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# 14-10 Beach Channel Drive

## Environmental Assessment Statement

**Address: 14-10 Beach Channel Drive, Far Rockaway, NY 11691**

**Block 15525, Lots 1, 40, 44, 47, 49, 51**

**Queens Community District 14**

**CEQR Reference: ~~TBD~~ 24DCP067Q**

**ULURP Reference: TBD**

**Lead Agency:**
Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

**Prepared for:**
14-10 Beach LLC

**Prepared by:**
GZA GeoEnvironmental, Inc.




**Date Submitted:**
November 13, 2023

GZA GeoEnvironmental, Inc.
55 Lane Road | Fairfield, NJ 07004
104 West 29th St, 10th Fl | New York, NY 10001
www.gza.com | GZA LinkedIn

# Table of Contents


EAS SHORT FORM ..... i

1 Project Description ..... 1

1.1 Introduction ..... 1

1.2 Background and Site History ..... 1

1.3 Description of the Surrounding Area ..... 2

1.4 Description of the Affected Area ..... 3

1.5 Description of the Proposed Project ..... 4

1.6 Action(s) Necessary to Facilitate the Project ..... 5

1.7 Purpose and Need ..... 5

1.8 Analysis Framework ..... 5

2 Environmental Review ..... 10

2.1 Land Use, Zoning, and Public Policy ..... 11

2.1.1 Land Use ..... 11

2.1.2 Zoning ..... 15

2.1.3 Public Policy ..... 20

2.2 Socioeconomic Conditions ..... 41

2.2.1 Preliminary Socioeconomic Assessment ..... 43

2.2.2 Indirect Residential Displacement Assessment ..... 44

2.2.3 Conclusion ..... 52

2.3 Open Space ..... 53

2.3.1 Preliminary Open Space Assessment ..... 54

2.3.2 Open Space Resources ..... 57

2.3.3 NYC Parks Walk to a Park Initiative ..... 60

2.3.4 Preliminary Open Space Assessment Conclusion ..... 62

2.3.5 Detailed Open Space Assessment ..... 63

2.3.6 Conclusions ..... 67

2.4 Shadows ..... 69

2.4.1 Tier 1 Shadow Screening Assessment ..... 70

2.4.2 Tier 2 Shadow Screening Assessment ..... 72

2.4.3 Tier 3 Shadow Screening Assessment ..... 72
2.4.4 Detailed Shadow Analysis ..... 78
2.4.5 Determination of Impacts ..... 80
2.4.6 Conclusion ..... 80
2.5 Historic and Cultural Resources ..... 81
2.5.1 Architectural Resources ..... 82
2.5.2 Archaeological Resources ..... 84
2.5.3 Conclusion ..... 85
2.6 Urban Design and Visual Resources ..... 86
2.6.1 Existing Conditions ..... 86
2.6.2 Future No-Action Condition ..... 99
2.6.3 Future With-Action Condition ..... 99
2.6.4 Conclusion ..... 101
2.7 Hazardous Materials ..... 104
2.7.1 Phase I Environmental Site Assessment ..... 105
2.7.2 Phase II Subsurface Investigation Report ..... 106
2.7.3 Conclusion ..... 107
2.8 Transportation ..... 109
2.8.1 Preliminary Assessment ..... 110
2.8.2 Level 1 Trip Generation Screening Assessment ..... 110
2.8.3 Level 2 Screening Assessment ..... 115
2.9 Air Quality ..... 122
2.9.1 Mobile Sources ..... 126
2.9.2 Stationary Sources ..... 127
2.9.3 Industrial Emissions ..... **Error! Bookmark not defined.**
2.9.4 Industrial Emissions Conclusion ..... 134
2.10 Noise ..... 142
2.10.1 Initial Impact Screening ..... 146
2.10.2 Noise Monitoring Results ..... 147
2.10.3 Conclusion ..... 156
2.11 Neighborhood Character ..... 158

2.11.1 Preliminary Analysis ..... 158
2.11.2 Conclusion ..... 163
2.12 Construction ..... 164
2.12.1 Conclusion ..... 170

**Appendices:**

Appendix A: Agency Correspondence

Appendix B: Architectural Plans

Appendix C: Waterfront Revitalization Program Consistency Assessment Form and Flood Evaluation Worksheet

Appendix D: Jamaica Bay Watershed Protection Plan Tracking Form

Appendix E: Detailed Shadows Analysis Figures

Appendix F: Noise Back Up Data

# EAS SHORT FORM

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

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

## Part I: GENERAL INFORMATION

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

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

**2. *Project Name*** 14-10 Beach Channel Drive Rezoning

**3. *Reference Numbers***

| CEQR REFERENCE NUMBER (to be assigned by lead agency) | BSA REFERENCE NUMBER (if applicable) |
|---|---|
| 24DCP067Q | |
| ULURP REFERENCE NUMBER (if applicable) | OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA) |
| 240079ZMQ; N240080ZRQ | |

| **4a. *Lead Agency Information*** | | | **4b. *Applicant Information*** | | |
|---|---|---|---|---|---|
| NAME OF LEAD AGENCY<br>New York City Department of City Planning | | | NAME OF APPLICANT<br>14-10 Beach LLC | | |
| NAME OF LEAD AGENCY CONTACT PERSON<br>Stephanie Shellooe, Director, EARD | | | NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON<br>Christina Szczepanski, Senior Consultant, Equity Environmental Engineering, a Division of GZA | | |
| ADDRESS 120 Broadway, 31st Floor | | | ADDRESS 55 Lane Road | | |
| CITY New York | STATE NY | ZIP 10271 | CITY Fairfield | STATE NJ | ZIP 07004 |
| TELEPHONE 212-720-3328 | EMAIL<br>sshellooe@planning.nyc.gov | | TELEPHONE 973-774-3300 | EMAIL<br>christina.szczepanski@gza.com | |

**5. *Project Description***

The Applicant, 14-10 Beach LLC, is seeking a zoning map amendment from an R5 zoning district to the R6A and R6A/C2-4 zoning districts and a zoning text amendment to Appendix F of the NYC Zoning Resolution to map a Mandatory Inclusionary Housing (MIH) area coterminous to the proposed rezoning area, collectively known as the "Proposed Actions." The Proposed Actions would facilitate the development of a new 6-story plus cellar, 67-foot tall, 95,608 gross square foot (GSF) (3.33 FAR) mixed-use residential, commercial, and community facility building (the "Proposed Project"). The proposed commercial and community facility spaces would be located on the ground floor of the proposed building and would house local retail and religious uses, respectively. Floors 2 through 6 would feature 96 dwelling units total, 25 to 30 percent (24 to 29 units) of which would be affordable pursuant to the MIH program, at an average of 60 to 80 percent Area Median Income (AMI) depending on the MIH Option selected. The Applicant intends to pursue MIH Option 1, which would result in 24 affordable units. Ninety-seven residential accessory parking spaces and 5 commercial accessory parking spaces would be provided as part of the Proposed Project, which would exceed the minimum accessory parking requirements of the proposed R6A/C2-4 zoning district, including 56 spaces at the cellar level and 46 spaces on the ground floor.

It is also expected that one additional site within the proposed rezoning area would be redeveloped in the future with the Proposed Actions, in accordance with the proposed R6A zoning district. The projected 8-story (85-feet tall), 79,322 GSF building on Projected Development Site 2 would be zoned R6A. The proposed building is assumed to contain 93 DUs (23-28 affordable DUs) and 41 accessory parking spaces.

***Project Location***

| BOROUGH Queens | COMMUNITY DISTRICT(S) 14 | STREET ADDRESS 14-10 Beach Channel Drive |
|---|---|---|
| TAX BLOCK(S) AND LOT(S) Block 15525, Lots 1 and 51 | | ZIP CODE 11691 |
| DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Nameoke Avenue to the south, Beach Channel Drive to the west, and residential properties to the north and east | | |
| EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R5 | | ZONING SECTIONAL MAP NUMBER 25b |

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

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

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

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

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

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

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

***Physical Setting*** (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 28,625 Waterbody area (sq. ft) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 28,625 Other, describe (sq. ft.): 0

**8. *Physical Dimensions and Scale of Project*** (if the project affects multiple sites, provide the total development facilitated by the action)

SIZE OF PROJECT TO BE DEVELOPED (gross square feet):

NUMBER OF BUILDINGS: 2 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 95,608 GSF; 79,322 GSF

HEIGHT OF EACH BUILDING (ft.): 67'; 85' NUMBER OF STORIES OF EACH BUILDING: 6 stories plus cellar; 8 stories plus cellar

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: 28,625
The total square feet not owned or controlled by the applicant: 20,031

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: 48,656 sq. ft. (width x length) VOLUME OF DISTURBANCE: TBD cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 48,656 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.) | 181,696 | 4,013 | 4,576 | 0 |
| ***Type*** (*e.g.,* retail, office, school) | 213 units | Local Retail | Institutional - Religious | N/A |

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 609 NUMBER OF ADDITIONAL WORKERS: 28

Provide a brief explanation of how these numbers were determined: The number of residents was calculated by multiplying the number of proposed dwelling units (213) by the average household size for Queens Community District 14 (2.86), pursuant to U.S. Census 2016-2020 American Community Survey (ACS) data. The number of additional workers on-site was calculated using the following factors: 1 employee per 25 dwelling units and 1 employee per 333.3 GSF of retail and community facility space.

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: 18

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: Assuming receipt of necessary approvals (e.g., ULURP) and completed construction by late 2024 and an 18-month construction schedule, the Applicant's Proposed Project is anticipated to be completed and operation by Spring 2026.

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

☒ RESIDENTIAL ☒ MANUFACTURING ☐ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Public Facilities / Institutions; Transportation / Utilities

## 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. See Attachment | | |
| **(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. See Attachment | | |
| **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 Attachment | | |
| **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 Attachment | ☐ | ☒ |
| **(j)** Based on the Phase I Assessment, is a Phase II Investigation needed? See Attachment | ☒ | ☐ |
| **10. *WATER AND SEWER INFRASTRUCTURE***: CEQR Technical Manual Chapter 13 | | |
| **(a)** Would the project result in water demand of more than one million gallons per day? | ☐ | ☒ |
| **(b)** If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens? | ☐ | ☒ |
| **(c)** If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13? | ☐ | ☒ |
| **(d)** Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase? | ☐ | ☒ |
| **(e)** If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase? | ☐ | ☒ |
| **(f)** Would the proposed project be located in an area that is partially sewered or currently unsewered? | ☐ | ☒ |
| **(g)** Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system? | ☐ | ☒ |

| | YES | NO |
|---|---|---|
| **(h)** Would the project involve construction of a new stormwater outfall that requires federal and/or state permits? | ☐ | ☒ |
| **11. *SOLID WASTE AND SANITATION SERVICES***: CEQR Technical Manual Chapter 14 | | |
| **(a)** Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 4,448 (net) | | |
| ○ 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): 22 Million (net) | | |
| **(b)** Would the proposed project affect the transmission or generation of energy? | ☐ | ☒ |
| **13. *TRANSPORTATION***: CEQR Technical Manual Chapter 16 | | |
| **(a)** Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16? | ☒ | ☐ |
| **(b)** If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions: | | |
| ○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour? | ☒ | ☐ |
| If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.* | ☐ | ☐ |
| ○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour? | ☐ | ☒ |
| If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing? | ☐ | ☒ |
| ○ Would the proposed project result in more than 200 pedestrian trips per project peak hour? | ☒ | ☐ |
| If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop, or Citywide Ferry Service landing? | ☐ | ☒ |
| **14. *AIR QUALITY***: CEQR Technical Manual Chapter 17 | | |
| **(a)** *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17? | ☐ | ☒ |
| **(b)** *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17? | ☒ | ☐ |
| ○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) | ☒ | ☐ |
| **(c)** Does the proposed project involve multiple buildings on the project site? | ☐ | ☒ |
| **(d)** Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements? | ☐ | ☒ |
| **(e)** Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts? | ☐ | ☒ |
| **15. *GREENHOUSE GAS EMISSIONS***: CEQR Technical Manual Chapter 18 | | |
| **(a)** Is the proposed project a city capital project or a power generation plant? | ☐ | ☒ |
| **(b)** Would the proposed project fundamentally change the City's solid waste management system? | ☐ | ☒ |
| **(c)** If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18? | ☐ | ☐ |
| **16. *NOISE***: CEQR Technical Manual Chapter 19 | | |
| **(a)** Would the proposed project generate or reroute vehicular traffic? | ☒ | ☐ |
| **(b)** Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line? | ☒ | ☐ |
| **(c)** Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise? | ☐ | ☒ |
| **(d)** Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts? | ☐ | ☒ |
| **17. *PUBLIC HEALTH***: CEQR Technical Manual Chapter 20 | | |
| **(a)** Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise? | ☒ | ☐ |

| | YES | NO |
|---|---|---|
| **(b)** If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. A preliminary analysis has not been provided. With appropriate mitigation measures (e.g., E-Designations, etc.), no significant adverse impacts associated with any of these technical areas are anticipated, such that a Public Health analysis is not warranted. | | |
| **18. *NEIGHBORHOOD CHARACTER***: CEQR Technical Manual Chapter 21 | | |
| **(a)** Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise? | ☒ | ☐ |
| **(b)** If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. See Attachment | | |
| **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. See Attachment | | |

**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 |
|---|---|
| Christina Szczepanski | 11/13/2023 |

SIGNATURE Christina Szczepanski

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

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

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

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

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

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

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

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

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

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

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

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

| TITLE | LEAD AGENCY |
|---|---|
| NAME | DATE |
| SIGNATURE | |

**NEGATIVE DECLARATION (Use of this form is optional)**

**Statement of No Significant Effect**

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

**Reasons Supporting this Determination**

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

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

| TITLE | LEAD AGENCY |
|---|---|
| NAME | DATE |
| SIGNATURE | |

**Figure 1.1-1: Site Location Map**

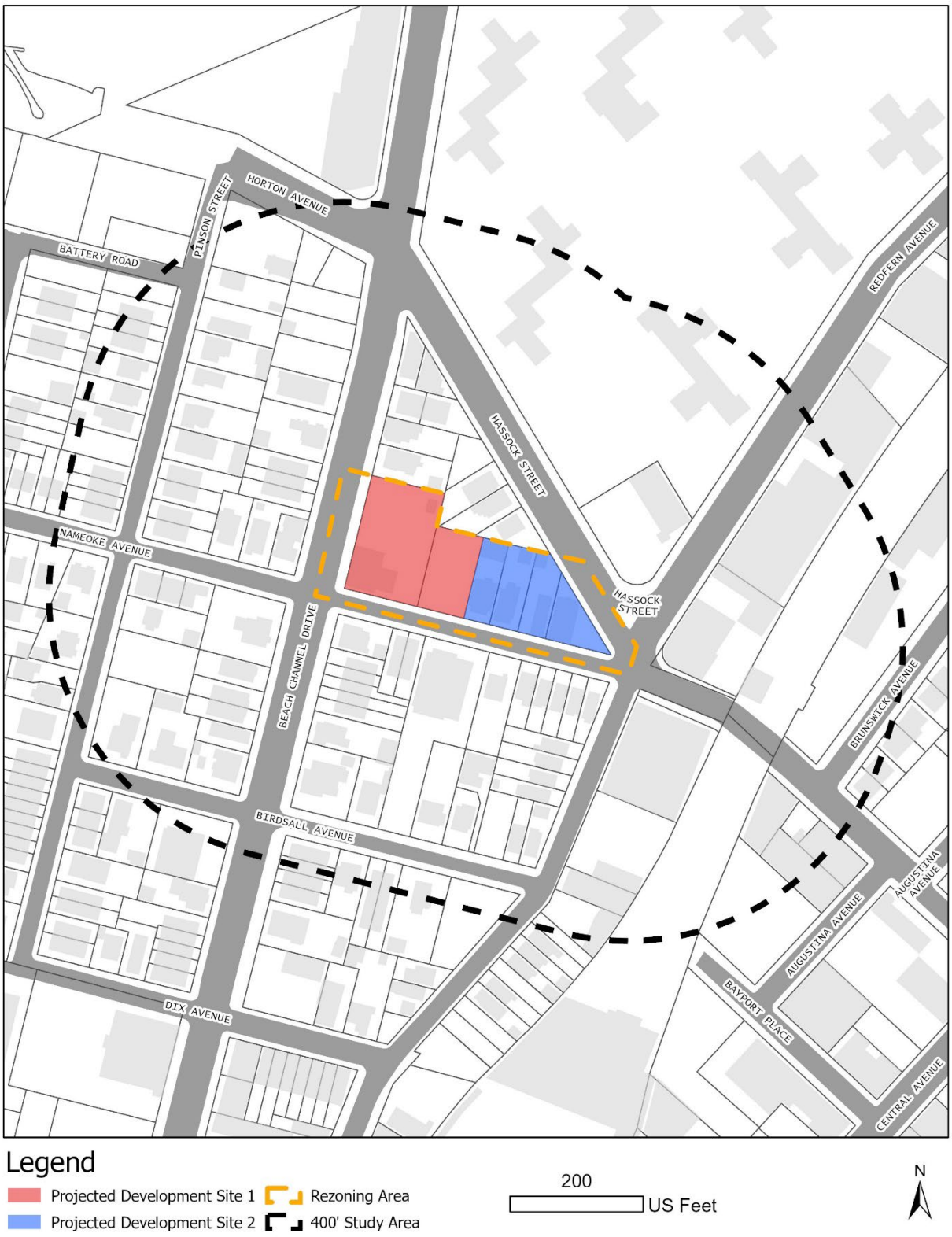


**Figure 1.1-2: Existing Land Use Map**

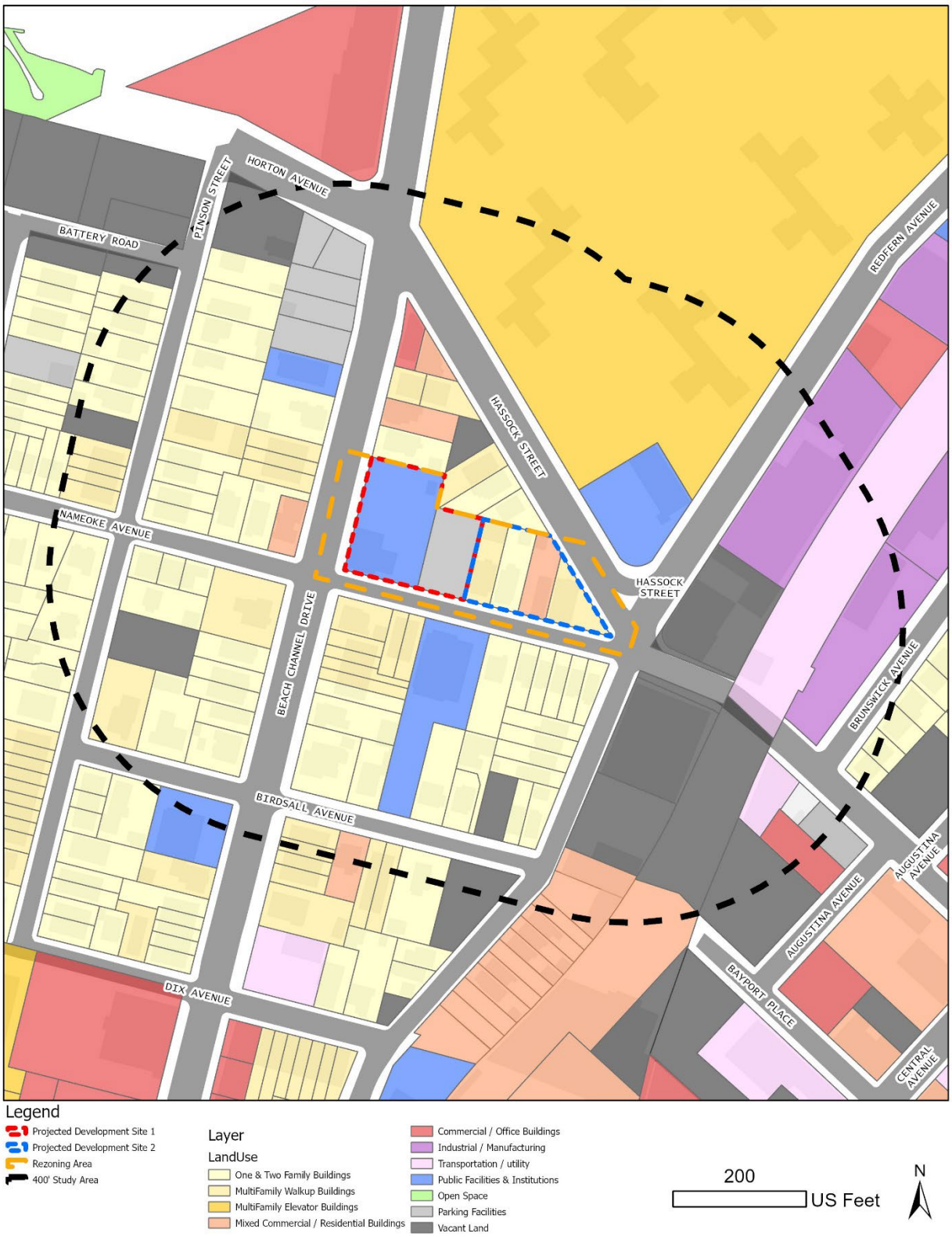


**Figure 1.1-3: Zoning Sectional Map**

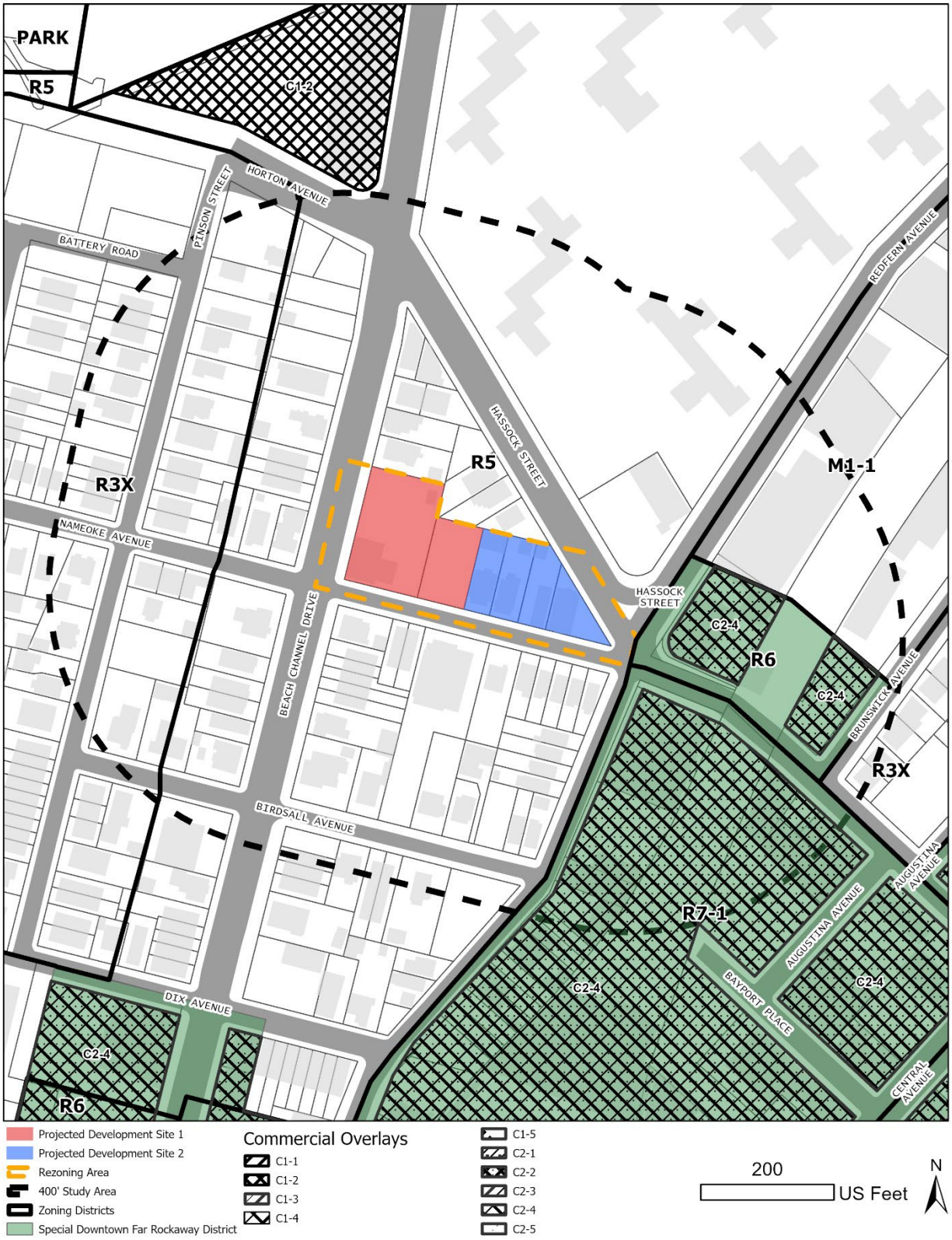
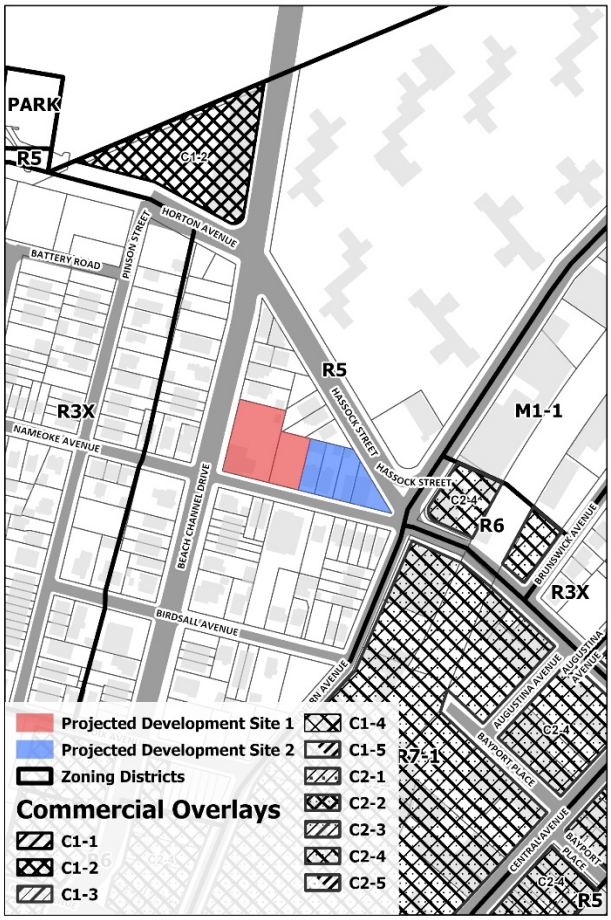
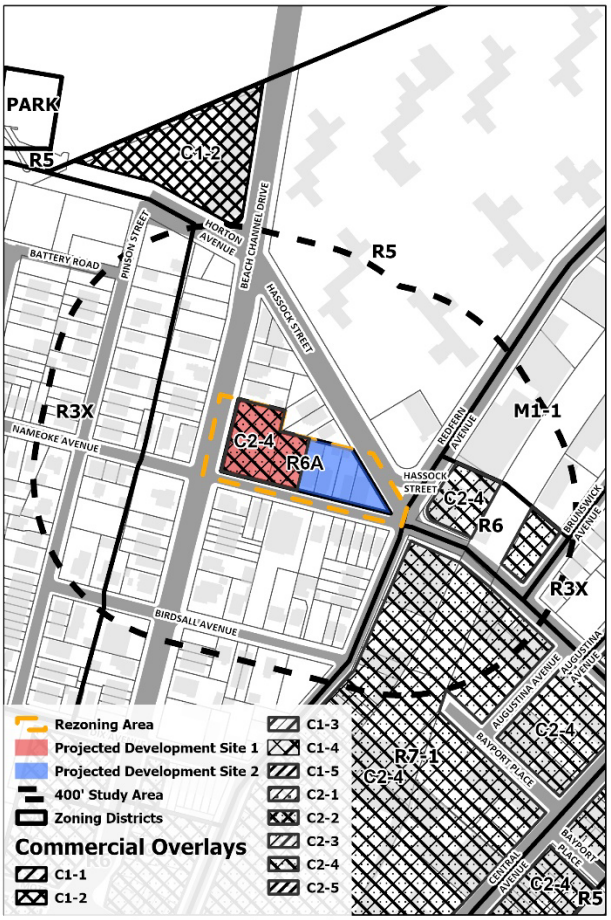


