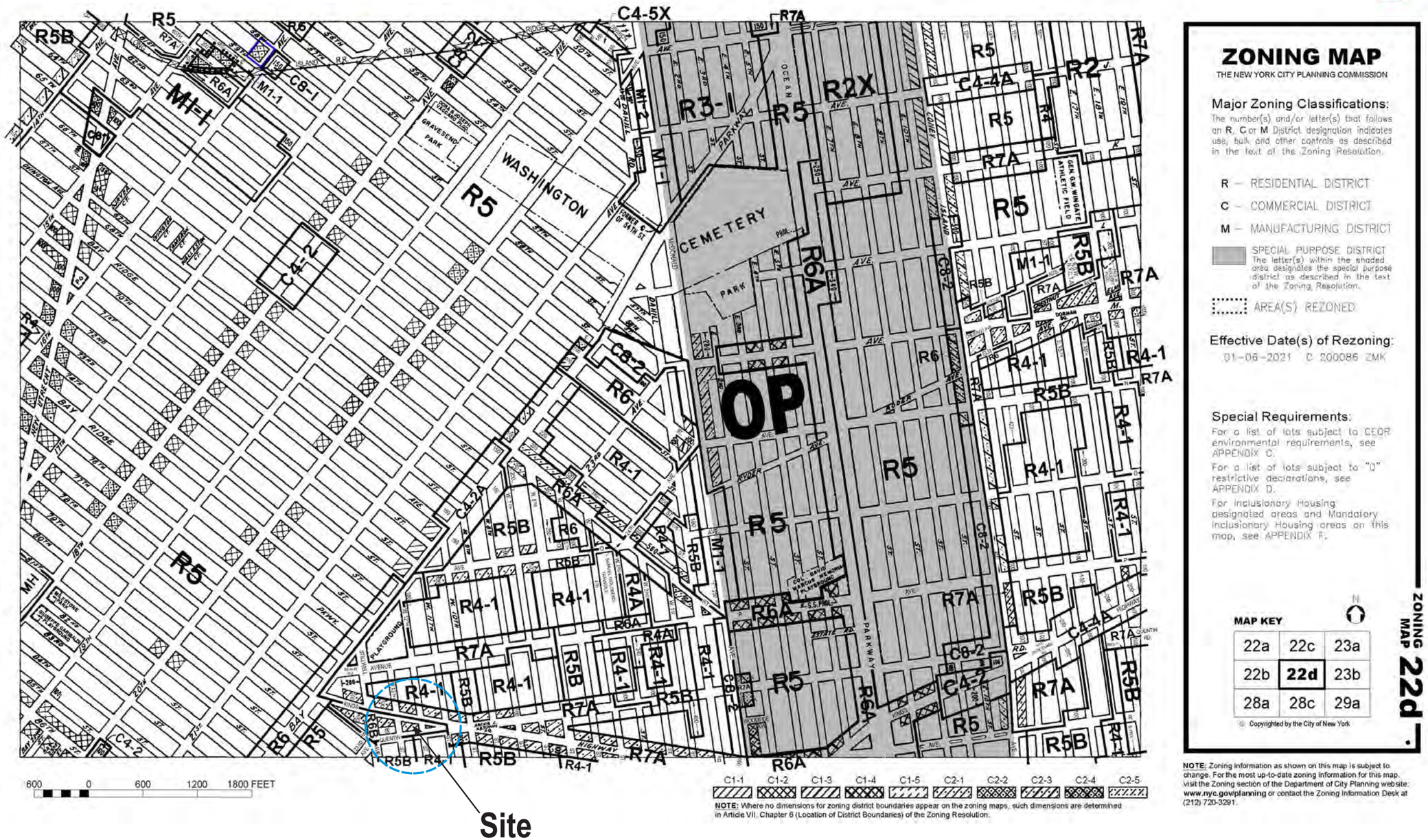
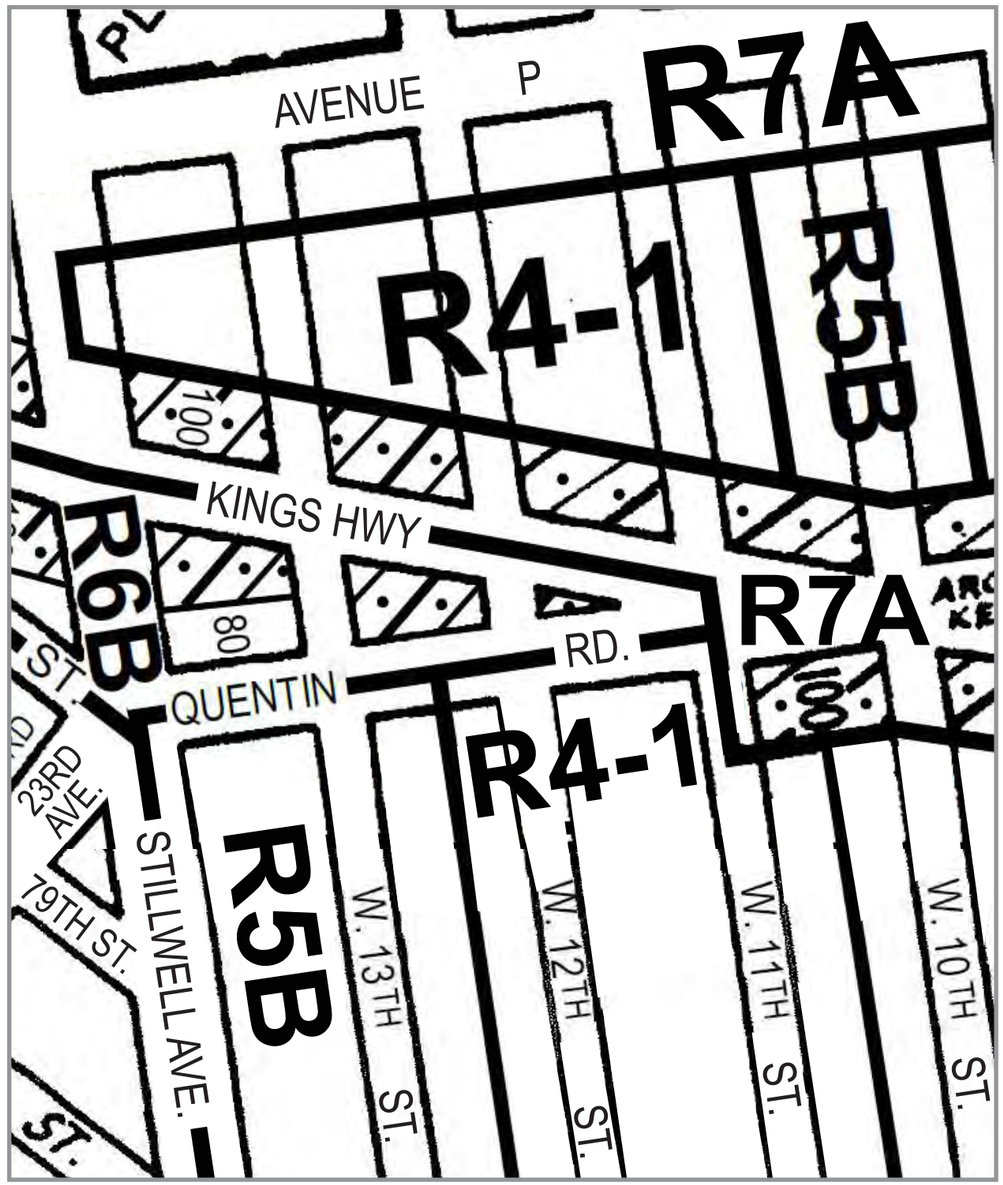
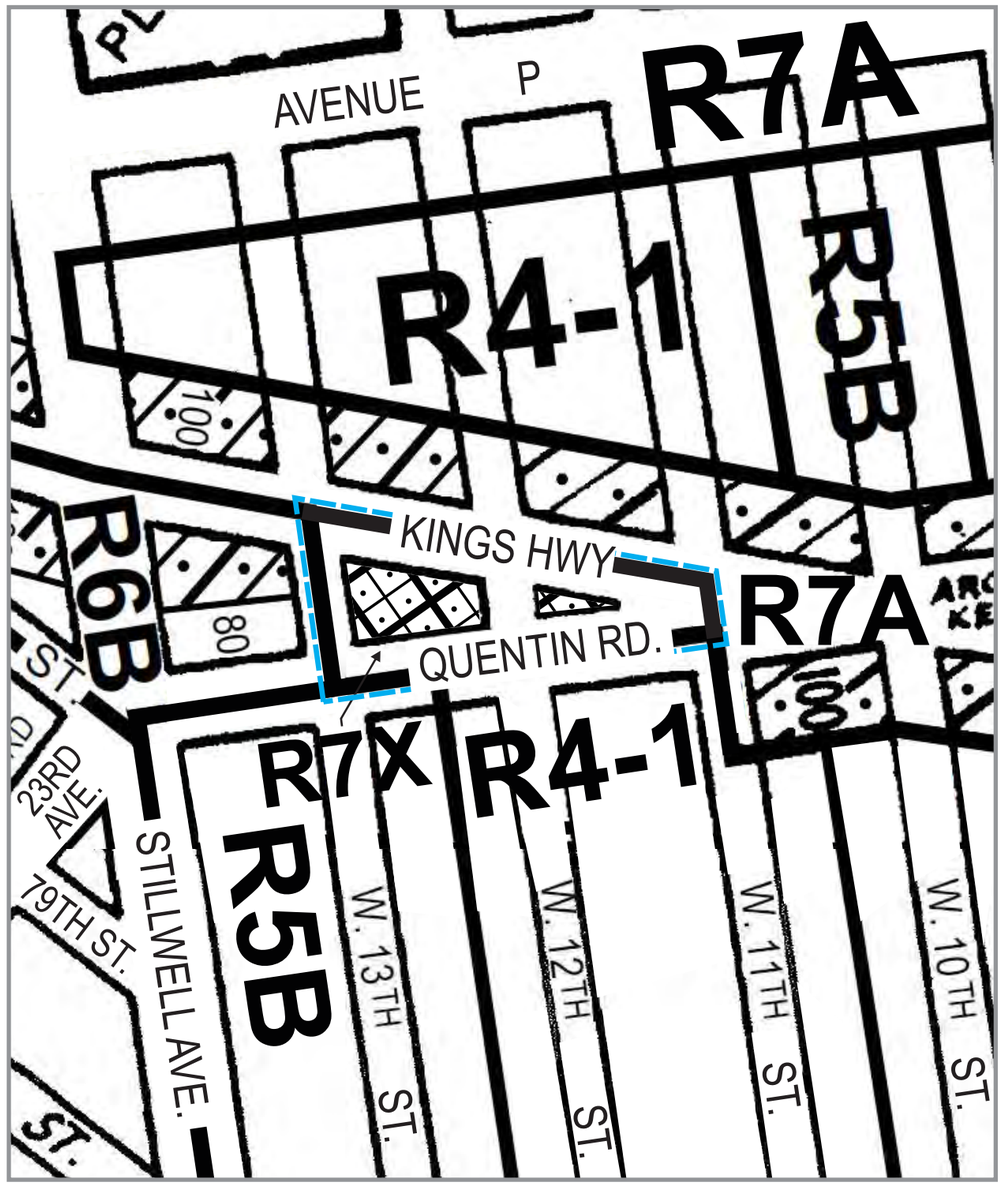

ZONING MAP
THE NEW YORK CITY PLANNING COMMISSION
Major Zoning Classifications:
The number(s) and/or letter(s) that follows an R, C or M District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.
R – RESIDENTIAL DISTRICT
C – COMMERCIAL DISTRICT
M – MANUFACTURING DISTRICT
SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.
AREA(S) REZONED
Effective Date(s) of Rezoning:
01-06-2021 C 200086 ZMK
Special Requirements:
For a list of lots subject to CEQR environmental requirements, see APPENDIX C.
For a list of lots subject to "D" restrictive declarations, see APPENDIX D.
For Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas on this map, see APPENDIX F.
MAP KEY
22a 22c 23a
22b 22d 23b
28a 28c 29a
© Copyrighted by the City of New York
ZONING MAP 22d
NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: www.nyc.gov/planning or contact the Zoning Information Desk at (212) 720-3291.
600 0 600 1200 1800 FEET
C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5
NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.
Site

Figure 4b - Proposed Zoning Map

Existing Zoning



Proposed Zoning



The proposed rezoning would map a new R7X district that would encompass all of Blocks 6619 & 6620. The existing C2-3 commercial overlays mapped over the blocks would be changed to C2-4 commercial overlays.

2. OPEN SPACE

INTRODUCTION

According to the 2021 City Environmental Quality Review (CEQR) Technical Manual guidance, open space is defined as publicly or privately-owned land that is publicly accessible and has been designated for leisure, play, or sport; or land that is set aside for the protection and/or enhancement of the natural environment. Under CEQR, an open space analysis is conducted to determine whether a Proposed Actions would have either a direct impact resulting from the elimination or alteration of open space or an indirect impact resulting from overtaxing the use of open space. The analyses focus on officially designated existing or planned public open space. Open space may be public or private and may include active and/or passive areas. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns, and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation with benches, walkways, and picnicking areas. Certain spaces such as lawns can be used for both active and passive recreation.

Open space analyses may be necessary when an action would potentially have a direct or indirect effect on open space. According to the 2021 CEQR Technical Manual, a proposed project would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As (1) there are no publicly accessible open space resources located within the Proposed Rezoning Area, and (2) the Proposed Actions would not result in significant adverse shadow, air quality, noise, or construction impacts on area open space resources, the Proposed Actions would not have any direct effects on open space resources and no further analysis is warranted.

Based on *CEQR Technical Manual* criteria, indirect effects may occur when the population generated by the proposed project overtaxes the capacity of existing open spaces so that their service to the future population of the affected area would be substantially or noticeably diminished. For the majority of projects, an assessment is conducted if the proposed project would generate more than 200 residents or 500 nonresidents (e.g. workers, visitors, etc). However, the need for an open space assessment may vary in certain areas of the city that are considered either underserved or well-served by open space. The RWCDS established for the Proposed Actions includes two mixed-use (commercial/residential) developments with a total of 172 dwelling units including a net increase of 125 dwelling units when compared to the No-Action Scenario. The RWCDS projected an incremental increase of an approximately 368 residents which exceeds the preliminary screening threshold of 200 residents. Therefore, a preliminary quantitative analysis of indirect open space impacts is warranted.

As part of the preliminary assessment for Open Space, a project should be reviewed to determine if it is located in an area of the city identified as a “Walk to a Park Service Area”. A “Walk to a

Park Service Area" is a component of *OneNYC 2050 building a Strong and Fair City* Plan, in which New York City has laid out a goal for 85% of New York City residents living within a walking distance of a park by 2030. The Project Area locating within a Walk to a Park Service Area meaning the Project Area is located within a walking distance to a park and is not located in "walk gaps" (areas not within walking distance to a park).

PRELIMINARY ASSESSMENT

The preliminary calculates the percentage change in the open space ratio between the No-Action condition and the future With-Action condition. The results of the preliminary assessment is used to determine if a detailed open space is necessary. Based on the calculation of the ratio of publicly accessible open space acres to the study area population, a determination of the adequacy of open space resources in the study area was quantified. If the open space ratio increases or remains the same in the With-Action condition compared to the No-Action Condition, no further analysis of open space is needed. Projects expected to result in a decrease in the open space ratio would warrant a more detailed analysis. For projects in study areas where the open space ratio is not near the City's planning goal of 2.5 acres per 1000 residents, the percentage decrease in open space ratio is weighed against how the open space ratio of the study area compares to the City's planning goal for open space.

The *CEQR Technical Manual* (Table 7-1 below) provides general guidelines for ranges of open space ratios and tolerated percentage changes. Projects which result in a percentage change greater than the guideline for the range of calculated open space ratio may warrant a more detailed analysis.

Table 7-1
Preliminary Assessment – Guidance for Percentage Change in Open Space Ratio

Open Space Ratio Range	Percentage Change in Open Space Ratio
2.01 to 2.50* or greater	5%
1.51 to 2.00	4%
1.01 to 1.50	3%
0.51 to 1.00	2%
0.50 or Less	1%
*2.5 OSR is the planning goal in NYC	

The *2021 CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would decrease the open space ratio substantially, thereby reducing the availability of open spaces for an area's population. For this study area that has an open space

ration of less than 0.50, a decrease in the open space ratio of one percent or more is generally considered to be a significant adverse impact on open space resources.

Existing Conditions

The study area population was estimated using data from the 2020 U. S. Census ACS Data for the census tracts located fully or at least 50 percent within the one-half mile study area. As shown in Table 2-1, in 2020 the study area contained a total of 60,711 residents within the 15 relevant census tracts. To determine the current population for the year of 2023, a conservative background growth rate of one percent was applied per year based on the average growth rate of the years between the 2010 census (55,275) and 2020 census (60,711) for the relevant census tracts. This results in a 2023 population of 62,551.

Table 2-1 Study Area Population

Census Tract	2020 Population
270	2,719
272	3,633
268	4,686
290	4,377
296	5,993
298	3,955
404	2,812
406	3,566
408	3,933
424	4,175
426	4,350
428	4,290
430	3,842
432	4,514
434	3,866
Study Area Total	**60,711**
Background Growth (2020-2023)	1,840
2023 Study Area Population	**62,551**

https://popfactfinder.planning.nyc.gov/#13.82/40.63945/-73.99458

Within the census tracts that are fully or at least 50 percent within this area, there is one publicly accessible facility – Seth Low Playground/Bealin Square. **(See Figure 2-1, Open Space Facilities and Census Tracts and Table 2-2, Inventory of Open Space Resources)** This publicly owned and accessible facility provides 4.95 acres of open space resources within the ½ mile radius project study area. Therefore, the existing open space ratio is 0.0791.

Table 2-2 Inventory of Open Space Resources

Map Key	Open Space Resource Name	Park ID	Total Size (Acres)
1	Seth Low Playground/Bealin Sq	B100	4.95
TOTAL			**4.95**

Future No-Action

To calculate the population in the 2026 analysis, the as-of-right development (41 units, 121 residents), No-Action Project (10 units, 30 residents) and the same background growth rate of one percent was applied to the Existing Condition population of 62,551. This would result in a 2026 population of 64,597. No new public facilities are assumed for the 2026 analysis year. Therefore, with a 2026 No-Action population of 64,597 and 4.95 acres of open space resources, the Future No-Action Scenario would result in an open space ratio of 0.0766.

Future With-Action

In the Future with the Proposed Actions, the net increase of 125 dwelling units from the proposed development is expected to generate approximately 368 new residents based on the average household size of 2.94 persons per household for Brooklyn Community District 11, in which the Project Area is located. Adding these 368 residents to the Future No-Action population of 64,597 residents would result in a total population of 64,977. No new publicly accessible open space and recreational resources are planned to be added to the study area by 2026. Therefore, in 2026 with the Proposed Actions, the project study area would contain approximately 0.0762 acres of open space resources, resulting a 0.585% decrease from the No-Action Open Space Ratio (0.0766). Based on the CEQR Technical Manual (Table 7.1) threshold for a detailed analysis, for a study area with an open space ratio of 0.50 or less, a one percent decrease in the overall open space ratio would require further analysis. The percentage change caused by the Proposed Actions is less than one percent, therefore a more detailed analysis is not warranted.

Table 2-3: Existing, Future No-Action and Future With-Action Open Space Ratios

	Existing Conditions (2023)	Future No-Action Scenario	Future With-Action Scenario	Percentage change in open space ratio
Open Space (Acreage)	4.95	4.95	4.95	
Study Area Population	62,551	64,597	64,977	
Open Space Ratio (acres/1,000 Residents)	0.0791	0.0766	0.0762	-0.5848

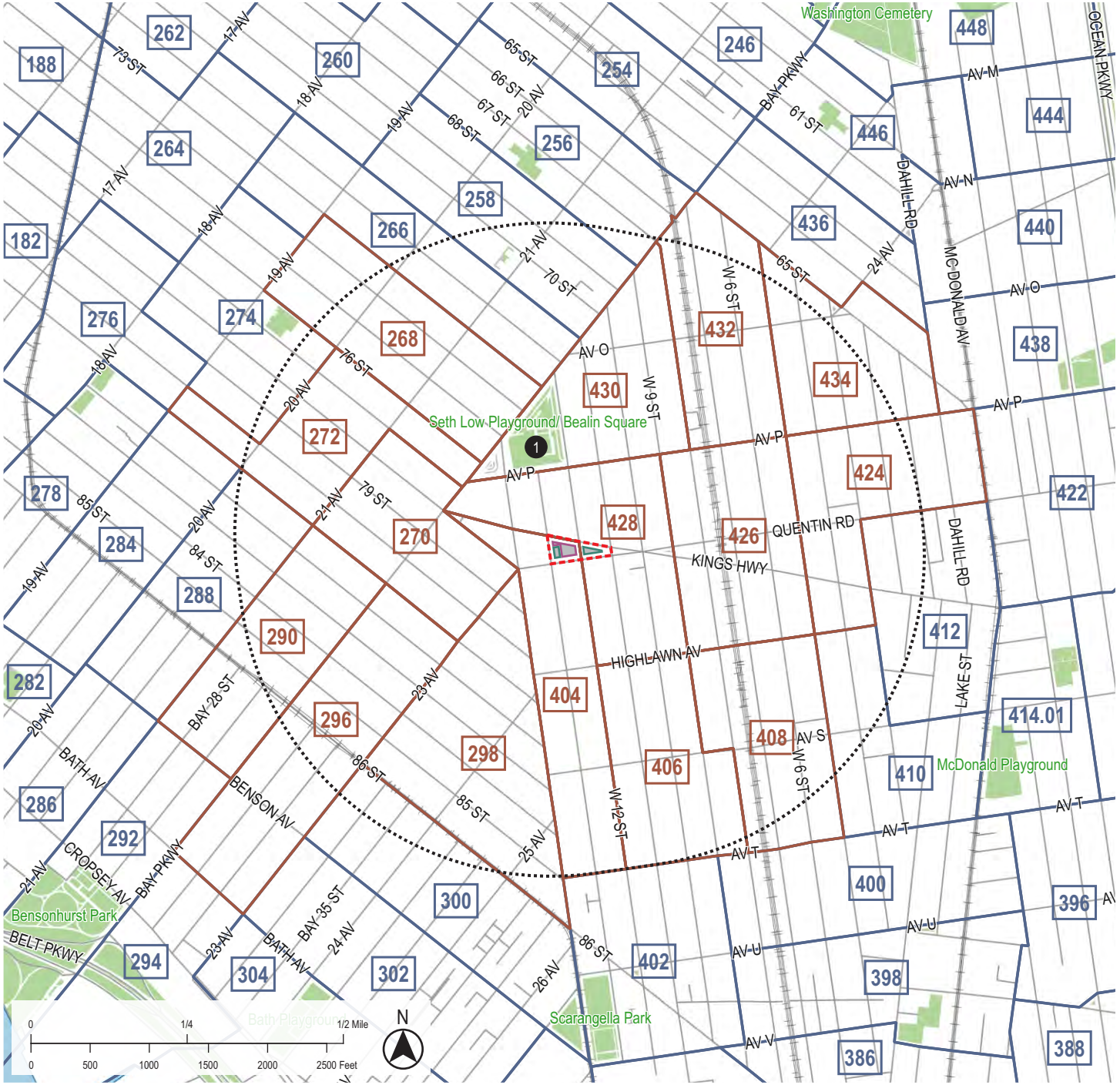
CONCLUSION

In the future with the Proposed Actions, the study area's open space ratio would decrease by 0.5% which is less than the threshold of one percent suggested in the CEQR TM for detailed analysis for project with open space ratio of 0.5 or less. Due to small decrease in the future with the action open space ratio, the project would not have any potentially significant adverse open space impacts and further assessment is not warranted. No significant adverse impacts associated with open space would occur because of the Proposed Actions.

166 Kings Highway, Brooklyn

Figure 2-1: Open Space Facilities and Census Tracts

- Proposed Rezoning Area
- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- 1/2-Mile Study Area
- Census Tract Boundaries
- 123 — 50% or More of Census Tract Within Study Area
- 123 — Less Than 50% of Census Tract Within Study Area
- 1 — Open Space Resources (see Table 7-1)



Urban Cartographics

166 Kings Highway, Brooklyn

Figure 2-2: Walk to Park Service Areas

- Proposed Rezoning Area
- Projected Development Sites (Applicant-Owned)
- Projected Development Sites (Non-Applicant-Owned)
- 1/2-Mile Study Area
- Walk to Park Service Area



Urban Cartographics

3. SHADOWS

INTRODUCTION

According to *2021 CEQR Technical Manual* , a shadow is defined as the circumstance in which a building or other built structure blocks the sun from the land. An adverse shadow impact is considered to occur when the shadow from a Proposed Development falls upon a publicly accessible open space, a historic landscape, or other historic resource if the features that make the resource significant depend on sunlight, or if the shadow falls on an important natural feature and adversely affects its uses or threatens the survival of important vegetation. In general, an adverse impact would occur if the incremental shadow would fall on a Sunlight-Sensitive Resource of concern and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use and enjoyment of the resource or threatening the viability of vegetation or other resources. Finally, the determination of whether the impact of new shadows on an open space or a natural or historic resource would be significant is dependent on their extent and duration. In general, shadows on City streets and sidewalks or on other buildings are not considered significant under CEQR. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under CEQR.