**Figure 1.1-4: Zoning Change Map**




Existing R5 Zoning District




Proposed R6A and R6A/C2-4 Zoning District

**Figure 1.1-5: Tax Map**

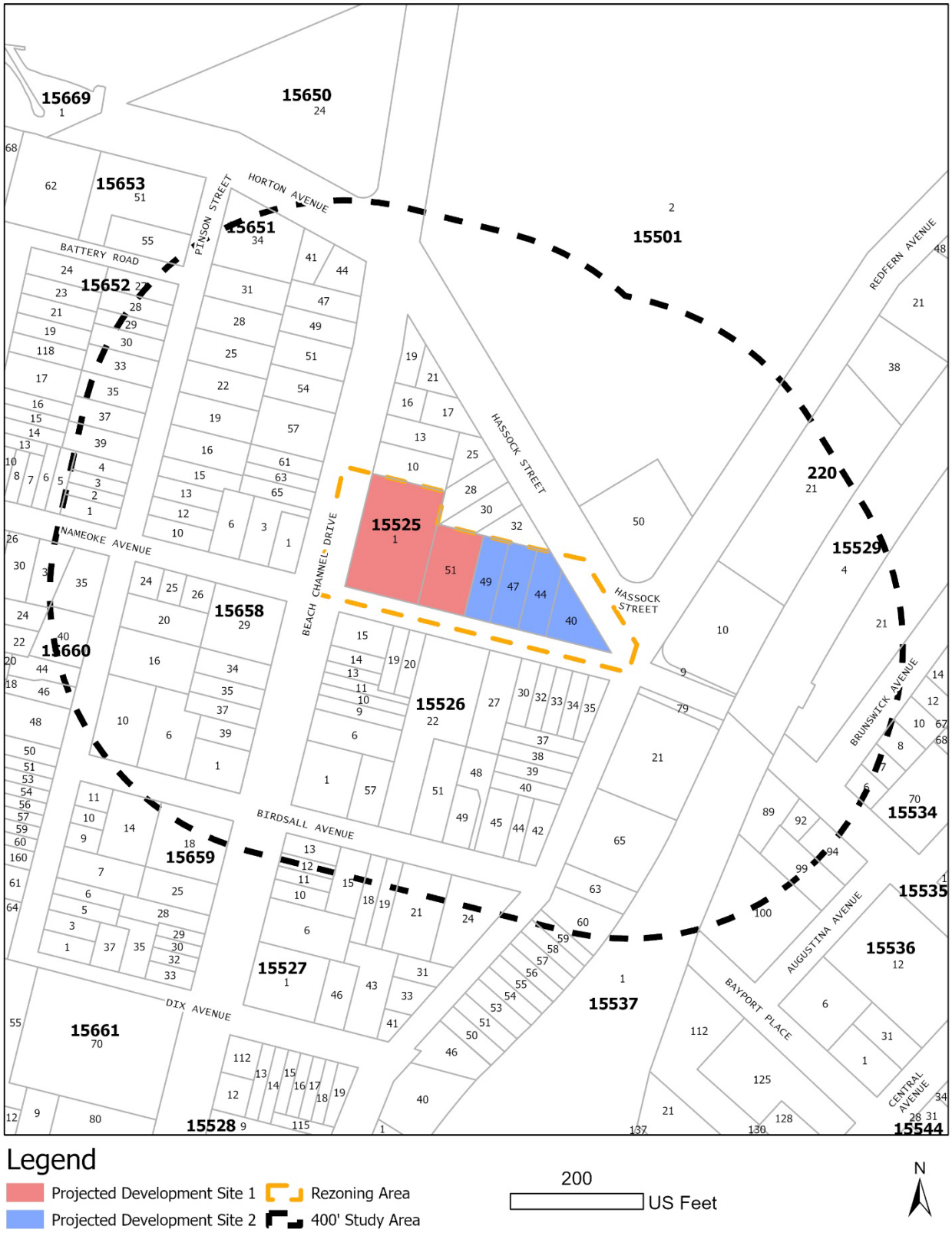


**Figure 1.1-6: Site Photos**



a Looking northwest along Hassock St from Redfern Ave



b Looking southeast along Hassock St from Beach Channel Dr



c Looking northwest along Nameoke Ave from Redfern Ave




Photo Key

**Figure 1.1-7: Site Photos**



d Looking northwest along Nameoke Ave towards Projected Development Site 2



e Looking northwest along Nameoke Ave towards Projected Development Site 1



f Looking southwest along Beach Channel Dr from Nameoke Ave

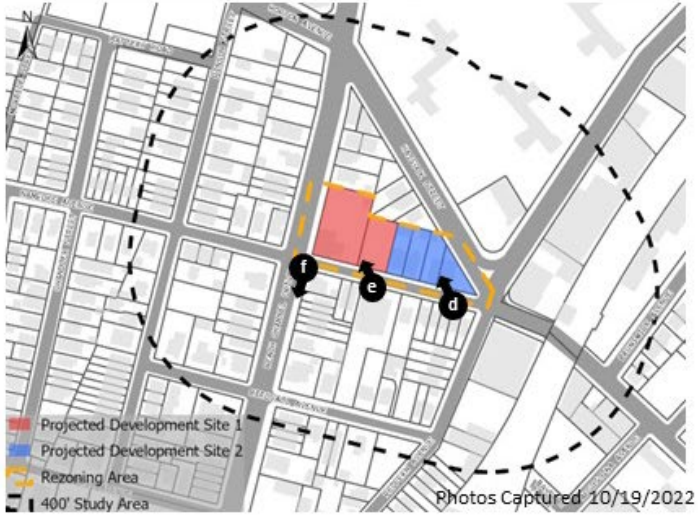



Photo Key

**Figure 1.1-8: Site Photos**



g Looking northeast at Projected Development Site 1 from Beach Channel Dr



h Looking north along Beach Channel Dr from Nameoke Ave; Projected Development Site 1 is to the right



i Looking southeast at Projected Development Site 1 from Beach Channel Dr




**Photo Key**

# 1 Project Description

## 1.1 Introduction

14-10 Beach LLC (the "Applicant") seeks a Zoning Map Amendment from the R5 zoning district to the R6A and R6A / C2-4 zoning districts on a portion of Block 15525 in the Far Rockaway neighborhood of Queens Community District 14. The "Affected Area" consists of Block 15525, Lots 1, 40, 44, 47, 49, 51. The proposed Zoning Map Amendment would rezone Block 15525, Lots 1 and 51 from an R5 zoning district to an R6A / C2-4 zoning district and Block 15525, Lots 40, 44, 47, and 49 from an R5 zoning district to an R6A zoning district. The Applicant is also proposing a Zoning Text Amendment to Appendix F to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. The Zoning Map Amendment and Zoning Text Amendment are collectively referred to as the "Proposed Actions."

The Proposed Actions are being requested to facilitate the Applicant's development of 14-10 Beach Channel Drive (Block 15525, Lots 1 and 51; "Projected Development Site 1"). The Applicant proposes to redevelop Projected Development Site 1 with a 100,388 GSF (95,608 ZSF, 3.33 FAR), six-story plus cellar mixed-use multi-family residential, commercial, and community facility building. The 90,600 GSF (86,287 ZSF, 3.01 FAR) residential portion would be located on floors two (2) through six (6) of the proposed building and would feature 96 residential units total, 25 to 30 percent (24 to 29 units) of which would be affordable pursuant to the MIH program, at an average of 60 to 80 percent AMI, dependent on the MIH Option selected. The Applicant intends to pursue MIH Option 1, which would result in 24 affordable units. The 5,125 GSF (4,881 ZSF, 0.17 FAR) commercial retail and 4,662 GSF (4,440 ZS, 0.15 FAR) community facility spaces would be located on the ground floor of the proposed building and would house local retail and religious uses, respectively. The proposed religious space would be used to re-establish the existing church at Projected Development Site 1. 97 residential accessory parking spaces and 5 commercial accessory parking spaces would be provided as part of the Proposed Project, which would exceed the minimum accessory parking requirements of the proposed R6A/C2-4 zoning district, including 56 spaces at the cellar level and 46 spaces on the ground floor.

Zoning Map and Zoning Text Amendments area discretionary actions subject to environmental review. The New York City Department of City Planning (NYCDCP) is the lead agency on behalf of the New York City Planning Commission (CPC) for environmental review under the City Environmental Quality Review Act (CEQR).

## 1.2 Background and Site History

The Affected Area is located in the Far Rockaway neighborhood of Queens Community District 14. The Affected Area is within a mapped R5 zoning district, established as part of the 1961 New York City Zoning Resolution and has not experienced a change in zoning since.

Both lots comprising Projected Development Site 1 were acquired by the Applicant in July 2021. Block 15525, Lot 1 features two (2) buildings, both of which were constructed in 1930. These two buildings are currently occupied by Glory Light Tabernacle International Ministry (i.e., a church) and the Hi5 Used Car Dealer, both of which operated on the site before the Applicant's acquisition. Lot 51 is paved and is used as an unlicensed parking lot. The remaining non-Applicant owned lots comprising the Affected Area include several residential buildings constructed in 1920 (Lots 40, 47, and 49) and a mixed-use residential and community facility building constructed in 1931 (Lot 44).

The Affected Area is situated between, but not within, two relatively recent rezoning areas, including the 2006 Bayswater Rezoning (C 06259 ZMQ) to the west and the 2017 Downtown Far Rockaway Rezoning (C 170243A ZMQ) to the east (see **Figure 1.1-3**). The 2006 Bayswater Rezoning Area is predominantly developed with one- and two-family detached homes, as well as some pockets of semi-detached houses. The rezoning lowered density and created contextual zoning districts to reflect and preserve the established neighborhood development patterns. The 2017 Downtown Far Rockaway Rezoning sought, among other things, to support new, mixed-use development and the development of permanently affordable housing, to ensure that new development blends into the existing neighborhood fabric, and to re-establish Downtown Far Rockaway as the commercial and transportation hub of the Rockaway peninsula. To that end, it rezoned areas around the A Train terminus to R6A and R7-1 zoning districts and established Special District-imposed controls. The Affected Area is within 300 feet of both of these districts.

The more recent Downtown Far Rockaway Rezoning reflects the City's interest in establishing Downtown Far Rockaway as a commercial and transportation hub with a diverse mix of multi-family residential, commercial, and community facility uses.

## 1.3 Description of the Surrounding Area

The Affected Area is located within the Far Rockaway neighborhood of Queens Community District 14. The area is bounded by Beach Channel Drive to the west, Nameoke Avenue to the south, Hassock Street to the east and northeast, and residential properties associated with Block 15525 to the north. Beach Channel Drive runs north-south and features one lane of traffic in each direction, each with a shared bike path and curbside parking. At its intersection with Nameoke Avenue, Beach Channel Drive features a dedicated left turning lane along at both the northbound and southbound lanes. Nameoke Avenue runs east-west with curbside parking on its northern shoulder; west of Beach Channel Drive, Nameoke Avenue features one lane of traffic in each direction while east of Beach Channel Drive it is a one-way eastbound street. Hassock Street is a one way, one lane northwest bound street that intersects with Beach Channel Drive at its northwest terminus and converges with Nameoke Avenue at its southeast terminus, with curbside parking on either side of the street.

*Land Use*

Existing land uses within a 400-foot radius of the Affected Area (the "surrounding area" or "Study Area") are defined by those east and west of Redfern Avenue, which bisects the Study Area north-south. Those land uses west of Redfern Avenue primarily consist of one- and two-family and multi-family residential buildings, interspersed with public facility and institutional uses, as well as scattered commercial uses and vacant land. A southern portion of the New York City Housing Authority (NYCHA) Redfern Houses is found in the northern Study Area, an 18.78-acre public housing development with nine (9) residential buildings containing over 600 dwelling units combined. Land uses east of Redfern Avenue are characterized by a cluster of vacant properties at the southeast Study Area, many which feature active construction, and large industrial and utility / transportation uses, the latter of which is associated with the Metropolitan Transportation Authority (MTA) Long Island Rail Road (LIRR) Far Rockaway station and rail tracks, at the eastern and northeastern Study Area. A cluster of one- and two-family residential uses is found at the eastern extent of the Study Area.

The area is well served by transit with multiple transportation options in the vicinity of the Affected Area. The closest bus stop to the Affected Area is for the Q114 bus near the intersection of Beach Channel Drive and Nameoke Avenue. The Q114 bus operates between Seagirt Boulevard in Far Rockaway via Brewster Boulevard and Parsons Boulevard/Hillside Avenue in Jamaica via Brewster Avenue. The Affected Area is also served by the MTA-LIRR Far Rockaway Station located on Nameoke Avenue between Redfern Avenue and Brunswick Avenue. The MTA-LIRR Far Rockaway train line operates from Nameoke Avenue in Far Rockaway to Penn Station in Manhattan.

*Zoning*

Mapped zoning districts within 400 feet of the Affected Area include the R3X, R5, R6, R7-1, and M1-1 districts, with portions of the R5 district featuring a C1-2 commercial overlay and portions of the R6 and R7-1 districts featuring C2-4 commercial overlays (see **Figure 1.1-3**).

## 1.4 Description of the Affected Area

The Affected Area is located within Block 15525, comprised of all parcels at the block with frontage on Nameoke Avenue, including Lots 1, 40, 44, 47, 49, and 51. The Affected Area contains approximately 48,656 SF of lot area within Block 15525.

**The Applicant-Owned Projected Development Site**

The Applicant-owned Projected Development Site 1 is located at 14-10 Beach Channel Drive (Block 15525, Lots 1 and 51), with a total area of 28,625 SF. Lot 1 is a corner lot with 175 feet of frontage on Beach Channel Drive and 110 feet of frontage of Nameoke Avenue. The lot features two buildings, both constructed in 1930, including a one-story, 3,582 GSF community facility

building (used as a church) and a 306 GSF, one-story commercial building used as an office for the associated car dealership. Lot 51 is an interior lot that is currently vacant, paved, and used as an unlicensed parking lot, with 75 feet of frontage along Nameoke Avenue. Both lots comprising Projected Development Site 1 were acquired by the Applicant in July 2021.

**Non-Applicant Owned Sites**

The other non-Applicant owned lots within the Affected Area are Lots 40, 44, 47, and 49, each of which are independently owned, as described below.

- Lot 40 is a 4,968 SF triangular, interior lot with frontages on Nameoke Avenue and Hassock Street. The lot is improved with a two-story, 2,500 GSF (2,500 ZSF) multi-family residential building with four (4) dwelling units, constructed in 1920.
- Lot 44 is a 5,063 SF interior lot, rectangular in shape, with frontage on Nameoke Avenue. The lot is developed with a two-story, 1,600 GSF (1,600 ZSF) mixed-use multi-family residential and community facility building with three (3) dwelling units and a groundfloor religious use, constructed in 1931.
- Lots 47 is a 5,000 SF interior lot, rectangular in shape, with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,382 GSF (2,382 ZSF) two-family residential structure constructed in 1920.
- Lot 49 is a 5,000 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,568 GSF (2,568 ZSF) multi-family residential structure with three (3) dwelling units, constructed in 1920.

## 1.5 Description of the Proposed Project

The Applicant proposes to redevelop Projected Development Site 1 with a 100,388 GSF (95,608 ZSF, 3.33 FAR), six-story plus cellar mixed-use multi-family residential, commercial, and community facility building. The 90,600 GSF (86,287 ZSF, 3.01 FAR) residential portion would be located on floors two (2) through six (6) of the proposed building and would feature 96 residential units total, 25 to 30 percent (24 to 29 units) of which would be affordable pursuant to the MIH program, at an average of 60 to 80 percent AMI, dependent on the MIH Option selected. The Applicant intends to pursue MIH Option 1, which would result in 24 affordable units. The 5,125 GSF (4,881 ZSF,0.17 FAR) commercial retail and 4,662 GSF (4,440 ZSF 0.15 FAR) community facility spaces would be located on the ground floor of the proposed building and would house local retail and religious uses, respectively. The proposed religious space would be used to re-establish the existing church at Projected Development Site 1. 97 residential accessory parking spaces and 5 commercial accessory parking spaces would be provided as part of the Proposed Project, which would exceed the minimum accessory parking requirements of the proposed R6A/C2-4 zoning district, including 56 spaces at the cellar level and 46 spaces on the ground floor.

## 1.6 Action(s) Necessary to Facilitate the Project

The discretionary actions (Proposed Actions) necessary to facilitate the construction of the Applicant's Proposed Project include the approval of:

(1) a Zoning Map Amendment to map a R6A and R6A/C2-4 zoning districts in the Affected Area that is currently with a mapped R5 zoning district; and

(2) A Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designation Areas and Mandatory Inclusionary Housing Areas for Community District 14, Queens, to establish the Affected Area as an MIH Area, Option 1.

As previously discussed, these requested discretionary approvals are collectively referred to as the "Proposed Actions."

## 1.7 Purpose and Need

Current zoning will not permit the Applicant to develop the Proposed Project, as the existing R5 zoning district does not permit the proposed commercial uses and floor area as-of-right. Mapping the proposed R6A/C2-4 district would be consistent with the City's goals for the Downtown Far Rockaway neighborhood as specified in the Downtown Far Rockaway Rezoning application by promoting development on underutilized property. Further, it would build on the existing middle-density residential community and would improve the local retail experiences and support the nearby public transit links.

The Affected Area is an underutilized area primarily used for parking with a modest low-rise building and would benefit from redevelopment as a mixed-use residential building to help meet the demand for additional housing. The Proposed Actions would provide new opportunities for affordable and market-rate housing development, adding 96 new housing units to help meet the housing demand in the area. Furthermore, 25 to 30 percent of the proposed dwelling units would be affordable pursuant to the MIH program, at an average of 60 to 80 percent AMI, dependent on the MIH Option selected. Overall, this would improve the housing conditions in the Far Rockaway – Bayswater neighborhood, where 14.7 percent of the population lives below the poverty level.

## 1.8 Analysis Framework

The analysis framework compares the incremental difference between the proposed and potential development under the Proposed Actions (Future With-Action Scenario) and the development which could occur under the existing zoning (Future No-Action Scenario) by the build year specified below. This EAS studies the potential for individual and cumulative environmental impacts related to the Proposed Actions occurring in a study area of approximately 400 feet around the Affected Area. The analysis framework is described below:

**Reasonable Worst-Case Development Scenario**

Discretionary actions sometimes permit a range of project characteristics, or development scenarios, to occur even though the action may be sought in order to facilitate a specific development. From the range of possible scenarios that are considered reasonable and likely, the scenario with the worst environmental consequences is chosen for analysis. This is considered to be the Reasonable Worst-Case Development Scenario (RWCDS), the use of which ensures that, regardless of which scenario actually occurs, its impacts would be no worse than those considered in the environmental review. The environmental assessment examines the incremental differences between the RWCDS of the future without the project in place (No-Action Scenario) and the future with the Proposed Actions (With-Action Scenario).

The *2021 CEQR Technical Manua*l categorizes soft sites as either "projected" or "potential" development sites. Projected development sites are defined as those sites that are more likely to be developed as a result of the proposed project. Potential sites are defined as sites that could be developed but have been determined to have less development potential than the projected development sites, based on observed historic and current market conditions, location, site configuration, proximity to transit, infrastructure and other facilities, and other factors that affect the likelihood that they would be developed under the Proposed Actions. Projected Development Sites are analyzed for both site-specific and density-related effects, whereas potential development sites are only analyzed for site-specific effects.

Pursuant to *2021 CEQR Technical Manual* methodology, sites may be considered 'soft' if they are built to substantially less than the maximum permitted floor area ratio and are of a sufficient size or could be assembled into a parcel of sufficient size, to support a feasible development. Sites that have recently been developed or redeveloped are considered less likely to be soft, due to the significant recent investment in the current use.

Build Year

The anticipated Build Year for the purposes of the analysis framework is 2028, which assumed receipt of all required approvals (e.g., ULURP) by Spring 2024. After receipt of approvals, construction of Projected Development Site 1 would commence in October 2024 and is projected to take 18 months, finishing in Spring 2026. Concurrently, the assemblage, finance, and design of Projected Development Site 2 would occur (anticipated 16-month duration) with construction commencing in Summer 2027 and lasting 16 months. Based on the foregoing, estimated completion and operation date for all development sites within the Affected Area is Fall / Winter 2028.

Future Without the Proposed Actions (No-Action Condition)

The Future No-Action Condition for the Affected Area would be equivalent to existing conditions. Redevelopment is not considered likely in this scenario as the area and bulk permitted under the current R5 district (1.25 residential and 2.00 community facility) does not allow for much additional development beyond what already exists within the Affected Area.

Future With the Proposed Actions (With-Action Condition)

This Future With-Action Scenario was determined by assuming a maximum FAR and height buildout for both Projected Development Sites. Standard assumptions were used for the development of the RWCDS, including 850 GSF per dwelling unit, 25 to 30 percent of residential floor area reserved as permanently affordable at an average of 60 to 80 percent AMI, dependent on the MIH Option selected, and a 15-foot bulkhead for a conservative shadows analysis.

*Projected Development Site 1 (Block 15525, Lots 1 and 51; the Applicant-Owned Lots)*

On the combined 28,625-sf lot, it is assumed that the Applicant would construct an eight-story, 85-foot-tall mixed residential, commercial, and community facility building with 110,964 GSF (103,050 ZSF, 3.6 FAR) of total floor area. There would be 4,576 GSF (4,400 ZSF, 0.15 FAR) of UG 4 community facility floor area and 4,013 GSF (3,859 ZSF, 0.13 FAR) of UG 6 local retail floor area on the ground floor and 102,374 GSF (94,791 ZSF, 3.31 FAR) of UG 2 residential floor area on the upper floors. Assuming 850 GSF per dwelling unit, there would be 120 dwelling units, 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Since the Applicant intends to pursue MIH Option 1, approximately 30 units would be reserved as affordable to households with incomes averaging 60 percent of the AMI, resulting in 90 market-rate units. 53 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

*Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49; Non-Applicant Lots)*

On the combined 20,031-SF site, it is assumed that a 79,322 GSF (72,111 ZSF, 3.6 FAR), eight-story, 85-foot-tall residential building would be constructed. Assuming 850 GSF per dwelling unit, Projected Development Site 2 would contain 93 residential dwelling units (UG 2), 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Consistent with Projected Development Site, use of MIH Option 1 is assumed, resulting in approximately 23 units reserved as affordable to households with incomes averaging 60 percent of the AMI, leaving a balance of 70 market rate units. 41 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

The Projected Development Sites within the Affected Area are shown in **Figure 1.1-1**.

The RWCDS Existing, Future No-Action, and Future With-Action Scenarios at the Projected Development Sites are shown below in **Table 1.8-1**. The RWCDS increment of Analysis on the Projected Development Sites within the Affected Area are presented in **Table 1.8-2**.

## Table 1.8-1: RWCDS Analysis Framework - Existing, No-Action, and With-Action Conditions

| Site Info | | | | Existing Condition | | | | | | | | No-Action Condition | | | | | | | | With-Action Condition | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Site ID | Block | Lot | Lot Area | Zoning | MF (gsf) | Com. (gsf) | CF (gsf) | Res. (gsf) | Total gsf | Afford. DUs | Total DUs | Zoning | MF (gsf) | Com. (gsf) | CF (gsf) | Res. (gsf) | Total gsf | Afford. DUs | Total DUs | Zoning | MF (gsf) | Com. (gsf) | CF (gsf) | Res. (gsf) | Total gsf | Afford. DUs | Total DUs |
| Projected Development Site 1 | 15525 | 1 | 19,250 | R5 | 0 | 306 | 3,582 | 0 | 3,888 | 0 | 0 | R5 | 0 | 306 | 3,582 | 0 | 3,888 | 0 | 0 | R6A/ C2-4 | 0 | 4,013 | 4,576 | 102,374 | 110,964 | 30 | 120 |
| | | 51 | 9,375 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| Projected Development Site 2 | 15525 | 40 | 4,968 | R5 | 0 | 0 | 0 | 2,500 | 2,500 | | 4 | R5 | 0 | 0 | 0 | 2,500 | 2,500 | | 4 | R6A | 0 | 0 | 0 | 79,322 | 79,322 | 23 | 93 |
| | | 44 | 5,063 | | 0 | 0 | 800 | 800 | 1,600 | 0 | 2 | | 0 | 0 | 800 | 800 | 1,600 | 0 | 2 | | | | | | | | |
| | | 47 | 5,000 | | 0 | 0 | 0 | 2,382 | 2,382 | 0 | 2 | | 0 | 0 | 0 | 2,382 | 2,382 | 0 | 2 | | | | | | | | |
| | | 49 | 5,000 | | 0 | 0 | 0 | 2,568 | 2,568 | 0 | 3 | | 0 | 0 | 0 | 2,568 | 2,568 | 0 | 3 | | | | | | | | |
| **Total** | | | **48,656** | **-** | **0** | **306** | **3,582** | **8,250** | **12,938** | **0** | **11** | **-** | **0** | **306** | **4,382** | **8,250** | **12,938** | **0** | **11** | **-** | **0** | **4,013** | **4,576** | **181,696** | **190,286** | **53** | **213** |

DU = Dwelling Units

gsf = gross square feet

Res. = Residential

Com. = Commercial

Mf = Manufacturing

CF = Community Facility

Afford. = Affordable

**Table 1.8-2: RWCDS Incremental Analysis Table**

| Use | No-Action Condition | With-Action Condition | Increment |
|---|---|---|---|
| Commercial GSF | 306 | 4,013 | +3,707 |
| Manufacturing GSF | 0 | 0 | No Change |
| Community Facility GSF | 4,382 | 4,576 | +194 |
| Residential GSF | 8,250 | 181,696 | +173,446 |
| Total GSF | 12,938 | 190,286 | +177,348 |
| Residential Dus | 11 | 213 | +202 |
| | | | |
| Residents[1] | 32 | 610 | +578 |
| Workers[2] | 14 | 33 | +19 |

1: Assumes an average household size 2.86 persons, per the U.S. Census 2016-20 American Community Survey data for Queens Community District 14

2: Assumes 1 employee per 25 dwelling units and 1 employee per 333.3 GSF or retail and community facility space

# 2 Environmental Review

The following technical sections are provided as supplemental assessments to the Environmental Assessment Statement ("EAS") Short Form. Part II: Technical Analyses of the EAS forms a series of technical thresholds for each analysis area in the respective chapter of the *2021 CEQR Technical Manual*. If the proposed project was demonstrated not to meet or exceed the threshold, the 'NO' box in that section was checked; thus, additional analyses were not needed. If the proposed project was expected to meet or exceed the threshold, or if this was not able to be determined, the 'YES' box was checked on the EAS Short Form, resulting in a preliminary analysis to determine whether further analyses were needed. For those technical sections, the relevant chapter of the *2021 CEQR Technical Manual* was consulted for guidance on providing additional analyses (and supporting information, if needed) to determine whether detailed analysis was needed.

A 'YES' answer was provided in the following technical analyses areas on the EAS Short Form:

- Land Use, Zoning, and Public Policy
- Socioeconomic Conditions
- Open Space
- Shadows
- Historic and Cultural Resources
- Urban Design and Visual Resources
- Hazardous Materials
- Water and Sewer Infrastructure
- Transportation
- Air Quality
- Noise
- Neighborhood Character
- Construction

## 2.1 Land Use, Zoning, and Public Policy

The *2021 CEQR Technical Manual* recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the Surrounding Area. Land use, zoning, and public policy are described in detail below. This section considers existing conditions, development trends, and zoning and other public policies in relation to the Affected Area and the Surrounding Area as well as the larger area in which the Proposed Actions may have an effect. The Proposed Actions would permit the redevelopment of the Affected Area with multi-family residential uses and mixed-use multi-family residential and ground floor commercial and community facility uses, as well as map a new zoning district that permits development of larger area, bulk, and height compared to existing zoning regulations, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

**Methodology**

Existing land uses were determined by reference to the New York City Zoning and Land Use (Zola) database and PLUTOTM 22v3 shapefiles in conjunction with an in-person survey of the area performed on Sunday, January 8, 2023. The evaluation of lots within the 400-foot Study Area was performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No-Action and Future With-Action Conditions. Public Policy research was performed through an evaluation of NYCDCP and other city agencies programs and documentation.

### 2.1.1 Land Use

The *2021 CEQR Technical Manual* suggests that a land use, zoning, and public policy Study Area should generally extend 400 feet from the Affected Area ("the Surrounding Area" or "Study Area). Existing land uses within approximately 400 feet of the Affected Area are presented in **Figure 1.1-1**.

**Existing Conditions**

<u>Land Use Study Area</u>

As shown in **Figure 1.1-2** and discussed in **Section 1.3**, land uses within 400 feet of the Affected Area are defined by those east and west of Redfern Avenue, which bisect the Study Area north-south. Those land uses west of Redfern Avenue primarily consist of one- and two-family and multi-family residential buildings, interspersed with public facility and institutional uses, as well as scattered commercial uses and vacant land. A southern portion of the NYCHA Redfern Houses is found in the northern study area, an 18.78-acre public housing development with nine (9) residential buildings containing over 600 dwelling units combined. East of Redfern Avenue is characterized by a cluster of vacant properties at the east and southeast Study Area, many of which feature active construction, and large industrial and utility / transportation uses at the

eastern and northeastern study area. A cluster of one- and two-family residential uses is found at the eastern extent of the Study Area.

There are multiple, active construction projects of note within the Study Area, the details of which are identified and discussed in the Future No-Action Condition section below.

Affected Area

A complete description of each lot within the Affected Area can be found in **Section 1.4**. The Affected Area is located within Block 15525, comprised of all parcels within the block with frontage on Nameoke Avenue, including Lots 1, 40, 44, 47, 49, and 51.

The Applicant-Owned Development Site is located at 14-10 Beach Channel Drive (Block 15525, Lots 1 and 51), with a total area of 28,625 SF. Lot 1 is a corner lot with 175 feet of frontage on Beach Channel Drive and 110 feet of frontage of Nameoke Avenue. The lot features two buildings, both constructed in 1930, including a one-story, 3,582 GSF community facility building (used as a church) and a 306 GSF, one-story commercial building used as offices associated with a car dealership. Lot 51 is an interior lot that is currently vacant, paved, and used as an unlicensed parking lot, with 75 feet of frontage on Nameoke Avenue. Both lots comprising the Applicant's Development Site were acquired by the Applicant in July 2021.

The other lots within the Affected Area are Lots 40, 44, 47, and 49, each of which are independently owned, as described below.

- Lot 40 is a 4,968 SF triangular, interior lot with frontages on Nameoke Avenue and Hassock Street. The lot is improved with a two-story, 2,500 GSF multi-family residential building with four (4) dwelling units, constructed in 1920.
- Lot 44 is a 5,063 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 1,600 GSF mixed-use multi-family residential and community facility building with three (3) dwelling units and a ground floor religious use, constructed in 1931.
- Lots 47 is a 5,000 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,382 GSF two-family residential structure constructed in 1920.
- Lot 49 is a 5,000 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,568 GSF multi-family residential structure with three (3) dwelling units, constructed in 1920.

**Future No-Action Condition**

Land Use Study Area

Pursuant to the NYC Active Major Construction Database[1] and NYCDCP House Database Project Level Files, there are six (6) approved or permitted developments within the 400-foot Study Area, including multi-family residential and mixed-use multi-family residential and commercial or community facility development; details regarding these developments are provided in **Table 2.1-1** below.

**Table 2.1-1: Future No-Action Developments**

| Address | Type | Land Use | Proposed Floor Area (GSF) | Dwelling Units | Stories |
|---|---|---|---|---|---|
| 1605 Village Lane, Queens | NB | Res, Com | 155,602 | 129 | 15 |
| 1607 Village Lane, Queens | NB | Res, Com | 68,871 | 55 | 10 |
| 1626 Village Lane, Queens | NB | Res, Com | 409,493 | 354 | 12 |
| 20-50 Nameoke Avenue, Queens | NB | Res, CF | 81,350 | 117 | 9 |
| 21-05 Birdsall Avenue, Queens | NB | Res | 16,411 | 11 | 3 |
| 21-08 Birdsall Avenue, Queens | NB | Res | 5,354 | 7 | 4 |

GSF = Gross Square Feet; Res = Residential; Com = Commercial; CF = Community Facility; NB = New Building

In addition to the developments identified above, Nameoke Park, a new public open space, is planned at the eastern extent of the Study Area. Based on a site visit conducted on January 8, 2023, and information provided by NYCPDR's website,[2] the park is currently under construction and is projected to be open and operational by August 2023. The planned 0.32-acre park will feature a variety of active and passive recreational amenities, including playgrounds, fitness, equipment, and seating areas.

Affected Area

Within the Affected Area, existing conditions are expected to remain the same in the Future No-Action Condition, including the existing community facility, commercial, and residential uses.

**Future With-Action Condition**

Land Use Study Area

[1] https://www1.nyc.gov/assets/buildings/html/active-major-construction.html, accessed December 23, 2022
[2] https://www.nycgovparks.org/planning-and-building/capital-project-tracker/project/9545, accessed January 9, 2023

Land use and development patterns in the Study Area are anticipated to remain unchanged in the future with the Proposed Actions. Any new development in the surrounding area would be consistent with the underlying zoning regulations.

Affected Area

*Projected Development Site 1 (Block 15525, Lots 1 and 51; the Applicant-Owned Lots)*

On the combined 28,625-sf lot, it is assumed that the Applicant would construct an eight-story, 85-foot-tall mixed residential, commercial, and community facility building with 110,964 GSF (103,050 ZSF, 3.6 FAR) of total floor area. On the ground floor there would be 4,576 GSF (4,400 ZSF, 0.15 FAR) of UG 4 community facility floor area and 4,013 GSF (3,859 ZSF, 0.13 FAR) of UG 6 local retail floor area, while the upper floors would contain102,374 GSF (94,791 ZSF, 3.31 FAR) of UG 2 residential floor area. Assuming 850 GSF per dwelling unit, there would be 120 dwelling units, 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI, depending on the MIH Option selected. Since the Applicant intends to pursue MIH Option 1, approximately 30 units would be reserved as affordable to households with incomes averaging 60 percent of the AMI, with a balance of 90 market-rate units. 53 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

*Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49; Non-Applicant Lots)*

On the combined 20,031-SF lot, it is assumed that a 79,322 GSF (72,111 ZSF, 3.6 FAR), eight-story, 85-foot-tall residential building would be constructed. Assuming 850 GSF per dwelling unit, Projected Development Site 2 would contain 93 residential dwelling units (UG 2), 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Consistent with Projected Development Site 1, it is assumed that MIH Option 1 would be utilized, resulting in approximately 23 units reserved as affordable to households with incomes averaging 60 percent of the AMI, with a balance of 70 market rate units. 41 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

**Conclusion**

The Applicant believes that the density and uses permitted by the Proposed Actions would be consistent with existing, currently under construction, and planned multi-family and mixed-use multi-family residential with commercial or community facility buildings within the Study Area. The Proposed Actions would not be incompatible with surrounding uses, which are predominantly residential and include commercial and or community facility uses and would not alter or accelerate development patterns in the area. Therefore, there would be no adverse impacts on land use as a result of the Proposed Actions, and further analysis is not required.

### 2.1.2 Zoning

The 2021 *CEQR Technical Manual* suggests that a zoning Study Area should extend 400 feet from the Affected Area. The Proposed Actions include Zoning Map and Text Amendments to Block 15525, Lots 1, 40, 44, 47, 49, and 51; existing zoning districts within approximately 400 feet of the Affected Area are described below and visualized in **Figure 1.1-3**.

**Existing Conditions**

Zoning Study Area

Mapped zoning districts within 400 feet of the Affected Area include the R3X, R5, R6, R7-1, and M1-1 districts, with portions of the R5 district featuring a C1-2 commercial overlay and portions of the R6 and R7-1 districts featuring C2-4 commercial overlays (see **Figure 1.1-3**). These zoning districts are described as follows:

*M1-1*

M1 districts are often developed with multistory lofts, one- or two-story warehouses characterized by loading bays, serving as a buffer between M2 or M3 districts of intensive industrial uses and adjacent residential or commercial districts. M1 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. M1-1 Districts are mainly found in areas with one-story industrial buildings, such as the Flatlands neighborhood of Brooklyn. The FAR for manufacturing and commercial are both 1.0 in M1-1 districts, while the FAR for community facilities is higher, reaching 2.4.

Though one parking space per 300 square feet is common in M1-1 districts, the buildings are subject to parking requirements based on the type of use and size of an establishment. For example, a warehouse in an M1-1 district requires one off-street parking space per 2,000 square feet of floor area or per every three employees, whichever would be less.

*R3X*

The R3X are contextual districts, often mapped to preserve or establish the character of older neighborhoods area characterized by detached, pitched roofed homes on average sized lots. Accordingly, the district only permits single- and two-family detached homes on lot sizes slightly larger than required in R3A Districts. Contextual zoning regulates the height and bulk of new buildings, their setback from the street line, and their width along the street frontage, to produce buildings that are consistent with existing neighborhood character.

R3X districts permit a maximum residential FAR of 0.5 (with a maximum community facility FAR of 1.0), with minimum front, rear, and side yard requirements of 10, 35, and 2 feet respectively. The maximum permitted building height is 35 feet, with a maximum streetwall height of 21 feet. The district features a parking requirement of one (1) space per dwelling unit.

*R5*

R5 districts are widely mapped districts intended for neighborhoods with an assortment of housing types at densities higher than those found in R3-2 or R4 Districts and are often transition districts between medium and lower density areas. These districts allow all types of residences in a variety of housing types.

R5 districts permit a maximum residential FAR of 1.25 (with a maximum community facility FAR of 2.0), with minimum front, rear, and side yard requirements of 10, 30, and 5 to 8 feet, dependent on housing type, respectively. The maximum permitted building height is 40 feet, with a maximum streetwall height of 30 feet. The district requires parking for 85 percent of market rate dwelling units and 42.5 percent of income-restricted dwelling units.

*R6 Quality Housing*

R6 quality housing districts are widely mapped in medium density areas of the city and cover a wide range of building types. The Quality Housing Program, mandatory in contextual R6 through R10 residence districts and optional in non-contextual R6 through R10 districts, encourages development consistent with the character of many established neighborhoods. Its bulk regulations set height limits and allow high lot coverage buildings that are set at or near the street line. The Quality Housing Program also requires amenities relating to interior space, recreation areas and landscaping.

R6 districts permit residential FARs ranging from 2.2 to 3.6, dependent on adjacent street widths and the utilization of inclusionary housing bonuses (with a maximum community facility FAR of 4.8), and a minimum rear yard requirement of 30 feet. Assuming, a wide street, inclusionary housing bonus and use of a Qualifying Ground Floor,[3] the minimum required base height of a building ranges from 40 to 65 feet with a maximum building height of 115 feet, limited to 11 stories. The district requires parking for 50 percent of market rate dwelling units and 25 percent of income-restricted dwelling units.

*R7-1 Quality Housing*

R7 districts, which encompass both R7-1 and R7-2 districts, are widely mapped in medium density areas of the city across a wide range of building types. While R7-1 and R7-2 Districts are very similar, R7-2 Districts have lower parking requirements and provide higher community facility floor area.

R7-1 districts permit a maximum residential FAR of 4.6, dependent on adjacent street widths and the utilization of inclusionary housing bonuses (with a maximum community facility FAR of 4.8),

[3] A ground floor of a development or enlargement of a Quality Housing building, where the start of the second story is 13 feet or more above the level of the sidewalk and, in certain instances, where additional supplementary use provisions are met. In some zoning districts, buildings with a Qualifying Ground Floor are permitted a higher maximum base and overall height.

and a minimum rear yard requirement of 30 feet. Assuming a wide street, inclusionary housing bonus, and use of a Qualifying Ground Floor, the minimum required base height of a building ranges from 40 to 75 feet with a maximum building height of 135 feet, limited to 13 stories. The district requires parking for 50 percent of market rate dwelling units and 25 percent of income-restricted dwelling units.

*C1-2 and C2-4 Commercial Overlay Districts*

C1-2 and C2-4 commercial overlay districts are commercial overlays mapped within residence districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants, and beauty parlors. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use.

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

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

**Table 2.1-2: Zoning Districts in the Surrounding Area[4]**

| Zoning District | Type and Use Group | Floor Area Ratio (FAR) | Parking |
|---|---|---|---|
| M1-1 | Light MF<br>UGs 4-14, 16-17 | 1.00 FAR - MF<br>1.00 FAR - Com<br>2.40 FAR - CF | 1 per 300 sf |
| R3X | One- and Two-Family Res<br>UGs 1-4 | 0.50 FAR – Res<br>1.00 FAR – CF | 1 per DU |
| R5 | Medium Density Res<br>UGs 1-4 | 1.25 FAR – Res<br>2.00 FAR – CF | 85% MR<br>42.5% IRHU |
| R6 | Medium Density Res<br>UGs 1-4 | 3.60 FAR – Res<br>4.80 FAR – CF | 50% MR<br>25% IRHU |
| R7-1 | Medium Density Res<br>UGs 1-4 | 4.60 FAR – Res<br>4.80 FAR – CF | 50% MR<br>25% IRHU |
| C1-2<br>Com Overlay | Com - Local Retail<br>UGs 1-9, 14 | 1.00 FAR - Com (R1-R5B)<br>2.00 FAR - Com (R5B - R10X) | 1 per 300 sf |

[4] Zoning Handbook, New York City Department of City Planning, 2019

| | | | |
|---|---|---|---|
| C2-4<br>Com Overlay | Com - Local Retail<br>UGs 1-9, 14 | 1.00 FAR - Com (R1-R5B)<br>2.00 FAR - Com (R5B - R10X) | 1 per 1,000 sf |

Res = Residential; Com = Commercial; CF = Community Facility; MF = Manufacturing

*Special Zoning Districts*

Portions of the Special Downtown Far Rockaway (DFR) District, mapped as part of the Downtown Far Rockaway Rezoning in 2017, are found in the eastern and southeastern Study Area (see **Figure 1.1-3**). The Special DFR District was created as part of a comprehensive plan to strengthen this commercial area by fostering a vibrant mix of uses on vacant and underutilized sites near mass transit and along the area's primary corridors. The Special District modifies certain regulations in the underlying districts including floor area ratio, street wall heights and setback depths, maximum building height, location of uses, and accessory off-street parking.

Affected Area

The Affected Area is within a mapped R5 zoning district (see **Figure 1.1-3**), which, as discussed above, are widely mapped districts intended for neighborhoods with an assortment of housing types at densities higher than those found in R3-2 or R4 Districts and are often transition districts between medium and lower density areas. These districts allow all types of residences in a variety of housing types.

Neighborhood Rezonings

It is noted that areas of the western and eastern Study Area capture portions of areas that were subject to the Bayswater and Downtown Far Rockaway Rezonings, respectively, described below.

*Downtown Far Rockaway Rezoning*

The Downtown Far Rockaway Rezoning was initiated by the New York City Economic Development Corporation (NYCEDC) and approved in 2017. The 2017 Downtown Far Rockaway Rezoning sought, among other things, to support new, mixed-use development and the development of permanently affordable housing, to ensure that new development blends into the existing neighborhood fabric, and to re-establish Downtown Far Rockaway as the commercial and transportation hub of the Rockaway peninsula. To that end, it rezoned areas around the A Train terminus to R6A and R7-1 zoning districts and established Special District-imposed controls.

*Bayswater Rezoning*

The Bayswater Rezoning was initiated by NYCDCP and approved in 2006. The two principal objectives of this rezoning were to: (1) protect areas developed with large homes on large lots by limiting subdivision into smaller lots; and (2) prevent out-of-character multifamily and attached developments in areas developed primarily with one- and two-family detached residences. To ensure that new development better matched the existing housing types and densities found in Bayswater and Far Rockaway, R2 districts were rezoning to R1-2, and all or

portions of R3-2, R4 and R5 districts were rezoned to lower-density or contextual districts (R3A, R3X, R4A, and R4-1).

**Future No-Action Condition**

Zoning Study Area and Affected Area

No changes to zoning would occur in the future without the Proposed Actions within the Affected Area or its associated Study Area. Existing zoning patterns would remain, and the Affected Area would continue to be subject to R5 zoning district.

**Future With-Action Condition**

Zoning Study Area

Changes to zoning would only occur in the Affected Area in the future with the Proposed Actions.

Affected Area – R6A / C2-4 and R6A

Block 15525, Lots 1 and 51 (i.e., Projected Development Site 1) would be rezoned from the R5 zoning district to the R6A zoning district with a C2-4 commercial overly, while Lots 40, 44, 47, and 49 on the same block (i.e., Projected Development Site 2) would be rezoned to the R6A zoning district. The R6A is a contextual, medium density residential district designed to produce Quality Housing buildings that are seven or eight stories tall. Several bulk regulations, including high lot coverage allowances, street wall location rules and maximum base height rules ensure the construction of buildings that either maintain or establish a scale similar to older buildings in medium density neighborhoods. These districts are often, but not exclusively, mapped along wide streets.

Under this Future With-Action Condition, the proposed R6A zoning district would permit a maximum FAR of 3.60 for residential uses and 3.00 for community facility uses, with a minimum rear yard requirement of 30 feet. The minimum base building height within the district ranges from 40 to 65 feet, with a maximum overall building height of 85 feet over eight (8) stories. The district requires parking for 50 percent of market rate dwelling units and 25 percent of income-restricted dwelling units.

As previously discussed, C2-4 commercial overlay districts are commercial overlays mapped within residence districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use. As the proposed C2-4 district would be mapped in conjunction with an R6A district, it would permit a maximum commercial FAR of 2.0.

In comparison with the existing mapped R5 zoning district the Affected Area is located within, the proposed R6A/C2-4 and R6A districts would permit moderately denser residential

development, including larger bulk, area, and building heights, as well as ground floor commercial uses at those lots within the proposed C2-4 overlay district.

**Conclusion**

The Applicant believes the proposed zoning would be consistent with nearby medium density residential zoning and commercial overlay districts east of Redfern Avenue, including the R6, R6 / C2-4, R7-1 / C2-4 zoning districts to the east and southeast of the Affected Area. These districts, mapped as part of the Downtown Far Rockaway Rezoning in 2017, are currently facilitating the construction of medium to high density residential development with ground floor commercial and or community facility uses, similar to development forecasted at Projected Development Sites 1 and 2 under the Future With-Action Condition. The rezoning would not adversely affect surrounding land uses, nor would it be incompatible with those land uses. Therefore, no significant adverse impacts are anticipated to zoning, and further analysis is not required.

### 2.1.3 Public Policy

According to the *2021 CEQR Technical Manual*, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports, which pertain to the Study Area. If the Proposed Actions could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary.

The Affected Area is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. In addition, the Affected Area is located within a designated FRESH-eligible area but would not include any FRESH programming.

The Affected Area is within the NYC Coastal Zone Boundary (CZB), such that an assessment of the Proposed Project's consistency with the NYC Waterfront Revitalization Program (WRP) is required.

The Proposed Actions include a Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Community District 14, Queens, to establish the Affected Area as an MIH Area under Program Option 1. As a result, analysis of the Proposed Development's alignment with Housing New York is warranted.

Though the Proposed Actions are not a large publicly sponsored project, consistency with the City's OneNYC for sustainability is provided below. In addition, the Proposed Actions consistency with "Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery" is provided below.

**Existing Conditions**

*New York City Waterfront Revitalization Program*

The New York City Waterfront Revitalization Program (WRP) establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation and public use of the waterfront, while minimizing any potential conflicts among these objectives. The WRP is authorized by New York State's Waterfront Revitalization of Coastal Areas and Inland Waterways Act, which was enacted in response to the Federal Coastal Zone Management Act, and allows municipalities to participate in the State's Coastal Management Program by creating their own local Waterfront Revitalization Program.

*Housing New York 2.0*

Carried out by Housing Preservation and Development (HPD), Housing New York is the Mayor's plan to build or preserve 300,000 affordable homes by 2026. The plan outlines a comprehensive set of policies and programs to address the city's affordable housing crisis and retain the diversity and vitality of its neighborhoods.

*OneNYC*

OneNYC is New York City's long-term strategy and Green New Deal to confront climate crisis, achieve equity, and strengthen democracy so that people can build a strong and fair city. It covers eight strategies: a vibrant democracy, an inclusive economy, thriving neighborhoods, healthy lives, equity and excellence in education, a livable climate, efficient mobility, and modern infrastructure.

*Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery*

*Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery* aims to accelerate job creation and make communities more resilient to future environmental and public health emergencies, financially stronger, and more connected. It contains five main strategies, including

1. Restarting the city's economic engines and reactivating the public realm, supporting small businesses, entrepreneurship, and a more equitable economy
2. Driving inclusive sector growth
3. Building a future-focused economy
4. Connecting New Yorkers to quality jobs and in-demand skills
5. Planning and building for inclusive growth now and in the future

**Future No-Action Condition**

No changes to the WRP, *Housing New York 2.0,* OneNYC, or *Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery* are anticipated under Future No-Action Conditions.

**Future With-Action Condition**

*New York City Waterfront Revitalization Program*

The Applicant's Projected Development Site is located within the NYCCZB and is therefore subject to CEQR discretionary review procedures; therefore, the Proposed Actions must be reviewed and assessed for consistency with the policies set forth in the WRP. The WRP establishes the City's policies for waterfront planning, preservation, and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront while minimizing any potential conflicts among these objectives.

The Proposed Actions would place a new mixed-use multi-family residential with ground floor commercial retail and community facility space in a FEMA-designated "Zone AE" within the 1.0 percent annual chance floodplain (100-year flood zone), with a base flood elevation (BFE) of nine (9) feet as well as within a FEMA-designated "Shaded X Zone" within the 0.2 percent annual chance floodplain (500-year flood zone), as per the 2015 FEMA Preliminary Flood Insurance Rate Maps (PFIRM). Refer to **Figure 2.1-1** for a visualization of the Affected Area's location within these flood zones.

The FEMA Zone AE, a special flood hazard area (SFHA), delineates areas that have a 1.0 percent probability of flooding every year (also known as the "100-year floodplain"), considered areas of high flood risk. SFHAs are areas where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. Further, the NYC Building Code features special provisions for construction in such zones.