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

ANALYSIS FRAMEWORK

The Proposed Actions would facilitate a new 10-story mixed-use building. Under the RWCDS, a 120,233 gsf, 120-foot-tall, 12-story mixed-use building would be development on the Projected Development Site 1 and a 36,900 gsf, 120-foot-tall, 12-story building would be developed on Projected Development Site 3 while the Projected Development 2 would be redevelopment with a 11,978 gsf, 24-foot-tall, 2-story commercial building. Since the maximum height permitted for Quality Housing within an MIH area is 14 stories with a maximum height of 145 feet in the proposed R7X zoning district, the shadows analysis analyzed the maximum height of 145 (170 feet with bulkhead) for the purpose of a conservative analysis.

Although the maximum height permitted for Quality Housing within an MIH area is 14 stories and 145 feet, 120 feet is the height the building would reach if the FAR is maxed out at 6.0. For the shadow analysis, to analyze the RWCDS, the maximum permitted height of 145 feet is analyzed, which could reach a maximum rooftop height above the bulkheads of 170 feet.

Based on CEQR Technical Manual guidelines, the longest shadow that any building would cast during the year (except within an hour and a half of sunrise or sunset which is not deemed to be of concern) is 4.3 times its height. Applying the 4.3 factor to the proposed maximum rooftop height of 170 feet would result in a maximum shadow distance of approximately 731 feet.

PRELIMINARY SCREENING ASSESSMENT

Tier 1 Screening Assessment

Within the vicinity of the Proposed Development, there is one historic resource and one shadow sensitive open space resources in the vicinity of the Proposed Development site as shown on the attached **Figure 1: Tier 1 Screening Assessment diagram**. The shadow sensitive resources include the following:

- *Highlawn Branch of the Brooklyn Public Library*, built in 1931, identified by New York State Cultural Resource Information System (CRIS) as an example of a Mid Century/Modern architecture. Its status is "eligible" for State/National Registry. This historic resource is labeled "1" on the attached **Figure 1, Tier 1 Screening Assessment diagram.**

- *Seth Low Playground/Beal Square (north of the Premises)* is located at the northwest intersection of Avenue P and West 12th Street, north of the Rezoning Area. It is approximately 4.95 acres and includes basketball and handball courts, a playground, and a scheduled mobile food truck. This park is labeled "2" on the attached **Figure 1, Tier 1 Screening Assessment diagram.**

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

Elevator bulkhead roof: 170'-0" x 4.3 = 731'

The longest shadow of 731 feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum proposed building height of 170 feet including elevator bulkheads on the roof of the proposed maximum 14-story building.

Due to the proximity of the Proposed Development site to the resources noted above (Highlawn Library and Seth Low Playground/Bealin Square), Tier 2 Screening Assessment is required.

Tier 2 Screening Assessment

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

The attached **Figure 2, Tier 2 Screening Assessment diagram** shows the area south of the Proposed Development site that cannot be shaded by the Proposed Development. As illustrated on the figure, no shadow sensitive resources are located within this area, therefore further assessment is required.

Tier 3 Screening Assessment

The Tier 3 screening assessment is used to determine if shadows resulting from the Proposed Development can reach a sunlight-sensitive resource. The screening assessment uses three-

dimensional computer modeling software with the capacity to accurately calculate shadow patterns.

A Tier 3 screening assessment was performed for the four representative days of the year set forth in the *CEQR Technical Manual*: December 21, the winter solstice and shortest day of the year; March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); and June 21, the summer solstice and the longest day of the year. The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset. In accordance with the *CEQR Technical Manual*, surrounding buildings are not included in the Tier 3 shadow assessment model.

A Tier 3 screening assessment was performed and as shown on the attached **Figures 3 through 6, Tier 3 Screening Assessment diagrams** shadows from the developments could not reach any part of Seth Low Playground/Bealin Square but would reach the Highlawn library.

As shown on the attached **Figures 7 through 11, Tier 3 Incremental Impact diagrams**, new shadows from the developments (shown in red) would reach the Highlawn library on all the analysis days.

Table 3-1 below presents the incremental shadows that would affect the open space resource on each of the four analysis days.

Table 3-1: Incremental Shadows

Analysis Day	December 21	March 21/ September 21	May 6 / August 6	June 21
Timeframe Window	8:51AM- 2:53PM	7:36AM - 4:29PM	6:27AM - 5:18PM	5:57AM- 6:01PM
1- Highlawn Library				
Shadow enter - exit times	8:15-10:03 AM	7:36-10:28 AM	6:27-9:59 AM	5:57-10:07 AM
Incremental shadow duration	1 hour, 48 minutes	2 hours, 52 minutes	3 hours, 32 minutes	4 hours, 10 minutes
Note: Daylight savings time not used.				

Highlawn Library

During the December 21st analysis day, the projected shadows would cover part of the building from 7:36-10:03 am (see **Figure 7**). During the March 21 analysis day, the projected shadow would cover most of the building from 7:36-10:28 am (**See Figure 8**). During the May 6th analysis day, the projected shadow would cover most of the building from 6:27-9:59 am (See **Figure 9**). During the June 21st analysis day, the projected shadows would cover various sections of the building from 5:57-10:07 am (see **Figure 10**). The celebrated architectural aspects of the building are the circular interior design, which is unaffected by shadows. The building does not include any sunlight sensitive stained glass, highly carved ornamentation or exterior materials and color that

depend on direct sunlight for visual character. Additionally, the library hours are between 10:00 am and 8:00 pm, resulting in most of the shadows ending before the library opens. As such, these shadows are minimal during the public's use and would not affect usage and or enjoyment. This was supported in the attached letter from the Landmarks Preservation Commission dated January 10, 2024.

Seth Low Playground/Bealin Square

No new shadows from the Proposed Development would reach the Seth Low Playground. As such, there is no risk to the viability of vegetation at the resource or to the public's use and enjoyment of the playground.

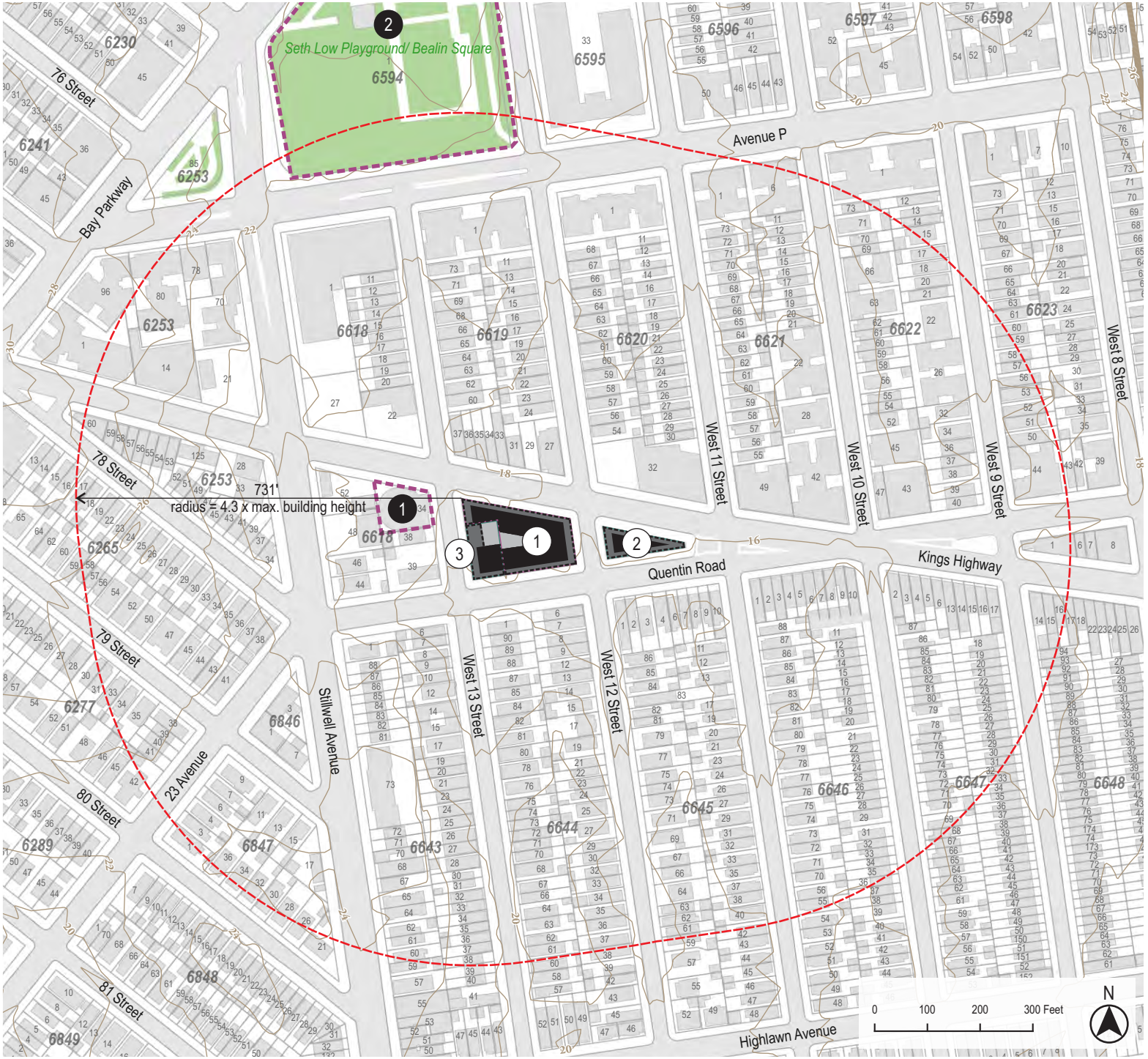
CONCLUSION

Although the RWCDS With-Action Scenario would project shadows on the library for several hours early in the day during all four analysis days, the celebrated architectural aspects of the building are the circular interior design, which would not be affected by the incremental shadows from the proposed developments. Highlawn Library does not include any sunlight sensitive stained glass, highly carved ornamentation or exterior materials and color that depend on direct sunlight for visual character; therefore, the incremental shadows introduced by the Proposed Actions won't affect its architectural design. Additionally, the RWCDS would not cast any new shadows on shadow sensitive open space (Seth Low Playground/Bealin Square). Therefore, no significant shadows impacts would result of the Proposed Actions, and no further assessment is needed for the project.

166 Kings Highway, Brooklyn

Figure 1: Tier 1 Screening Assessment

- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- Projected Building Footprint
- Roof Above Base Height (105')
- Roof Above Bulkheads (170')
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Resource
- Potentially Affected Sunlight-Sensitive Resource

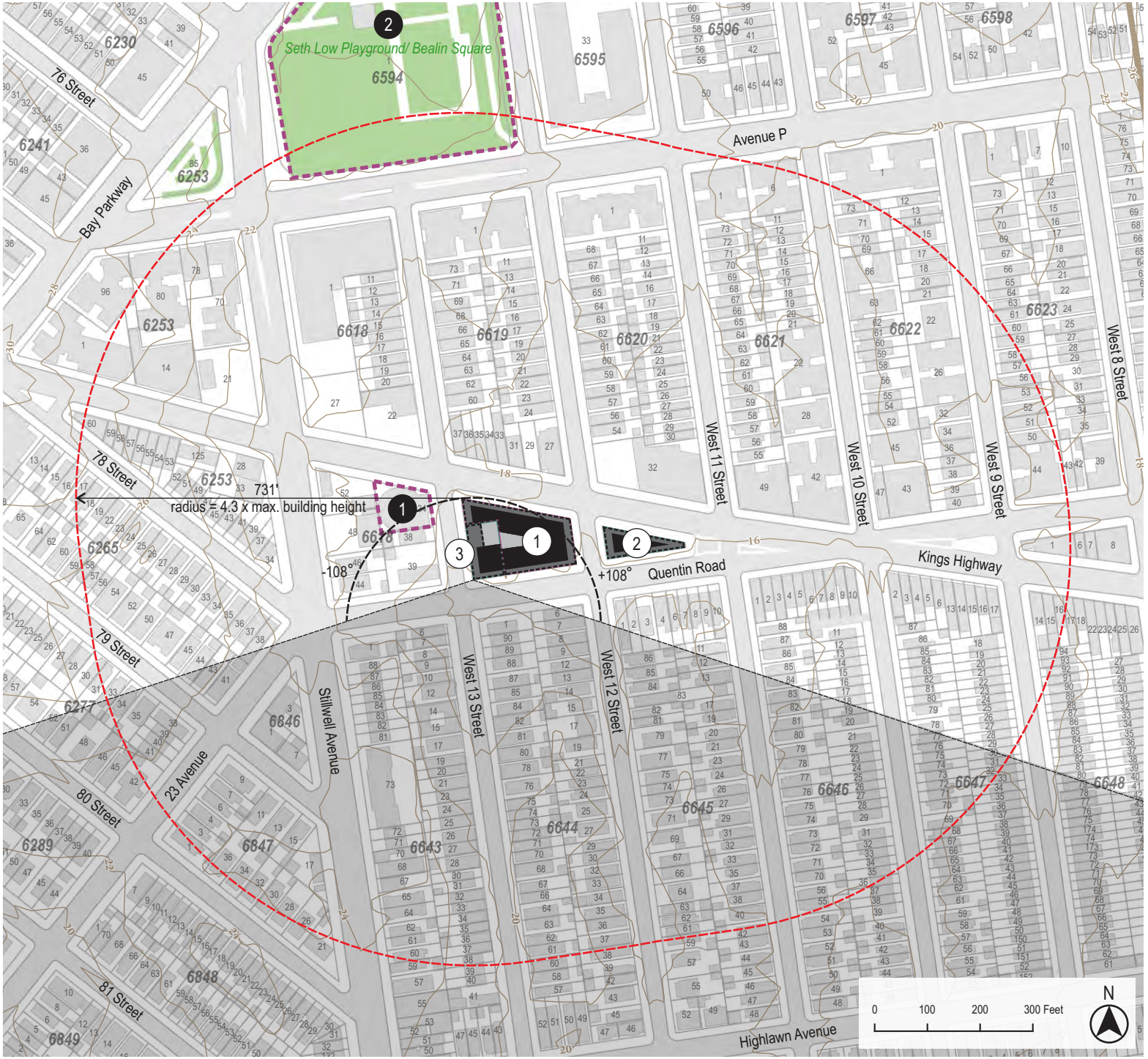


Urban Cartographics

166 Kings Highway, Brooklyn

Figure 2: Tier 2 Screening Assessment

- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- Projected Building Footprint
- Roof Above Base Height (105')
- Roof Above Bulkheads (170')
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Resource
- Potentially Affected Sunlight-Sensitive Resource
- Area That Cannot Be Shaded by the Proposed Building

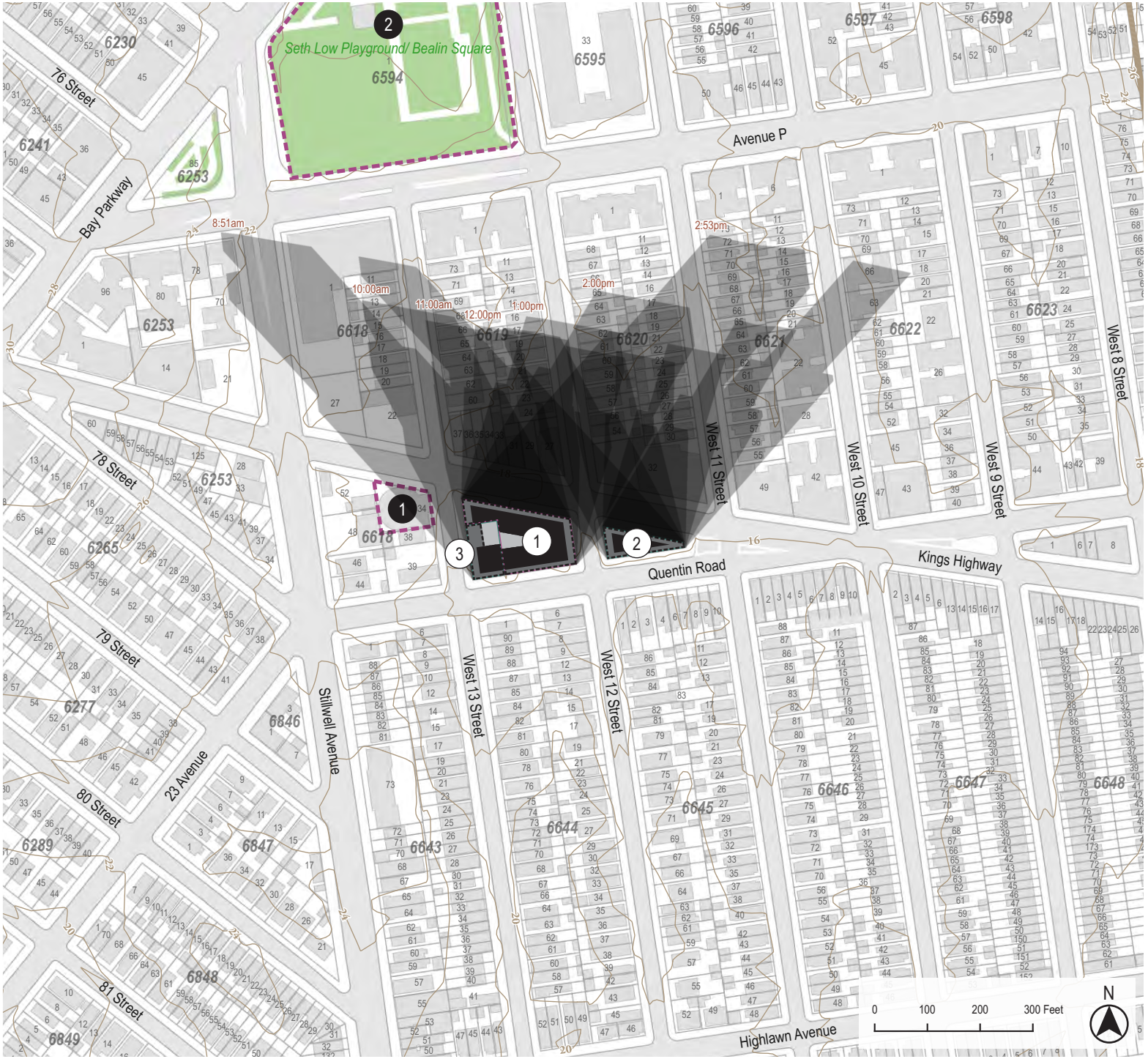


Urban Cartographics

166 Kings Highway, Brooklyn

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

- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- Projected Building Footprint
- Roof Above Base Height (105')
- Roof Above Bulkheads (170')
- 8:51am — Shadow Cast/Analysis Time
- # — Sunlight-Sensitive Resource
- Potentially Affected Sunlight-Sensitive Resource



Urban Cartographics

166 Kings Highway, Brooklyn

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

- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- Projected Building Footprint
- Roof Above Base Height (105')
- Roof Above Bulkheads (170')
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Resource
- Potentially Affected Sunlight-Sensitive Resource



Urban Cartographics

166 Kings Highway, Brooklyn

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

- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- Projected Building Footprint
- Roof Above Base Height (105')
- Roof Above Bulkheads (170')
- 8:51am — Shadow Cast/Analysis Time
- # — Sunlight-Sensitive Resource
- Potentially Affected Sunlight-Sensitive Resource



Urban Cartographics

166 Kings Highway, Brooklyn

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

- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- Projected Building Footprint
- Roof Above Base Height (105')
- Roof Above Bulkheads (170')
- 8:51am — Shadow Cast/Analysis Time
- # — Sunlight-Sensitive Resource
- Potentially Affected Sunlight-Sensitive Resource



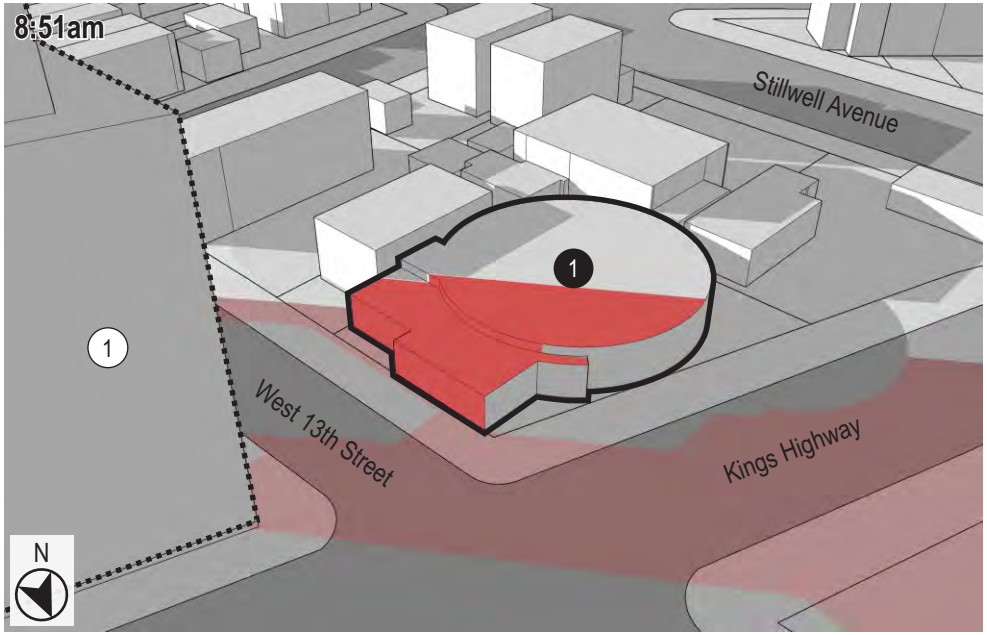
Urban Cartographics

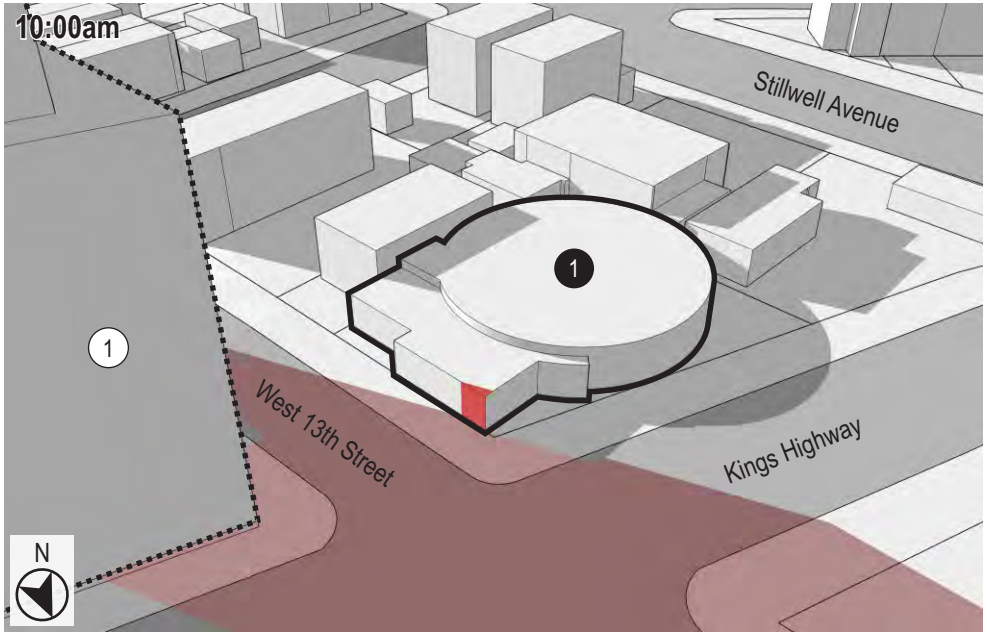
166 Kings Highway, Brooklyn

Figure 7: Detailed Analysis for the December 21 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources

1 8:51am – 10:03am

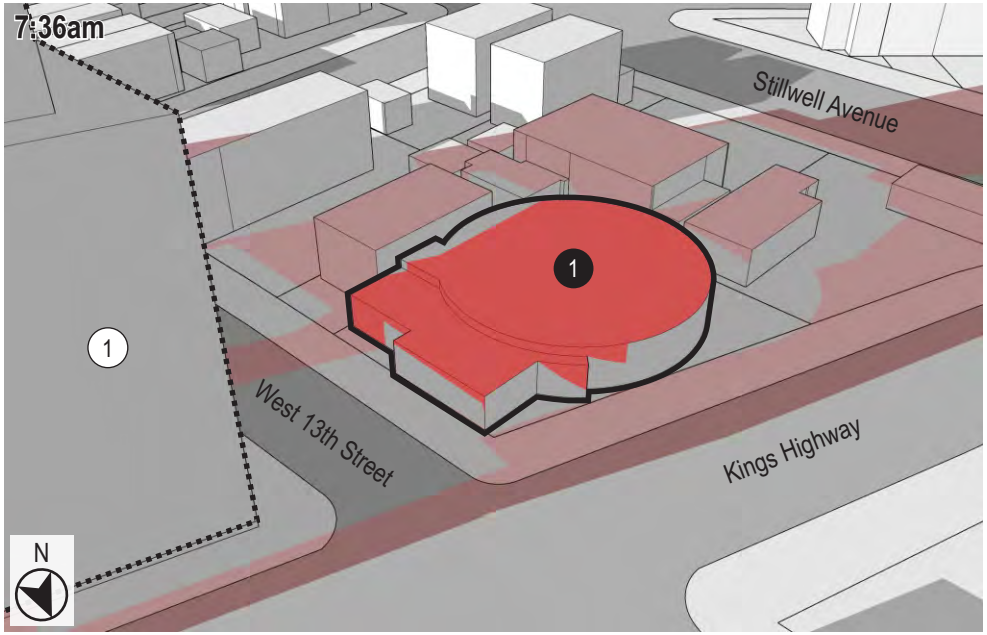


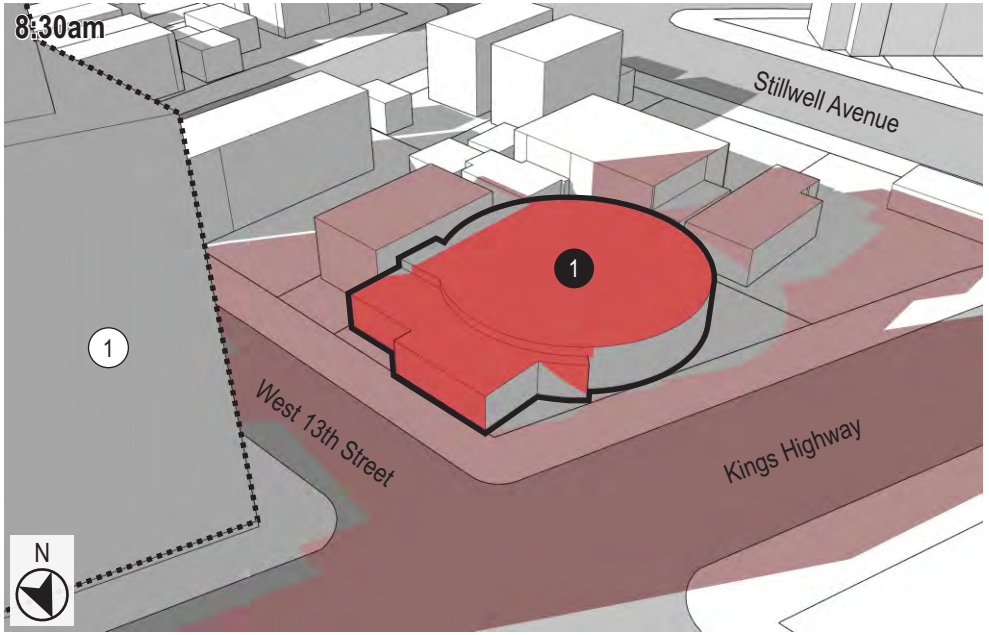


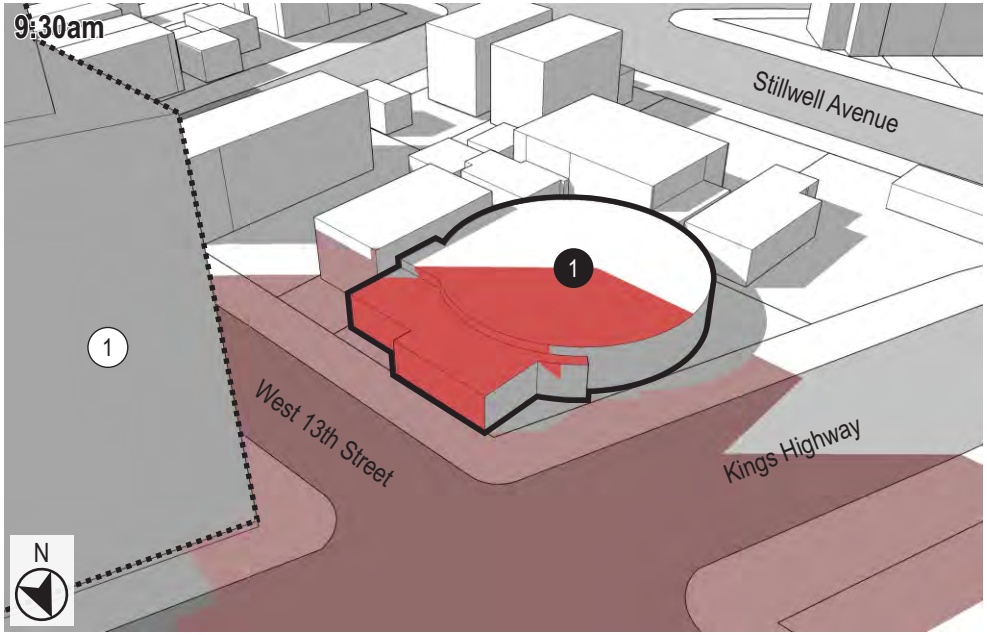
166 Kings Highway, Brooklyn

Figure 8: Detailed Analysis for the March 21 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources 1 7:36am – 10:28am





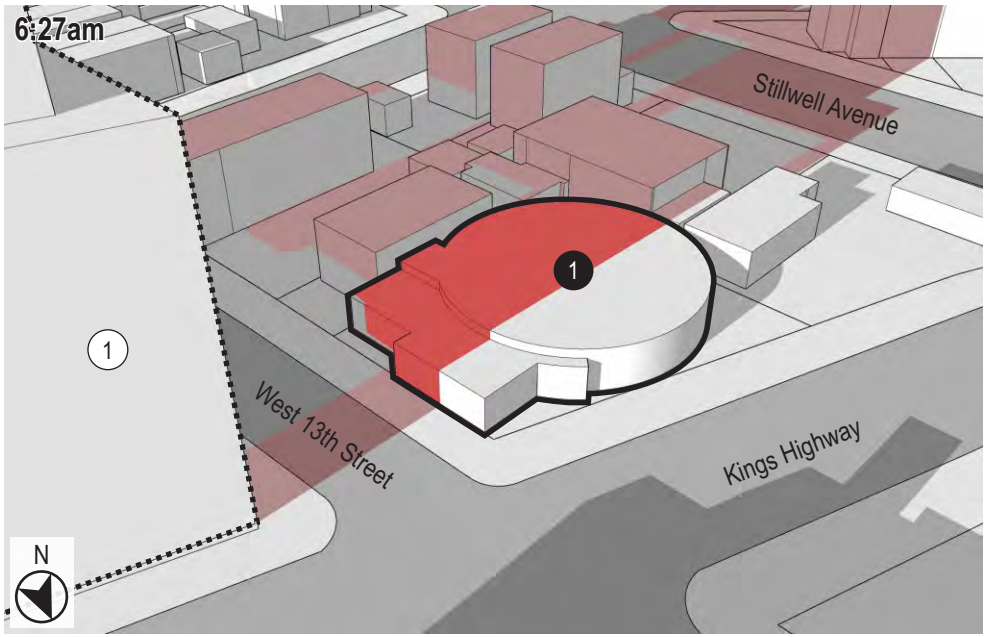


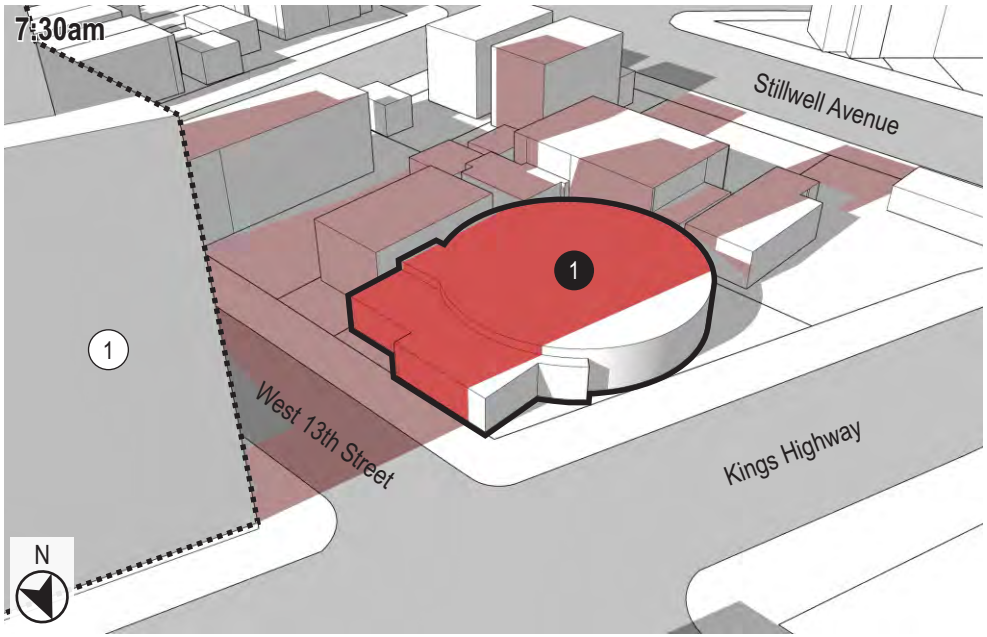
Urban Cartographics

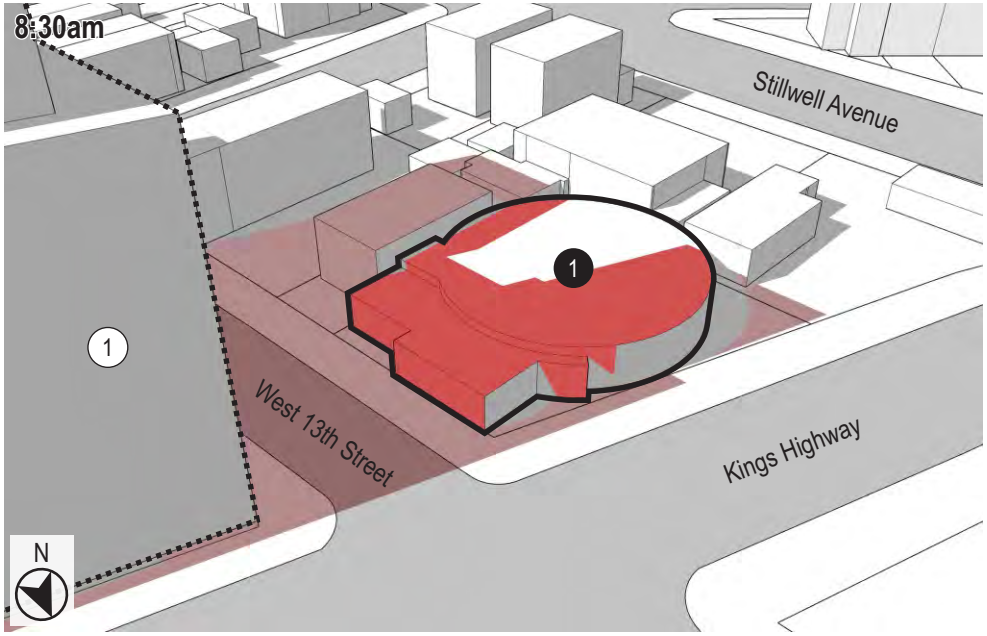
166 Kings Highway, Brooklyn

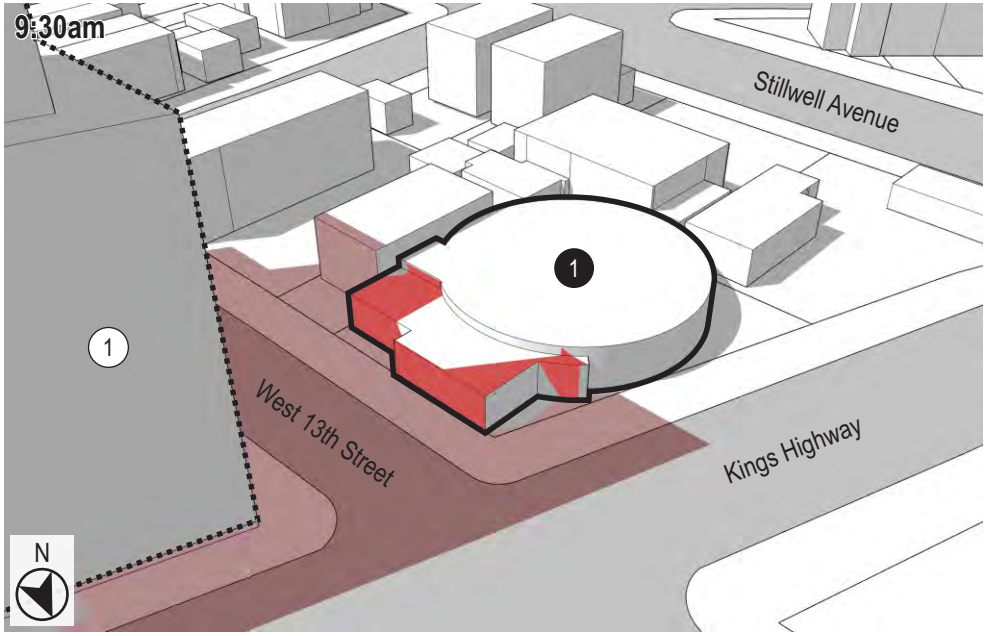
Figure 9: Detailed Analysis for the May 6 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources 1 6:27am – 9:59am







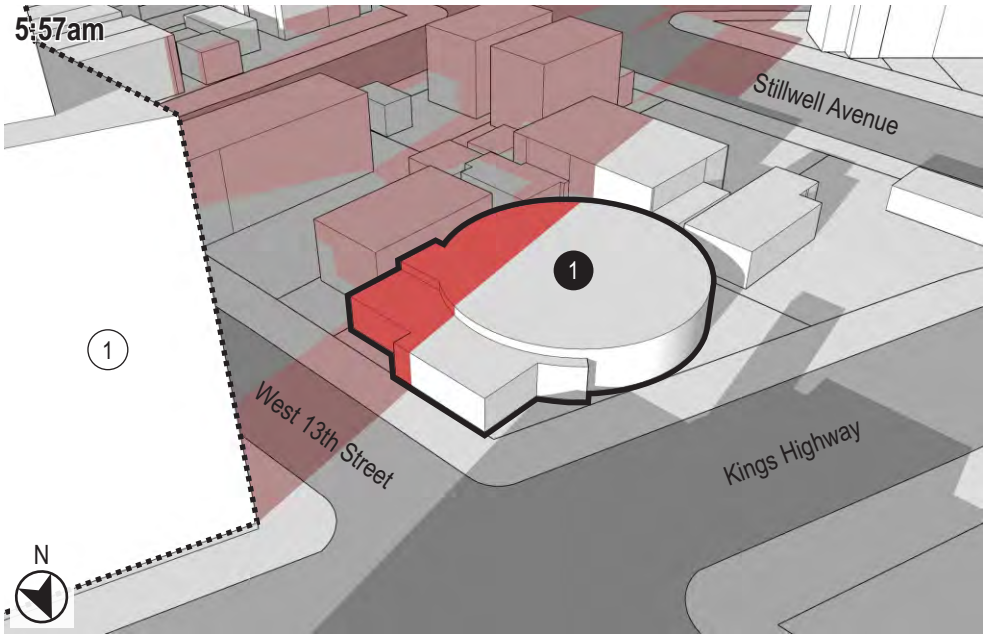


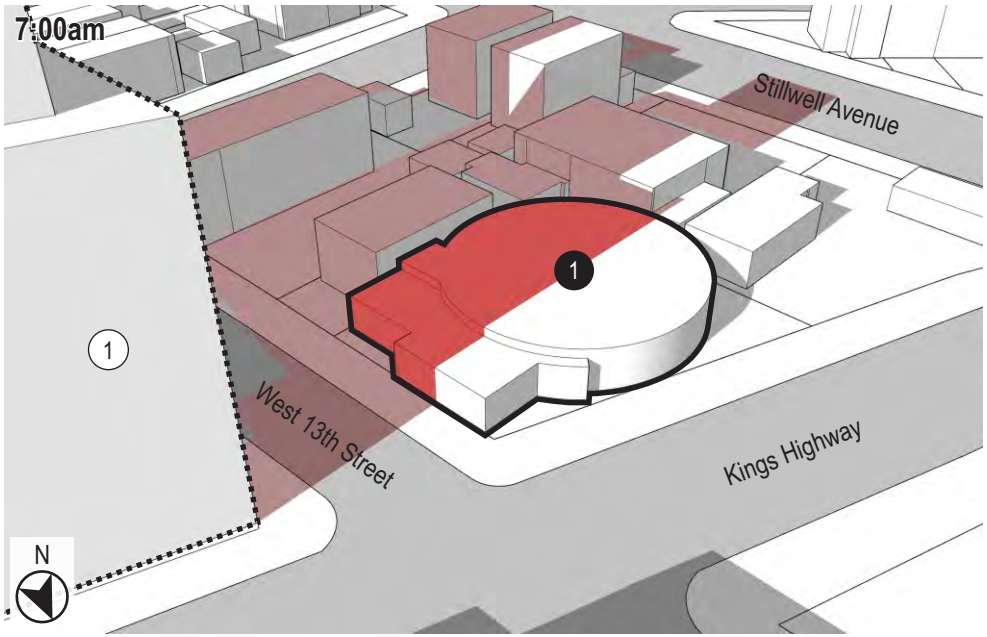
Urban Cartographics

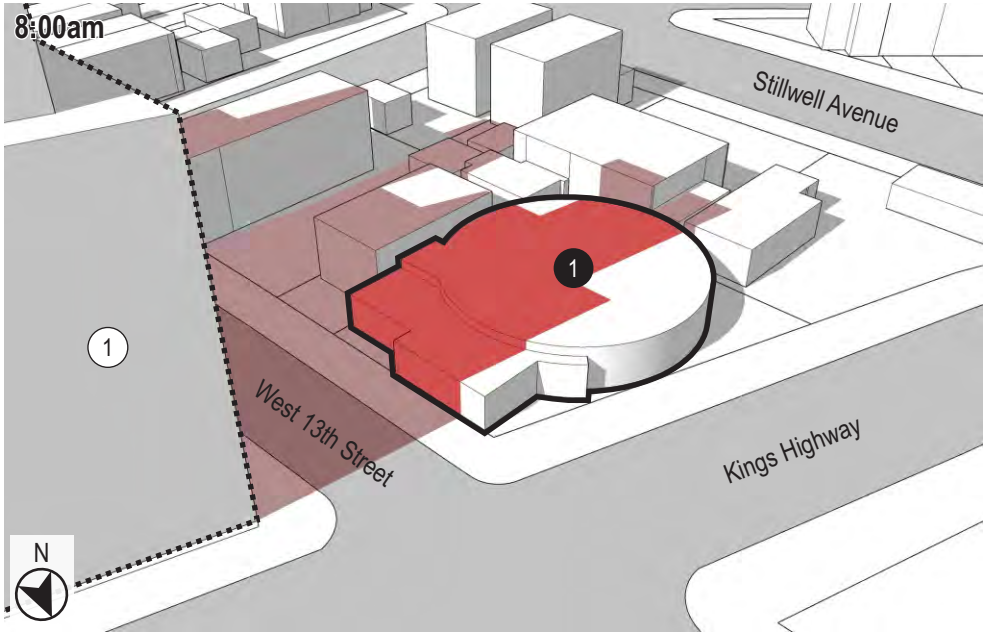
166 Kings Highway, Brooklyn

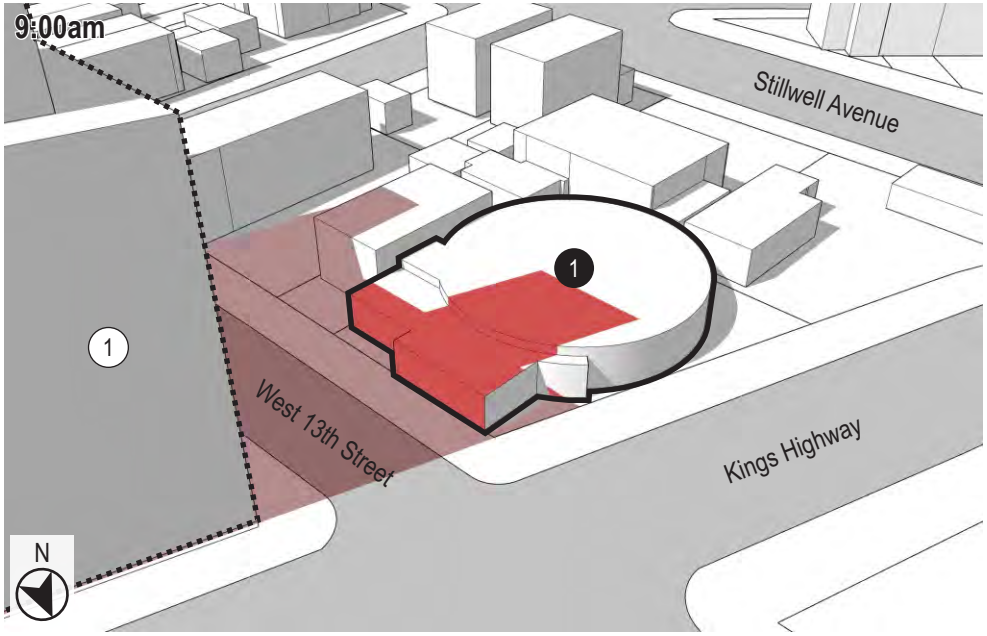
Figure 10: Detailed Analysis for the June 21 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources 1 5:57am – 10:07am





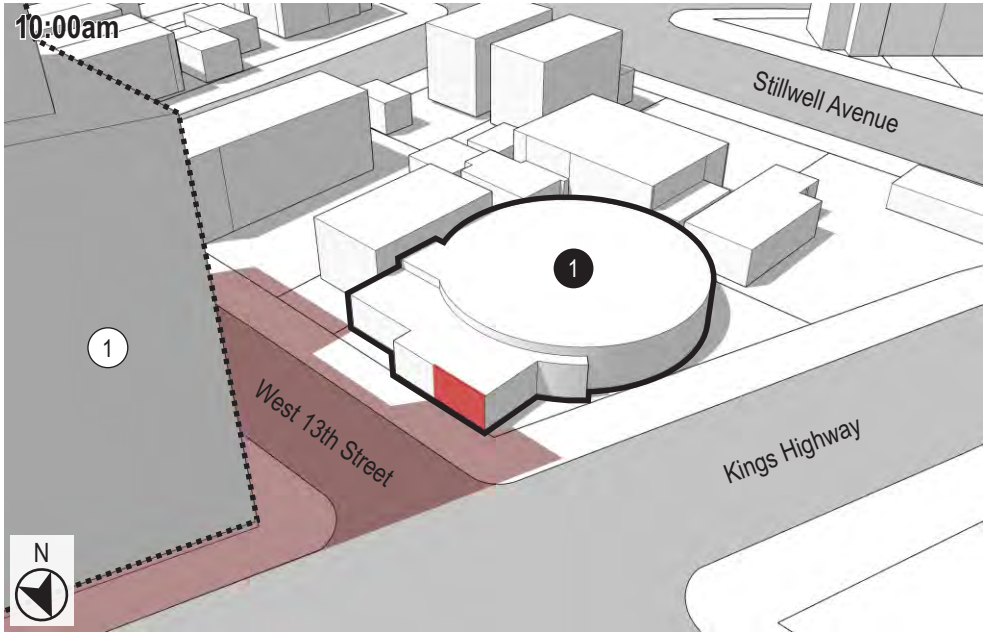




Urban Cartographics

166 Kings Highway, Brooklyn

Figure 11: Detailed Analysis for the June 21 Analysis Day



Shadows Cast on Sunlight-Sensitive Resources

1 5:57am – 10:07am

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 / 23DCP163K
Project: 166 KINGS HIGHWAY
Date Received: 1/10/2024

Comments:

LPC is in receipt of the revised EAS and Shadows Analysis dated December, 2023.

The analysis is acceptable for Historic and Cultural Resources. There are no additional concerns.

Gina Santucci

1/10/2024

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 36828_FSO_GS_01102024.docx

4. HISTORIC AND CULTURAL RESOURCES

INTRODUCTION

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

To assess the potential for historic and cultural resources impact, the study area has been defined as the area located within a 400-foot radius of the Rezoning Area, within which the Proposed Actions has the potential to affect historic and cultural resources. The 400-foot radius study area is bounded roughly by 120 feet north of Kings Highway to the north, 80 feet east of W11th Street to the east, 120 feet south of Quentin Road to the south and 90 feet west of W13th Street to the west.

According to *2021 CEQR Technical Manual,* a historic and cultural resources assessment is required if a project has the potential to affect either archaeological or architectural resources.

ASSESSMENT

Archaeological

Based on previous Certificates of Occupancy, previous buildings on Projected Development Site 1 contained cellars which would likely have disturbed any potential archaeological remains under the building. However, since the Proposed Actions would include 100 percent site coverage, the new developments would exceed the previous building footprint size and there would be additional disturbance in an area that has not already be excavated. Therefore, the New York City Landmarks Preservation Commission (LPC) has reviewed the site for potential impacts to archeological resources.

Architectural

Within the study area (400-feet radius), New York State Cultural Resource Information System (CRIS) has identified the Highlawn Branch of the NYC Public Library, built in 1931, as an example of a Mid Century/Modern architecture. Although not Listed on the Registry, its status is “eligible” for State/National Registry. The Highlawn Branch expanded from its storefront home, opened in 1949, to an adjacent store in 1956, and then to its current building in 1972. It features an interior circular main room with walls of glazed block in a variety of colors, a design departure for Brooklyn libraries. The Proposed Actions would have no impact on the eligibility of the library. The LPC has reviewed the site for potential impacts to architectural resources. And, although the Proposed Development would project shadows on the library for several hours early in the day, the library does not open until 10:00 am, therefore patrons would avoid most of the shadowed

times. In additional, the library does not have any sunlight sensitive features, such as stained glass, highly carved ornamentation or exterior materials and color that depend on direct sunlight for visual character.