Shaded X Zone delineates areas that have a 0.2 percent probability of flooding every year (also known as the "500-year floodplain"), outside the regulatory 1 percent annual chance flood (also known as the "100-year floodplain") but within the limits of the 0.2 percent annual chance flood level. Shaded X Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile. Properties in Shaded X Zone are considered to be at moderate risk of flooding under the NFIP. There are no current NYC Building Code or FEMA flood insurance purchase requirements for buildings in the Shaded X Zone.

The WRP Consistency Assessment Form (CAF) was completed (see **Appendix C**) to determine the consistency of the Proposed Actions with the WRP's ten policies. Based on the information provided in the CAF, a detailed methodology and policy response is provided below, which

incorporates the findings of the Proposed Actions' consistency with the applicable WRP Policies (Policy 1 and 6) and Sub-Policies (Policy 1.1, 1.3, 1.5, 6.1, 6.2).

Based on the information provided in the WRP CAF, the Proposed Actions require assessment relative to the following policies:

**Policy 1: Support and Facilitate Commercial and Residential Development in Areas Well-Suited to Such Development**

Sub-Policy 1.1: Encourage commercial and residential development in appropriate coastal zone areas.

Criteria that should be considered to determine areas appropriate for reuse through public and private actions include: compatibility with the continued functioning of the designated Special Natural Waterfront Areas, the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or Significant Maritime and Industrial Areas, where applicable; the absence of unique or significant natural features or, if present, the potential for compatible development; the presence of substantial vacant or underused land; proximity to existing residential or commercial uses; the potential for strengthening upland residential or commercial areas and for opening up the waterfront to the public; transportation access; the maritime and industrial jobs potentially displaced or created; and the new opportunities created by redevelopment. Public actions—such as property disposition, urban renewal plans, and infrastructure provision—should facilitate redevelopment of underused property to promote housing and economic development and enhance the city's tax base, subject to consideration of Policy 2, where applicable.

The Proposed Actions are consistent with this policy. It would allow redevelopment of underutilized land in proximity to established and newly emerging residential, commercial, and community facility development that is well served by transit and located along Beach Channel Drive, considered a minor arterial road.

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

Encourage development at a density compatible with the capacity of surrounding roadways, mass transit, and essential community services such as public schools. Lack of adequate local infrastructure need not preclude development, but it may suggest the need to upgrade or expand inadequate or deteriorated local infrastructure.

The Proposed Actions are consistent with this policy. The Proposed Actions would redevelop underutilized land for multi-family residential, commercial retail, and community facility uses with higher density in close proximity to high-capacity roadways, mass transit infrastructure, and would integrate the site into the surrounding residential and commercial area.

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

Residential, commercial, and other non-industrial projects that comply with Article 6 Chapter 2 of the New York City Zoning Resolution satisfy the consistency requirements for Policy 1.2. If the project is not subject to the Zoning Resolution, the standards of Article 6 Chapter 2 of the Zoning Resolution should be used as guidelines for development and the inclusion of open space, visual access, upland connections, and water-related uses.

The Proposed Actions are consistent with this policy; as portions of the Applicant's Proposed Project are located within the FEMA-designated Zone AE, a 100-year floodplain, development would appropriately incorporate building features from the New York City Building Code Appendix G Flood Resistant Construction Standards for flood protection.

**Policy 6: Minimize Loss of Life, Structures, Infrastructure, and Natural Resources Caused by Flooding and Erosion, And Increase Resilience to Future Conditions Created by Climate Change.**

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

As indicated below in **Figure 2.1-1**, a portion of the Applicant's Development Site is located within the 2015 PFIRMS 1.0 percent annual chance floodplain (i.e., 100-year flood zone) as well as the 0.2 percent annual chance floodplain (500-year flood zone). However, as shown below in **Figure 2.1-2** through **Figure 2.1-5**, which reference the New York City Panel on Climate Change (NPCC) future floodplain projections through the 2100s, the entirety of the Affected Area is anticipated to fall within the future 1.0 percent annual chance floodplain by the 2080s.

Under Policy 6, the primary goal for projects within flood hazard areas is to reduce the risks posed by current and future flood events, mainly major storms that are likely to increase due to climate change and sea level rise.

As portions of the Applicant's Development Site falls within the 1.0 percent annual chance floodplain, the proposed development would be subject to compliance with NYC Building Code Appendix G, which requires owners of severely damaged or destroyed buildings and new built buildings in the 1.0 percent annual chance floodplain to comply with the flood resistant construction standards of the Building Code when they rebuild or construct. Those portions of the Affected Area within the 0.2 percent annual chance floodplain are not subject to such requirements. As discussed under Policy 6.2 below, based on the future flood projections. the design of the Proposed Project would take the future climate change into consideration. Therefore, the Proposed Project would meet the requirements of building-scale resiliency measures to reduce the risks of damage from current and future coastal hazards and would be consistent with Policy 6.1.

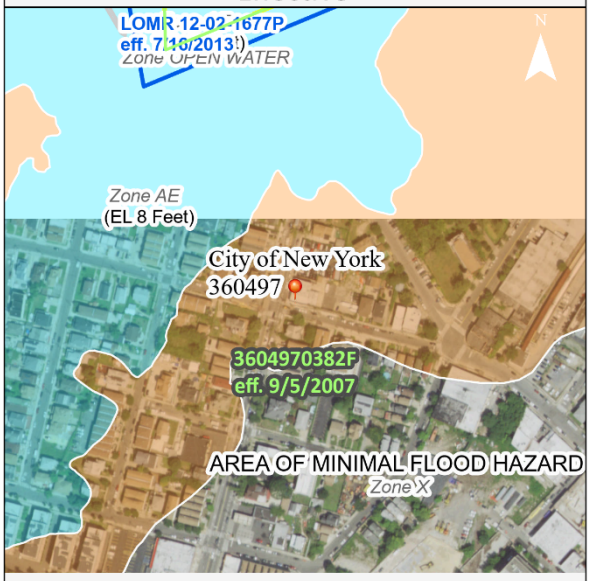
**Figure 2.1-1: 2007 FIRM vs. 2015 PFIRM**

# Comparison of Flood Hazard

Effective & Preliminary Flood Hazards

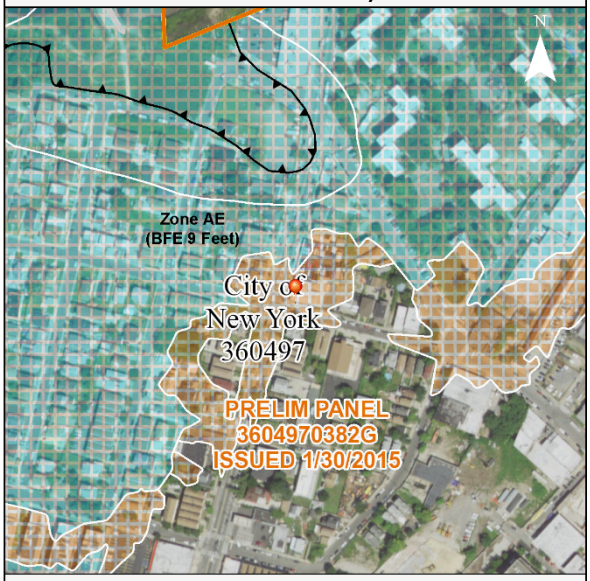
FEMA

Effective




| Effective | |
|---|---|
| **POI Longitude/Latitude** | -73.7539, 40.6082 |
| **Effective FIRM Panel** | 3604970382F |
| **Effective Date** | 9/5/2007 |
| **Flood Zone** | X |
| **Static BFE*** | Not Available |
| **Flood Depth** | Not Available |
| **Vertical Datum** | Not Available |

Preliminary




| Preliminary | |
|---|---|
| **POI Longitude/Latitude** | -73.7539, 40.6082 |
| **Preliminary FIRM Panel** | 3604970382G |
| **Preliminary Issue Date** | 1/30/2015 |
| **Flood Zone** | X |
| **Estimated Static BFE*** | Not Available |
| **Estimated Flood Depth** | Not Available |
| **Vertical Datum** | Not Available |

* A **Base Flood Elevation** is the expected elevation of flood water during the 1% annual chance storm event. Structures below the estimated water surface elevation may experience flooding during a base flood event.

| Hazard Level | Flood Hazard Zone |
|---|---|
| High Flood Hazard | **AE, A, AH, AO, VE and V Zones.** Properties in these flood zones have a 1% chance of flooding each year. This represents a 26% chance of flooding over the life of a 30-year mortgage. |
| Moderate Flood Hazard | **Shaded Zone X.** Properties in the moderate flood risk areas also have a chance of flooding from storm events that have a less than 1% chance of occuring each year. Moderate flood risk indicates an area that may be provided flood risk reduction due to a flood control system or an area that is prone to flooding during a 0.2% annual chance storm event. These areas may have been indicated as areas of shallow flooding by your community. |
| | **Unshaded Zone X.** Properties on higher ground and away from local flooding sources have a reduced flood risk when compared to the Moderate and High Flood Risk categories. Structures in these areas may be affected by larger storm events, in excess of the 0.2% annual chance storm event. |
| Low Flood Hazard | **Insurance Note:** High Risk Areas are called 'Special Flood Hazard Areas' and flood insurance is mandatory for federally backed mortgage holders. Properties in Moderate and Low Flood Risk areas may purchase flood insurance at a lower-cost rate, known as Preferred Risk Policies. See your local insurance agent or visit https://www.fema.gov/national-flood-insurance-program for more information. |

**Disclaimer:** This report is for informational purposes only and is not authorized for official use. The positional accuracy may be compromised in some areas. Please contact your local floodplain administrator for more information or go to msc.fema.gov to view an official copy of the Flood Insurance Rate Maps.

Service Layer Credits: USGS, USDA

1/4/2023 11:00:39 AM

**Figure 2.1-2: 2020s High Tide and 1% Flood Projections**

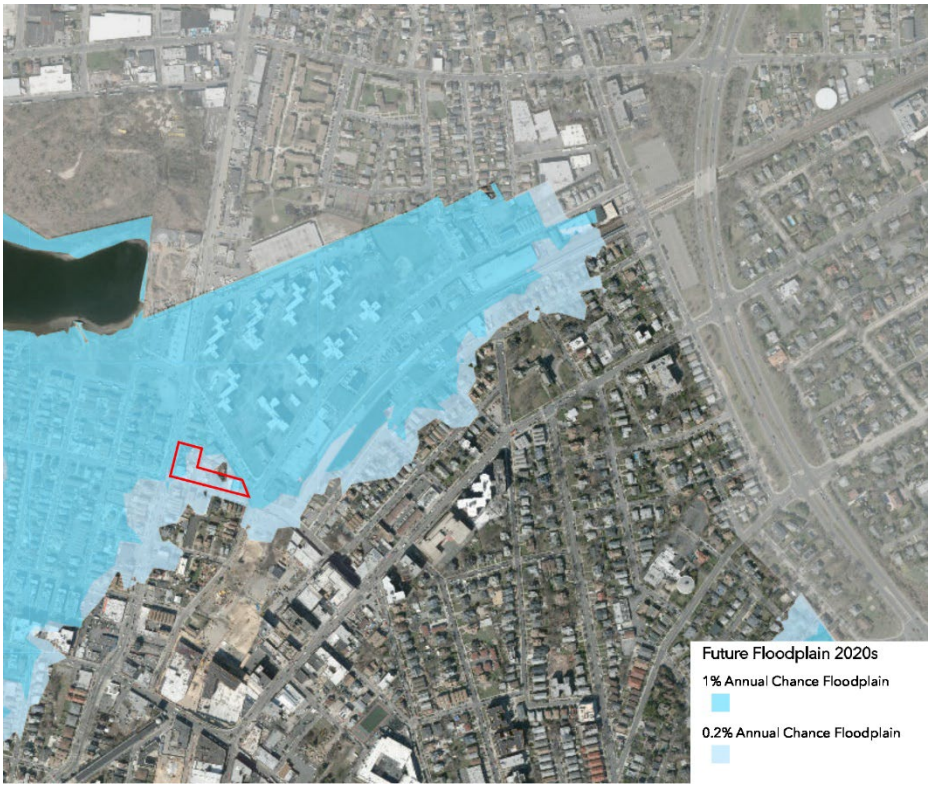





**Figure 2.1-3: 2050s High Tide and 1% Flood Projections**

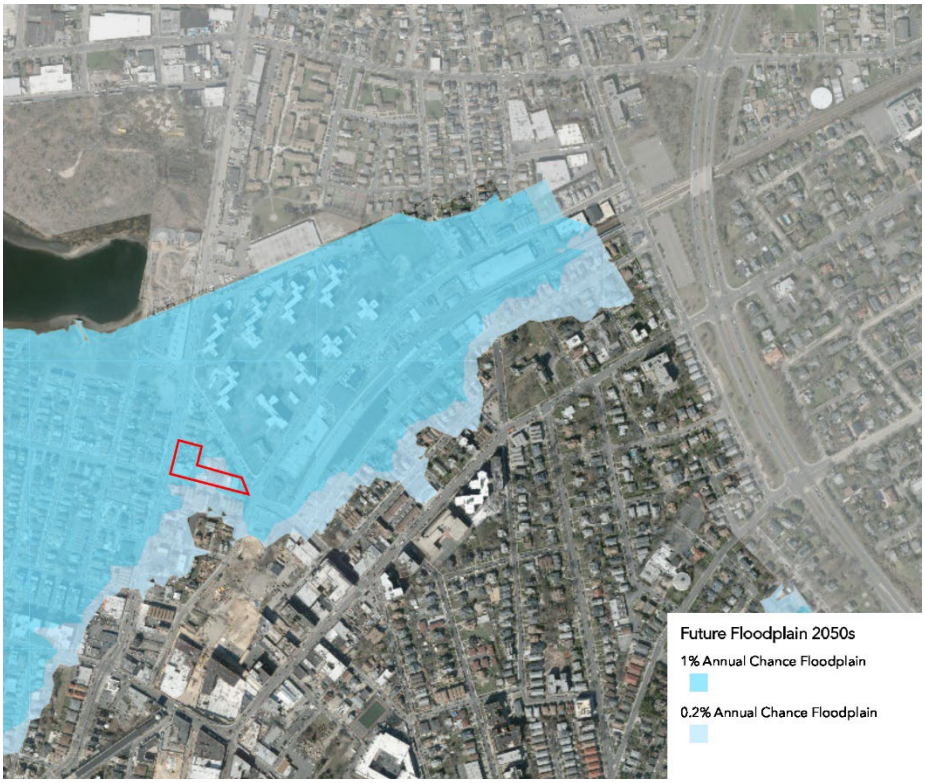
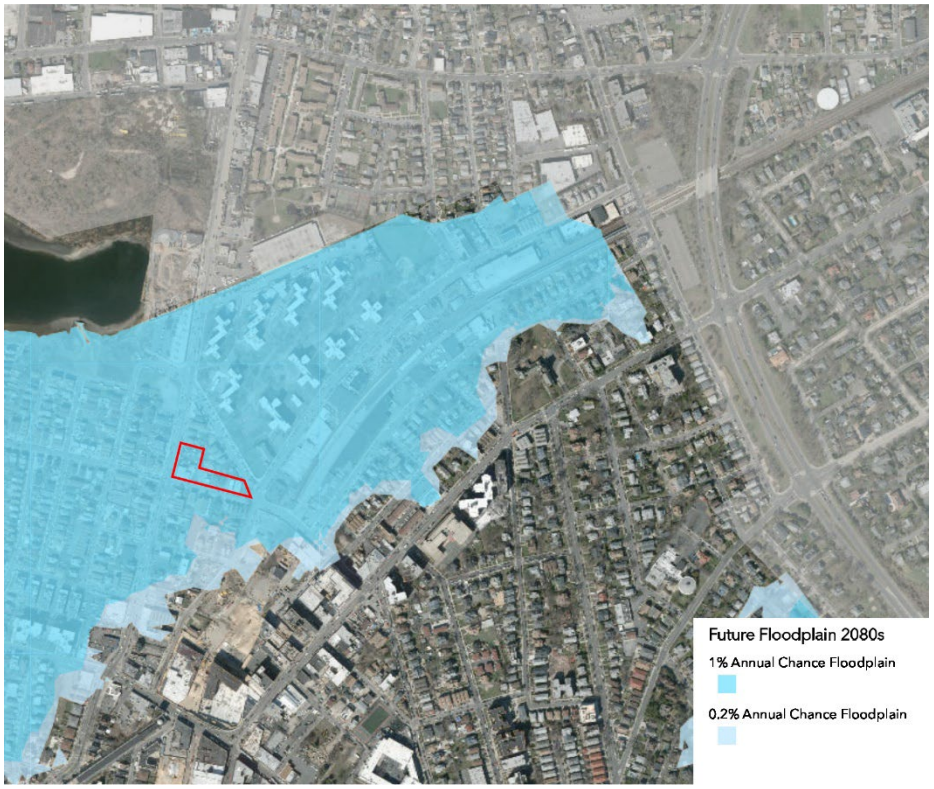





**Figure 2.1-4: 2080s High Tide and 1% Flood Projections**



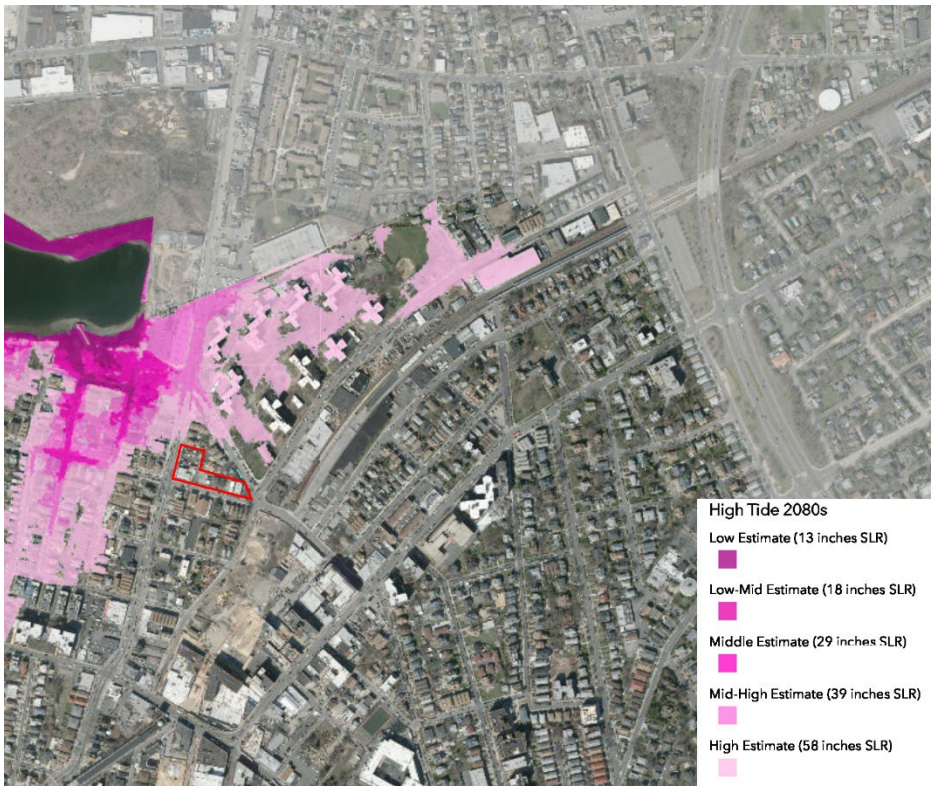
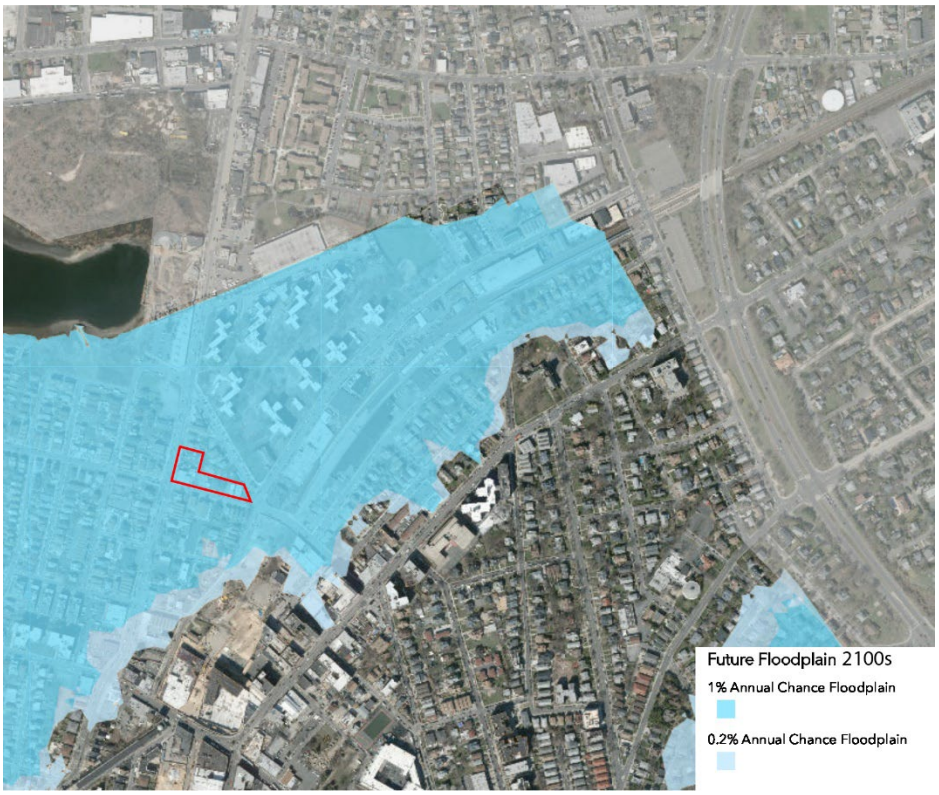
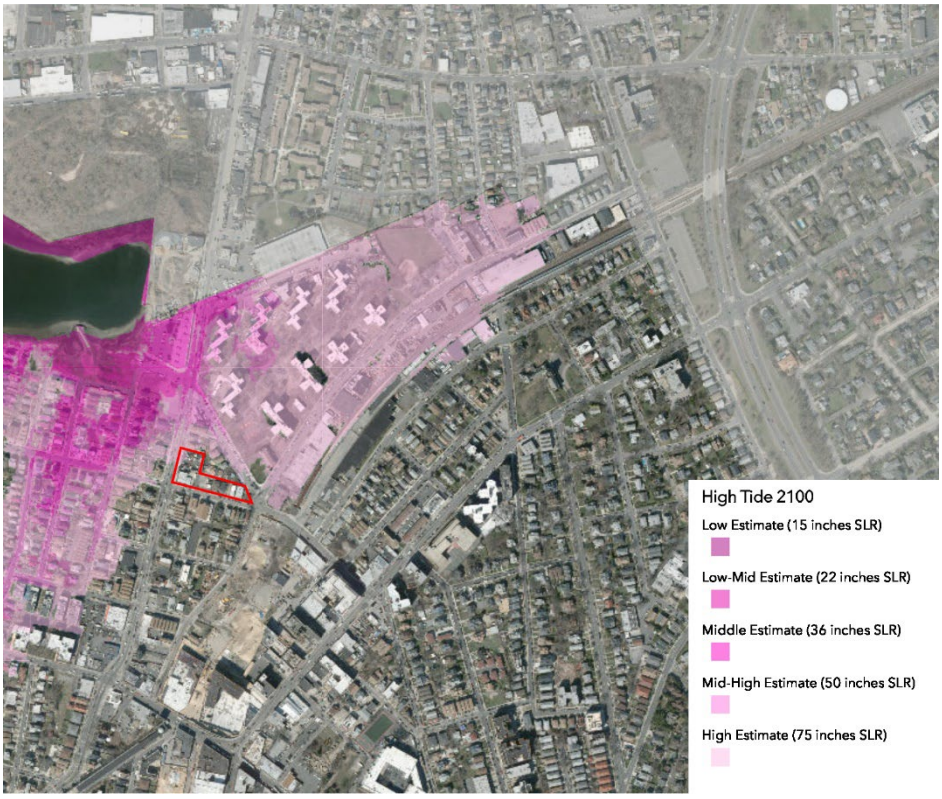



**Figure 2.1-5: 2100s High Tide and 1% Flood Projections**



Sub-Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

The following assessment was prepared in accordance with *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance Document for Policy 6.2*. [5] The three basic steps to assessing an action's consistency with Policy 6.2 of the Waterfront Revitalization Program include identifying vulnerabilities and consequences, identifying adaptive strategies, and assessing policy consistency.

Sub-Policy 6.2 Detailed Methodology

1. **Identify Vulnerabilities and Consequences**

*a) Assess the Project Area's Exposure to current and future flood risk (Flood-Evaluation Worksheet)*

The information in the following subsections is based on the results of the completed flood evaluation worksheet, which is provided in **Appendix C**.

The Proposed Project's first-floor level is located approximately 9.5' in elevation above grade (NAVD88 Datum). The cellar level is located at approximately -1.0' in elevation (NAVD88 Datum). The Proposed Building's vulnerable or critical features, which are most likely to be impacted by future flood are located on the cellar level.

Regulatory floodplains are defined by the elevation of the base flood (BFE) in relation to the elevation of the ground. According to datum (NAVD88) obtained from the National Oceanic and Atmospheric Administration (NOAA)[6] website for the nearest NOAA station, Beach Channel Station (Station ID 8517137), the mean higher high-water height (MHHW) is 2.43 feet (adjusted). Pursuant to the 2015 PFIRMs, the 1.0 percent flood height is 9 feet, and the design flood elevation (DFE) is 11 feet.

Based on the results of the calculations completed in the flood evaluation worksheet using site-specific data, **Figure 2.1-6** shows the results of the 1.0 percent Flood Elevation and Sea Level Rise (SLR) projections, and **Figure 2.1-7** shows the results of the MHHW and SLR projections.

For this assessment, building features are defined in one of four categories: (1) vulnerable: project features that have the potential to incur significant damage if flooded; (2) critical: project features that if damaged would have severe impacts on the project and its ability to function as designed; (3) potentially hazardous: project features that if damaged or made unsecure by flooding could potentially adversely affect the health and safety of the public and the

[5] https://www1.nyc.gov/assets/planning/download/pdf/planning-level/waterfront/wrp/revisions-2017/policy-62-guidance-document-nov2018.pdf

[6] https://tidesandcurrents.noaa.gov/datums.html?id=8518699

environment; and (4) other: project features that are entirely open and unenclosed spaces, except the open storage of potentially hazardous materials, which may be damaged by flooding, but are not likely to present significant consequences and are more easily repaired.