The required documentation was forwarded to the LPC for their determination regarding the archaeological and architectural significance of the Applicant's Projected Development Site 1. In a letter dated January 11, 2023, the NYC LPC affirms that the proposed Rezoning Area has no architectural or archaeological significance. See **Appendix A**.

CONCLUSION

Based on the ground disturbance from previous developments on the site, the shadow analysis, and the NYC LPC determination, there is no potential for impacts related to architectural historic resources or archaeological historic resources because of the Proposed Actions and further analysis is not required.

166 Kings Highway, Brooklyn

Historical and Cultural Resources Map



Data Source: NYC DOF Digital Tax Map 3/1/23

Urban Cartographics

5. URBAN DESIGN AND VISUAL RESOURCES

INTRODUCTION

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

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

2. Projects that result in an increase in built floor area beyond what would be allowed 'as-of-right'.

The Applicant seeks a zoning map amendment to rezone the Project Area (Block 6619, Lots 42, 49, 50, 51 and Block 6620, Lot 46) from an R6B/C2-3 zoning district to an R7X/C2-4 zoning district and a zoning text amendment to designate an MIH area coterminous with the Project Area. The maximum residential FAR would increase from the 2.2 to 6.0 (with MIH), and the maximum community facility FAR would increase from 2.0 to 5.0. The maximum permissible building height would increase from 55 feet under the existing R6B zoning district to 145 feet, with a qualifying ground floor, under the proposed R7X zoning district. As the Proposed Actions would permit the modification of yard, height, and setback requirements, as well as result in an increase in built floor area beyond what would be allowed "as-of-right.", the Proposed Actions have the potential to change pedestrians' experience of public space surrounding the Proposed Rezoning Area in comparison to conditions in the No-Action condition. Therefore, it is necessary to assess the Proposed Actions' potential impacts on urban design and visual resources.

ASSESSMENT

Existing Conditions

Primary Study Area (Project Area)

The Proposed Rezoning Area (Project Area) consists of 29,414 square feet (sf) across five tax and zoning lots (Block 6619, Lots 42, 49, 50, 51 and Block 6620, Lot 46) in the East Bensonhurst neighborhood of Brooklyn, Community District 11. It is bounded by Kings Highway to the north and Quinten Road to the south, both of which are classified as a 'wide' street with a width of 80 feet. West 11th Street to the east and West 13th Street to the west, both of which are classified as a 'narrow' street with a width of 60 feet. Block 6620, Lot 46 is improved with a one-story 5,300 gsf (4,077 zsf with FAR 0.68) commercial building containing a discount shoe store. Block 6619, Lots 49, 50, and 51 are improved with three fully occupied two-story two-family homes.

Secondary Study Area (400-Foot Radius)

The neighborhood within 400 feet of the Project Area is generally characterized by residential and commercial uses. Residential uses are predominantly one- and two-family homes ranging from one to two stories in height to the south of the Rezoning Area and larger four-six story multi-family residential use, commercial use and mixed-use commercial residential buildings along Kings Highway. To the north, the larger buildings are located along Kings Highway and Avenue P, with lower density one- and two-family homes located on the side streets in between. Retail and other commercial uses in the surrounding area are concentrated along Kings Highway and Quentin Road and include local retail uses (salons, pharmacies, liquor stores, delicatessens, florist) as well store-front office space. Many commercial buildings along Kings Highway are set at or near the street line and on-street parking is available.

As shown in the Aerial Photograph attached below, the Project Area and the surrounding 400-foot radius study area does not contain or offer view to public parks, public art/statues/sculpture, or landmark structures or districts. There is a recently completed project located a 7616 Bay Parkway (Block 6241, Lot 43), but it located over 800 feet northwest of the Rezoning Area and is outside of the Urban Design study area. No development plans are known to exist within the 400-foot radius project study area by the project build year of 2026.

The Aerial Photograph, as well as street level photographs of the existing area are attached which show existing conditions in the Project Area and the surroundings. Zoning calculations of the existing conditions on Projected Development Sites 1, 2, and 3, including floor area calculations, lot coverage, and building heights, are shown in Table 4-1 below.

Future No-Action

Absent the Proposed Actions, the Project Area's existing R6B/C2-3 zoning district would remain. The Applicant-owned Projected Development Site 1 (Block 6619, Lot 42) would be developed as-of-right, 55-foot-tall, 35,896 gsf (34,850 zsf with 2.0 FAR) five-story mixed-use commercial/residential building using the maximum FAR permitted by the existing zoning (R6B/C2-3). A Projected Development Site 2 (Block 6620, Lot 46) and Projected Development Site 3 (Block 6620, Lots 49,50, and 51) would remain in their existing conditions. The No-Action Development Scenario in the Project Area would not result in any changes to the existing urban design and visual character of the Area. There are no known developments expected within the study area and no changes to streets or streetscape are anticipated in the study area. No new natural features or open spaces would be added to the study area.

Zoning calculations of the No-Action conditions on Projected Development Sites 1, 2, and 3, including floor area calculations, lot coverage, and building heights, are shown in **Table 4-1** below.

Future With-Action

In the future with the Proposed Actions, the three Projected Development Sites would be redeveloped based on full and partial FAR build out permitted FAR of the proposed rezoning (R7X/C2-4). The Project Area would result in three denser and taller developments as compared

to the existing/future No-Action Development Scenario. For the purposes of the urban design and visual resources analysis, the With-Action Development Scenario evaluates the maximum allowable development envelope with respect to bulk and height under the proposed R7X/C2-4 as the zoning approvals sought do not lock in a specific building design. Figure 1-3 : Urban Design Diagrams provide illustrative views of the primary study area comparing the No-Action and With-Action conditions

Primary Study Area (Project Area)

In the future with the Proposed Actions, Projected Development Site 1 would include a 145-foot-tall, fourteen-story, mixed-use commercial/residential building with 100% lot coverage and 68 cellar parking spaces. Projected Development site 2 would be improved with a 24-foot-tall, two-story local retail and service establishment commercial building with 100% lot coverage. Twelve cellar parking spaces would be required with curb cut access along the north side of Quentin Road. The three privately-owned adjacent lots (Block 6619, Lots 49, 50 and 51) that make up Projected Development Site 3 would be merged and be improved with a 145-foot-tall, fourteen-story, mixed-use commercial/residential building with 100% lot coverage. Eighteen cellar parking spaces would be required with curb cut access along the north side of Quentin Road.

Table 4-1: Zoning Calculations Relevant to Urban Design Analysis

Item	Existing Conditions			No-Action Conditions			With-Action Conditions		
Site	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
Scenario	Vacant	Commercial Retail	Residential 6 units 4 parking spaces	Mixed-use commercial/ residential 39 parking spaces	Commercial Retail	Residential 6 units 4 parking spaces	Mixed-use Commercial/ Residential 128 units 68 parking spaces	Commercial Retail 12 parking spaces	Mixed-use commercial/ Residential 44 units 18 parking spaces
Floor Area	0 gsf	5,300 gsf	1,408 sf 1,472 sf 1,840 sf = 4,720 sf	35,896 gsf	5,300 gsf	1,408 sf 1,472 sf 1,840 sf = 4,720 sf	120,233 gsf	11,978 gsf	36,900 sf
Lot Coverage	0 sf (0%)	5,300 sf (88%)	2,360 sf (39%)	0 sf (0 %)	5,300 sf (88%)	2,360 sf (39%)	17,425 sf (100 %)	5,989 sf (100%)	6,000 sf (100%)
Heights	0-story 0’	1-story 12’	2-story 22’	5-story 55’	2-story 22’	2-story 22’	14-story 145’	2-story 24’	14-story 145’

CONCLUSION

The RWCDS analyzed three taller and denser commercial and residential developments in the Project Area. The three projected developments would be constructed on existing blocks and would not entail any changes to topography, street patterns, street hierarchy, block shapes, or natural features within the Project Area or the Study Area. As illustrated in **Figure 1-3 : Urban Design Diagrams**, the building envelope allowed under the proposed zoning district (R7X/C2-4) would be larger and taller than existing buildings across the street and nearby, larger residential and/or commercial buildings are commonly found on the corners of Kings Highway and Avenue P. Additionally, Kings Highway is a wide commercial avenue that travels east/west in the East Bensonhurst neighborhood which is suitable for increased commercial uses and higher density of

development. Therefore, while the building envelopes at the Projected Development Sites in With Action would be taller and bigger compared to the permitted development within the 400-foot radius study area, they would be compatible with the adjacent R7A zoning district mapped along parts of Kings Highway, Avenue P and Quentin Road. Furthermore, there is no visual or public access to any nearby open space, waterfront or other significant views that would be impacted by the Proposed Actions.

The study area primarily consists of one- and two-family residential units to the south with commercial uses along Kings Highway. The Proposed Actions and resultant RWCDS would not create land uses nor structures that would be substantially incompatible with the existing and emerging character of the surrounding neighborhood.

While the addition of the projected developments to the Project Area and the Study area would be a noticeable change from the perspective of a pedestrian, the change would not represent a significant adverse impact. Instead, the Proposed Actions would develop underutilized and underbuilt property to expand existing commercial use and add mixed-use commercial/residential (including affordable housing), enhancing pedestrian experience with ground floor retail and improved sidewalk and streetscape conditions. Additionally, the Proposed Actions would not alter the essential character of the neighborhood, impair the appropriate use or development of the adjacent properties, or be detrimental to the public welfare.

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

166 Kings Highway, Brooklyn

Aerial Map



Imagery Source: 2023 Bing, Microsoft Corporation

Urban Cartographics

166 Kings Highway, Brooklyn

Figure 1: Urban Design Diagram

No-Action Scenario

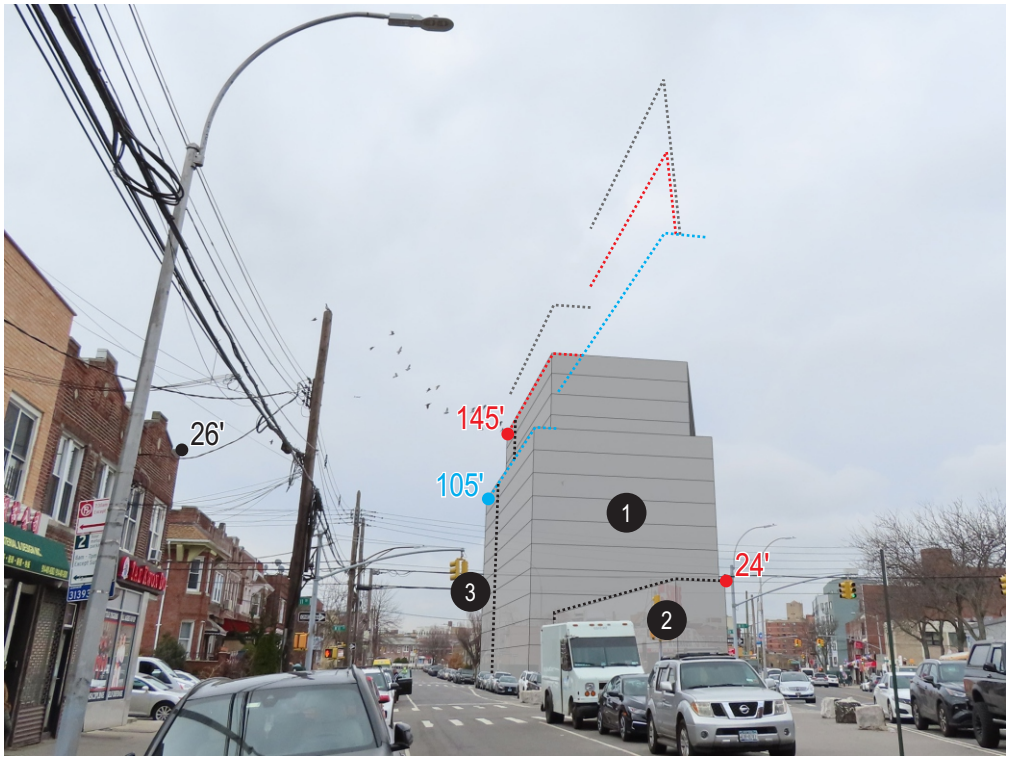
Quentin Road facing west (Site at right)



Maximum Permitted Base Height (45') Maximum Permitted Building Height (55') Maximum Permitted Bulkhead Height (80')

With-Action Scenario

Quentin Road facing west (Site at right)



Maximum Permitted Base Height (105') Maximum Permitted Building Height (145') Maximum Permitted Bulkhead Height (170')

Proposed Base Height Proposed Building Height Proposed Bulkhead Height

Urban Cartographics

166 Kings Highway, Brooklyn

Figure 2: Urban Design Diagram

No-Action Scenario

Quentin Road facing east (Site at left)



Maximum Permitted Base Height (45') Maximum Permitted Building Height (55') Maximum Permitted Bulkhead Height (80')

With-Action Scenario

Quentin Road facing east (Site at left)



Maximum Permitted Base Height (105') Maximum Permitted Building Height (145') Maximum Permitted Bulkhead Height (170')

Proposed Base Height Proposed Building Height Proposed Bulkhead Height

Urban Cartographics

166 Kings Highway, Brooklyn

Figure 3: Urban Design Diagram

No-Action Scenario

Kings Highway facing southeast (Site at right)



Maximum Permitted Base Height (45') Maximum Permitted Building Height (55') Maximum Permitted Bulkhead Height (80')

With-Action Scenario

Kings Highway facing southeast (Site at right)



Maximum Permitted Base Height (105') Maximum Permitted Building Height (145') Maximum Permitted Bulkhead Height (170')

Proposed Base Height Proposed Building Height Proposed Bulkhead Height

6. HAZARDOUS MATERIALS

INTRODUCTION

An analysis of hazardous materials is conducted to determine whether a proposed project would increase the exposure of the people of the environment to hazardous materials, and, if so, whether this increased exposure would result in potentially significant public health or environmental impacts. If significant adverse impacts are identified CEQR requires that the impacts be disclosed and mitigated or avoided to the greatest extent practicable.

A Phase I Environmental Site Assessment was performed at the property located at located at 166 Kings Highway in the East Bensonhurst section of Brooklyn, in May of 2018 by PVE, LLC. At that time the property contained a vacant, 1-story diner building and open parking areas. The Phase I identified several Recognized Environmental Conditions (RECs) in connection with the property, including the past use of the site as a car wash from 1968 to 1976, the possible presence of gasoline underground storage tanks (USTS) on the northwest part of the property, and the potential for impacts from off-site sources of contamination in the immediate vicinity of the site (including former dry cleaners and auto repair garages).

In May of 2018, a Limited Phase II Environmental Site Assessment was performed by PVE, LLC to investigate the RECs identified in the May 2018 Phase I. The investigation found USTs present in the northwest part of the property, petroleum-impacted soil and groundwater were detected around the USTs, and NYSDEC Spill Number 1801388 was assigned for the spill. Historical fill materials were also identified in soil borings performed during the investigation. The recommendations in the report include the installation of a vapor barrier below any future foundations at the site, and a request that the property be accepted into the NYC Mayor's Office of Environmental Remediation (OER) Voluntary Cleanup Program (VCP).

In October 2018, PVC, LLC submitted a Remedial Investigation Report for the project site under the address 174 Kings Highway to OER for the NYC VCP (OER #18TMP1382K, NYC VCP #19CVCP021K). The investigation was performed to collect sufficient information for the establishment of remedial objectives at the site for the proposed future use as a charter school. The proposed school included a 1-story building containing a gym and cafeteria, a 3-story building for classrooms and offices, and an outdoor play area. The investigation discovered contaminants in excess of regulatory Soil Cleanup Objectives or standards in soil, groundwater, and soil vapor at the site.

In November of 2018, PVC, LLC submitted a Remedial Action Workplan to OER that establishes the remedial actions which provide for the protection of public health and the environment consistent with the intended use of the property. The proposed remedial measures include establishment of Track 4 Site Specific Soil Cleanup Objectives, the removal of USTs on the northwest part of the site, closure of open NYSDEC Spill Number 1801388, completion of a waste characterization study, excavation, removal and proper disposal of approximately 3,000-tons of soil/fill from the property, construction of an engineered composite cover, installation of a vapor barrier system below all buildings, installation of an active sub-slab vapor depressurization system (SSDS), and others.

On 2/5/2019, OER issued a Decision Document approving the proposed Remedial Action Work Plan for the project site (included in **Appendix B**)

On January 8th, 2020, PVE, LLC issued a letter summarizing the remedial actions performed at the site (included in **Appendix B**). These actions include the removal of nine USTs from the northwest portion of the property, excavation, and off-site disposal of soil from the westerly portion of the site, excavation, and off-site disposal of soil from the central cellar area, and the design and partial installation of sub-slab depressurization system and associated vapor barrier. The letter closes with "Currently the SSDS piping has been installed within the gas-permeable layer in the northwest corner of the property. Installation of the vapor barrier across the foundation was not completed. Future vapor mitigation requirements would be dependent on the future owner and intended use of the property."

Spill Number 1801388 was closed by the NYSDEC on 5/21/2021.

Based on the results of the Phase II investigation conducted under the VCP and the requirement for the installation of an active SSDS for the subject property, continued oversight by the city may be necessary. An (E) Designation for hazardous materials would be placed on Projected Development Site 1 (Block 6619, Lot 42) pursuant to Section 11-15 of the New York City Zoning Resolution. Additionally, based on prior on-site and/or surrounding area land uses of the Project Area which could result in environmental contamination, an (E) Designation for hazardous materials would be placed on Projected Development Site 2 (Block 6620, Lot 46) and Projected Development Site 3 (Block 6619, Lots 49, 50, and 51). The (E) Designation would ensure that testing and mitigation would be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

The text of the hazardous Materials (E) Designation [E-753] for Block 6620, Lot 46, and Block 6619, Lots 42, 49, 50, and 51 would be as follows:

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must he submitted to OER after

completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

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

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

CONCLUSION

With the implementation of the above (E-) designation [E-753], no significant adverse impacts related to hazardous materials would result, and no further analysis is warranted.

7. TRANSPORTATION

INTRODUCTION

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

Project Area

The entire Proposed Rezoning Area consists of five tax and zoning lots, (Block 6619, Lots 42, 49, 50, 51 and Block 6620, Lot 46) in the East Bensonhurst section of Brooklyn, Community District 11. It is bounded by Kings Highway, a two-way eastbound/westbound roadway to the north; West 13th Street, a one-way northbound roadway to the west; Quentin Road, a one-way eastbound roadway to the south; and West 11th Street, a one-way northbound roadway to the east.

Projected Development Sites

The transportation analysis is based on three (3) Projected Development Sites (total of 5 lots), as described below:

- Block 6619, Lot 42: Would be developed as Projected Development Site 1 in the With-Action condition (owned by the applicant).
- Block 6620, Lot 46: This non-Applicant owned site would be developed as Projected Development Site 2 in the future under the proposed rezoning.
- Block 6619, Lots 49, 50, and 51: This non-Applicant owned site would be developed as Projected Development Site 3 in the future under the proposed rezoning.

Build Year

Based on an estimated 16-month CEQR approval process, a concurrent Uniform Land Use Review Process (ULURP), then a 12-month construction period for the Applicant-owned Projected Development Site 1 and 6 months for soft sites to react to the rezoning (concurrent with construction), the analysis year for the Projected Development Sites is 2026.

ANALYSIS FRAMEWORK

Existing Conditions

The three (3) Projected Development Sites within the Project Area currently contain a total of 6 residential dwelling units (4,720 gsf) and 5,300 gsf of local retail space, and no parking, as summarized in **Table 6-1.**

Future No-Action

Absent the Proposed Actions, it is assumed that Projected Development Site 1 would be developed into a five-story mixed-use commercial/residential building that includes 41 residential dwelling units (28,716 gsf) and 7,171 gsf of local retail space. Projected Development Sites 2 and 3 within the Project Area would remain the same as the existing condition. As a result, the three Projected Development Sites in the future without the Proposed Actions would contain a total of 47 residential dwelling units (33,436 gsf) and 12,479 gsf of local retail space with 18 public parking and 21 accessory parking spaces, as summarized in **Table 6-1**.

Future With-Action

The Proposed Actions would result in a development comprised of 172 residential dwelling units (135,543 gsf) and 33,570 gsf of local retail space, as summarized in **Table 6-1**. The Proposed Actions would also provide 36 public parking spaces, and 69 on-site accessory-parking spaces, accessed via curb cuts along the north side of Quentin Road.

Table 6-1 – Existing, No-Action Scenario, With-Action Scenario, and Increment on Projected Development Sites

Land Use	Existing	No-Action	With-Action	Increment
Residential d.u.	6 d.u. (4, 720 gsf)	47 d.u. (33,436 gsf)	172 d.u. (135,543 gsf)	125 d.u. (102,107 gsf)
Local Retail (gsf)	5,300 gsf	12,479 gsf	33,570 gsf	21,098 gsf
Public Parking	0	18	36	18
Accessory Parking	0	21	69	48

Source: Approved RWCDS.

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

Increment

The Proposed Actions would result in an increase of 125 net new residential dwelling units (102,107 gsf), 21,098 gsf of local retail space, 18 public parking spaces, and 48 accessory parking spaces, as summarized in **Table 6-1**.

PRINCIPAL CONCLUSIONS

The following detailed trip generation (Level 1 Screening) and trip assignment (Level 2 Screening) analyses have been conducted for the project increment scenario, as are summarized in **Table 6-1**.

The Proposed Actions would generate a total of 457, 661, 909, and 1056 net person trip-ends, 46 (16 inbound and 30 outbound), 48 (24 inbound and 24 outbound), 69 (37 inbound and 32 outbound), and 79 (41 inbound and 38 outbound) net vehicle trip-ends; 56, 45, 66, and 74 net subway trip-ends; 13, 16, 22, and 25 net bus trip-ends; and 387, 576, 791, and 919 net pedestrian trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. Based on the results of trip generation screening analyses, as summarized in **Tables 2 through 4 (Appendix C**), the Proposed Actions would generate fewer transit (subway and bus) trips than the *2021 CEQR Technical Manual thresholds*. Therefore, in accordance with the threshold guidelines as detailed in the *2021 CEQR Technical Manual,* the Proposed Actions would not expect to result in significant adverse impacts related to transit (Subway and Bus) and no further transit (subway and bus) analyses would be warranted, as detailed below. The Proposed Actions, however, would generate more vehicular and pedestrian trips than the *2021 CEQR Technical Manual thresholds,* therefore in accordance with the *2021 CEQR Technical Manual guidelines,* a Level 2 (trip assignments) screening analysis would be required for traffic, and pedestrians, as described below.

Traffic and Parking

Based on the results of trip generation and trip assignment screening analyses, it is concluded that in the future with the Proposed Actions, none of the intersections in the study area would experience 50 or more peak hour vehicle trip-ends, as summarized in **Table 4** and shown in **Figures 1 and 2** (**Appendix C**) for the Weekday PM and Saturday Midday peak hours, respectively. Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-ends threshold, the vehicular trip-ends generated by the Proposed Actions would not result in any conditions that would require a detailed assessment of traffic and parking impacts.

Parking

The Proposed Actions would provide 36 public parking spaces, and 69 on-site accessory-parking spaces. The proposed off-street parking garage could be accessed via curb cuts along the north side of Quentin Road. The proposed project would screen for vehicular traffic as detailed below, and per the *CEQR Technical Manual,* no detailed parking assessment would be required.

Transit: Subway

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

Transit: Bus

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

Pedestrian

Based on the results of the trip generation (Level 1) screening analysis, as summarized in **Table 3** and trip assignment (Level 2), as shown in **Figures 3 through 6** (**Appendix C**), it is concluded that in the future with the Proposed Actions, none of the pedestrian elements would experience 200 or more peak hour pedestrian trip-ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour periods. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold per pedestrian element, a detailed assessment of pedestrian impacts would not be warranted.

TRANSPORTATION PLANNING ASSUMPTIONS

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

Residential Development

The *202*1 *CEQR Technical Manual* Table 16-2 was utilized for trip generation rates, including truck trips, peak hour temporal distribution, and directional splits. The 2015-2019 American Community Survey (ACS) Journey-to Work (JTW) data for Census Tract #'s 270, 298, 402, 404, 406, and 428 in Brooklyn, NY was used for modal split information and auto occupancy rate, as is estimated in **Exhibits A and B** (**Appendix C**) and summarized in **Table 2**.

The estimated modal split data for residential use found that approximately 32.0% would travel by car, 0.2% would travel by taxi, 6.0% would travel by bus, 47.2% would travel by subway, and 14.6% would travel by foot and other modes of travel, such as bicycle, as shown and summarized in **Exhibit A**. The auto occupancy rate is 1.163, based on the 2015-2019 ACS JTW data for Census Tract #'s 270, 298, 402, 404, 406, and 428 in Brooklyn NY as summarized in **Exhibit B**. The taxi occupancy rate is based on the *East New York Rezoning Proposal FEIS* (Table 13-8).