The Flood Elevation Worksheet was prepared for the Proposed Project in accordance with DCP guidance. This is a tool which identifies current and future flood elevations in relation to the elevations of the site and project features, presenting a range of future flood elevations as affected by sea level rise (SLR), from high (90th percentile) to low (10th percentile). In other words, "high" refers not to the predicted likelihood, which is estimated at approximately one in ten, but to being a high-end projected increase in flood elevation and as such physically higher than the "low" projections. Conversely, the "low" projection is more likely to occur, estimated at an approximately nine in ten probability.

**Figure 2.1-6: Mean Higher High Water + SLR Projections**

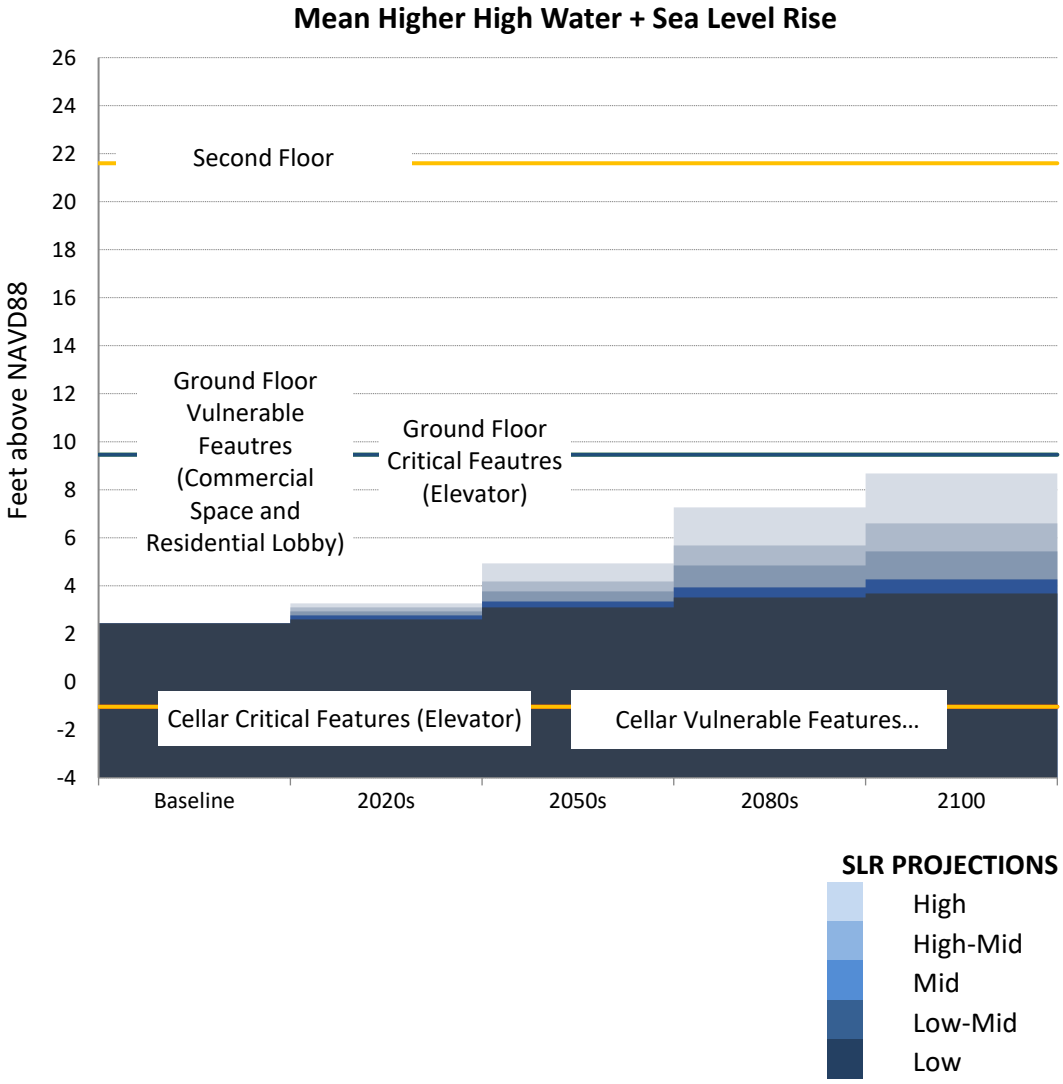
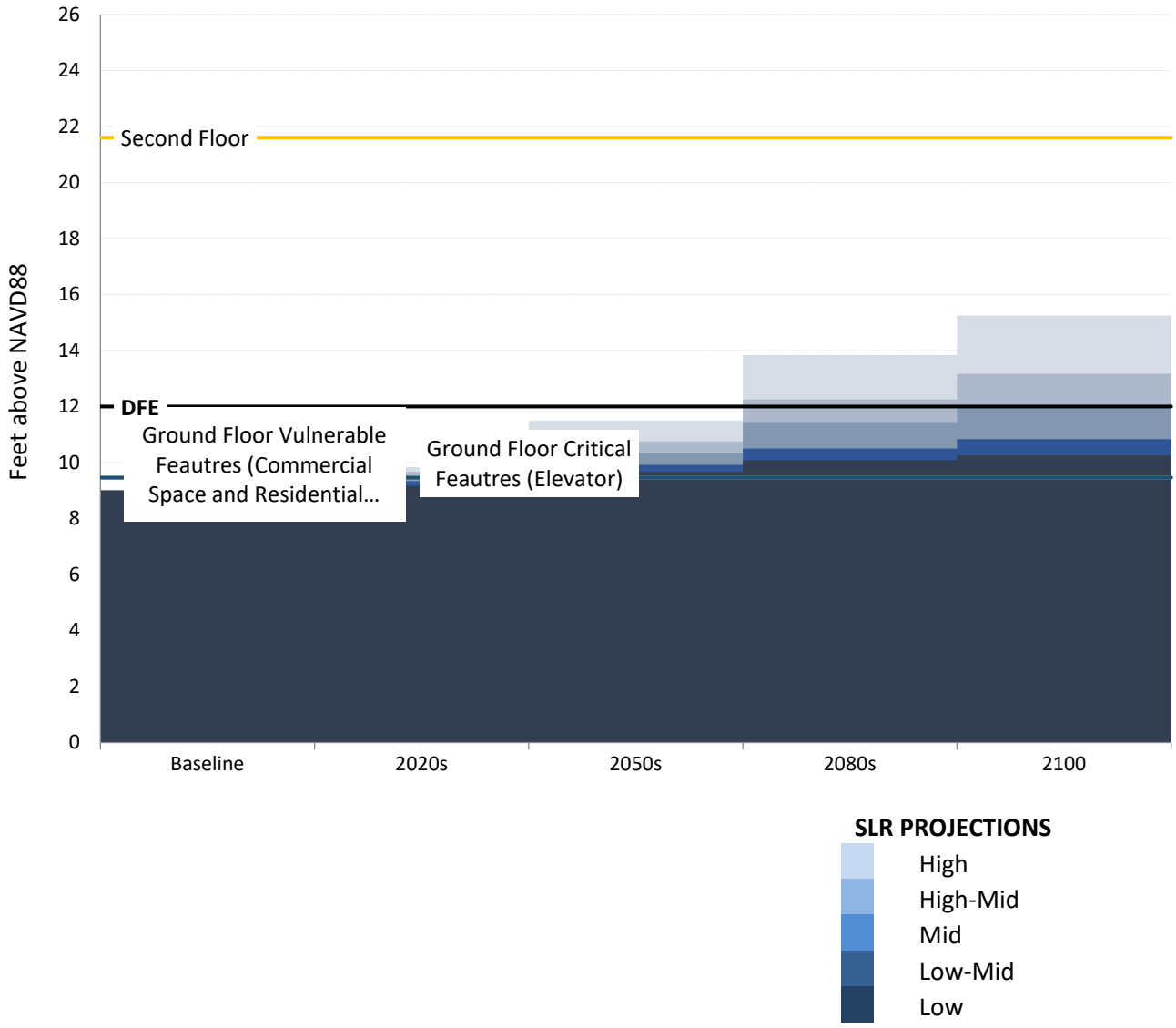


**Figure 2.1-7: 1.0 Percent Flood Elevation + SLR Projections**



As indicated in **Figure 2.1-6** above, currently, the Proposed Project's cellar level falls within the 1.0 percent annual chance floodplain under low SLR projections.

As shown in **Figure 2.1-2** through **Figure 2.1-5** based on the New York City Panel on Climate Change (NPCC) future floodplain projections, Projected Development Site 1 would not fall within the future high tides through the 2100s. Thus, the cellar and first floor are not projected to be below the MHHW under any SLR projections through the 2100s.

*b) Identify any Project Features that may be located below the elevation of the 1% floodplain over the lifespan of the project under any SLR scenario:*

In the future, the Proposed Project's cellar and first-floor level fall within the 1.0 percent annual chance floodplain under low SLR projections.

The cellar includes parking, bicycle storage, and two elevator vestibules. The first floor includes commercial and community facility space, two elevators, a residential lobby, and building storage.

*c) Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.*

As discussed above, based on the NPCC future floodplain projections, the Proposed Project's cellar and first-floor levels would not be impacted by the MHHW under any SLR projections.

*d) Identify if the project or action would facilitate the development of any vulnerable, critical, or potentially hazardous features, as defined under "Key Terms" below, within areas exposed to flooding from Mean Higher High Water or 1% Annual Chance Flood by the 2050s under the 90th percentile of sea level rise projections:*

Vulnerable, Critical or Potentially Hazardous Features pursuant to Policy 6.2 guidance:

- *Vulnerable Features, if damaged, have the potential to incur significant damage if flooded.*

  *These include any form of enclosed space within a building, including residential, commercial, industrial, or community facility land uses; enclosed parking structures; storage areas; enclosed recreational facilities; and bulkheads, revetments, piers, platforms, and other in-water infrastructure elements.*

- *Critical Features, if damaged, would have severe impacts on the project and its ability to function*

  *The project features that, if damaged, would have severe impacts on the project and its ability to function as designed. Examples include electrical utilities, building heating*

*and cooling systems, telephone and data connection and distribution rooms, and other supporting and related building technology and utility spaces.*

- *Potentially Hazardous Features, if damaged or made insecure by flooding, could potentially adversely affect the health and safety of the public and the environment.*

  *Examples include hazardous materials, including highly volatile, flammable, explosive, toxic, or water-reactive materials; and materials that have the potential to become waterborne in the event of a flood and would be dangerous to the health and safety of the public and the environment, such as the storage of construction materials, demolition debris, and aggregate materials.*

As discussed above, in the future, the first floor and cellar levels fall within the 1% annual floodplain under low SLR projections. **Figure 2.1-8** below shows the illustrative proposed building elevation under 90$^{th}$ Percentile SLR projections.

*Proposed Development Building Features:*

- *Cellar Level*: The cellar level would contain enclosed parking spaces, bicycle parking, and an elevator vestibule. The vulnerable building features within the cellar level would include the walls and flooring. The elevator vestibule would be considered potentially critical building features, which if damaged, would have severe impact on the building and its ability to function as designed. The building's mechanical and electrical systems would be located on the second floor which would be located well above the current and future 1 percent annual chance floodplain under high-projections. Further, as discussed below, following Appendix G, the cellar level is to be fully dry floodproofed to prevent groundwater and/or flood waters from entering. The cellar level would not introduce any hazardous features, materials, or substances that if made insecure, would result in a threat to public health or the environment.

- *First Floor Level*: The ground floor level would contain commercial and community facility space, a residential lobby, two elevators, and building storage. The vulnerable building features within the ground floor level would include the walls flooring, and electrical. The elevator would be considered a potentially critical building feature, which if damaged, would have impact on the project and its ability to function as designed. The first floor level would not introduce any hazardous features, materials, or substances that if made insecure, would result in a threat to public health or the environment.

**2. Identify Adaptive Strategies**

The goal of Step 2 under WRP Policy 6.2 is to assess how the vulnerabilities and consequences identified in Step 1 are addressed through the project's design and planning. Assess how applicable codes and regulations, planned flood damage reduction elements and adaptive measures, or likely future infrastructure investments (beyond the scope of the proposed project), would or would not reduce potential flood damage for any proposed vulnerable, critical, or potentially hazardous features.

Because the Projected Development Site is susceptible to the impacts of future flood events, it is recommended that building scale resiliency measures and flood mitigation strategies be considered. Pursuant to Policy 6.2: Climate Change Adaptation Guidance, consideration of climate change projections for coastal flooding and sea level rise should be incorporated into the design and planning of projects. The Proposed Project should identify potential vulnerabilities to and consequences of sea level rise and coastal flooding over its lifespan and identify and incorporate design techniques to address these risks.

*a) Flood Damage Reduction Elements/Controls*

A portion of Projected Development Site 1 is located within the current 1% annual chance floodplain and is therefore required to comply with Appendix G of the NYC Building Code for Flood Resistant Construction.

Pursuant to Appendix G, the following flood resilience techniques and controls will be implemented in the building design to increase building-scale resilience to future flood conditions, and to minimize future damage and vulnerability to the proposed building's cellar and first floor levels.

Following section G104.5.1 A-Zones of the NYC Building Code, the following will be employed:

- Dry Floodproofing: The building is over 3 stories and although it contains residential use, it is considered a commercial building for flood and energy purposes. Therefore, dry floodproofing would be implemented. For dry floodproofed buildings and structures that are nonresidential (for flood zone purposes), construction documents shall include a certification by the applicant that the dry floodproofing is designed in accordance with ASCE 24.

- Utility Certifications: For all applications involving utility or mechanical work, including applications where such work is to be filed in a separate, related application, construction documents shall include a certification by the applicant that "all heating, ventilation, air conditioning, plumbing, electrical and other services facilities and equipment within the structure or site will be located or constructed so as to prevent water from entering or accumulating within the components during conditions of flooding in accordance with ASCE 24."

- Flood Shields: The Proposed Project would apply section G105.4 Flood Shield Inspection, where flood shields would be installed at all building entrances at grade level as part of the dry floodproofing system.

These building scale resiliency measures would help prevent damage to vulnerable and critical building features and reduce the susceptibility of water damage from a future flood event or inundation. With the provision of the above, the building features would not be considered vulnerable or critical.

*b) Flood Protection of Adjacent Sites:*

The Proposed Development would not significantly increase stormwater runoff. Therefore, the proposed action would not affect the flood protection of adjacent sites.

**3. Assess Policy Consistency**

A project or action would advance the policy when:

- No new vulnerable, critical, or potentially hazardous features would be located within area flooded by current or future high tide, or current or future 1% annual chance flood, over the project's lifespan; or
- All new vulnerable, critical or potentially hazardous features would be protected through flood damage reduction elements or future adaptive measures within the timeframe that they would be needed.

A project or action would hinder the policy when:

- Vulnerable, critical, or potentially hazardous features would be introduced in areas that will be flooded by high tide during the project's lifespan and adaptive measures are not feasible.
- Industrial development would not be protected from 2050s high tides or the current 1% annual chance flood.
- Critical infrastructure would not be protected to the elevation of the 1% annual chance storm over its lifespan.
- Shoreline structures would not function as intended with increases in sea levels projected over their lifespan.

A portion of Projected Development Site 1 is within a current 1% annual chance floodplain, and the Proposed Project is therefore subject to flood resilient construction requirements outlined in Appendix G of the NYC Building Code. These building-scale resiliency measures and adaptive strategizes, as referenced above, would minimize the potential damage to site-specific vulnerable or critical features. Therefore, the Proposed Actions are consistent with Policy 6.2 of the Waterfront Revitalization Program and would not jeopardize the intent of the WRP.

**Conclusion**

The development effectuated as a result of the Proposed Actions would not create a land use conflict, nor would it conflict with public policies and plans for the site or surrounding area. The Proposed Actions would also not result in significant material changes to existing regulations or policy. Therefore, no significant adverse impacts are anticipated on public policies, and no further analysis is warranted.

*Housing New York 2.0*

The Proposed Actions are consistent with the goals of Housing New York as an MIH area would be established over the Affected Area to introduce more affordable residential units to the area. The development of the two Projected Development Sites would set aside 53 dwelling units, far more than the total 11 existing market-rate residential units, as permanently affordable units for households making an income at or below 60 percent AMI, which makes up 25 percent of the total 213 project induced dwelling units. These affordable units would foster diverse and livable neighborhoods, preserve the affordability and quality of the housing stock, and build new affordable housing for all New Yorkers.

*OneNYC*

The Proposed Actions support the OneNYC strategies in terms of an inclusive economy and thriving neighborhoods by creating new job opportunities within the proposed commercial local retail space in the ground floor of Projected Development Site 1, including cashier, sales associate, and / or managerial positions.

The Proposed Actions would support OneNYC initiatives by constructing new multi-family housing, as well as community facility, uses on underbuilt land. The Proposed Actions are consistent with the goals of OneNYC 2050, as it would create additional affordable housing and contribute to the community and economic development of the Far Rockaway neighborhood and Queens as a whole. Therefore, the Proposed Actions would not conflict with this public policy.

*Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery*

The Proposed Actions would provide new-built spaces for small businesses, increase the community's economic diversity, and create quality jobs for New Yorkers. Thus, the Proposed Actions are supportive of this policy.

**Figure 2.1-8: Proposed Illustrative Building Elevation under 90th Percentile SLR Projections**



**Conclusion**

The development effectuated as a result of the Proposed Actions would not create a land use conflict, nor would it conflict with public policies and plans for the site or surrounding area. The Proposed Actions would also not result in significant material changes to existing regulations or policy. Therefore, no significant adverse impacts are anticipated on public policies, and no further analysis is warranted.

## 2.2 Socioeconomic Conditions

According to the *2021 CEQR Technical Manual*, a socioeconomic assessment should be conducted if a project may be reasonably expected to create socioeconomic changes within the area affected by the project that would not be expected to occur without the project. The following circumstances would typically require a socioeconomic assessment:

- The project would directly displace residential population to the extent that the socioeconomic character of the neighborhood would be substantially altered. Displacement of less than 500 residents would not typically be expected to alter the socioeconomic character of a neighborhood. For projects exceeding this threshold, assessments of the direct residential displacement, indirect residential displacement, and indirect business displacement are appropriate.

- The project would directly displace more than 100 employees. For projects exceeding this threshold, assessments of direct business displacement and indirect business displacement are appropriate.

- The project would directly displace a business that is unusually important because its products or services are uniquely dependent on its location; that, based on its type or location, is the subject of other regulations or publicly adopted plans aimed at its preservation; or that serves a population uniquely dependent on its services in its present location. Information provided in Chapter 4, "Land Use, Zoning, and Public Policy," may be useful in determining whether an assessment is appropriate. If any of these conditions is considered likely, assessments of direct business displacement and indirect business displacement are appropriate.

- The project would result in substantial new development that is markedly different from existing uses, development, and activities within the neighborhood. Such a project may lead to indirect displacement. Typically, projects that are small to moderate in size would not have significant socioeconomic effects unless they are likely to generate socioeconomic conditions that are very different from existing conditions in the area. Residential development of 200 units or less or commercial development of 200,000 square feet or less would typically not result in significant socioeconomic impacts. For projects exceeding these thresholds, assessments of indirect residential displacement and indirect business displacement are appropriate.

- The project would add to, or create, a retail concentration that may draw a substantial number of sales from existing businesses within the Study Area to the extent that certain categories of business close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets. Projects resulting in less than 200,000 square feet of retail on a single development site would not typically result in socioeconomic impacts. If the proposed development is located on multiple sites located

across an Affected Area, a preliminary analysis is likely only warranted for retail developments in excess of 200,000 sq. ft. that are considered regional-serving (not the type of retail that primarily serves the local population). For projects exceeding these thresholds, an assessment of the indirect business displacement due to market saturation is appropriate.

- If the project is expected to affect conditions within a specific industry, an assessment is appropriate. For example, a citywide regulatory change that would adversely affect the economic and operational conditions of certain types of businesses or processes may affect socioeconomic conditions in a neighborhood: (1) if a substantial number of residents or workers depend on the goods or services provided by the affected businesses; or (2) if it would result in the loss or substantial diminishment of a particularly important product or service within the city. Since the range of possible types of projects that may require an analysis of specific industries varies, the lead agency, in consultation with the Mayor's Office of Environmental Coordination (MOEC), should provide guidance as to whether an analysis is warranted.

**Methodology**

Typically, the socioeconomic study area boundaries are similar to those of the land use study area. The study area encompasses the project site and adjacent area within 400 feet, 0.25-mile, or 0.5-mile, depending on project size and area characteristics. The socioeconomic assessment seeks to examine the potential to change socioeconomic character relative to the study area population. For projects that result in an increase in residential population, the scale of the relative change is typically represented as a percent increase in population.

**Existing Conditions**

Existing conditions within the Affected Area include 8,250 GSF of residential uses in four separate buildings (11 dwelling units total), as well as 3,888 GSF and 306 GSF of community facility (i.e., religious use) and commercial (i.e., car dealership) uses, respectively.

**Future No-Action Condition**

In the future without the Proposed Actions, existing conditions would remain within the Affected Area by the 2028 Project Build Year. Pursuant to the NYC Active Major Construction Database[7] and NYCDCP Housing Database Project Level Files, there are eight (8) approved or permitted developments within the two census tracts comprising the socioeconomics Study Area, characterized by mixed-use multi-family residential and commercial or community facility development, that would add a total of 1,555 new dwelling units to this geography (see **Table 2.2-1** below).

[7] https://www1.nyc.gov/assets/buildings/html/active-major-construction.html, accessed December 23, 2022

**Future With-Action Condition**

Under the Future With-Action Condition, existing development within the Affected Area would be demolished and be replaced with the development that is projected on Projected Development Sites 1 and 2. The total net-induced developed effectuated by the Proposed Actions would include 202 new dwelling units, 3,707 GSF of new commercial local retail space, and an additional 194 GSF of community facility space (4,576 GSF total).

### 2.2.1 Preliminary Socioeconomic Assessment

**Direct Residential Displacement**

There are 11 residential dwelling units within the Affected Area under existing conditions. As per U.S. Census 2016 - 2020 ACS data, the Proposed Actions would lead to the direct displacement of 30 resident, based on an average of 2.86 persons per dwelling unit within Queens Community District 14. Far less than 500 residents would be directly displaced by the Proposed Actions, which is not expected to alter the socioeconomic character of a neighborhood as per *2021 CEQR Technical Manual*. Therefore, an assessment of direct residential displacement is not warranted.

**Direct Business Displacement**

The Future With-Action Condition is projected to generate 33 workers at the Affected Area, a 19 worker increase over the Future No-Action Condition, including workers associated with proposed local retail, community facility, and residential spaces. Of these 33 workers, 14 would be associated with the existing community facility within the Affected Area, which would occupy the new community facility space at Projected Development Site 1 under the Future With-Action Condition. Therefore, no direct business displacement is anticipated under the Future With-Action Condition, such that further analysis is not warranted.

**Indirect Residential Displacement**

The Proposed Actions would result in a net-induced development of 202 dwelling units, 53 of which would be permanently affordable. Pursuant to the *2021 CEQR Technical Manual*, for projects exceeding 200 dwelling units, assessments of indirect residential displacement are appropriate. Therefore, further analysis of the potential for indirect displacement due to increased rents is warranted.

**Indirect Business Displacement due to Retail Market Saturation**

The Proposed Actions are projected to result in the net incremental development of 194 GSF of community facility space and 3,707 GSF of commercial space. Pursuant to the *2021 CEQR Technical Manual*, for projects exceeding 200,000 square feet of retail spaces, assessments of indirect business displacement due to market saturation are appropriate. The commercial spaces of the projected development would be far below this threshold, and therefore further analysis of indirect business displacement is not warranted.

**Adverse Effects on Specific Industries**

The Proposed Actions would not affect a business that provides goods or services to a substantial number of residents or workers and would not result in the loss or substantial diminishment of a particularly important product or service within the city. Therefore, no adverse impacts to any industries would occur as a result of the Proposed Actions.