Local Commercial Retail Development

The *2021 CEQR Technical Manual* Table 16-2 was utilized for trip generation rates, peak hour temporal distribution, directional splits, truck trip rates, and modal split information. Vehicle

occupancy rates are based on the *East New York Rezoning Proposal FEIS* Table 13-8 in Transportation Chapter, as is summarized in **Table 2**.

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

Preliminary Analysis Methodology and Screening Assessments

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

Level 1 Screening Assessments

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

The Proposed Actions would generate a total of 457, 661, 909, and 1056 net person trip-ends, 46 (16 inbound and 30 outbound), 48 (24 inbound and 24 outbound), 69 (37 inbound and 32 outbound), and 79 (41 inbound and 38 outbound) net vehicle trip-ends; 56, 45, 66, and 74 net subway trip-ends; 13, 16, 22, and 25 net bus trip-ends; and 387, 576, 791, and 919 net pedestrian trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. Based on the results of trips generated by the Proposed Actions, as summarized in **Tables 3, and 4**, Level 2 screening analysis (trip assignment) would be required for vehicular traffic during Weekday PM and Saturday Midday peak hours and for pedestrian traffic during all four peak hours, as described below.

Level 2 Screening Assessments

A Level 2 screening assessment involves the distribution and assignment of projected trips to the transportation network and the determination of whether specific locations are expected to

experience incremental trips exceeding *CEQR Technical Manual* thresholds. Typically, if the results of this analysis show that the Proposed Actions would result in 50 or more peak hour vehicle trip-ends through an intersection, 50 or more peak hour bus trip-ends on a bus route in a single direction, 200 or more peak hour subway trip-ends per station, or 200 or more peak hour pedestrian trip-ends per pedestrian element, further quantified analyses may be warranted to evaluate the potential for significant adverse traffic, transit, pedestrian, and parking impacts.

Vehicle Trips (Vehicular Trip-Ends)

The Proposed Actions would generate a total of 46 (16 inbound and 30 outbound), 48 (24 inbound and 24 outbound), 69 (37 inbound and 32 outbound), and 79 (41 inbound and 38 outbound) net vehicle trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday Peak hour periods, respectively. Auto trips are assigned to the proposed on-site parking garage accessed via Quentin Road. No taxi trips or truck trips would be generated by the Proposed Actions according to Level 1 screening analysis, as is summarized in **Table 4**. Based on trip assignments, and as shown in **Figures 1 and 2** (**Appendix C**) for Weekday PM and Saturday Midday peak hours**,** none of the intersections in the study area would experience 50 or more vehicle trip-ends (**Figures 1 and 2** show the highest vehicle trip-ends of 44 and 49 at the intersection of West 10th Street and Kings Highway/Quentin Road, during the Weekday PM and Saturday Midday peak hours, respectively). Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-end threshold, the vehicular trip-ends generated by the Proposed Actions would not result in any conditions that would require a detailed assessment of traffic and parking impacts.

Transit (Bus Trip-Ends)

The Proposed Actions would generate a total of 13, 16, 22, and 25 net bus trip ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour periods, respectively, as summarized in **Table 3**. Currently two bus lines serve the Project Area, including bus line B82 which runs eastbound/westbound along Kings Highway; and Bus line B4 which runs northbound/southbound along Stillwell Avenue. The Proposed Actions would generate less than 50 or more peak hour bus trip-ends in one direction along a bus route during any peak hour time period, and in accordance with the *CEQR Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of bus impacts.

Subway Trip-Ends

The Proposed Actions would generate a total of 56, 45, 66, and 74 net subway trip-ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Tables 3**. Currently there is only one subway station in the study area. The Kings Highway subway station for the N train is located within a ¼ mile radius of the Project Area (Brooklyn Transit Zone). The Proposed Actions would generate less than 200 subway trip-ends per subway station during the Weekday AM, Midday, PM, and Saturday Midday peak hour time periods, and in accordance with CEQR *Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of subway impacts.

Pedestrian Trip-Ends

The Proposed Actions would generate a total of 387, 576, 791, and 919 net pedestrian trip-ends during the Weekday AM, Midday, PM, and Saturday Midday peak hour periods, respectively. Based on the results of the trip generation **Table 3** and trip assignment **Figures 3 through 6** analyses (**Appendix C**), it is concluded that in the future with the Proposed Actions, none of the pedestrian elements in the study area would experience 200 or more peak hour pedestrian trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold per pedestrian element, a detailed assessment of pedestrian impacts would not be required.

CONCLUSIONS

The results of the transportation screening analyses indicate that the Proposed Actions would generate fewer than the *CEQR Technical Manual* analysis threshold of 50 net vehicle trip ends at any intersection in the study area during the Weekday AM, Midday, PM, and Saturday Midday peak hour time periods. No significant adverse impacts related to traffic and parking conditions would occur. Similarly, no significant adverse impacts related to transit and pedestrians would be expected. In conclusion, the Proposed Actions would not result in any significant adverse impacts related to transportation, therefore, no further detailed assessment would be warranted.

8. AIR QUALITY

INTRODUCTION

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. Under the City Environmental Review (CEQR), an air quality assessment determines both a proposed project's effects on ambient air quality and the quality of the ambient air at the project.

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. The pollutants of concern include six criteria pollutants—known as “criteria” pollutants, and air toxics or toxic air pollutants known as noncriteria pollutants, which include hazardous air pollutants (HAPs) and many other pollutants. 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.

ANALYSIS FRAMEWORK

The Rezoning Area consists of 29,414 square feet (sf) across five tax and zoning lots, (Block 6619, Lots 42, 49, 50, 51 and Block 6620, Lot 46) in the East Bensonhurst section of Brooklyn, Community District 11. It is bounded by Kings Highway to the north, Quinten Road to the south, West 11th Street to the east, and West 13th Street to the west. The Proposed Actions could affect all the properties located within the Rezoning Area.

Absent the Proposed Actions, the Applicant-owned Projected Development Site 1 (Block 6619, Lot 42) would be developed with a five-story, 55-foot-tall, mixed-use commercial/residential building containing 35,896 gross square feet (gsf). It would include 7,719 gsf of local retail and service establishment commercial use on the first floor and 28,716 gsf of residential use on floors two through five. Thirty-nine accessory parking spaces would be provided in the cellar garage. Projected Development Site 2 (Block 6620, Lot 46) and Projected Development Site 3 (Block 6619, Lots 49, 50, and 51) would remain in their current conditions.

Under Future With-Action conditions, the Applicant-controlled Projected Development Site 1 (Block 6619, Lot 42) would be developed with a mixed-use, predominantly residential building. The Proposed Development would be a ten-story, 105-foot-tall building. The Reasonable Worst Case Development Scenario (RWCDS) would facilitate a 120 feet high building. The RWCDS building would contain 120,233 gsf of floor area, of which 104,643 gsf are residential floor area and 15,590 gsf are commercial floor area. The building would contain 68 cellar parking spaces.

Projected Development Site 2 (Block 6620, Lot 46) would be developed with a two-story, 11,978 gsf commercial building. The building would be 24-foot-tall. Twelve accessory parking spaces would be required.

Projected Development Site 3 (Block 6619, Lots 49, 50, and 51) would be developed with a mixed-use, predominantly residential, twelve-story building. The RWCDS building would contain 36,900

gsf of floor area, of which 30,900 gsf are residential floor area and 6,000 gsf are commercial floor area. The building would contain 18 accessory parking spaces on the cellar level.

AIR QUALITY STANDARDS, REGULATIONS, AND BENCHMARKS

Criteria Pollutants

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

Determination of significant impact related to criteria pollutants accounts for pollutants concentrations in the ambient air, which include background concentrations. The New York State Department of Environmental Conservation (NYSDEC) measures air pollutants concentrations at more than 50 sites across the state. The primary NAAQS and background concentrations of the pollutants that a detailed analysis was required for, from the nearest federally mandated monitoring station(s), are presented in **Table 7-1.**

Table 7-1: NAAQS and Background Concentration

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO_2 (1)	1-Hour	188 µg/m^3	103.6 µg/m^3	Queens College
	Annual	100 µg/m^3	26.8 µg/m^3	
$PM_{2.5}$ (2)	24-Hour	35 µg/m^3	19.2 µg/m^3	Division Street
	Annual	12 µg/m^3	9.1 µg/m^3	

1. NYSDEC (2019). New York State Ambient Air Quality Report for 2019, dec.ny.gov/chemical/8406.html#Quality.
2. NYSDEC (2020). New York State Ambient Air Quality Report for 2020, dec.ny.gov/chemical/8406.html#Quality.
3. µg/m^3 – microgram per meter cube; ppm – parts per million.

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply $PM_{2.5}$ and CO significant impact criteria (based on concentration increments). The *CEQR Technical Manual de minimis* criteria set allowable incremental increase in CO and $PM_{2.5}$ concentrations that would result as a consequence of a proposed project. As CO detailed analysis

was not required, CO *de minimis* is not shown. $PM_{2.5}$ significant impact concentrations are evaluated as follows:

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

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

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

Accordingly, 24-hour $PM_{2.5}$ *de minimis* is a concentration increment of 7.90 $\mu g/m^3$, and annual $PM_{2.5}$ concentration increments of 0.3 $\mu g/m^3$ for stationary source and 0.1 $\mu g/m^3$ for mobile source on a neighborhood scale.

Non-Criteria Pollutants

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

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

MOBILE SOURCE

According to the *CEQR Technical Manual,* projects may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic, create any other mobile sources of pollutants (e.g., diesel trains, helicopters, boats), or add new uses near mobile sources (e.g., roadways, garages, parking lots). A detailed analysis is required to predict whether a Proposed Actions could potentially result in significant adverse air quality impact if certain threshold criterion is met or exceeded. A Proposed Actions that does not meet or exceeds the threshold criteria (screens out) would not result in mobile source impact(s).

The Proposed Actions would not result in operable windows or air intakes within 200 feet of an atypical roadway, nor would it result in creation of a covered roadway or be affect by covered

roadway. The project would not create a new sensitive receptor adjacent to existing large parking facilities. The incremental capacity of parking facilities introduced by the project would not exceed 85 off-street parking spaces, and therefore (according to the New York City Department of City Planning (DCP) guidance on other projects), a detailed analysis is not required. The project would not significantly increase the vehicle miles traveled in a large area. Therefore, no further assessment of the above-mentioned criterions potential for mobile source air quality impacts is warranted.

The peak-hours project generated traffic would not exceed the threshold of 170 vehicular trips. Therefore, no CO detailed analysis is required. However, the Proposed Actions would generate peak hour heavy-duty diesel vehicle traffic or its equivalent in vehicular emissions exceeding the 12 or more heavy-duty diesel vehicles threshold for paved roads with average daily traffic of fewer than 5,000 vehicles. Therefore, a detailed analysis is required.

Project-Generated Traffic

Screening Assessment

According to the transportation analysis for this project, the Proposed Actions would generate a total of 43, 48, 67, and 74 net vehicle trip ends (inbound and outbound combined) during the AM, Midday, PM, and Saturday Midday peak hour periods, respectively. The peak-hours project generated traffic would not exceed the threshold of 170 vehicular trips. Therefore, no CO detailed analysis is required.

A heavy-duty diesel vehicles (HDDVs) screen was conducted for the project generated PM and Saturday Midday peak hours traffic increments (the peak hours that required a detailed transportation trip assignment (Level 2) analysis). Using the New York City Department of Environmental Protection's ("DEP's") Equivalent Truck Calculation Matrix, the $PM_{2.5}$ vehicular emission screening threshold ranges from 12 to 23 HDDVs depending on the type of roadway. For analysis purpose, all autos were assumed to be LDGT1 class vehicles, based on guidance from the DCP for similar projects. The project increment was used in the analysis for the less sensitive roadways (Kings Highway and Stillwell Avenue), and the trip assignment (see Transportation **Appendix D, Figures 1 and 2**) at the more sensitive intersections. **Table 7-2** shows the PM and Saturday Midday peak hours action-generated incremental traffic volumes by vehicle type at intersections near the Rezoning Area, and the results of the *CEQR Technical Manual* Equivalent Truck Calculation Matrix.

Table 7-2: Peak Period Incremental Vehicle Traffic by Vehicle Type and HDDVs Truck Calculation Matrix

Intersection	Truck Per Hour	Auto Per Hour Midday	Equivalent Truck	Equivalent Truck Threshold
Kings Highway or Stillwell Avenue (any intersection) (1)	0	67	2.95	23
	0	74	3.26	
Quentin Road & West 13th Street (2)	0	30	14.46	12
	0	31	14.9	
Quentin Road & West 12th Street (2)	0	31	14.94	12
	0	36	17.35	
Quentin Road & West 11th Street (2)	0	26	12.53	12
	0	30	14.46	

Note:
1. Project increment used.
2. Action-generated incremental traffic volumes from the transportation trip assignment used in the HDDVs screening analysis.

As shown in **Table 7-2**, the project generated HDDVs traffic or its equivalent in vehicular emissions exceed the equivalent truck threshold at three intersections, where the intersection of Quentin Road and West 12th Street would result in the greatest HDDVs or its equivalent in vehicular emissions (a maximum of 17.35 equivalent trucks during the Saturday Midday peak hour). Therefore, a detailed microscale analysis is required, and the intersection of Quentin Road and West 12th Street was selected for the detailed analysis.

HDDVs Detailed Analysis

As shown in **Table 7-2**, the maximum equivalent truck was projected at the intersection of Quentin Road and West 12th Street, and therefore, the intersection was selected for detailed analysis. A Tier 1 approach, applying the Saturday peak hour period traffic, was used in the analysis. Existing traffic volume and vehicle classification on Highlawn Avenue from West 8th Steet to West 7th Street westbound direction, obtained from the New York State Department of Transportation (NYSDOT) dataset for Highlawn Avenue Station 026132, was used for Quentin Road. Existing traffic volume on West 10th Street from Bay parkway to 86th Steet southbound direction, obtained from the NYSDOT dataset for West 10th Street Station 025134, was used for West 12th Street. Vehicle classification for Highlawn Avenue from West 8th Steet to West 7th Street eastbound/westbound combined direction was used for West 12th Street.

Annual background growth rate, obtained from the *CEQR Technical Manual,* was used to project the No-Action traffic from the existing traffic. The action-generated incremental volumes by

vehicle type were added to the No-Action scenario traffic volumes to project the With-Action scenario traffic volumes by vehicle type.

The EPA's Mobile Vehicle Emission Simulator (MOVES3 version) was utilized to predict vehicular emissions. MOVES inputs of inspection/maintenance, fuel data, age distribution, and meteorology were obtained from NYSDEC. The Kings County projected vehicle population database, part of MOVES3 database, was used to further classify vehicle types (e.g., intercity bus, transit bus, and school bus). In addition, $PM_{2.5}$ emissions of dust generated by vehicles traveling on paved roadways were added to estimate total particulate matter emissions for the short-term analysis (annual fugitive dust emission is negligible, based on similar types of analysis under CEQR). Fugitive dust emissions were calculated using the methodology in the EPA's AP-42 manual,[1] where a conservative assumption of "dry" road condition was used (precipitation reduced silt loading). A silt loading factor of 0.4 g/m^2 for local roadways was applied in the analysis, based on value in the *CEQR Technical Manual*.

Dispersion analysis was conducted using EPA's CAL3QHCR dispersion model version 13196. The model specified settling and deposition velocities of 0-meter per second, 60-minute averaging time, and urban surface roughness of 108-centimeter corresponding to single family residential land use, which is generally the most conservative assumption. The map application built into Lakes Environmental, Inc. CALRoad commercial version of CAL3QHC/R was used to spatially locate links and receptors. Roadway segments were modeled as free flowing, at grade, links. Receptors for the short-term analysis were placed on the sidewalks around the modeled intersection, and receptors for the annual timeframe analysis were placed 15-meter from the roadways curb sides. $PM_{2.5}$ concentrations were predicted with model-ready John F. Kennedy Airport meteorology data, obtained from the DCP for another project.

The potential for significant adverse impact was evaluated with the CEQR Technical Manual de minimis criteria. Table 7-3 shows the results of the dispersion analysis.

Table 7-3: $PM_{2.5}$ Dispersion Analysis Results at the Intersection of Quentin Road and West 12th Street

Pollutant	Increment (modeled) Concentration ($\mu g/m^3$)	*de minimis* Concentration ($\mu g/m^3$)
24-Hour	1.64	7.90
Annual (1)	0.02	0.1

Note:

1. Annual $PM_{2.5}$ concentration increment corresponds to the With-Action concentration. As the With-Action concentration is less than the *de minimis*, accounting for the No-Action concentration would only reduce the increment concentration.

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

As shown in **Table 7-3**, the Proposed Actions' incremental $PM_{2.5}$ concentration would not exceed the *CEQR Technical Manual de minimis* criteria. Therefore, no significant adverse air quality impacts from mobile sources would result at intersections located near the Rezoning Area.

STATIONARY SOURCE

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

The Proposed Developments' heating/hot water, ventilation, and air conditioning (HVAC) systems could potentially be fueled by fossil fuel, and, therefore, have the potential to result in a significant adverse impact to nearby sensitive land uses.

Heating and Hot Water System(s)

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

Screening Assessment

The potential for the heat and hot water system(s) to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used by the HVAC system, the height of the stack venting the emissions, the distance to the nearest building of similar or greater height, and the building's use and the square footage of the development that would be served by the system, both of which effect the amount of fossil fuel consumed. The *CEQR Technical Manual* screening assessment is based on these factors. In addition, the CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height.

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

Projected Development Site 2 on Other Land Uses

Based on the methodology above, Projected Development Site 2 was analyzed as a 24-foot-tall building, containing 11,978 gsf. A distance of 55 feet was applied in the screening analysis nomograph, which is the distance between Projected Development Site 2 and Projected Development Site 1. **Figure 7-1** (based on Figure 17-3 of the *2021 CEQR Technical Manual*) shows the Projected Development Sites 2 screening analysis.

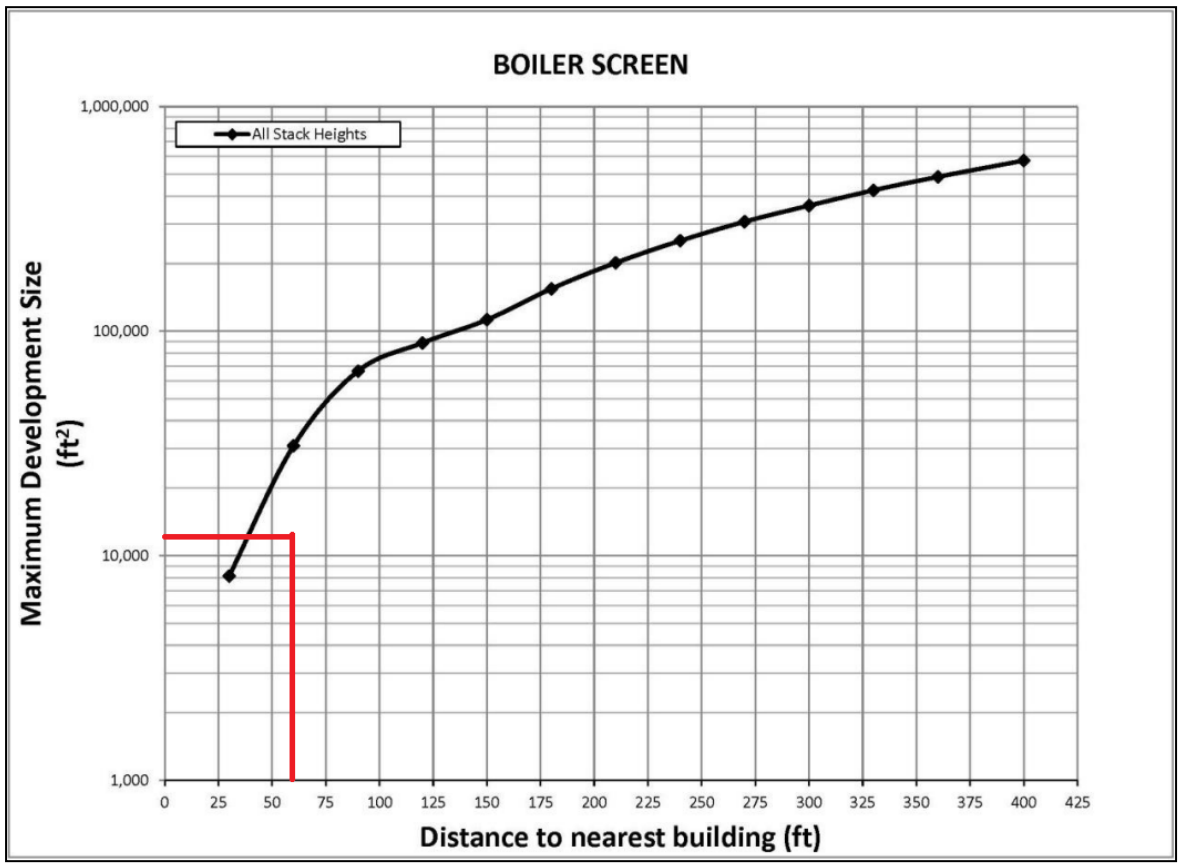


Figure 7-1: Projected Development Site 2 HVAC Screen on Other Land Uses

As shown in **Figure 7-1** (using Figure 17-3 of the *CEQR Technical Manual*), the line corresponding to the Projected Development Site 2 gsf is below the curve for fossil fuel fired HVAC system. Therefore, the Projected Development Site 2 passes the screening analysis on other land uses (existing land uses or project-increment buildings)

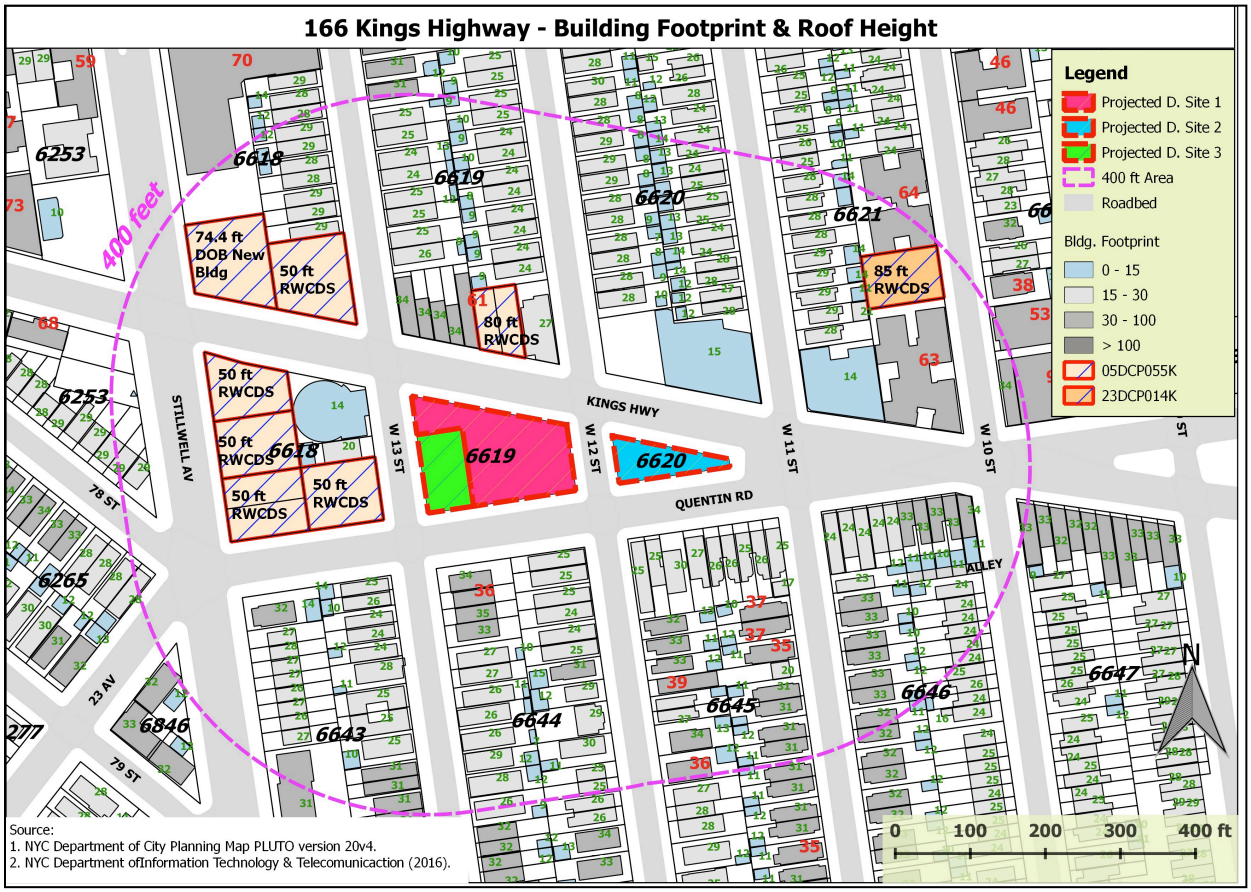
Projected Development Sites 1 and 3 on Other Land Uses

Based on the methodology above, Projected Development Sites 1 and 3 were analyzed as a single 157,133 gsf building, which is the floor area of Projected Development Site 1 and Projected Development Site 3 combined gsf, excluding the parking facilities gsf. A height of 105 feet was

assumed, which is the Projected Development Site 1 proposed building height. A distance of 400 feet was assumed as no other buildings similar or greater in height are located within that distance.