### 2.2.2 Indirect Residential Displacement Assessment

**0.25-Mile Study Area**

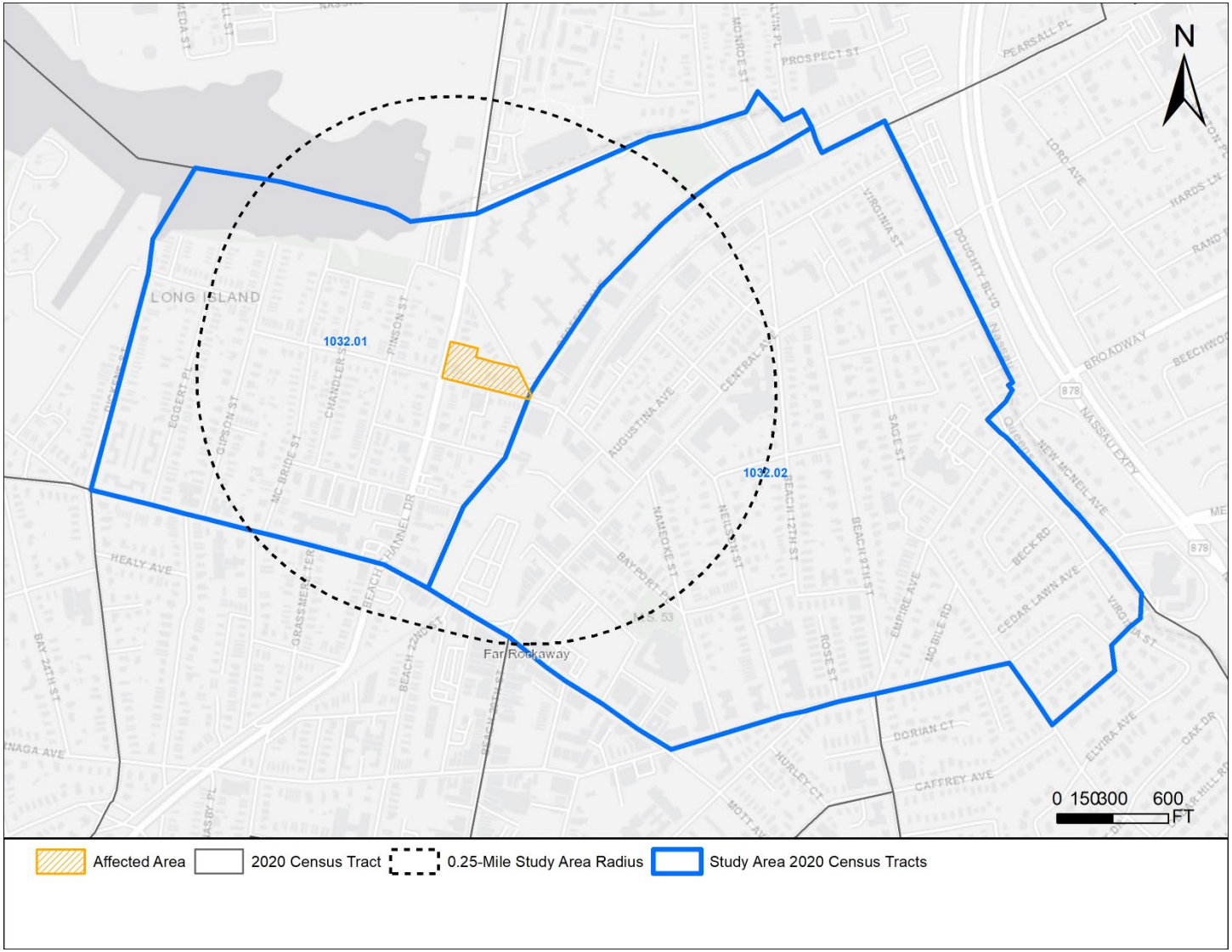
Because the Proposed Actions would result in the induced development of over 200 residential units, further analysis of the potential for indirect impacts associated with increased rents was conducted, relying on the methodology of the *2021 CEQR Technical Manual*. Pursuant to *Chapter 5, Section 310* of the *2021 CEQR Technical Manual*, an initial Study Area radius of 0.25-mile is identified as appropriate. The Study Area was defined to include those census tracts that are more than 50 percent within a 0.25-mile radius of the Affected Area (**Figure 2.2-1**). Queens county census tract 1032.01 is the only census tract with more than 50 percent of its land area within a 0.25-mile radius of the Affected Area. Due to the Affected Area's proximity to Queens Census Tract 1032.02 (adjacent to the west – see **Figure 2.2-1**), data for that census tract was also included in this analysis.

**Existing Conditions**

As stated in the *2021 CEQR Technical Manual*, to better understand the trends of changing socioeconomic conditions of the Study Area that may potentially displace a vulnerable population, it is useful to include data from the most recent census as well as data from the completed DOB permits in the previous decade when determining the existing population of the Study Area. The data adopted to determine the existing population includes 2010 and 2020 decennial census data and DCP Housing Database Project-Level Files.

Based on the 2016-20 ACS estimates, the total population of the two census tracts within the 0.25-mile Study Area was 14,573 residents in 2020. According to the Project-Level DCP Housing Database, 931 dwelling units were added to those census tracts since 2020; based on an average household size of 2.86 persons per household for Queens Community District 14, those new dwelling units were projected to add an additional 2,663 persons, resulting in an estimated existing population of 17,236 residents in year 2022.

**Figure 2.2-1: 0.25-Mile Socioeconomic Study Area**



**Future No-Action Condition**

Projecting the Future No-Action Condition population within the two census tracts comprising the socioeconomics Study Area is based on the household size and known and planned developments within those census tracts. A review of active major construction projects, approved BSA applications, and approved ULURP actions, and NYCDCP Housing Database Project Level Files was undertaken to determine known developments in the area, where developments with less than 18 dwelling units were excluded due to their small size with limited impact on the socioeconomic condition. As shown in **Table 2.2-1** below, a total of nine (9) proposed projects with more than 18 dwelling units were identified, which would result in 1,871,690 GSF of development and 1,555 new dwelling units. The proposed 1,555 dwelling units multiplied by the average household size (2.86) for Queens Community District 14 (2016-2020 ACS data) comes out to 4,447 additional residents; when added to previously calculated existing population (17,236 residents), the Future No-Action Condition population is forecasted to be 21,683 residents.

**Table 2.2-1: No-Action Developments within Census Tracts 1032.01 and 1032.02**

| Address | Land Use | Permit Type | GSF | DU | Stories |
|---|---|---|---|---|---|
| 1605 Village Lane, Queens | Res, Com | New Building | 155,602 | 129 | 15 |
| 1607 Village Lane, Queens | Res, CF | New Building | 68,871 | 55 | 10 |
| 13-12 Beach Channel Drive, Queens | Res, CF | New Building | 131,906 | 59 | 8 |
| 11-27 Foam Place, Queens | Res, Com | New Building | 66,154 | 68 | 8 |
| 20-50 Nameoke Avenue, Queens | Res, CF | New Building | 81,350 | 117 | 9 |
| 1701 Village Lane, Queens | Res, Com | New Building | 237,017 | 231 | 15 |
| 1720 Village Lane, Queens | Res, Com | New Building | 314,500 | 231 | 12 |
| 1725 Village Lane, Queens | Res, Com | New Building | 407,797 | 311 | 12 |
| 1626 Village Lane, Queens | Res, Com | New Building | 409,493 | 354 | 12 |
| | | **Total** | **1,872,690** | **1,555** | **N/A** |

Res = Residential; CF = Community Facility; Com = Commercial

**Future With-Action Condition**

Compared to No-Action Conditions, the Proposed Actions would introduce 202 incremental dwelling units, resulting in 578 new incremental residents, assuming an average household size of 2.86 persons. Added to the projected Future No-Action Condition population (21,683 residents), the Future With-Action Condition population is forecasted to be 22,261 residents, an increase of approximately 2.67 percent.

In determining whether a detailed analysis of potential indirect residential displacement is warranted, *2021 CEQR Technical Manual Chapter 5, Section 322.1*, Step 2, stated in part, "if the population increase is greater than 5 percent in the Study Area as a whole or within any identified

subareas, move on to Step 3." As the increase is not greater than 5 percent, further analysis pursuant to Step 3 of the *2021 CEQR technical Manual was not* conducted.

Step 1

*Study Area Household Income*

Household income characteristics within the 0.25-mile Study Area can be revealed with the median household income, the mean household income, and the percentage of households below poverty level. The median household income divides the household income distribution into two equal parts with half having income above that amount and half having income below that amount. Unlike the median household income, the mean household income is the amount obtained by dividing the total aggregate income of all households by the number of households, which is more affected by the relatively unequal distribution of the income that tilts towards the top. As a result, the mean household income is typically higher than the median household income given that the top earning households could boost the number. The percentage of households below poverty level is also important in forming a comprehensive understanding of the household income as the poverty level is determined by the Census Bureau with an official poverty measure that compares pre-tax cash income against a threshold that is set at three times the cost of a minimum food diet in 1963 and adjusted for family size.

Referencing the NYC Planning Population FactFinder, as shown below in **Table 2.2-2** the 0.25-mile Study Area census tracts have a lower median household income ($43,347) and mean household income ($65,078) than those in the borough of Queens ($65,785 median and $83,533 mean household incomes) and New York City ($59,829 median and $92,682 mean household incomes) in 2010. In 2020, the median and mean household incomes within the Study Area were $58,748 (35.5 percent increase) and $82,916 (27.4 percent increase), respectively. Within Queens in 2020, the median household income increased approximately 9.5 percent (to $72,028), while the mean household income increased 13.0 percent (to $94,363). Within New York City, the median household income rose 12 percent in 2020 (to $67,046) while mean income rose 15.4 percent (to $107,000). Overall, while median and mean household incomes within the Study Area were lower than Queens and New York City in both 2010 and 2020, they experienced the largest relative increases over that time period.

From 2010 to 2020, households below the poverty level fell from 27.7 percent to 21.8 percent within the 0.25-mile Study Area (a 5.9 percent decrease). Decreases within Queens and New York City were somewhat smaller over that time period; households in Queens below the poverty line decreased from 10.6 to 9.0 percent (a 1.6 percent decrease) while New York City's households below the poverty line decreased from 16.2 to 14.0 percent (a 2.2 percent decrease).

Although the changes in the household income numbers and household poverty rates are not considered statistically reliable or significant, they can be viewed as directionally accurate and indicative of increasing household incomes and decreasing household poverty rates within the 0.25-mile Study Area. The increasing household median and mean incomes and the decreasing

household poverty rate, at rates greater than Queens and New York City, show an observable trend towards higher-earning residents within the Study Area census tracts.

**Table 2.2-2: Household Income Characteristics of the 0.25-Mile Study Area, Queens, and NYC**

| | Median Household Income ($) | Mean Household Income ($) | Households Below Poverty Level (%) |
|---|---|---|---|
| **2010 ACS Data** | | | |
| **0.25-Mile Study Area** | $43,347 | $65,078 | 27.7 |
| **Queens** | $65,785 | $83,533 | 10.6 |
| **New York City** | $59,829 | $92,682 | 16.2 |
| **2020 ACS Data** | | | |
| **0.25-Mile Study Area** | $58,738 | $82,916 | 21.8 |
| **Queens** | $72,028 | $94,363 | 9.0 |
| **New York City** | $67,046 | $107,000 | 14.0 |

*Study Area Market Rent*

The US Census provides information on median contract rent, which reflects the range of rents for both units of different sizes and ages and occupants who may have moved in recently or lived in their units for a long time. However, these data are of limited use because they fail to distinguish between units subject to market rents and those under some form of rent regulation. To understand the current trends, particularly trends affecting unregulated rental units, the rental data from ACS should be supplemented by information from real estate brokers and examination of current rental apartment listings.

Though utilizing the median gross rent from the ACS data to determine market rents in a Study Area is not recommended as ACS rents do not distinguish between market and rent-regulated units, often making the data difficult to parse, the value of ACS rent data lies in its ability to show trends over time as opposed to the actual values. Therefore, the 2010 ACS and 2020 ACS have been adopted to show the trend of rent change in the 0.25-mile Study Area, Queens, and New York City.

**Table 2.2-3: Median Gross Rent of the 0.25-Mile Study Area, Queens, and NYC**

| | 2010 ACS ($) | 2020 ACS ($) | Percent Change (%) |
|---|---|---|---|
| **0.25-Mile Study Area** | $1,132 | $1,519 | +34.2 |
| **Queens** | $1,405 | $1,629 | +15.9 |
| **New York City** | $1,274 | $1,489 | +16.9 |

As shown in **Table 2.2-3** above, in 2010 the median gross rent within the 0.25-mile Study Area was the lowest at $1,132, compared to that in Brooklyn ($1,405) and in New York City ($1,259). However, in 2020, the median gross rent within the 0.25-mile Study Area was $1,519, slightly higher than New York City ($1,489) and slightly lower than Queens ($1,629). The median gross rent increase rate within the 0.25-mile Study Area is the highest from 2010 to 2020, reaching 34.2 percent, compared to a 15.9 percent increase in Queens and a 16.9 percent increase

citywide. As described above, though the ACS median gross rent data is considered to be of limited use, it still indicates that the 0.25-mile Study Area may have experienced a readily observable trend toward increasing rents in the last decade.

**Table 2.2-4: GRAPI Comparison of 0.25-Mile Study Area, Queens, and NYC**

| | Less than 15% | 15% to 30% | 30% to 50% | 50% or more |
|---|---|---|---|---|
| **2010 ACS** | | | | |
| **0.25-Mile Study Area** | 13.2% | 31.7% | 22.3% | 32.8% |
| **Queens** | 12.5% | 34.8% | 24.7% | 28.0% |
| **New York City** | 14.4% | 34.3% | 23.6% | 27.7% |
| **2020 ACS** | | | | |
| **0.25-Mile Study Area** | 17.8% | 22.2% | 30.5% | 29.5% |
| **Queens** | 12.5% | 34.6% | 25.2% | 27.7% |
| **New York City** | 14.6% | 33.4% | 24.2% | 27.8% |

Further investigation was undertaken regarding gross rent as a percentage of household income (GRAPI). The comparisons between the GRAPI values for the 0.25-mile Study Area and that of Queens and New York City are statistically valid as the margin of error of the difference is no larger than 1/3 of the difference itself. As shown in **Table 2.2-4** above, as of 2010, households that spend 15% to 30% of their household income on gross rent within the 0.25-mile Study Area constitute 31.7 percent of the total households paying rent, which decreased to 22.2 percent in 2020. Rent burdened households that spend 30 percent 50 percent of their total income on gross rent increased within the Study Area from 2010 to 2020, from 22.3 to 30.5 percent. The proportion of rent burdened households within the Study Area was comparable to both Queens and New York City in 2010 (24.7 and 23.6 percent, respectively); however, in 2020 those rates for Queens and New York City remained relatively similar (25.5 and 24.2 percent, respectively), while the proportion of those household within the Study Area increased 8.2 percent (from 22.3 to 30.5 percent, as previously discussed).

Overall, rental markets in Queens and New York City appear to be slightly healthier than in the Study Area as of the 2020 ACS data; 47.1 and 48.0 percent of households in Queens and New York City spend 30 percent or less of their income on rent, while only 40 percent of households within the Study Area spend less than 30 percent of their income on rent.

The number of very rent burdened households (spending 50 percent or more of their income on rent) with the 0.25-mile Study Area decreased from 2010 to 2020, from 32.8 percent to 29.5 percent (a 3.3 percent drop) while rates in Queens and New York City were relatively stable over that period (from 28.0 to 27.7 percent in Queens and from 27.7 to 27.8 percent in New York City).

In addition to the ACS data, a more appropriate data source for determining market rents in the 0.25-Mile Study Area would be from professional market reports of real estate agency websites. Since most real estate reports use the neighborhood as the basic geographic unit, Far Rockaway, where the Affected Area is located and witnessing a new, robust rental market, was used in the market rate rental price research respectively.

The *M.N.S Queens Rental Market Report*[8] for January 2022 through November 2022, which features a more detailed perspective in the average rental prices of different unit types in both Queens and specific neighborhoods, indicates a trend of steadily increasing rent in the borough of Queens as a whole. The average rent in Queens in November 2021 was $2,341, which increased to $2,667 in November 2022, an increase of approximately 13.9 percent over that 12-month period. None of the individual neighborhoods in Queens surveyed by these reports (i.e., Long Island City, Astoria, Ridgewood, Flushing, Rego Park, Forest Hills, Jackson Heights, and Jamaica) provide an adequate comparison to Far Rockaway.

To determine market rents for the Study Area, the website StreetEasy[9] was consulted. Within the Rockaway Peninsula (the most granular level of rental data the StreetEasy website can provide), median asking rent ranged from $1,370 to $3,400 between November 2021 and November 2022. This is indicative of an area in transition, some of which can be attributed to the Downtown Far Rockaway Rezoning in 2017 and resultant development. The range of market rents is shown below in **Table 2.2-5,** along with two columns showing the estimated annual household income to afford the rent. Typically, rents are estimated to be 30 percent of the household incomes.

**Table 2.2-5: StreetEasy Median Asking Rent in the Rockaway Peninsula, November 2021 – November 2022**

| Bedrooms | Low Rent | High Rent | Annual Household Income Estimate (Low) | Annual Household Income Estimate (High) |
|---|---|---|---|---|
| **Studio** | $1,378 | $1,500 | $54,000 | $60,000 |
| **1BR** | $1,712 | $2,124 | $60,000 | $84,960 |
| **2BR** | $2,200 | $2,750 | $69,000 | $110,000 |
| **3BR** | $2,775 | $3,400 | $90,000 | $136,000 |

*Proposed Building Household Income and Market Rent Estimates*

Since new development tends to be at the higher end of the rents, the third quantile of market rent range in the Study Area would be referred to as the potential rent of the proposed market-rate units, which is approximately $1,470 for a studio, $1,975 for a one-bedroom, $2,453 for a two-bedroom, and $2,963 for a three-bedroom. Accordingly, the estimated annual household income to afford these rents, based on the 30 percent of income assumption, would be $58,800

[8] https://www.mns.com/queens_rental_market_report
[9] https://streeteasy.com/blog/data-dashboard/

for a studio, $79,000 for a one-bedroom, $98,120 for a two-bedroom, and $118,520 for a three-bedroom**.**

The Proposed Actions would introduce an increment of 202 dwelling units on the two Projected Development Sites, with 53 affordable units permanently set aside at or below 60 percent AMI. As discussed above, the expected household income in the proposed market-rate units would be approximately $58,800 for a studio, $79,000 for a one-bedroom, $98,120 for a two-bedroom, and $118,520 for a three-bedroom per StreetEasy market rent data. As described above, since the proposed affordable units would be permanently set aside at or below 60 percent AMI, the maximum expected household income in the proposed affordable units would be $72,060 for a household of three people in 2022 based on the New York City Area Median Income provided on the New York City Department of Housing Preservation and Development (HPD) shown in **Table 2.2-6** below.

**Table 2.2-6: New York City Area Median Income in 2022[10]**

| Family Size | 30% AMI | 40% AMI | 50% AMI | 60% AMI | 70% AMI | 80% AMI | 90% AMI |
|---|---|---|---|---|---|---|---|
| **1 Person** | $28,020 | $37,360 | $46,700 | $56,040 | $65,380 | $74,720 | $84,060 |
| **2 Persons** | $32,040 | $42,720 | $53,400 | $64,080 | $74,760 | $85,440 | $96,120 |
| **3 Persons** | $36,030 | $48,040 | $60,050 | $72,060 | $84,070 | $96,080 | $108,090 |
| **4 Persons** | $40,020 | $53,360 | $66,700 | $80,040 | $93,380 | $106,720 | $120,060 |

As analyzed above, the household income and market rents of the proposed dwelling units on the two Projected Development Sites would be on the higher end of the existing market rate rents and household income. Although 53 affordable units would be permanently set aside at or below 60 percent AMI, the overall average income of the introduced population would likely be slightly higher than that of the surrounding Study Area. Therefore, the analysis will continue to Step 2.

Step 2

Step 2 of a socioeconomics analysis requires determining if the Proposed Actions would increase the Study Area's population in an amount large enough relative to the size of the population expected to reside in the Study Area without the project to affect real estate market conditions in the Study Area. If the population increase is less than five percent within the Study Area, further analysis is not warranted as the change would not be expected to affect real estate market conditions.

As discussed above, the With-Action Condition population would result in a 2.67 percent increase over the No-Action Condition, which would be below the threshold requiring further analysis.

[10] https://www1.nyc.gov/site/hpd/services-and-information/area-median-income.page

### 2.2.3 Conclusion

Induced development resulting from the Proposed Actions would continue established trends of population growth in the area, as illustrated by the significant number of active or planned construction projects within the 0.25-mile Study Area. As indicated above, though the household income and market rents of the proposed dwelling units on the two Projected Development Sites would be on the higher end, the Proposed Actions are anticipated to result in a 2.67 percent increase to the 0.25-Mile Study Area population, which is below the threshold of 5 percent which would require further analysis. Therefore, the Proposed Actions would not be expected to result in significant adverse impacts on socioeconomic conditions, and further analysis is not required.

## 2.3 Open Space

The *2021 CEQR Technical Manual* defines the need for an open space assessment if the Proposed Action(s) would have a direct or indirect effect on open space resources. Direct effects would occur if the Proposed Action(s) would result in the physical loss of a public open space; change of use of an open space so that it no longer serves the same user population; limit public access to an open space; or cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether temporary or permanent. Indirect effects would occur if the proposed action would result in an increase in population sufficiently large enough to noticeably diminish the ability of an area's open space to serve the future population.

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

Pursuant to Chapter 7, Section 100 of the *2021 CEQR Technical Manual*, Open Space Resources are defined as active and/or passive, and may include, but is not limited to, the following:

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

- Waterfront piers used for recreation.

**Methodology**

According to the guidelines of the *2021 CEQR Technical Manual* for analysis of residential development, census tracts with at least half of their geographic area within a one-half mile radius of the Affected Area comprise the Open Space Study Area. Using current population figures, an open space ratio is calculated for both the future no-action and future with-action conditions, expressed as the amount of open space acreage per 1,000 user population. Typically, a comparison is made to the city's planning goal of 2.50 acres per 1,000 residents. Ideally, this would comprise 0.50 acres (20 percent) of passive space and 2.0 acres (80 percent) of active open space per 1,000 residents. For nonresidents who tend to use passive open space, for example, workers taking a break in a park, the optimal ratio for nonresidential populations is 0.15 acres of passive open space per 1,000 nonresidents.

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

**Direct Effects**

Direct effects to open space are addressed in the sections for those specific technical areas where warranted. Construction impacts to open space are not anticipated as there would be no physical loss of public open space, no change in existing open space so that it no longer serves the same user population, would not limit public access, and would not increase noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness. An assessment of the effects of the Proposed Actions related to shadows on open space resources is provided in **Section 2.4: Shadows**.

**Indirect Effects**

The threshold for assessment of the potential for indirect open space impacts is 200 new residents or 500 additional employees. As discussed below, development at Projected Development Sites 1 and 2 under the Future With-Action Condition would generate 578 new residents (see **Table 1.8-2**). Therefore, an assessment of indirect effects on public open space resources is warranted.

### 2.3.1 Preliminary Open Space Assessment

There would be an incremental increase of 202 dwelling units within the Affected Area under the Future With-Action Condition, from 11 in the Future No-Action Condition to 213 in the Future With-Action Condition. Assuming an average occupancy of 2.86 persons based on the average household size within Queens Community District 14 (2016-2020 ACS data), the incremental population introduced as a result of the Proposed Actions would be approximately 578 residents, well beyond the 200-resident threshold for a preliminary residential open space assessment.

As indicated in **Table 1.8-2**, the Future With-Action Condition is projected to result in an incremental increase of 19 employees, from 14 employees in the Future No-Action Condition to 33 employees in the Future With-Action Condition; employee generation under the Future With-Action Condition is associated with new retail and community facility space as well as residential building operation and maintenance. The projected 19 employee increase is less that the 500-employee increase threshold for a preliminary commercial open space assessment.

As such, this preliminary assessment addresses the residential population projected to be generated by the Future With-Action Condition.

**Study Area Definition**

In accordance with the guidelines established in the City's *2021 CEQR Technical Manual*, the Open Space Study Area is defined to analyze both the nearby open spaces and the population using those open space resources. It is generally defined by a reasonable walking distance that users would travel to reach local open spaces and recreational areas. Pursuant to the *2021 CEQR Technical Manual*, the Defined Open Space Study Area includes all U.S. Census Tracts that have 50 percent or more of their area within a half-mile radius of the Affected Area for residential users. As shown in **Figure 2.3-1**, those Census Tracts with 50 percent or more of their area within the half-mile Study Area include 1008.03, 1010.03, 1032.01, and 1032.02 in Queens County, New York City.

**Existing Condition Residential Population**

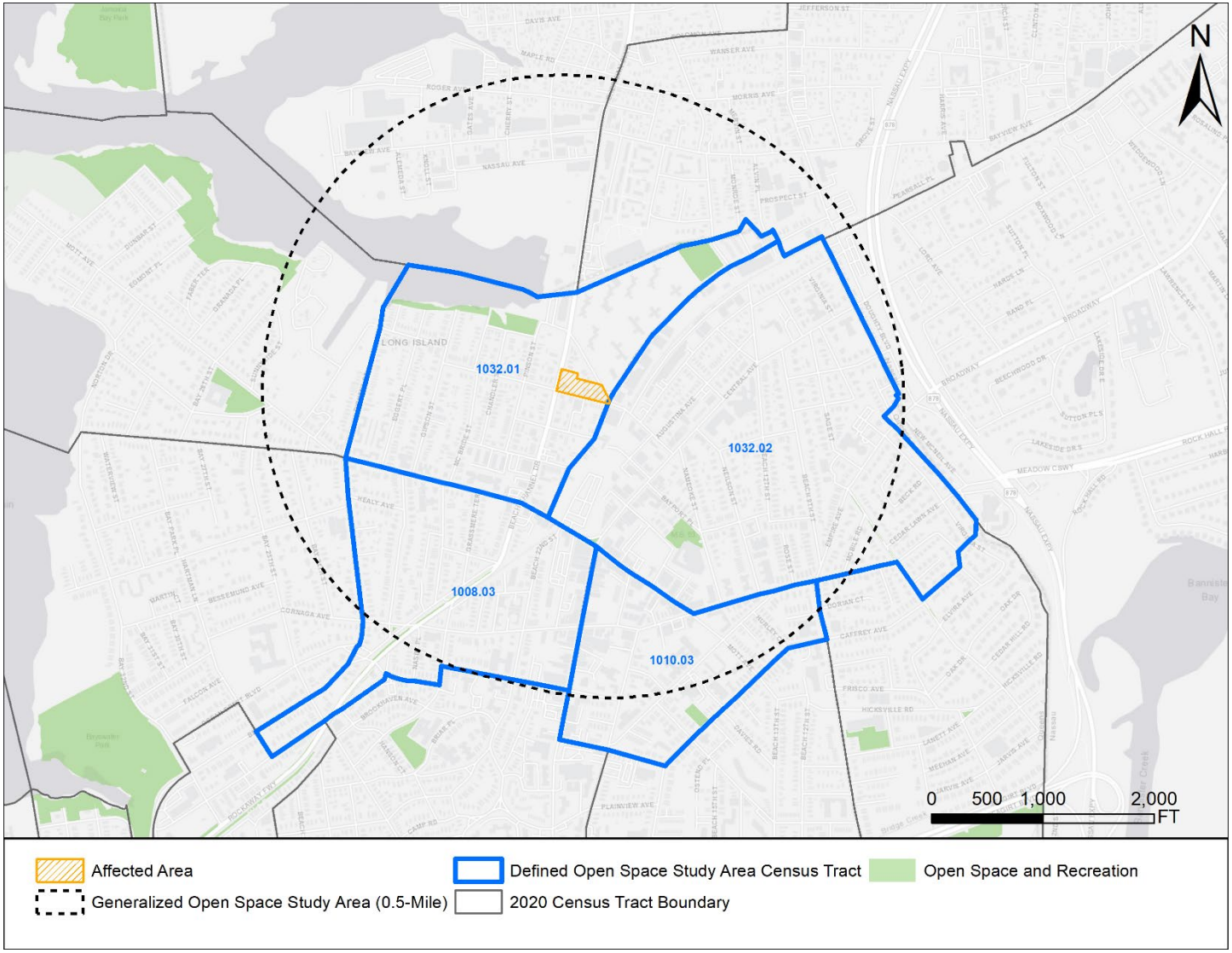
Based on data from the 2016-2020 ACS, the Study Area shown in **Figure 2.3-1** had a population of 22,606 residents in 2020, as shown in below **Table 2.3-1.**

**Table 2.3-1: Study Area Population 2020**

| Census Tract | 2020 Population |
|---|---|
| 1008.03 | 3,640 |
| 1010.03 | 4,393 |
| 1032.01 | 5,981 |
| 1032.02 | 8,592 |
| **Total** | **22,606** |

According to the Project-Level DCP Housing Database, 1,391 new housing units were constructed in the within the census tracts comprising the Defined Open Space Study Area since January 1, 2020. Based on the aforementioned average household size of 2.86 persons in Queens Community District 14, these new housing units have been projected to add 3,878 persons to the existing population of the Defined Open Space Study Area, resulting in a total population of 26,854 persons.