For the screening analysis, while there are no existing buildings similar or greater in height within 400 feet of the Projected Development Sites, there are a few developments associated with the Bensonhurst Rezoning (CEQR No. 05DCO055K) and a single development associated with the 1656 West 10th Street Rezoning (CEQR No. 23DCP014K) in the study area, which were also considered. **Figure 7-2** shows the Development Sites with a 400 feet area and buildings in the area, including developments associated with other CEQR actions, with their roof height specified.

Figure 7-2: The project increment buildings, existing buildings footprint and roof heights[2], and not yet developed development sites associated with the CEQR actions Bensonhurst Rezoning (CEQR No. 05DCP014K) and 1656 West 10th Street Rezoning (CEQR No. 23DCP014K)



As shown in **Figure 7-2,** no building, including developments associated with other CEQR actions in the area, within 400 feet of the Project Area is 105-foot or taller. The development on the northeast corner of Kings Highway (Block 6618, Lot 27), which is associated with the Bensonhurst Rezoning (CEQR No. 05DCP014K) was recently developed with a 74.4-foot-tall building,

[2] City of New York, nyc-geo-metadata (May 03, 2016); https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh

according to the property zoning document obtained from the New York City Department of Building (DOB) online database. The property located at the northwest corner of Kings Highway and West 12th Street (Block 6618, Lot 22), which is also associated with the Bensonhurst Rezoning (CEQR No. 05DCP014K), is currently under construction for a city plan to build a homeless shelter.[3] However, no data is available in the DOB online database for that property (Block 6618, Lot 22) other than a job filing (Job No. 321965904) for demolition of a one-story structure.

Figure 7-3 (based on Figure 17-3 of the *2021 CEQR Technical Manual*) shows the Projected Development Sites 1 and 3 on existing land uses screening analysis.

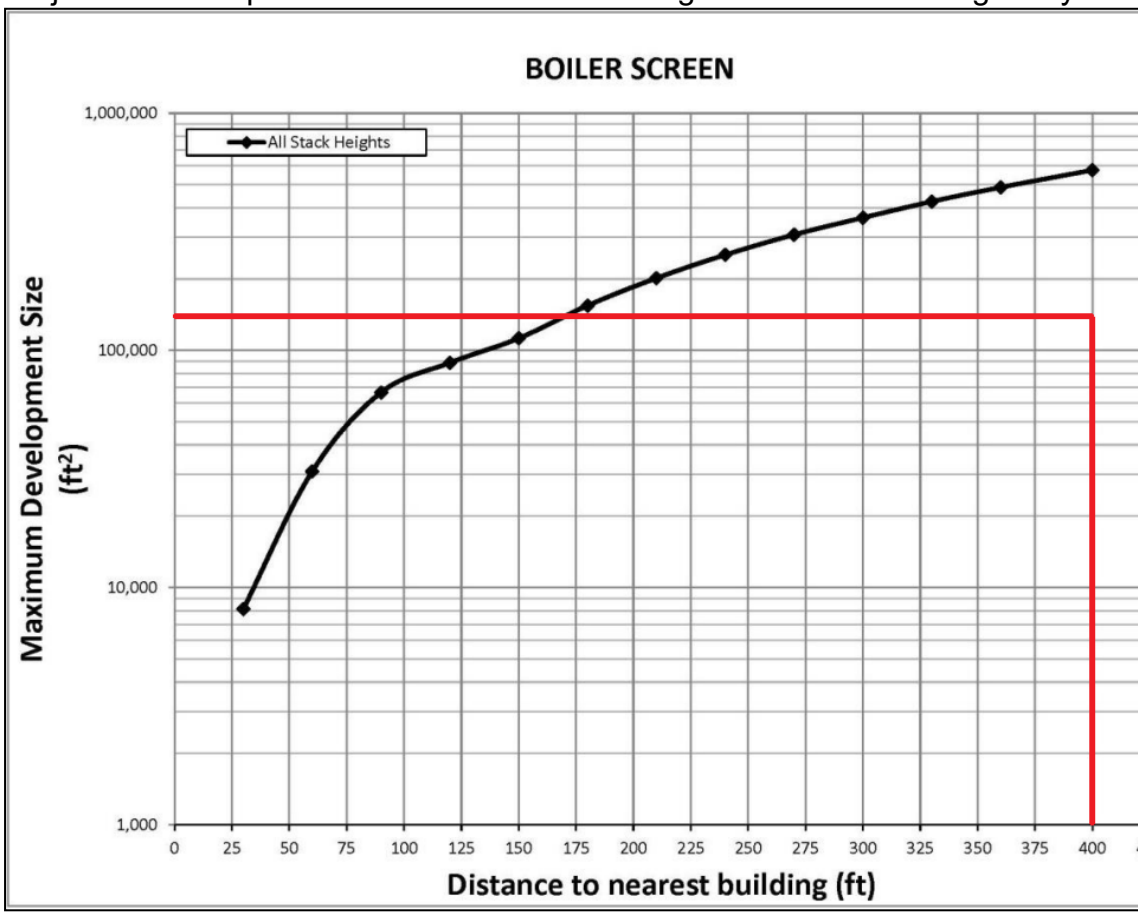


Figure 7-3: Projected Development Sites 1 and 3 HVAC Screen on Other Land Uses

As shown in **Figure 7-3**, the Projected Development Sites 1 and 3 combined gsf, excluding the parking facilities floor areas, is below the curve for fossil fuel fired HVAC system. Therefore, the Projected Development Sites 1 and 3 passes the screening analysis on other land uses.

[3] New York State Assemblyman William Colton (2021). "Assemblyman Colton Alerts Community To Second Proposed Homeless Shelter At 137 Kings Highway While Continuing His Strong Battle Against A Homeless Shelter At 2147 Bath Avenue."
<https://nyassembly.gov/write/upload/member_files/047/pdfs/20211129_0099909.pdf> January 25, 2023.

Projected Development Site 1 on Projected Development Site 3

Projected Development Site 1 abuts Projected Development Site 3. Therefore, the screening analysis is not applicable, and a detailed analysis is required.

Projected Development Site 3 on Projected Development Site 1

Projected Development Site 1 proposed building height is 105 feet. However, the RWCDS facilitates a 120 feet tall building, which is similar in height to Projected Development Site 3. Therefore, as a conservative measure, a detailed analysis was conducted.

Detailed Analysis

A detailed analysis was conducted to evaluate the Projected Development Site 1 potential for significant impact on Projected Development Site 3, and the Projected Development Site 3 potential for significant impact on Projected Development Site 1 RWCDS. Emission from the Projected Development Site 2 HVAC system was included in the analyses (cumulative analysis). Lakes Environmental, Inc. MPI version 22112 executable was used in the AERMOD detailed analysis. The MPI executable takes advantage of computers with multiple processors, reducing run-time significantly. Lakes Environmental, Inc. adjusted the US EPA AERMOD source code and recompiled the model to parallelize the processing of receptors. The latest MPI executable (used in the analysis) modified EPA's AERMOD latest executable model version 22112. The AERMOD model incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. The model was run with the regulatory default option, where applicable, and for both with and without downwash effects options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses were conducted using five consecutive years of meteorological data (2016-2020), obtained from the NYSDEC. Surface data used in the analysis is from John F. Kennedy Airport, upper air data is from Brookhaven station, New York. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period. Population in Kings County, obtained from DCP 2020 annual report, was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

Natural gas would be the type of fossil fuel, if any, used in Projected Development Sites 1 and 3 HVAC systems. In addition, the Projected Development Site 1 HVAC system would be equipped with a 15 parts per million (ppm) low NOx burners. The pollutants of concern for natural gas fueled boilers are NO_2 and $PM_{2.5}$. The HVAC systems' total energy capacities were calculated based on the developments' gsf, excluding the parking garage gsf, and an energy consumption rate of 60.3 thousand Btu per gsf.[4] Oil No. 2 was assumed to be the type of fuel, if any, used in the Projected Development Site 2 HVAC system. The Projected Development Site 2 HVAC system'(s) energy capacity was calculated based on the RWCDS gsf, excluding the parking facility

[4] Energy Information Administration (2022). "Table US1. Total Energy Consumption, Expenditures, and Intensities, 2005 Part 1: Housing Unit Characteristics and Energy Usage Indicators." *2005 Residential Energy Consumption Survey: Energy Consumption and Expenditures Tables.*

gsf, and energy consumption rate, obtained from the *CEQR Technical Manual Appendices*, corresponding to commercial use in the building.

Projected Development Site 1 NOx emission was calculated based on factors used to calculate emission of low-NOx 30 ppm boilers, obtained from the DCP. All other emission factors were obtained from the EPA AP-42 manual for external combustion sources. All fuel was assumed to be consumed during the 100-day (or 2,400 hour) heating season. **Table 7-4** shows the HVAC system(s)' energy capacities and pollutants emission rates.

Table 7-4: HVAC System(s) Short-term and Annual Emission Rates

Site ID	Floor Area; Roof Height	Fuel Used	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
Projected Development Site 1	120,233 gsf; 105 ft (1)	Natural gas low-NOx (15 ppm)	NO_2	6.18E-03	1.69E-03
			$PM_{2.5}$	2.53E-03	6.93E-04
Projected Development Site 2	11,978 gsf; 24 ft	Fuel Oil No 2	NO_2	3.77E-03	1.03E-03
			$PM_{2.5}$	4.02E-04	1.10E-04
Projected Development Site 3	36,900 gsf; 120 ft	Natural gas	NO_2	1.15E-02	3.14E-03
			$PM_{2.5}$	8.70E-04	2.38E-04

Note:
1. Proposed Development building height.
2. As Projected Development Site 2 passes the HVAC screen on other land uses and Projected Development Site 1 would use natural gas as the type of fossil fuel, if any, SO_2 analysis is not needed.

The boilers stacks' diameters and stack exit temperatures were estimated based on values obtained from the New York City Department of Environmental Protection (DEP) "CA Permit" database for the corresponding boiler sizes (i.e., rated heat input or million Btu per hour).[5] Projected Development Site 1 boiler stack was initially placed 3 feet above the roofline and as close as possible to the receiving building. A stack set back distance was specified if impact was predicted.

The project-increment buildings were modeled as buildings that cover their entire lot area (the wall façade located on the outer lot lines). Buildings in the surrounding area, including developments associated with other CEQR actions in the area, were accounted for in the downwash effect on plums dispersions (BPIP). Receptors on the receiving building were placed on all wall façade from the ground floor to the roof-top height in spaced intervals. For the Projected Development Site 3 on the Projected Development Site 1 model, receptors were also placed in a grid over the rooftop.

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

The U.S. Geological Service (USGS) National Elevation Dataset (NED) 1/3 arc-second resolution (GeoTIFF dataset) was used to process buildings' base elevations. The base elevations of receptors and stacks were set to their buildings' base elevations.

One-hour NO_2 was predicted using a Tier 1 approach, which is the most conservative approach. The model was run twice; with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The NO_2 modeled concentrations were added to the background concentrations and the result was evaluated with the NAAQS. $PM_{2.5}$ modeled concentrations were evaluated with the *de minimis* for stationary source. The HVAC dispersions analysis results are shown in **Table 7-5**.

Table 7-5: Project-on-Project - HVAC Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
Concentration at Projected Development Site 1					
1-hour NO_2	75.45	103.59	179.0	188	NAAQS
Annual NO_2	0.72	26.8	27	100	NAAQS
24-hour $PM_{2.5}$	0.96	19.2	1.0	7.90	*de minimis*
Annual $PM_{2.5}$	0.05	9.1	0.05	0.3	*de minimis*
Concentration at Projected Development Site 3					
1-hour NO_2	83.60	103.59	187.2	188	NAAQS
Annual NO_2	0.64	26.8	27	100	NAAQS
24-hour $PM_{2.5}$	6.09	19.2	6.1	7.90	*de minimis*
Annual $PM_{2.5}$	0.26	9.1	0.26	0.3	*de minimis*

As seen in **Table 7-5**, the NO_2 predicted concentrations are within the NAAQS and $PM_{2.5}$ concentrations do not exceed the *de minimis*. These results were predicted with certain requirements to ensure that no impact(s) would occur.

The environmental requirements (E-Designations) related to air quality would be placed on the properties to ensure that no impact would occur. The restrictions on the fuel type and the stack height are specified in the (E) -Designation [E-753] language below:

Projected Development Site 1 (Block 6619, Lot 42):

> *Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating and air conditioning (HVAC) system and hot water equipment and must be fitted with low NOx (15 ppm) burners, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 108 feet above grade, and that the stack is located no more than 85 feet from the eastern lot line facing West 12th Street to avoid any potential significant adverse air quality impacts.*

Projected Development Site 2 (Block 6620, Lot 46):

Any new commercial 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 building's highest level and at least 27 feet above grade to avoid any potential significant adverse air quality impacts.

Projected Development Site 3 (Block 6619, Lots 49, 50, and 51):

Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating and air conditioning (HVAC) system and hot water equipment, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 126 feet above grade, and that the stack is located at least 30 feet from the eastern lot line facing West 12th Street and at least 30 feet from the northern lot line facing Kings Highway to avoid any potential significant adverse air quality impacts.

Existing Stationary Source

Industrial Source

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

Existing manufacturing uses with exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project were identified by reviewing the DEP online Clean Air Tracking System (CATS) database, the NYSDEC online database (DECinfo Locator[6]), and through a fieldwork study. The fieldwork study was conducted on November 3rd, 2022.

The study area encompasses all or part of Blocks 6253, 6265, 6618, 6619, 6620, 6621, 6622, 6643, 6644, 6645, 6646, 6647, and 6846, and includes properties along Kings Highway, Quentin Road, Stillwell Avenue, West 10th Street, West 11th Street, West 12th Street, West 13th Street, 23rd Avenue and 78th Street. Land uses in the study area are a mix of residential apartments, retail stores, professional office uses, schools, a public library, and an adult center. There were not any heavy industrial or manufacturing uses identified in the study area, and no stacks, odors or emissions were observed in the study area during the field survey.

[6] New York State Department of Environmental Conservation (2021). DECinfo Locator. <https://gisservices.dec.ny.gov/gis/dil/> (July 7, 2021).

The results of the survey are as follows: There were not any facilities with DEP Processing permits found within the study area in a search of the Clean Air Tracking System (CATS) database. There were not any facilities identified in the study area which appear in the DECinfo Locator database. There were not any potential sources of toxic air emissions observed in the study area during the field survey.

Major and Large Source

Per the *CEQR Technical Manual*, projects that would introduce new uses near major sources, large sources, or odor producing facilities may result in potentially significant adverse air quality impacts. The study area considers major sources, large sources, and odor producing facilities within 1,000 feet of the Rezoning Area. Major emission sources are identified as those sources located at Title V facilities; large emission sources are identified as sources located at facilities which require an Air State Facility permit. Solid waste or medical waste incinerators, asphalt and concrete plants, power generating plants, large boilers of large public facilities for example, and large industrial facilities are typical type of sources requiring these permits. Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

No existing large combustion source(s), such as power plants, cogeneration facilities, etc., located within 1,000 feet of the Projected Development Sites, was identified. According to the NYSDEC database, the nearest major/large source facility is the Title V facility NYC-TA Coney Island Yard, which is located at 2556 McDonald Avenue and approximately 6,000 feet south of the Rezoning Area. In addition, no odor producing facility was identified within 1,000 feet of the Rezoning Area. As such, no analysis is warranted.

CONCLUSION

No significant adverse air quality impact was predicted in the analysis. The result of the analysis is as follows:

- Based on the analysis of project generated traffic and heavy-duty diesel vehicles, no significant adverse impact related to mobile source emissions would occur as a result of the Proposed Actions.

- No existing industrial source within 400 feet of the Rezoning Area, nor major/large source or odor producing facility within 1,000 feet of the Rezoning Area were identified. Therefore, no significant adverse air quality impact would result from existing emission sources.

- No significant impact was predicted in the HVAC analysis with the Proposed Development and Projected Development Site 3 adhering to the environmental requirement specified in the Air Quality E-Designation(s) established for Block 6620, Lot 46, and Block 6619, Lots 42, 49, 50, and 51

9. **NOISE**

INTRODUCTION

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

Environmental Studies Corp (ESC) conducted noise monitoring on Wednesday, June 21, and Thursday, June 22, 2023, in support of zoning map amendment. The Rezoning Area includes Block 6619, Lots 42 in the Gravesend neighborhood of Brooklyn, Community District 11.

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.

ANALYSIS FRAMEWORK

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 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: 2021 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 would 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 would 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 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 8-3 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 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	DNL ≤ 0 dBA		60 < DNL ≤ 65 dBA		65 < DNL ≤ 75 dBA		75 dBA <DNL
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		$55<L_{10}\leq 65$ dBA		$65<L_{10}\leq 80$ dBA		$L_{10}>80$dBA	
3. Residence, residential hotel or motel	7 am to 10 pm	$L_{10}\leq 65$dBA		$65<L_{10}\leq 70$ dBA		$70<L_{10}\leq 80$ dBA		$L_{10}>80$dBA	
	10 pm to 7 am	L10≤55dBA		$55<L_{10}\leq 70$ dBA		$70<L_{10}\leq 80$ dBA		$L_{10}>80$dBA	
4. School, museum, library, courthouse 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 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)	See Notes 2

Source: New York City of Environmental Protection

Notes:

1 The above composite window-wall attenuation values are for residential dwellings. Commercial and office spaces/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 The required attenuation value is the difference between Lbuild and Linterior,, using the appropriate noise descriptor
Where:
Lbuild is the projected noise level under the build condition rounded up to the whole number
Linterior is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise

MEASUREMENT LOCATION AND EQUIPMENT

Noise measurement was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day. Since the MTA N train track is located in the cut approximately 1200 feet east of the Project Area, the project site would not have a direct line-of-sight to the train tracks, and noise from the train is not considered for this project. The weather condition is normal with calm wind and is considered suitable for an ambient noise measurement.

A Type 1 sound level meter (Larson Davis 831) with wind shield was used to conduct the noise monitoring. The meter was calibrated prior to and following each monitoring session. The meter was placed on a tripod at a height of approximately five feet above the ground, away from any reflective surfaces.

The noise measurements were conducted at the following locations (as shown in **Figure 8-1**):

L1: midblock of Quentin Road, between W 12th Street and W 13th Street (**Figure 8-2**);

L2: in front of 1664 W 13th Street (**Figure 8-3**);

L3: midblock of Kings Hwy, between W 12th Street and W 13th Street (**Figure 8-4**);

L4: midblock of W 12th Street, between Quentin Road and Kings Hwy (**Figure 8-5**).

Figure 8-1: Noise Monitoring Locations



Figure 8-2: Meter Setup at Location 1



Figure 8-3: Meter Setup at Location 2



Figure 8-4: Meter Setup at Location 3



Figure 8-5: Meter Setup at Location 4



Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Jun 21, 2023 (Wednesday) and Jun 22, 2023 (Thursday). 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 8-4 to 8-7 below contains the results for the measurements taken at the Project Sites:

Table 8-4 *Noise Levels (dB) at Location 1*			
Jun 21 and 22, 2023 (Wednesday and Thursday)			
Time	**7:25 am – 7:45 am**	**12:41 pm – 13:01 pm**	**17:36 pm – 17:56 pm**
L_{eq}	59.2	61.7	66.7
L_{max}	79.8	85.5	96.3
L_{10}	61.7	61.6	63.4
L_{50}	51.4	54.6	55.0
L_{90}	47.7	52.1	51.9
L_{min}	45.6	49.1	49.8

Table 8-5 *Noise Levels (dB) at Location 2*			
Jun 21 and 22, 2023 (Wednesday and Thursday)			
Time	**7:47 am – 8:07 am**	**13:04 pm – 13:24 pm**	**17:15 pm – 17:35 pm**
L_{eq}	60.7	61.4	61.7
L_{max}	77.2	80.0	80.9
L_{10}	63.7	63.2	63.6
L_{50}	58.1	58.0	58.6
L_{90}	53.8	55.0	55.0
L_{min}	51.3	53.4	52.9

Table 8-6 *Noise Levels (dB) at Location 3*			
Jun 21 and 22, 2023 (Wednesday and Thursday)			
Time	**8:10 am – 8:30 am**	**12:18 pm – 12:38 pm**	**16:53 pm – 17:13 pm**
L_{eq}	67.2	66.4	67.8
L_{max}	86.0	83.9	84.6
L_{10}	69.9	69.5	70.8
L_{50}	61.7	61.1	63.6
L_{90}	53.9	54.5	56.6
L_{min}	48.6	51.9	51.9

Table 8-7 *Noise Levels (dB) at Location 4*			
Jun 21 and 22, 2023 (Wednesday and Thursday)			
Time	**8:32 am – 8:52 am**	**11:56 am – 12:16 pm**	**16:32 pm – 16:52 pm**
L_{eq}	60.9	62.4	62.9
L_{max}	76.2	81.1	82.7
L_{10}	63.7	65.2	64.0
L_{50}	57.6	58.2	58.7
L_{90}	50.1	52.5	54.5
L_{min}	45.1	48.5	51.1

Table 8-8 and 8-11 *below contains the traffic counts and vehicle classifications during each monitoring period:*

Table 8-8 ***Location 1:*** *Traffic volumes and vehicle classifications*			
	7:25 am – 7:45 am	**12:41 pm – 13:01 pm**	**17:36 pm – 17:56 pm**
Car/ Taxi/ Van/SUV	34	39	46
Bus	1	1	0
Medium Truck	4	0	0
Heavy Truck	0	1	0
Motorcycle	0	0	0

Table 8-9 ***Location 2:*** *Traffic volumes and vehicle classifications*			
	7:47 am – 8:07 am	**13:04 pm – 13:24 pm**	**17:15 pm – 17:35 pm**
Car/ Taxi/ Van/SUV	22	20	15
Bus	0	1	0
Medium Truck	0	0	0
Heavy Truck	0	0	1
Motorcycle	0	0	0

Table 8-10 ***Location 3:*** *Traffic volumes and vehicle classifications*			
	8:10 am – 8:30 am	**12:18 pm – 12:38 pm**	**16:53 pm – 17:13 pm**
Car/ Taxi/ Van/SUV	102(61)[7]	101(81)	142(133)
Bus	8(5)	6(4)	11(3)
Medium Truck	2(2)	1(0)	1(2)
Heavy Truck	1(4)	0(3)	1(1)
Motorcycle	0	2(0)	0(1)

‘

Table 8-11 ***Location 4:*** *Traffic volumes and vehicle classifications*			
	8:32 am – 8:52 am	**11:56 am – 12:16 pm**	**16:32 pm – 16:52 pm**
Car/ Taxi/ Van/SUV	28	28	49
Bus	1	0	2
Medium Truck	0	0	0
Heavy Truck	0	0	0
Motorcycle	0	0	0

Mobile Source

Since the Proposed Project would not result in sufficient vehicular traffic to exceed the threshold for a detailed transportation analysis, according to the 2021 CEQR Technical Manual, the Proposed Project would not result in a doubling of noise passenger car equivalents (PCEs), which would be necessary to cause a 3-dBA increase in noise levels. Therefore, the Proposed Actions Project would not result in a significant adverse vehicular noise impact.

Stationary Source

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.

DETERMINATION OF IMPACTS/BUILDING ATTENUATION REQUIREMENTS

The 2021 *CEQR Technical Manual* Table 8-2 contains noise exposure guidelines. For residential use such as would occur under the proposed action, an L_{10} of between 65 and 70 dB(A) is identified

[7] Number within () are the EB traffic volumes, numbers without () are WB traffic volumes.

as marginally acceptable general external exposure. An L_{10} of between 70 and 80 dB(A) is identified as marginally unacceptable general external exposure.

Based on the measured L_{10} noise level of 70.9 dBA at Location 3, a window/wall attenuation of 28 dBA is required for north façade facing Kings Hwy. As measurement results for other locations are all lower than 70 dBA during all peak periods, no window/wall attenuation is required for other facades. Therefore, there would be no potential adverse noise impacts from the Proposed Actions.
To implement this attenuation requirement, (E-753) Designations for noise specifying the appropriate amount of window/wall attenuation and the need for alternate means of ventilation. would be applied to the Project Development Site 1 and 2:

Projected Development Site 1 (Block 6619, Lot 42):

> *In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the northern facade facing Kings Highway, the eastern façade facing W 12th Street and the western facade facing W 13th Street within 50 feet of Kings Highway to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office use. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

Projected Development Site 2 (Block 6620, Lot 46):

> *In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the northern facade facing Kings Highway, and the western façade facing W 12th Street within 30 feet of Kings Highway to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office use. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

Figure 8-6 below indicates where the required window/wall attenuations should apply.



Figure 8-6 Required 28 dBA Attenuation

APPENDIX A

Landmarks Preservation Commission

Landmarks Preservation Commission
1 Centre Street
9th Floor North
New York, NY 10007
Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: 166 KINGS HIGHWAY
Date Received: 1/5/2023

Properties with no Architectural or Archaeological significance:

1) 166 KINGS HIGHWAY, BBL: 3066190042
2) 29 QUENTIN ROAD, BBL: 3066190049
3) 25 QUENTIN ROAD, BBL: 3066190050
4) 23 QUENTIN ROAD, BBL: 3066190051
5) 65 QUENTIN ROAD, BBL: 3066200046

Comments:

S/NR ELIGIBLE HIGHLAWN BRANCH, BROOKLYN PUBLIC LIBRARY, 1664 WEST 13 STREET WITHIN RADIUS.

Gina Santucci 1/11/2023

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 36828_FSO_ALS_01112023.docx

APPENDIX B

Hazardous Materials

OFFICE OF ENVIRONMENTAL REMEDIATION
100 Gold Street – 2nd Floor
New York, New York 10038

Mark P. McIntyre, Esq.
Director
Tel: (212) 788-8841

DECISION DOCUMENT
NYC VCP Remedial Action Work Plan Approval

February 5, 2019

Re: 174 KINGS HIGHWAY
Brooklyn Block 6619, Lot 42
OER Project Number 19CVCP021K

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated November 2018 with Stipulation Letter dated January 3, 2019 for the above-referenced project.

The Plan was submitted to OER under the NYC Voluntary Cleanup Program.

The RAWP was released for public comment for 30 days as required by program rule. That comment period ended on December 26, 2018. There were no public comments.

Project Description
The proposed development includes a new charter school consisting of one (1) one-story building containing a gym and cafeteria, an outdoor playground area, and one (1) three-story school building containing a partial basement and typical school features. These two buildings will be connected. The buildings and playground occupy the entire footprint of the lot; the entire lot will be capped with the concrete building slab and concrete playground. A partial basement is proposed in the three-story building, with a proposed excavation depth to approximately 12 feet below ground surface (bgs), over an area of 2,016 square feet.

Statement of Purpose and Basis
This document presents the remedial action for the NYC Voluntary Cleanup Program project known as "174 Kings Highway" pursuant to Title 43 of the Rules of the City of New York Chapter 14, Subchapter 1.

Description of Selected Remedy
1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Establishment of Track 4 Site-specific Soil Cleanup Objectives (SCOs).
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
5. Removal of four (4) suspected underground storage tanks (USTs) with unknown size and contents in the northwestern portion of the site and any other encountered tanks during the excavation. Registration of tanks and reporting of any petroleum spills associated with USTs and appropriate closure of these petroleum spills in compliance with applicable local, State and Federal laws and regulations.
6. Closure of open DEC Spill No. 1801388.
7. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility(s).
8. Excavation and removal of soil/fill exceeding Track 4 Site Specific SCOs. Approximately 20% (3,950-Square feet) of the footprint of the site will be excavated to a depth of approximately 15 feet below grade

for basement development purposes and UST removal. The remainder of the site (16,480- Square feet) which includes a SVOCs hotspot will be excavated to a depth of approximately 3 to 3.5 feet below grade. Approximately 2,950 tons of soil/fill will be removed from the Site and properly disposed at an appropriately licensed or permitted facility.

9. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of excavated media on-Site.
10. Management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials.
11. Transportation and off-Site disposal of all soil/fill material at licensed or permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities.
12. Collection and analysis of six post-excavation confirmation samples to determine the performance of the remedy with respect to attainment of SCOs.
13. Import of materials to be used for backfill and cover in compliance with the RAWP and in accordance with applicable laws and regulations.
14. Construction of an engineered composite cover consisting of a four-inch thick concrete building slab beneath all building areas, an eleven-inch thick concrete building slab in utility locations, and a one-foot thick poured concrete cap for the playground area
15. Installation of a vapor barrier system consisting of a 20-mil Raven Industries VaporBlock® Plus™ vapor barrier below the slab throughout the full building area and outside all sub-grade foundation sidewalls. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier system is an Engineering Control for the remedial action. The remedial engineer will certify in the RAR that the vapor barrier system was designed and properly installed to mitigate soil vapor migration into the building.
16. Installation of an active sub-slab depressurization system (SSDS) consisting of a network of horizontal pipe set in the middle of a gas permeable layer immediately beneath the building slab and vapor barrier system. The horizontal piping will consist of fabric wrapped, perforated schedule 40 4-inch PVC pipe connected to a 6-inch steel riser pipes (a total of three) that penetrates the slab and travels through the building to the roof. The gas permeable layer will be three (3) continuous layers beneath the building footprint on the east and west side of the proposed basement, and beneath the basement, for a total of three (3) systems. Sub-slab features will consist of a 10-inch thick layer of 3/4-inch clean stone around 36-inch wide trenches for all underground piping, and a 6-inch thick layer of ¾-inch clean stone in the remainder of the footprint. Sub-slab piping will penetrate through grade beams where needed in the cellar area and western portion of the building. SSDS risers will be terminate at the roof line on the stairwell bulkhead and roof with a 6-inch goose neck pipe to prevent rain infiltration. The active SSDS will be hardwired and will include three (3) RadonAway RP265 blowers installed on the roof line and a pressure gauge and alarm located in accessible areas in the basement and first floor. The system's exhaust points will be located at least 10 feet away from air intake units, windows and publicly accessibly outdoor areas. Eleven (11) permanent pressure monitoring points will be installed in the basement and first floor to allow for continued monitoring of sub-slab conditions. The active SSDS is an Engineering Control for the remedial action. The remedial engineer will certify in the RAR that the active SSDS was designed and properly installed to establish a vacuum in the gas permeable layer and a negative (decreasing outward) pressure gradient across the building slab to prevent vapor migration into the building.
17. Performance of all activities required for the remedial action, including acquisition of required permits and attainment of pretreatment requirements, in compliance with applicable laws and regulations.
18. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
19. Submission of a RAR that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, lists any changes from the RAWP, and describes all Engineering and Institutional Controls to be implemented at the Site.
20. Submission of an approved Site Management Plan (SMP) in the Remedial Action Plan (RAR) for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency.

21. Recording of a Declaration of Covenants and Restrictions that includes a listing of Engineering Controls and Institutional Controls and a requirement that management of these controls must be in compliance with an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

The remedy for Hazardous Materials described above conforms to the promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration OER guidance, as appropriate.



February 5, 2019
Date

Caleb Bailey
Project Manager



February 5, 2019
Date

Sarah Pong
Assistant Director

cc: Carlo Schriattarelle, School House Project - carlo@schoolhouseproject.net
Andrew McLaughlin, Hollister Construction Services - Amclaughin@hollistercs.com
Christopher Brown, PVE Sheffler, LLC - cbrown@pve-llc.com
Erik Draijer, PVE Sheffler, LLC - edraijer@pve-llc.com
Pratik Lakhani, NYS Department of Environmental Conservation - Pratik.Lakhani@dec.ny.gov
Nathan Walz, NYS Department of Health - nathan.walz@health.ny.gov
Mark McIntyre, Shaminder Chawla, Zach Schreiber, Maurizio Bertini, Sarah Pong
Caleb Bailey, PMA-OER

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January 8, 2020

Adam Ezrapour
Kleinberg, Kaplan, Wolff & Cohen, P.C.
500 Fifth Avenue
New York, NY 10110

Re: **Summary of Remedial Activities;** 174 Kings Highway, Brooklyn, New York 11223
Block 6619 Lot 42
NYC OER VCP #19CVCP021K
NYC OER #18TMP1382K
NYSDEC PBS #2-612963
NYSDEC Spill #1801388
PVE # 561129

Dear Mr. Ezrapour,

Partridge Venture Engineering, PC, dba PVE Engineering ("PVE") was retained by Highmark School Development for the management and remediation of environmental conditions at the above-referenced site. Below is a summary of the work PVE has completed, to date.

Prior Site Investigations and Work Plans

- PVE completed due diligence activities at the subject property in May 2018, including a Phase I Environmental Site Assessment (ESA) and Phase II ESA.
- Supplemental Remedial Investigation was completed prior to redevelopment of the site in order to determine impacts from previous site operations identified in the Phase I, which included a former gas filling station and auto repair. Several underground storage tanks were depicted on the subject property in historical Sanborn Fire Insurance maps.
- Based on contamination observed during the Phase II ESA, PVE contacted the New York State Department of Environmental Conservation (NYSDEC) to report a petroleum spill, and spill #1801388 was assigned.
- Friends of Hebrew Public Borrower, LLC the NYC Mayor's Office of Environmental Remediation (OER) Voluntary Cleanup Program (VCP) as a part of the proposed redevelopment.
- In accordance with the OER's program requirements, PVE completed a Remedial Investigation and prepared a Remedial Action Work Plan (RAWP), dated November 2018. The RAWP was approved in January 2019, and construction activities commenced in May 2019.

Remedial Actions

- Remedial actions commenced with excavation of soil for foundation construction. All excavated materials were disposed of off-site in accordance with the OER-approved RAWP.
- During the course of excavation activities, nine (9) underground storage tanks (USTs) were identified and registered with NYSDEC (PBS #2-612963). The 9 tanks, and petroleum-contaminated soil were excavated and disposed of off-site in accordance with State and local regulations. The UST Closure Report is attached for reference.
- Other remedial activities completed during site redevelopment, included the following:
    - Excavation and off-site disposal of soil located in the proposed playground in the westerly portion of the site (hot-spot) as described in the OER-approved RAWP.
    - Excavation and off-site disposal of soils for construction purposes, site-wide, to a depth of 4.0' bgs, and 10.0' bgs in the centralized cellar area;
    - Installation of one (1) monitoring well and periodic groundwater sampling to monitor groundwater quality for the purposes of NYSDEC spill closure and OER requirements;
    - Design and partial installation of a sub-slab depressurization system (SSDS) and associated vapor barrier.

Satisfy Remedial Action Work Plan

- In November 2020, PVE and OER agreed upon modifications to the Remedial Action Work Plan in order to satisfy VCP requirements.
- OER is requiring that PVE prepare and submit a Remedial Action Report which describes the following :
    - Any deviations from the previously approved RAWP.
    - At least two (2) feet of clean fill installed across the entire site with soils that meet Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs).
    - Submit a request for Spill-closure to NYSDEC.

Currently, the SSDS piping has been installed within the gas permeable layer in the northwest corner of the property. Installation of the vapor barrier across the foundation (as described in the RAWP) was not completed. Future vapor mitigation requirements will be dependent on the future owner and intended use of the property.

If you have any questions, please do not hesitate to contact us. Reports associated with the activities summarized above are available upon request.

Sincerely,

PVE Engineering



Christopher B. Brown, P.G.
Principal\Director of Environmental Services

APPENDIX C

Transportation

Population FactFinder

Selection Method | 166 KINGS HIGHWAY, Bl ✕ | Census Tract | Neighborhood Tabulation Area (NTA) | Community District Tabulation Area (CDTA) | Community District (CD) | More Geographies

Your Selection

6 Tracts selected

20,400
Population
(2020 Census)

7,312
Housing Units
(2020 Census)

Clear Selection | View Data ›

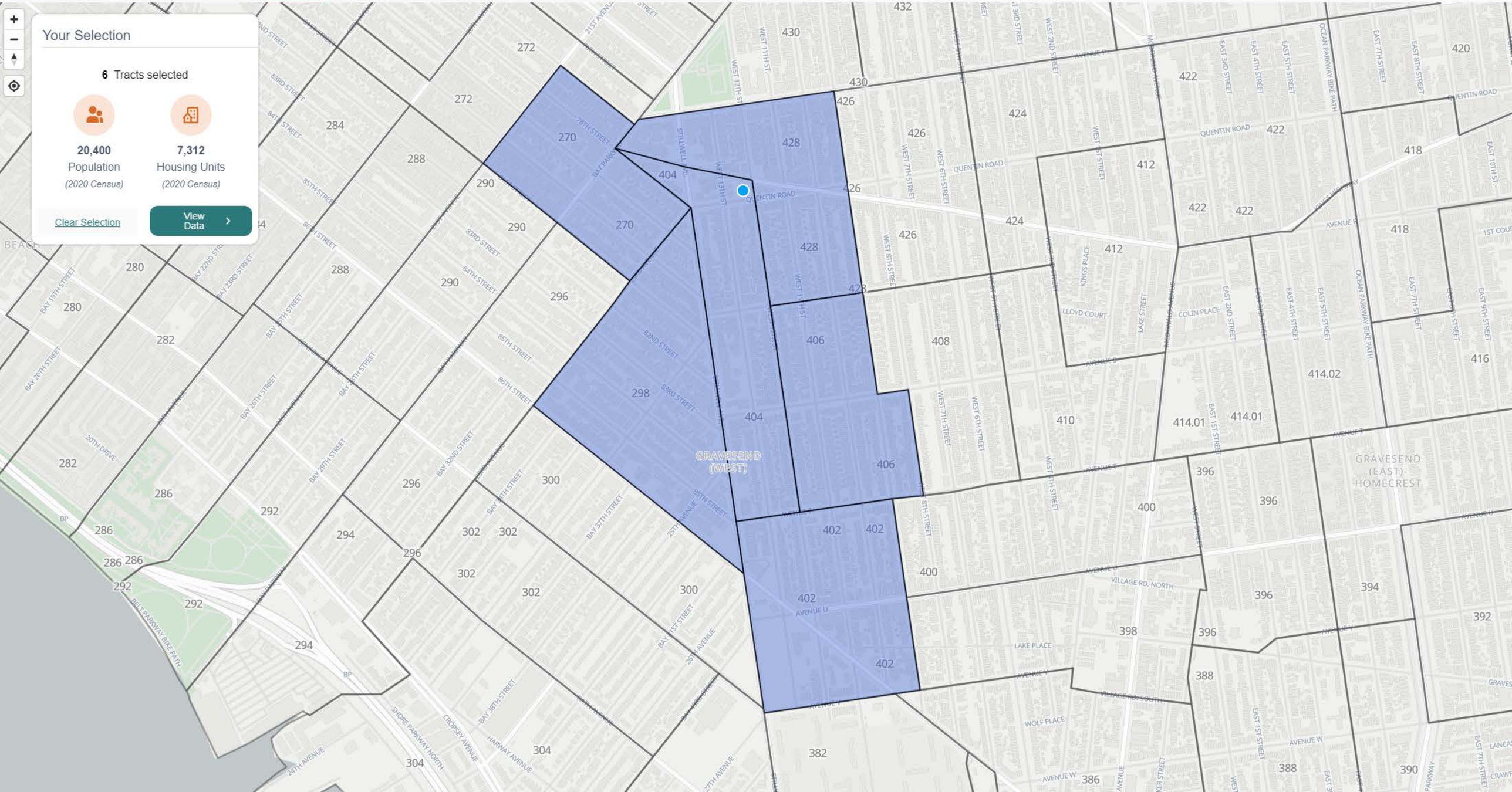


Table 2 : Transportation Planning Factors

166 Kings Highway, Brooklyn NY

Land Use:	***Residential***		***Local Retail***	
	d.u.		***gsf***	
Size/Units:	***125***		***22,924***	
	(1)		**(1)**	
Trip Generation:				
Weekday	8.18		329	
Saturday	9.08		358	
	per d.u.		per 1,000 gsf	
Linked-Trip:	0%		0%	
Temporal Distribution:	**(1)**		**(1)**	
AM Peak Hour	9.3%		4.8%	
MD Peak Hour	5.6%		8%	
PM Peak Hour	8.5%		10.9%	
Saturday Midday Peak Hour	8.4%		11.7%	
	(2)		**(1)**	
Modal Split :	All Periods		All Periods	
Auto	32.0%		11%	
Taxi	0.2%		0%	
Subway	47.2%		3%	
Bus	6.0%		2%	
Walk & Other	14.6%		84%	
Total	100%		100%	
	(1)		**(1)**	
In/Out Splits:	In	Out	In	Out
AM Peak Hour	22%	78%	52%	48%
MD Peak Hour	50%	50%	50%	50%
PM Peak Hour	62%	38%	50%	50%
Saturday Midday Peak Hour	55%	45%	50%	50%
Vehicle Occupancy:	**(2 & 3)**		**(3)**	
Auto	1.163		2.0	
Taxi	1.3		2.0	
Truck Trip Generation:	**(1)**		**(1)**	
Weekday	0.06		0.35	
Saturday	0.02		0.04	
	per d.u.		per 1,000 gsf	
	(1)		**(1)**	
AM Peak Hour	12%		8%	
MD Peak Hour	9%		11%	
PM Peak Hour	2%		2%	
Saturday Midday Peak Hour	9%		11%	
Truck In/Out Splits:	In	Out	In	Out
AM/MD/PM/Sat.Midday	50%	50%	50%	50%

Sources:

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

(2)-2015-2019 American Community Survey (ACS) Journey-to-Work (JTW) Census Tract #'s 270, 298, 402, 404, 406, and 428 in Brooklyn NY-Exhibits A and B.

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

Table 3 : Estimated Person Trips

166 Kings Highway, Brooklyn NY

Land Use:	***Residential***		***Local Retail***		Total Net Demand		**Subway**
	d.u.		***gsf***				**Bus**
Size/Units:	***125***		***22,924***				**Walk**
							Pedestrian Trips
Peak hour Trips							
AM Peak Hour	95		362		457		
Midday Peak Hour	57		603		661		
PM Peak Hour	87		822		909		
Saturday Midday Peak Hour	95		960		1056		
Person Trips:							
AM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	7	24	21	19	27	43	
Taxi	0	0	0	0	0	0	
Subway	10	35	6	5	16	40	**56**
Bus	1	4	4	3	5	8	**13**
Walk & Other	3	11	158	146	161	157	**318**
Total	21	74	188	174	209	248	**387**
Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	9	9	33	33	42	42	
Taxi	0	0	0	0	0	0	
Subway	14	14	9	9	23	23	**45**
Bus	2	2	6	6	8	8	**16**
Walk & Other	4	4	253	253	258	258	**515**
Total	29	29	302	302	330	330	**576**
PM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	17	11	45	45	62	56	
Taxi	0	0	0	0	0	0	
Subway	25	16	12	12	38	28	**66**
Bus	3	2	8	8	11	10	**22**
Walk & Other	8	5	345	345	353	350	**703**
Total	54	33	411	411	465	444	**791**
Saturday Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**	
Auto	17	14	53	53	70	67	
Taxi	0	0	0	0	0	0	
Subway	25	20	14	14	39	35	**74**
Bus	3	3	10	10	13	12	**25**
Walk & Other	8	6	403	403	411	410	**820**
Total	52	43	480	480	533	523	**919**

Table 4 : Estimated Vehicular Trips

166 Kings Highway, Brooklyn NY

Land Use:	*Residential*		*Local Retail*		**Total Net Demand**	
	d.u.		*gsf*			
Size/Units:	*125*		*22,924*			
Vehicular Trips						
AM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**
Auto (Total)	6	20	10	10	16	30
Taxi	0	0	0	0	0	0
Taxi (Balanced)	0	0	0	0	0	0
Truck (Balanced)	0	0	0	0	0	0
Total	6	20	10	10	**16**	**30**
Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**
Auto (Total)	8	8	17	17	24	24
Taxi	0	0	0	0	0	0
Taxi (Balanced)	0	0	0	0	0	0
Truck (Balanced)	0	0	0	0	0	0
Total	8	8	17	17	**24**	**24**
PM Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**
Auto (Total)	15	9	23	23	37	32
Taxi	0	0	0	0	0	0
Taxi (Balanced)	0	0	0	0	0	0
Truck (Balanced)	0	0	0	0	0	0
Total	15	9	23	23	**37**	**32**
Saturay Midday Peak Hour	**In**	**Out**	**In**	**Out**	**In**	**Out**
Auto (Total)	14	12	26	26	41	38
Taxi	0	0	0	0	0	0
Taxi (Balanced)	0	0	0	0	0	0
Truck (Balanced)	0	0	0	0	0	0
Total	14	12	26	26	**41**	**38**

Exhibit A

Modal Split Data

2015-2019 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 270, 298, 402, 404, 406, and 428 in Brooklyn, NY

166 Kings Highway, Brooklyn NY

Census Tract	Total Workers	Car or Van Drive-Alone	Carpool	Bus	Street Car	Subway	R.R.	Ferry	Taxi	Motor cycle	Bicycle	Walked	Other Means	Worked @ Home	Total
270	**1045**	**226**	**52**	**77**	**0**	**458**	**0**	**0**	**14**	**0**	**0**	**113**	**0**	**105**	1,045
298	**2001**	**421**	**233**	**168**	**0**	**788**	**0**	**0**	**7**	**0**	**0**	**227**	**7**	**150**	2,001
402	**1386**	**373**	**95**	**13**	**0**	**677**	**0**	**0**	**0**	**0**	**19**	**175**	**13**	**21**	1,386
404	**1147**	**410**	**109**	**36**	**0**	**495**	**0**	**0**	**0**	**0**	**0**	**50**	**6**	**41**	1,147
406	**1496**	**202**	**123**	**102**	**0**	**951**	**0**	**0**	**0**	**0**	**0**	**69**	**0**	**49**	1,496
428	**1695**	**507**	**51**	**132**	**0**	**774**	**0**	**0**	**0**	**0**	**25**	**112**	**7**	**87**	1,695
Total	8,770	2,139	663	528	0	4,143	0	0	21	0	44	746	33	453	8,770
%		***0.244***	***0.076***	***0.060***	***0.00***	***0.472***	***0.000***	***0.00***	***0.00***	***0.00***	***0.01***	***0.085***	***0.00***	***0.052***	***1.00***

Exhibit B

Auto Occupancy Rate

2015-2019 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 270, 298, 402, 404, 406, and 428 in Brooklyn, NY

Census Tract	Total	Drove alone	Total carpool	carpool 2person	3 Person	4 Person	5 or 6 Person	7 or more Person	Total
270	278	226	52	35	0	17	0	0	52
298	654	421	233	36	158	35	4	0	233
402	468	373	95	76	5	0	14	0	95
404	519	410	109	97	6	0	0	6	109
406	325	202	123	85	19	0	10	9	123
428	558	507	51	30	21	0	0	0	51
persons	2,802	2,139	663	359	209	52	28	15	663
cars		2139		180	70	13	5	2	2,408

Modal Split Data summary

Auto	**0.319**
Taxi	**0.002**
Bus	**0.060**
Subway	**0.472**
Walk	**0.085**
Other	**0.060**
Total	**1.00**