**Figure 2.3-1: Open Space Study Area Census Tracts**



**Future No-Action Condition Residential Population**

Based on a review of the NYC Project Level Housing Database Files and NYC Active Major Construction Database,[11] an additional 1,782 dwelling units over 19 separate development projects within the Defined Open Space Study Area are forecasted under the Future With-Action Condition (included approved and permitted applications). For the purposes of a conservative analysis, it is assumed all of these dwelling units would be completed an occupied by the 2028 Project Build Year and thus considered as no-build projects and be included in the baseline analysis for open space. Using the same 2.86 residents per household average for Queens Community District 14, the Future No-Action Condition would have 5,097 new residents introduced by the 1,782 new dwelling units in the Defined Open Space Study Area by the 2028 build year. When added to the existing 2022 population (26,854 persons), the Future No-Action population is projected to be 31,951 persons.

**Future With-Action Condition Residential Population**

As previously discussed, the Future With-Action Condition is projected to generate an incremental increase of 578 new residents, which results in a total population of 32,529 persons within the Defined Open Space Study Area. Populations under the Existing, No-Action, and With-Action Conditions are provided below in **Table 2.3-2**.

**Table 2.3-2: Existing, No-Action, and With-Action Populations[12]**

| Existing Population | No-Action Population | With-Action Population |
|---|---|---|
| 26,854 | 31,951 | 32,529 |

### 2.3.2 Open Space Resources

There are four (4) open space resource with regular access to the public within the Defined Open Space Study Area, identified below in **Table 2.3-3**, for a total of 5.67 acres of open space. Of those 5.67 acres, 3.24 of which are considered active and 2.43 of which are considered passive based on field visits and a review of their respective site plans, as available.

[11] https://www1.nyc.gov/assets/buildings/html/active-major-construction.html, accessed December 23, 2022

[12] Existing = 2020 American Community Survey and NYCDCP Project Level Housing Database Files; No-Action = Existing plus 1,782 proposed dwelling units; With-Action = No-Action plus 578 additional residents from the Projected Development Site 1 and 2

## Table 2.3-3: Open Space Resources

| Map ID No. | Name | Address | Responsible Agency | Area (Acres) | Total Active (Acres / %) | Total Passive (Acres / %) | Operating Hours | Observed Utilization[2] | Features |
|---|---|---|---|---|---|---|---|---|---|
| *Existing Open Space* | | | | | | | | | |
| 1 | Redfern Playground | Beach 12th St and Redfern Ave Far Rockaway, NY 11691 | NYCDPR | 2.09 | 1.88 (90%) | 0.21 (10 (10%) | N/A – Park Under Construction | N/A – Park Under Construction | HC, BC, Ba, Pg, BF |
| 2 | Jamaica Bay Park (p/o) | Far Rockaway, NY 11691 | NYCDPR | 2.22 | 0.00 (0%) | 2.22 (100%) | N/A – Natural Area Being Replanted | N/A – Natural Area Being Replanted | Natural Area |
| 3 | Sorrentino Recreation Center | 8-48 Cornaga Avenue Far Rockaway, NY 11691 | NYCDPR | 0.28[1] | 0.28 (100%) | 0.00 (0%) | M-F: 6 AM – 10 PM; Sat: 8 AM – 8 PM; Sun: 8 AM – 6 PM | N/A – Observation not Possible | Fitness Center, Pool |
| 4 | M.S. 53 Community Playground* | 10-45 Nameoke Street, Queens, NY | NYCDOE | 1.08 | 1.08 (100%) | 0.00 (0%) | Apr – Sept: 6 AM – 9PM Oct – Mar: 6 AM – 5 PM[3] | Low | BC, AF, Pg, Tr |
| **EXISTING OPEN SPACE TOTALS:** | | | | **5.67** | **3.24 (57.1%)** | **2.43 (42.9%)** | - | - | - |
| *Future No-Action Open Space* | | | | | | | | | |
| A | Nameoke Park | 20-06 Nameoke Avenue | NYCDPR | 0.32 | 0.24 | 0.08 | N/A – Park Under Construction | N/A – Park Under Construction | Pg, FE, Be |
| **FUTURE NO-ACTION SCENARIO TOTALS:** | | | | **5.99** | **3.48 (58.1 %)** | **2.51 (41.9%)** | - | - | - |

* This is a Schoolyards to Playgrounds site regularly open to the public during non-school hours.

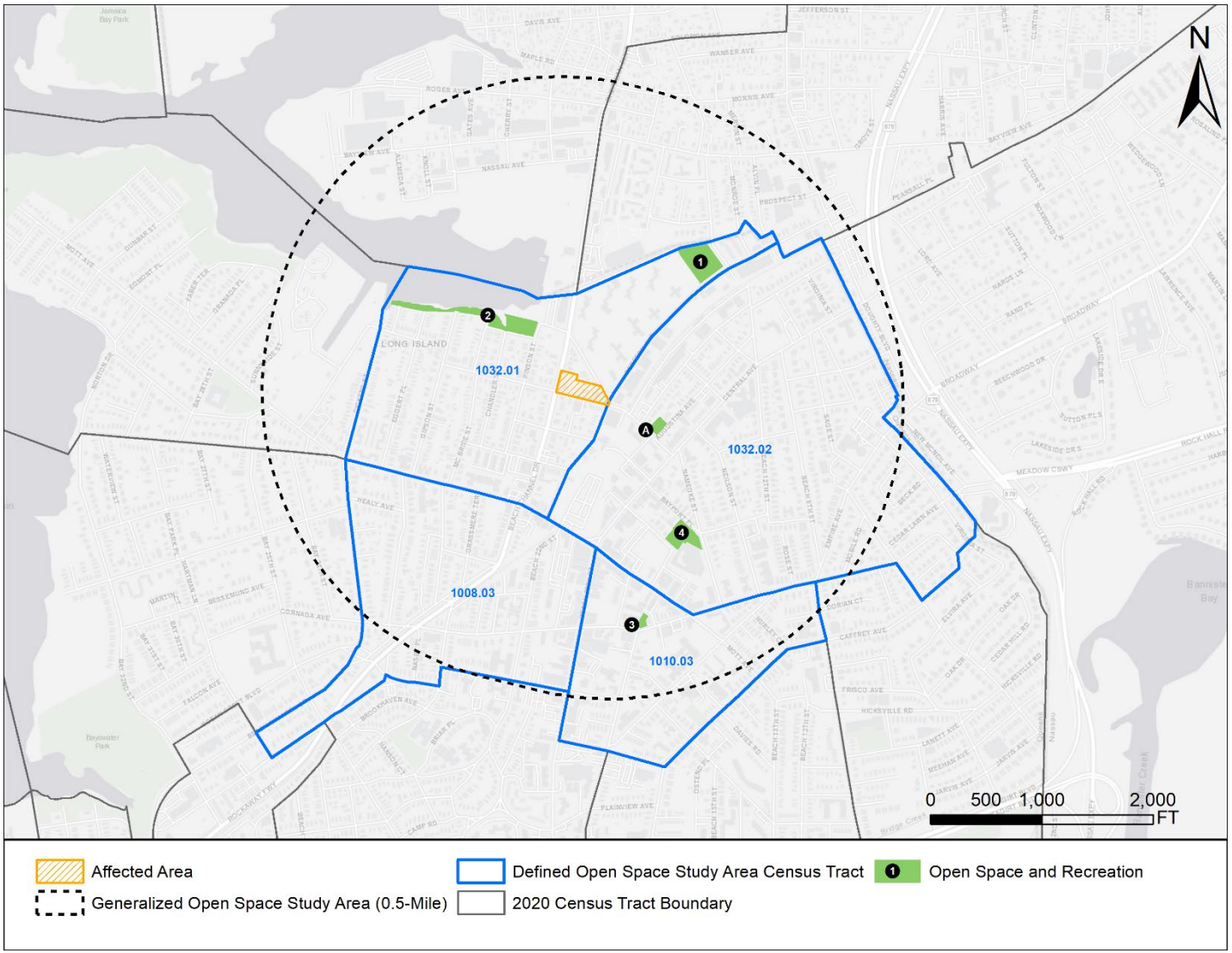
SS = Spray Showers; Pg = Playgrounds; Bi = Bicycling; BC = Basketball Courts; Ba = Bathrooms; Be = Benches; HC = Handball Courts; GW = Greenway; CG = Community Garden; BF = Baseball Fields; PL = Pool; Tr = Track; AF = Athletic Field; FE = Fitness Equipment

1: The Sorrentino Recreation Center is an indoor facility with 12,240 SF of floor area, which equates to 0.28-acre of recreational space (12,240 SF / 43,560 SF)

2: Based on observations taken on January 8, 2023

3: Closed to public during school hours and after school programs

**Figure 2.3-2: Open Space Location in Study Area**



In addition to the existing open spaces identified above, one new public open space is planned within the Defined Open Space Study Area in the Future No-Action Condition, Nameoke Park. Based on site visit observations and data provided by NYCPDR's website,[13] the park is currently under construction and is projected to be open operational by August 2023. The planned 0.32-acre park will feature a variety of active and passive recreational amenities, including playgrounds, fitness, equipment, and seating areas.

The location of these resources is visualized in **Figure 2.3-2** (cross reference labels on the map with the "Map ID No." column in **Table 2.3-3** for a specific resource's information).

**Existing Condition Open Space Ratio**

The Study Area has 5.67 acres of open space and an existing residential population of 26,854 persons. The open space ratio (OSR) under existing conditions is approximately 0.211 acres per 1,000 residents.

**Future No-Action Condition Open Space Ratio**

In the future without the Proposed Actions the population for the Study Area in the 2028 build year is forecasted to be 31,951 persons, projected to be served by the 5.99 acres of open space with the addition of Nameoke Park. With this population, the OSR would be approximately 0.187-acre per 1,000 residents.

**Future With-Action Condition Open Space Ratio**

The Proposed Actions would result in an increase in the No-Action population by 578 residents by the 2028 build year, resulting in a With-Action population would be 32,529 persons, served by 5.99 acres of open space. With this increase in population, the OSR would be approximately 0.184-acre per 1,000 residents, or a 1.6 percent reduction in the OSR from the Future No-Action Condition.

### 2.3.3 NYC Parks Walk to a Park Initiative

New York City, as part of the OneNYC 2050 Building a Strong and Fair City plan, has put forth a goal for 85 percent of New York City residents living within walking distance of a park by 2030. To help the City reach this goal, NYCDPR has a Walk to a Park initiative that focuses on increasing access to parks and open space in areas of the City where residents live further than walking distance to a park. Areas outside of Walk to a Park Service Areas are considered "walk gaps" – i.e., areas of the city that are not within walking distance to a park.

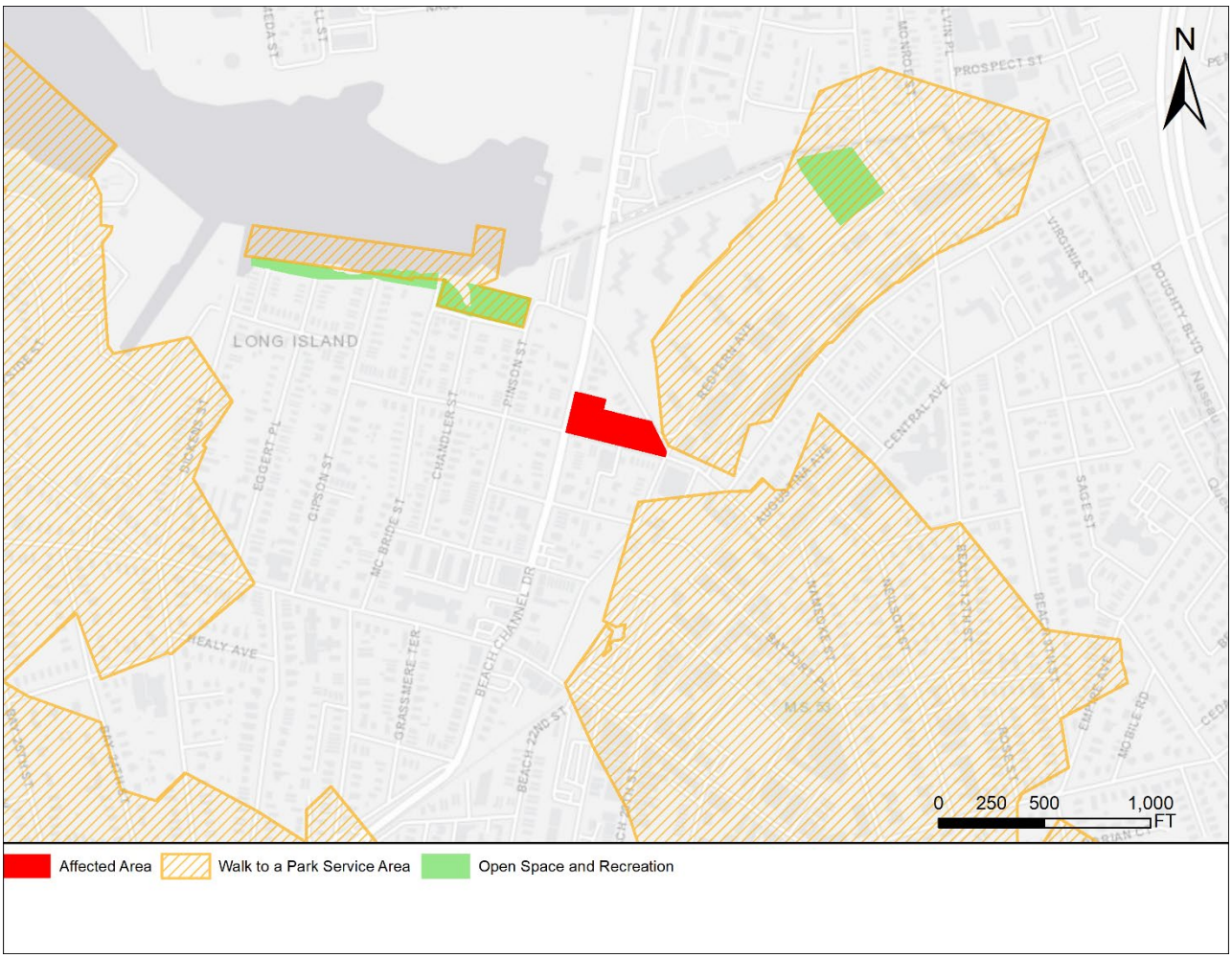
As part of the preliminary assessment for open space, a project should be reviewed to determine if it is located in an area of the city within a Walk to a Park Service Area. Project sites that are located outside of a Walk to a Park Service Area (i.e., located in a known walk gap areas) suggests

[13] https://www.nycgovparks.org/planning-and-building/capital-project-tracker/project/9545, accessed January 9, 2023

there is a need for a detailed analysis to be performed to determine if the project may further exacerbate a condition of residents living in areas of the city with inadequate park access, potentially leading to a significant impact. While the focus of the Walk to a Park initiative is on residents living within walking distance to a park, projects that create a non-residential population (e.g., new workers) should also review if the project is located within a known walk gap and assess if the project would generate a new non-residential population within areas of the City with inadequate access to open space resources.

As shown in **Figure 2.3-3**, the no portion of the Affected Area is within a Walk to a Park service area, such that it is located in an identified "walk gap." **Figure 2.3-3**: Walk-to-a-Park Service Area Map

**Figure 2.3-3: Walk-to-a-Park Service Area Map**



### 2.3.4 Preliminary Open Space Assessment Conclusion

Pursuant to the *2021 CEQR Technical Manual*, projects expected to result in a decrease in the open space ratio should consider the following to determine if a more detailed analysis is warranted:

- Projects in study areas where the open space ratio approaches or exceeds the City's planning goal of 2.5 acres per 1,000 residents, may generally tolerate up to a five percent decrease of the open space ratio before considering the need for 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 1,000 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. Table 7-1 of the *2021 CEQR Technical Manual* (**Table 2.3-5** below) provides general guidelines for ranges of open space ratios and acceptable percentage changes.
- Projects that have an effect on a nonresidential population's use of passive open space would not follow the guidelines presented in the below table, and should consider the need for a detailed assessment based on a comparison of the open space ratio to the optimal ratio of 0.15 acres of passive space per 1,000 nonresidents. Projects that lead to the non-residential open space ratio to drop below the optimal ratio of 0.15 acres of passive open space per 1,000 non-residents may warrant a more detailed assessment.

As shown below in **Table 2.3-4**, under the No-Action and With-Action Conditions, the overall residential OSR in the area would be below the planning goal in NYC of 2.5 acres per thousand residents. Under Future With-Action Condition, the OSR would be 0.184 acres per 1,000 residents, or a 1.6 percent reduction from the No-Action OSR of 0.187. Referencing **Table 2.3-5** below, in conjunction with the Affected Area's location within an open space "walk gap," indicates the need for additional analysis via a detailed open space assessment.

**Table 2.3-4: Existing, No-Action and With-Action Open Space Ratios**

| | Residential Total | Residential Active | Residential Passive |
|---|---|---|---|
| Existing OSR | 0.211 | 0.121 | 0.09 |
| No Action OSR | 0.187 | 0.109 | 0.078 |
| With Action OSR | 0.184 | 0.107 | 0.077 |
| % Change | -1.6% | -1.8 | -1.3 |

**Table 2.3-5: 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 | |

Source: Table 7-1 of the *2021 CEQR Technical Manual*

### 2.3.5 Detailed Open Space Assessment

The *2021 CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would directly displace or alter an existing resource to the detriment of its users. The Proposed Project would not result in the direct displacement of any parklands or recreational facilities in either development scenario. However, the Proposed Actions would result in a decrease in the open space ratio from the Future No-Action Condition to the Future With-Action Condition to such a degree that such that a detailed open space analysis for each is required.

**Demographic Characteristics of the Defined Open Space Study Area**

Within a given area, the age distribution of a population affects the way open spaces are used and the need for various types of recreational facilities. Typically, children five (5) years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages five (5) through nine (9) typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for activities such as ball playing, running, and skipping rope. Children ages 10 through 14 use playground equipment, court spaces, little league fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, ad hoc active sports such as Frisbee, and recreational activities in which all ages can participate. Senior citizens typically engage in active recreation such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

The residential population of the study area was broken down by age groups, indicated in **Table 2.3-6** below. As show in that table, approximately 63.59 percent of the study area residents are adults, with approximately 53.52 percent between the ages of 20 and 64 and approximately 10.07 percentage 65 and older. Conversely, 36.41 percent of the study area population is children, with 9.56 percent under the age of 5 and 26.85 percent between the ages of 5 and 19.

**Table 2.3-6: Defined Open Space Study Area Population by Age Group**

| | Total Persons | Percent of Population |
|---|---|---|
| Under 5 Years | 2,161 | 9.56 |
| 5 to 9 Years | 2,226 | 9.85 |
| 10 to 14 Years | 2,006 | 8.87 |
| 15 to 19 Years | 1,838 | 8.13 |
| 20 to 64 Years | 11,098 | 53.52 |
| 65 Years or Older | 2,277 | 10.07 |
| **TOTAL:** | **22,606** | **100%** |

**Defined Open Space Study Area Inventory of Open Spaces**

According to the *2021 CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to CEQR, public open spaces are defined as facilities open to the public at designated hours on a regular basis and are assessed for impacts under CEQR guidelines, whereas private open spaces are not accessible to the general public on a regular basis and are therefore only considered qualitatively. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

An open space is determined to be active or passive by the uses which the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways and picnicking areas. However, some passive spaces can be used for both passive and active recreation; such as a green lawn or riverfront walkway, which can also be used for ball playing, jogging or rollerblading. Within the defined study area, all publicly accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition of available open space (refer to **Table 2.3-3** and **Figure 2.3-2**). The information used for this analysis was gathered from the DPR's website, DCP's Primary Land Use Tax Lot Output (PLUTO) data, and through a field survey conducted in December 2022.

The condition of each public open space facility is based on DPR's Park Inspection Program (PIP), derived from an assessment of up to sixteen features, grouped into one of three categories: cleanliness, landscape, and structural features. When a park is inspected, each feature is evaluated and is deemed either "Acceptable" or "Unacceptable" by PIP inspectors. The four cleanliness features are used to determine each park's cleanliness rating while all sixteen features are used to determine the overall condition. For those private open space facilities (or otherwise not subject to DPR's inspection program), field observations were used to make determinations on the overall condition and cleanliness of the facility similar to that of the PIP.

Determination of the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekend between 11:30 AM to and 2:30 PM. If a facility

seemed to be at or near capacity with the majority of equipment in use, then utilization was considered heavy. If equipment was in use but could accommodate additional users, utilization was considered moderate. If equipment was being used by few people, utilization was considered light. **Table 2.3-3** provides relevant information for each open space in the defined open space study area, while **Figure 2.3-2** maps their locations.

Quantitative Analysis of Open Space Adequacy

As previously discussed, there are four publicly-accessible open space resources within the Defined Open Space Study Area, comprising 5.67 acres total, including 3.24 acres of active open space and 2.51 acres of passive open space, described in detail below.

*Redfern Playground*

The Redfern Playground is a 2.09-acre public playground, owned and operated by NYCDPR, featuring a variety of active recreation amenities, including athletic fields / courts and playground areas, as well as bathroom facilities. The playground facility was lasted inspected on September 9, 2022 as part of the PIP; the overall condition and cleanliness of this park was graded as "acceptable." It is noted that this park is currently undergoing a reconstruction project and is closed to public access; the park is anticipated to reopen in February 2023 pursuant to information provided by the NYCDPR.[14] As such, a determination of park utilization was not possible as well as operating hours.

*Jamaica Bay Park*

A 2.22-acre portion of Jamaica Bay Park, owned and operated by the NYCDPR, is found within the Detailed Open Space Study Area. This portion of the park provides waterfront access, natural areas, and general passive open space areas, but is generally unimproved. This park was lasted inspected on May 6, 2022 as part of the PIP; the overall condition and cleanliness of this park was graded as "acceptable." Based on a site inspection on January 8, 2023, a replanting is being undertaken at this natural area and, as such, the open space is not accessible to the public.

*Sorrentino Recreation Center*

This an indoor recreation center with 12,240 SF of floor area (equivalent to 0.28-acre) featuring a variety of recreational amenities, including a fitness center and pool, as well as an after-school programming areas (e.g., arts and crafts, media lab, library, etc.) for children. It is noted that the recreation center requires a nominal annual fee for membership (up to $150 per year, with discounts for seniors and veterans, and free for anyone under 24 with appropriate identification). Due to the nature of this facility, there is no PIP data regarding its condition and utilization rates could not be determined.

*M.S. 53 Community Playground*

[14] https://www.nycgovparks.org/planning-and-building/capital-project-tracker/project/9103, accessed December 29, 2022.

This playground, part of Queens M.S. 053, was made publicly accessible via the Schoolyards to Playgrounds initiative. This open space features playground facilities, athletic courts and fields, and a track. Due to the nature of this facility, there is no PIP data regarding its condition, however its condition and cleanliness were observed to be acceptable during a site visit conducted on January 8, 2023. Further, utilization of this open space was observed to be low.

Qualitative Analysis of Open Space Adequacy

There are other open spaces to consider in addition to the publicly accessible open spaces within the Defined Open Space Study Area, including NYCHA open spaces within the Redfern Houses Complex, and large, destination open spaces near the study area, described below.

*Redfern Houses Open Space*

The Redfern Houses complex features several active open space facilities, including playgrounds, athletic courts, and outdoor congregation areas, which are estimated to total 0.91-acre. While the area of these facilities was not included in the total open space acreage used in the analysis as they are for the use of residents of the housing complex, these facilities likely defray demand on surrounding, publicly-accessible open space, such that the calculated open space ratios are likely an understatement of open space adequacy within the study area.

*Rockaway Beach and Boardwalk*

Pursuant to the *2021 CEQR Technical Manual*, larger and regional parks proximate to the study area may also be considered as part of a qualitative assessment when they are in a reasonable distance for project-generated users to access.

The Rockaway Beach and Boardwalk is located approximately one mile south the Affected Area at its closest point, and is a nearly 500-acre publicly-accessible open space (owned and operated by NYCDPR) that spans virtually the entire southern length of the Rockaway Peninsula. As such, this park is a destination open space for all New York City residents during warmer months due to its extensive coastal beachfront recreation areas. It also features an extensive amount of active recreation areas, including playground, fitness equipment, athletic courts and fields, and bathroom / shower facilities. Based on data provided by Google Maps,[15] using 14-10 Beach Channel Drive as an origin address, travel to the Rockaway Beach and Boardwalk takes approximately 25 minutes by foot, nine (9) minutes by bicycle, and 17 minutes by transit.

Based on the breadth of amenities this open space resource provides and its relatively close proximity to the Affected Area (despite being located outside of the Defined Open Space Study Area's boundaries), it can be assumed that the Rockaway Beach and Boardwalk would attract users from the development under the Future With-Action Condition and defray demand on

[15] https://www.google.com/maps, accessed December 28, 2022

surrounding open spaces in the Defined Open Space Study Area, such that the calculated open space ratios are likely an understatement of open space adequacy.

*Project Generated Private Open Space*

It is noted that the Applicant plans to provide nearly 4,000 SF of private recreation space for residents on the rooftop of Projected Development Site. It is assumed Projected Development Site 2 would provide similar amenities.