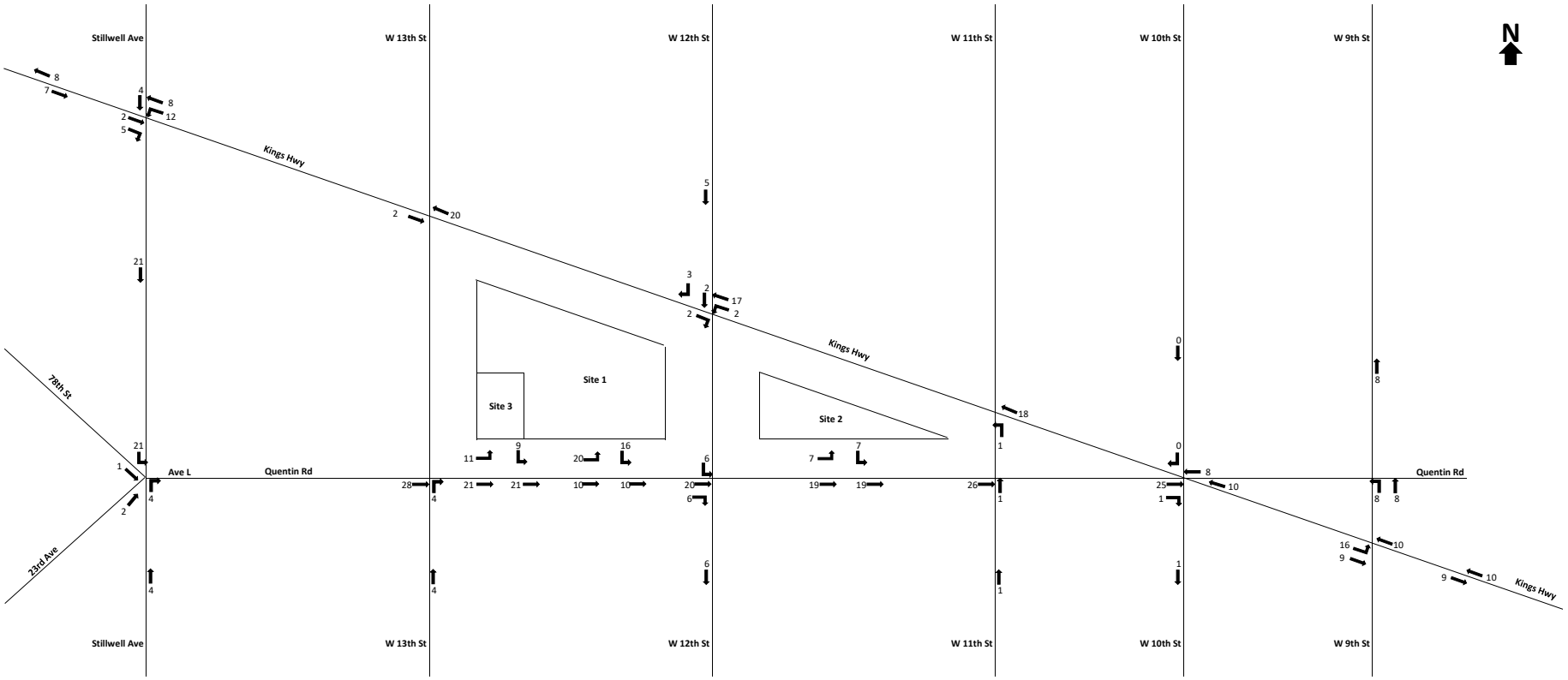
Auto Occupancy Rate: 1.163

TABLE 13-8

Transportation Planning Factors

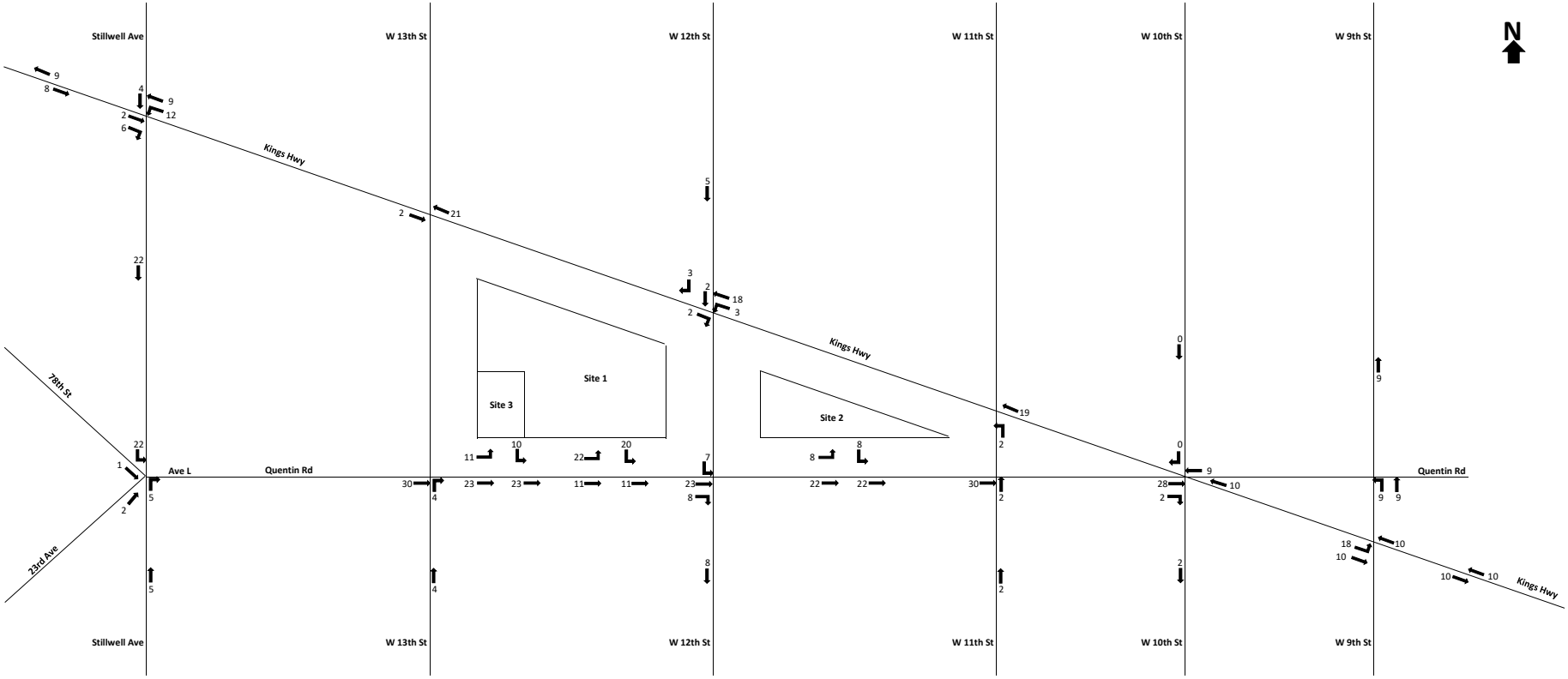
Land Use:	Local Retail	Office		Residential (Market Rate)	Residential (Affordable)	Hotel	Light Industrial		Restaurant	Auto Repair	Auto Dealership	Warehouse	FRESH (Supermarket)	Pre-K (Student) (14,23)	
Size/Units:	681,436 gsf	132,695 gsf		2,954 DU	3,538 DU	-418 Rooms	-27,035 gsf		51,400 gsf	-118,365 gsf	-10,000 gsf	-73,170 gsf	20,000 gsf	263 Students	
Trip Generation:	(1)	(1)		(1)	(1)	(1)	(2)		(5)	(2)	(6)	(7)	(9,10)	(12)	
Weekday	205	18.0		8.075	8.075	9.4	14.7		173.0	19.42	2.63	4.87	205	2	
Saturday	240	3.9		9.600	9.600	9.4	2.2		139.0	19.42	2.63	1.68	271	0	
	per 1,000 sf	per 1,000 sf		per DU	per DU	per room	per 1,000 sf		per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per Student	
Temporal Distribution:	(1)	(1)		(1)	(1)	(1)	(2)		(5)	(2)	(6)	(7,8)	(9,11)	(12)	
AM	3.0%	12.0%		10.0%	10.0%	8.0%	13.2%		1.0%	13.2%	12.0%	11.8%	3.0%	50.0%	
MD	19.0%	15.0%		5.0%	5.0%	14.0%	11.0%		13.7%	11.0%	12.0%	11.0%	12.0%	0.0%	
PM	10.0%	14.0%		11.0%	11.0%	13.0%	14.2%		7.7%	14.2%	9.0%	12.6%	10.0%	5.0%	
SatMD	10.0%	17.0%		8.0%	8.0%	9.0%	10.7%		11.6%	10.7%	12.0%	10.6%	12.0%	0.0%	
	(2)	(3)	(20)	(4)	(4)	(2)	(3)	(20)	(5)	(2)	(6)	(8)	(9)	(12)	
Modal Splits:	All Periods	AM/PM/SAT	MD	All Periods	All Periods	All Periods	AM/PM/SAT	MD	All Periods	All Periods	All Periods	All Periods	All Periods	AM/MD/SAT	PM
Auto	5.0%	45.3%	2.0%	30.7%	16.3%	30.1%	45.3%	2.0%	30.0%	85.0%	100.0%	51.0%	4.0%	15.0%	56.3%
Taxi	1.0%	0.4%	3.0%	0.9%	0.4%	12.3%	0.4%	3.0%	5.0%	5.0%	0.0%	2.0%	3.0%	0.0%	0.0%
Subway/Railroad	3.0%	26.9%	6.0%	54.3%	58.4%	18.8%	26.9%	6.0%	15.0%	1.0%	0.0%	28.0%	5.0%	3.3%	12.4%
Bus	6.0%	15.4%	6.0%	8.9%	17.9%	5.5%	15.4%	6.0%	15.0%	1.0%	0.0%	7.0%	5.0%	1.7%	6.4%
School Bus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	55.0%	0.0%
Walk/Other	85.0%	12.0%	83.0%	5.2%	7.1%	33.3%	12.0%	83.0%	35.0%	8.0%	0.0%	12.0%	83.0%	25.0%	25.0%
	100.0%	100.0%	100%	100.0%	100.0%	100.0%	100.0%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	(2)	(2)		(2)	(2)	(2)	(2)		(5)	(2)	(6)	(8)	(9,11)	(12)	
In/Out Splits:	In Out	In	Out	In	Out	In Out	In	Out	In	Out	In	Out	In	Out	In Out
AM	50% 50%	96.0%	4.0%	15.0%	85.0%	15.0% 85.0%	41%	59%	88%	12%	94%	6%	65%	35%	67% 33%	88% 12%	45% 55%	100% 0%
MD	50% 50%	39.0%	61.0%	50.0%	50.0%	50.0% 50.0%	68%	32%	50%	50%	65%	35%	50%	50%	50% 50%	50% 50%	46% 54%	0% 0%
PM	50% 50%	5.0%	95.0%	70.0%	30.0%	70.0% 30.0%	59%	41%	12%	88%	65%	35%	50%	50%	15% 85%	12% 88%	47% 53%	0% 100%
Sat MD	55% 45%	60.0%	40.0%	50.0%	50.0%	50.0% 50.0%	56%	44%	47%	53%	63%	37%	50%	50%	50% 50%	50% 50%	46% 54%	0% 0%
				(2,4,19)		(2,4,19)									
Vehicle Occupancy:	(2)	(2,3)		AM/PM	MD/SMD	AM/PM MD/SMD	(2)		(2)	(5)	(2)	(6)	(8)	(9,11)	(12)
Auto	2.00	1.12		1.065	1.49	1.064 1.49	1.60		1.20	2.2	1.30	1.30	1.30	1.65	1.30
Taxi	2.00	1.20		1.30	1.30	1.30 1.30	1.40		1.20	2.3	1.30	1.50	1.30	1.40	1.30
School Bus															35.00
Truck Trip Generation:	(1)	(1)		(1)	(1)	(21)	(2)		(5)	(2)	(6)	(8)	(9,11)	(15)	
Weekday	0.35	0.32		0.06	0.06	0.06	0.67		3.60	0.89	0.15	0.67	0.35	0.03	
Saturday	0.04	0.01		0.02	0.02	0.01	0.67		3.60	0.89	0.15	0.67	0.04	0.03	
	per 1,000 sf	per 1,000 sf		per DU	per DU	per room	per 1,000 sf		per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per Student	
	(1)	(1)		(1)	(1)	(21)	(2)		(5)	(2)	(6)	(8)	(9,11)	(15)	
AM	8.0%	10.0%		12.0%	12.0%	12.0%	14.0%		6.0%	14.0%	9.6%	14.0%	10.0%	9.6%	
MD	11.0%	11.0%		9.0%	9.0%	9.0%	9.0%		6.0%	9.0%	11.0%	9.0%	8.0%	11.0%	
PM	2.0%	2.0%		2.0%	2.0%	2.0%	1.0%		1.0%	1.0%	1.0%	1.0%	5.0%	1.0%	
Sat MD	11.0%	11.0%		9.0%	9.0%	9.0%	0.0%		0.0%	0.0%	11.0%	0.0%	10.0%	0.0%	
	In Out	In	Out	In	Out	In Out	In	Out	In	Out	In	Out	In	Out	In Out
AM/MD/PM	50.0% 50.0%	50.0%	50.0%	50.0%	50.0%	50.0% 50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0% 50.0%

This table has been revised for the FEIS.



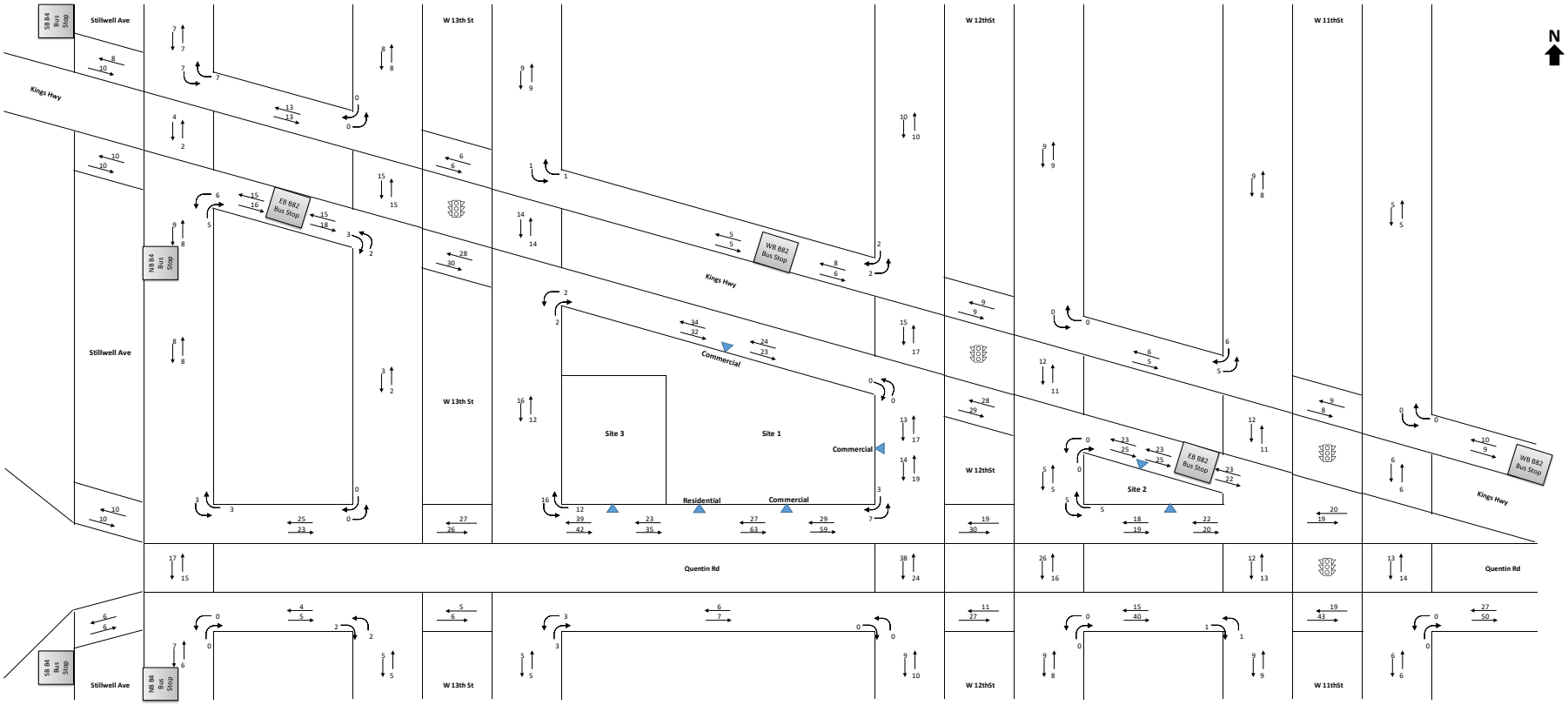
	in	out
Total Vehicle Trips	38	32

Project Generated Vehicle Trips
Weekday PM Peak Hour
Figure 1



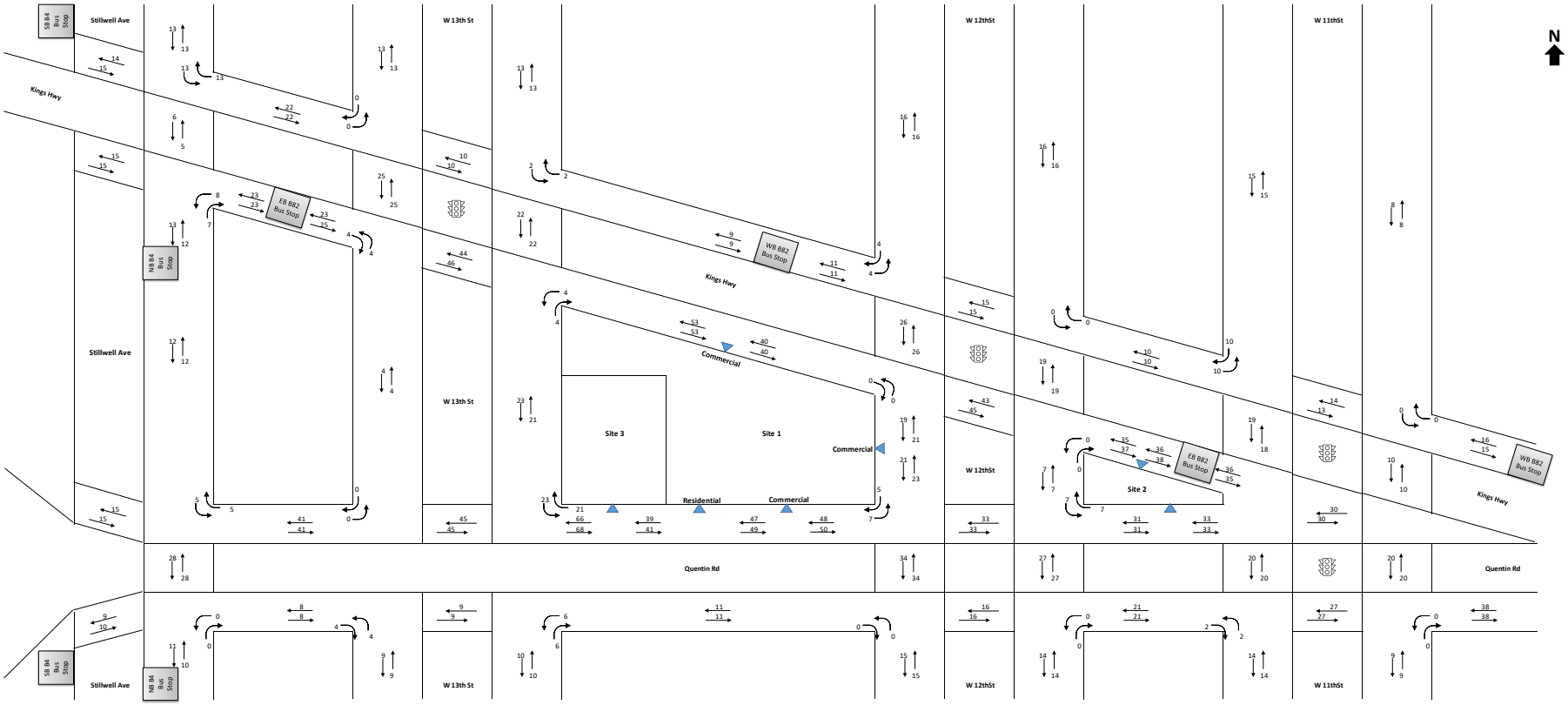
	in	out
Total Vehicle Trips	41	38

Project Generated Vehicle Trips
Saturday MD Peak Hour
Figure 2



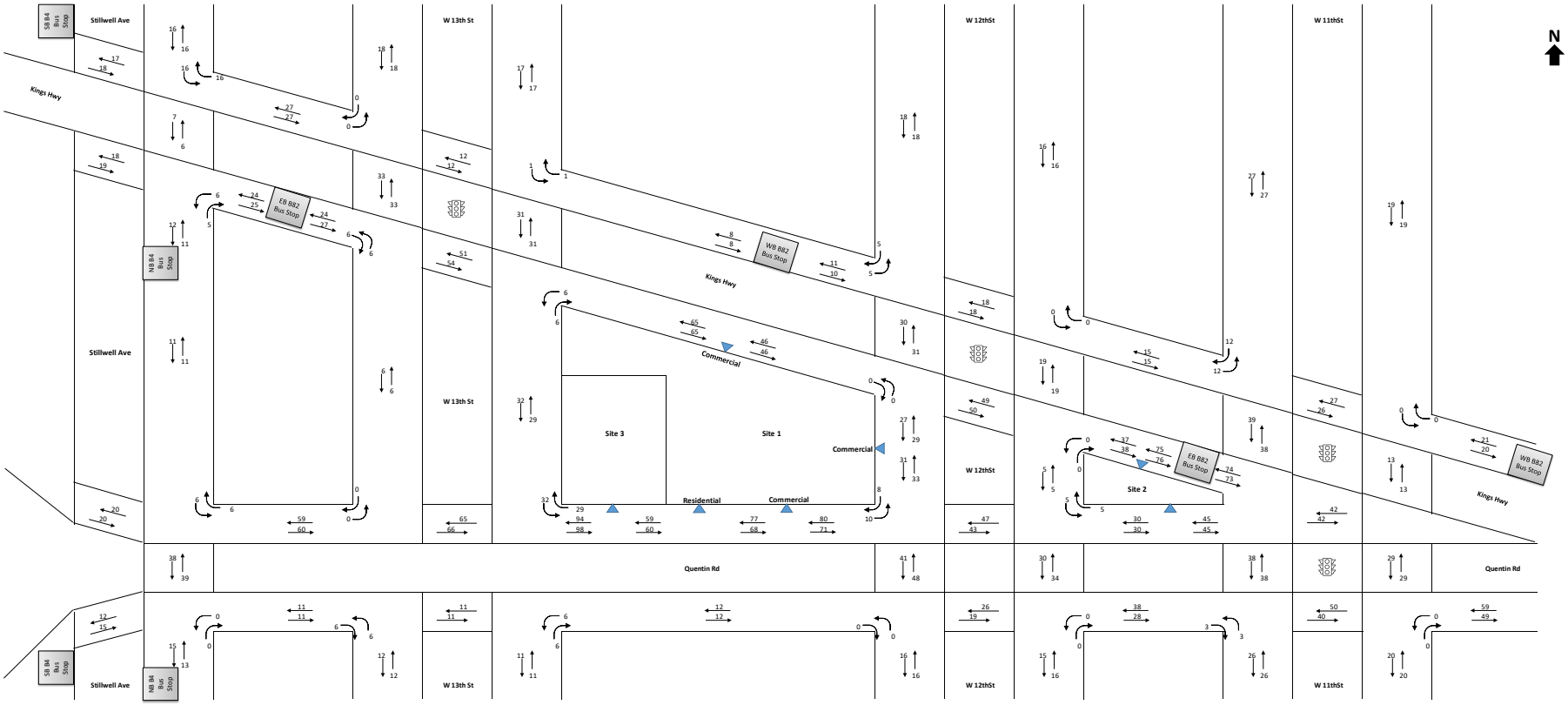
	Ped	In	Out
Site 1	190	86	104
Site 2	95	49	46
Site 3	103	47	56
Total	388	182	206

Project Generated Pedestrian Trips
Weekday AM Peak Hour
Figure 3



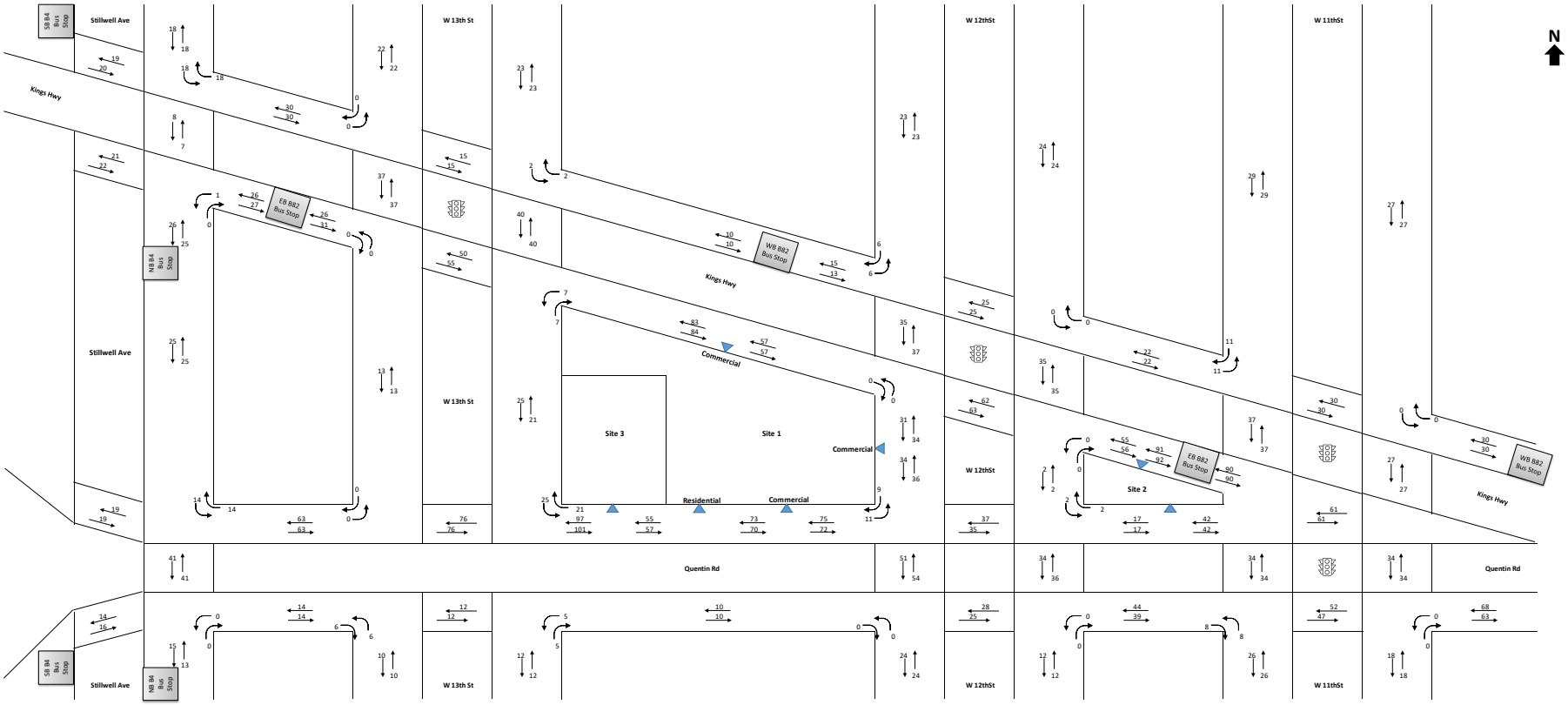
	Ped	In	Out
Site 1	266	133	133
Site 2	158	79	79
Site 3	152	76	76
Total	576	288	288

Project Generated Pedestrian Trips
Weekday MD Peak Hour
Figure 4



	Ped	In	Out
Site 1	368	189	179
Site 2	214	107	107
Site 3	209	106	103
Total	791	402	389

Project Generated Pedestrian Trips
Weekday PM Peak Hour
Figure 5



	Ped	In	Out
Site 1	427	216	211
Site 2	248	124	124
Site 3	246	124	122
Total	921	464	457

Project Generated Pedestrian Trips
Saturday MD Peak Hour
Figure 6