**Impact Determination**

As previously discussed, the Future With-Action Condition would not result in any direct displacement of existing public open space resources. The OSR under the Future With-Action Condition would be 0.184 (a 1.6 percent decrease from the Future No-Action Condition), therefore remaining below the NYC's planning goal of 2.5 acre per 1,000 residents. However, the Future With-Action Condition is not anticipated to significantly exacerbate the deficiency of open space in the Defined Open Space Study Area

There are five (5) publicly-accessible open spaces within the Defined Open Space Study Area that provide a range of active and passive amenities, including playgrounds and fitness equipment, athletic fields and courts, benches, bicycle paths, and walking paths (including one [1] Future No-Action Condition Open Space). The overall condition and cleanliness of all of these existing open space resources (for which date was available) was determined to be acceptable (based on the NY DPR PIP and field observations), with utilization generally observed as light, indicating these resources could easily accommodate additional users without being adversely impacted. Further, several of these open spaces are either under construction or actively undergoing reconstruction or replanting projects, indicating these spaces will be appropriately suited to handle new open space demand.

Additionally, there is a significant amount of additional open space within and nearby outside of the study area that alleviates the low OSR calculated for the study area. This includes 0.91-acre of dedicated open space facilities within the NYCHA Redfern Houses and the nearly 500-acre Rockaway Beach and Boardwalk located approximately one-mile south of the Affected Area.

The population added under the Future With-Action Condition is not expected to noticeably affect utilization of the study area's open space. The ratio of open spaces to residents would continue to be lower than the optimal planning goals furnished by the City. The projected residential population is expected to exhibit similar characteristics to the current residents of the study area and the breakdown of the population is expected to be similar.

### 2.3.6 Conclusions

Pursuant to the *2021 CEQR Technical Manual* guidelines, a project may result in a significant adverse impact on open space resources if there would be a direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing and

anticipated users and / or it would reduce the open space ratio and consequently result in overburdening existing facilities or further exacerbates a deficiency in open space.

The Proposed Actions would not result in the direct displacement or alteration of existing public open space resources in the Study Area. Although there would continue to be a shortage of publicly accessible open space adequacy in the Study Area under the Future With-Action Condition, the increase in demand from the Proposed Actions would not result in significant decreases in open space ratios that result in overburdening existing and future facilities or significantly exacerbating deficiencies in open space.

Existing open space resources within the study area were found to be in acceptable condition and contain a variety of active and passive recreation uses. Several of these open spaces are either being construction or undergoing renovation projects, such that they will be appropriately suited to handle new open space demand. Further, dedicated open spaces for residents of the Redfern Houses and the presence of the Rockaway Beach and Boardwalk slightly south of the study area alleviate its low OSR.

Based on the foregoing, the Proposed Actions would not result in a significant adverse open space impacts and no further analysis is necessary.

## 2.4 Shadows

The *2021 CEQR Technical Manual* defines a shadow as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space or feature. An incremental shadow is the additional or new shadow that a building or other built structure resulting from a Proposed Actions would cast on a sunlight-sensitive resource during the year. The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. Shadows can have impacts on publicly accessible open spaces or natural features by adversely affecting their use and important landscaping and vegetation. In general, increases in shadow coverage make parks feel darker and colder, affecting the experience of park patrons. Shadows can also have impacts on historic resources whose features are sunlight-sensitive, such as stained-glass windows, by obscuring the features or details, which make the resources significant.

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

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

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

resources. Furthermore, shadows occurring within one and one-half hour of sunrise or sunset generally are not considered significant in accordance with *CEQR Technical Manual* guidance.

**Methodology**

This preliminary analysis of shadows follows the guidelines set forth in the *2021 CEQR Technical Manual* for a preliminary assessment (Section 310). According to the *2021 CEQR Technical Manual*, a preliminary shadow assessment includes the development of a base map showing the site location in relationship to any sunlight-sensitive resources as per guidelines provided in the *2021 CEQR Technical Manual*. Following these guidelines, the longest shadow Study Area is determined, and a Tier 1 screening assessment is conducted to determine if any sunlight-sensitive resources fall within the Study Area. If no resources are identified, no further analysis would be required. If sunlight-sensitive resources lay within the longest shadow Study Area, the next tier of screening assessment should be conducted. This preliminary assessment includes a basic description of the proposed project that would be facilitated by the Proposed Actions in order to determine whether a more detailed assessment would be appropriate.

**Analysis Framework**

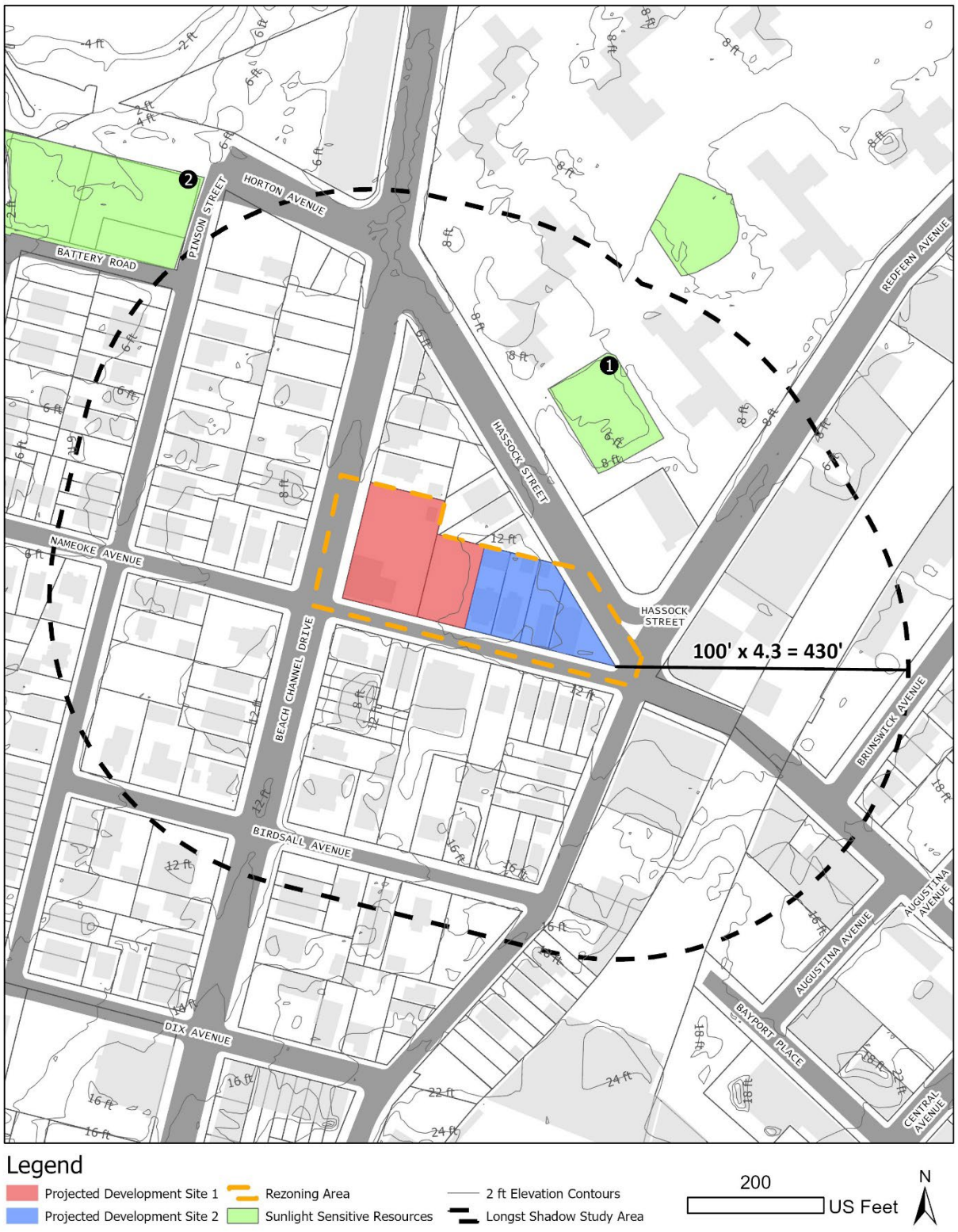
The development proposed by the Applicant would consist of an 8-story building that would reach a height of 85 feet on Block 15525, Lots 1 and 51. Additionally, the development would be expected to exceed the maximum building height by 15 feet to accommodate rooftop mechanical space that would result in a total potential building height of 100 feet. As Projected Development Site 1 is currently occupied by two one-story buildings and parking lot and would result in an incremental change in height greater than 50 feet, a preliminary assessment for shadows is warranted. In addition, Projected Development Site 2, located on Block 15525, Lots 40, 44, 47, and 49 is also assumed to be developed with an 8-story building that would reach a height of 85 feet (100 feet including rooftop mechanical space). As Projected Development Site 2 is currently occupied by four 2-story residential buildings and would result in a height greater than 50 feet, a preliminary assessment for shadows is warranted.

### 2.4.1 Tier 1 Shadow Screening Assessment

Under the Future With-Action Condition, Projected Development Sites 1 & 2 could be developed with new buildings having a maximum height of 100 feet and the longest action-induced shadow would be approximately 430 feet (4.3 x 100 feet) in length. The first step in a shadow analysis is to determine there are any sunlight sensitive resources located within the length of the 430-ft radius.

As **Figure 2.4-1** shows below, there are two sunlight sensitive resources within the longest Shadow Study Area. These resources include the Redfern Housing Authority Playground (Resource 1) and Jamaica Bay Park (Resource 2). Accordingly, a Tier 2 screening assessment is required.

**Figure 2.5-1: Tier 1 Shadow Screening Assessment**



### 2.4.2 Tier 2 Shadow Screening Assessment

The *2021 CEQR Technical Manual* states that if any portion of a sunlight-sensitive resource lies within the longest Shadow Study Area, a Tier 2 screening assessment should be performed. Because of the path the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. For a Tier 2 screening assessment, sunlight-sensitive resources within the triangular area cannot be shaded by new Projected Development Sites, and are screened out. The complementing portion to the north within the longest Shadow Study Area is the area that can be shaded by the proposed project.

As shown in **Figure 2.4-2**, the Tier 2 screening assessment shows that the Redfern Housing Authority Playground (Resource 1) and Jamaica Bay Park (Resource 2 are within of the -108/+180-degree area. Accordingly, a tier 3 shadow screening assessment is required.

### 2.4.3 Tier 3 Shadow Screening Assessment

The *2021 CEQR Technical Manual* states that if any portion of a sunlight-sensitive resource is within the area that could be shaded by the projected developments, a Tier 3 screening assessment should be performed. Because the sun rises in the east and travels across the southern part of the sky to set in the west, a project's earliest shadows would be cast almost directly westward. Throughout the day, they would shift clockwise (moving northwest, then north, then northeast) until sunset, when they would fall east. Therefore, a project's earliest shadow on a sunlight-sensitive resource would occur in a similar pattern, depending on the location of the resource in relation to the Projected Development Sites. For a Tier 3 screening assessment, if the assessment determines that no shadows from the development would reach any of the sunlight-sensitive resources on any of the representative analysis days, then no further assessment for those days is needed. If, however, in the absence of intervening buildings shadows from the proposed buildings would reach sunlight-sensitive resources on any of the representative analysis days, then a detailed shadow analysis would be warranted for those days.

**Figure 2.4-2: Tier 2 Shadow Screening Assessment**

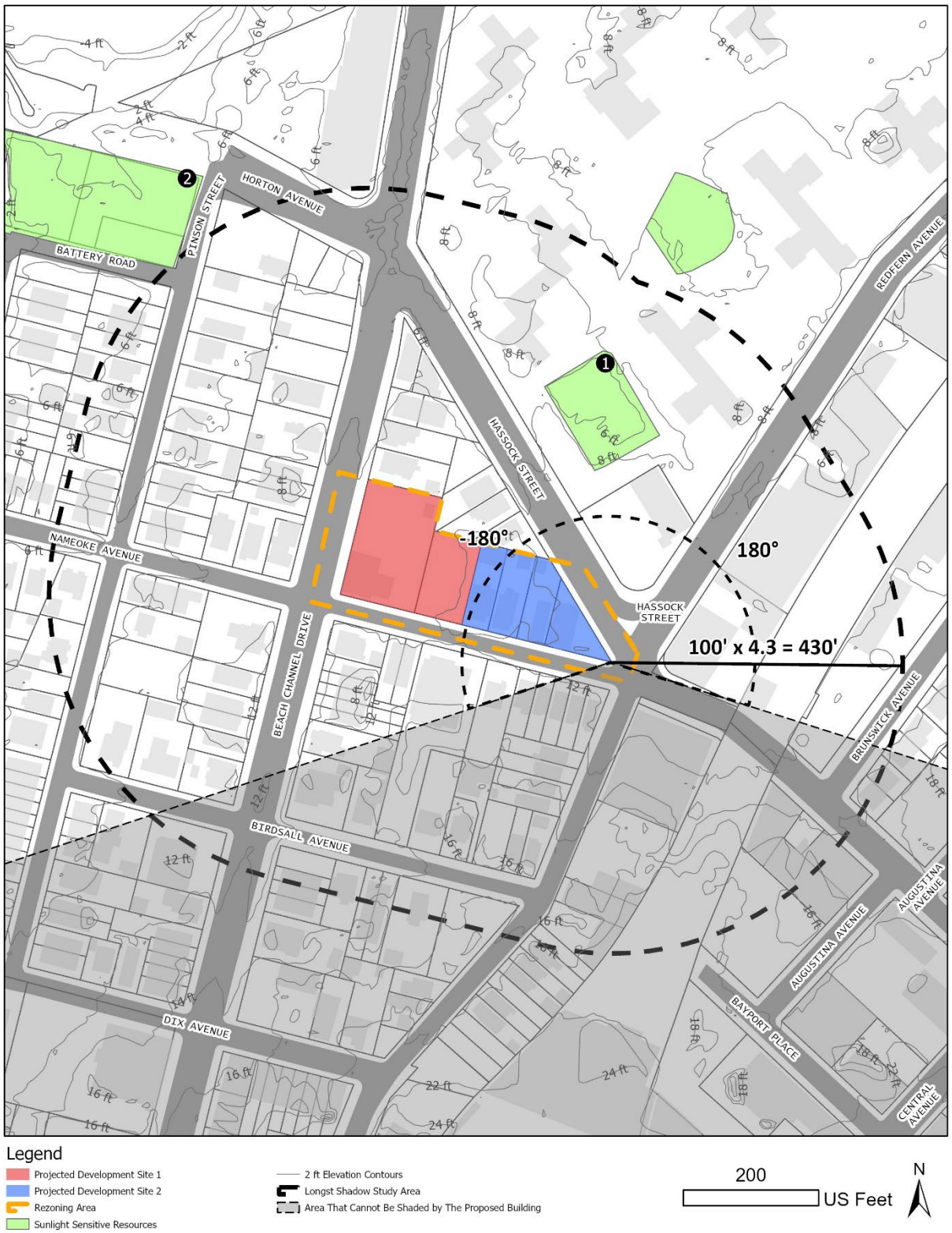


**Figure 2.4-3: Tier 3 Shadow Screening December 21st (Winter Solstice)**

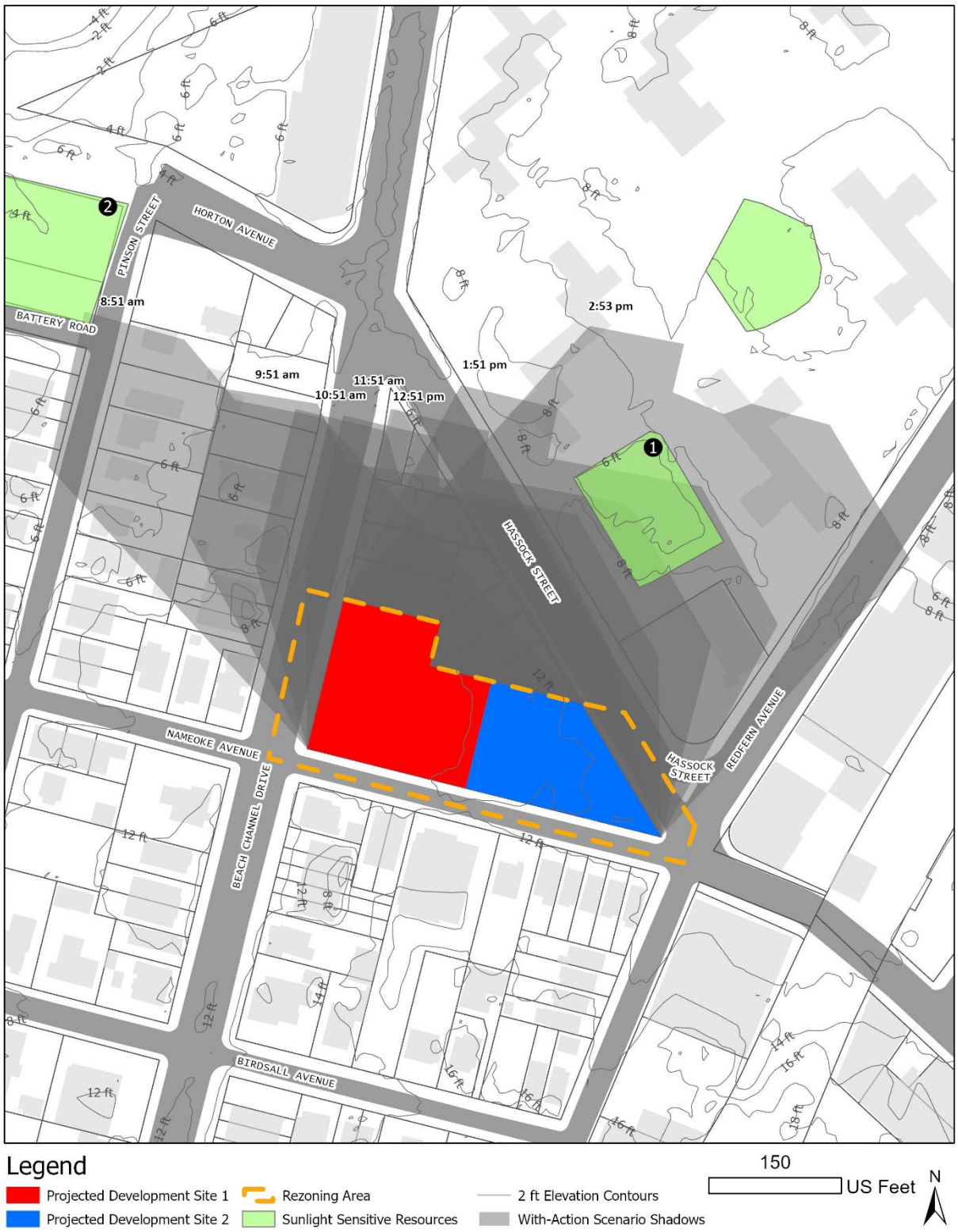


**Figure 2.4-4: Tier 3 Shadow Screening March 21st/September 21st (Vernal and Autumnal Equinox)**

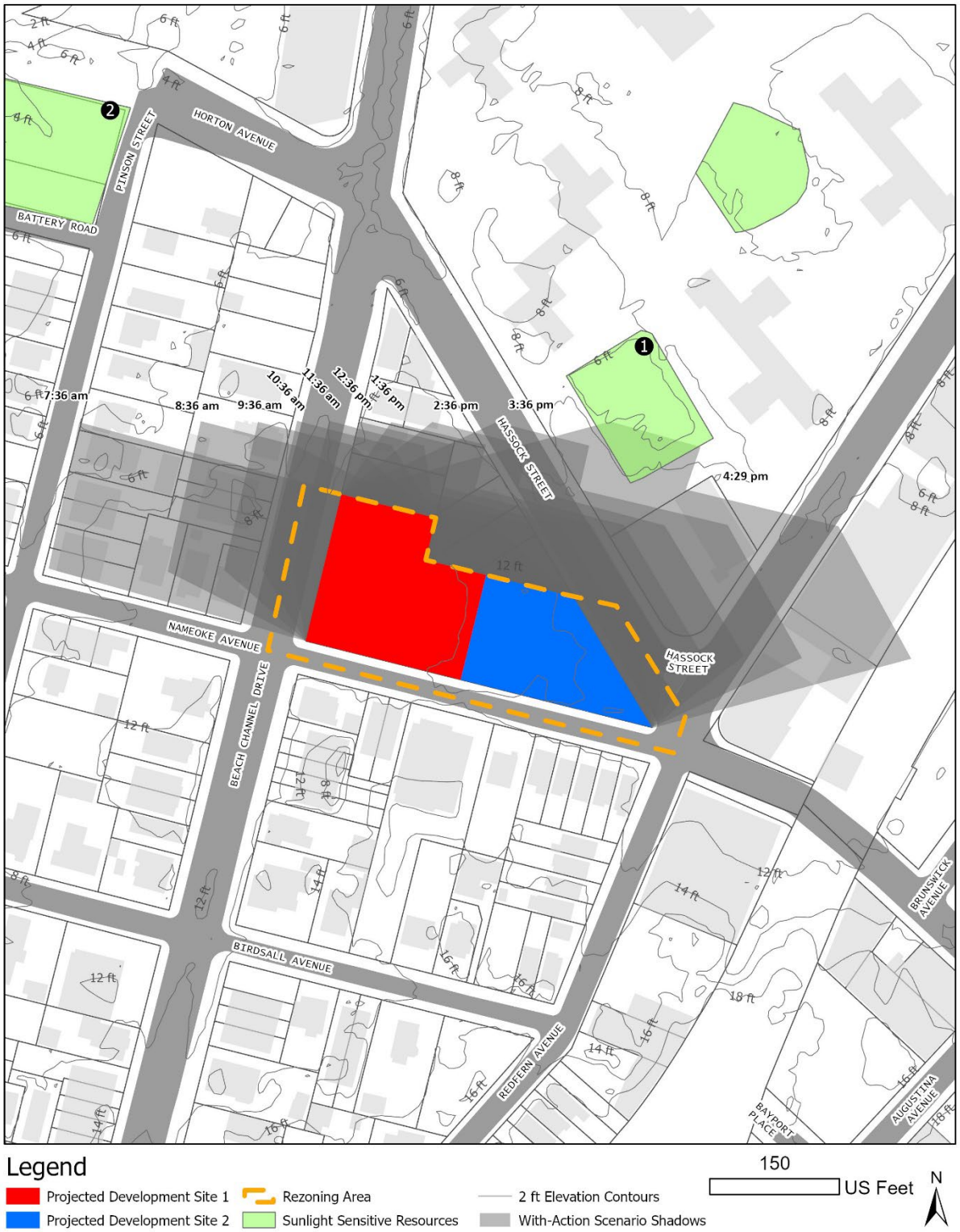


**Figure 2.4-5: Tier 3 Shadow Screening May 6th/August 6th**

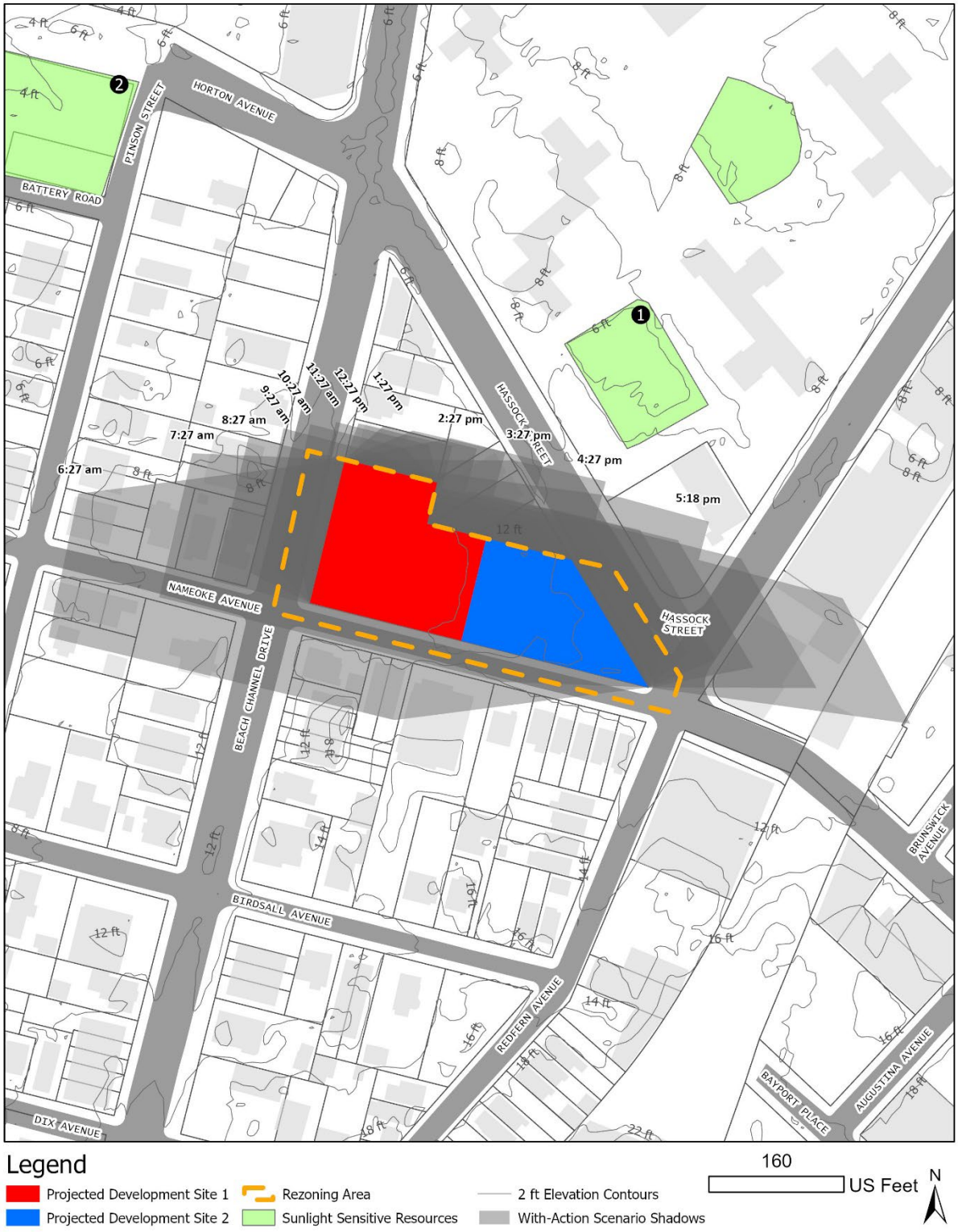
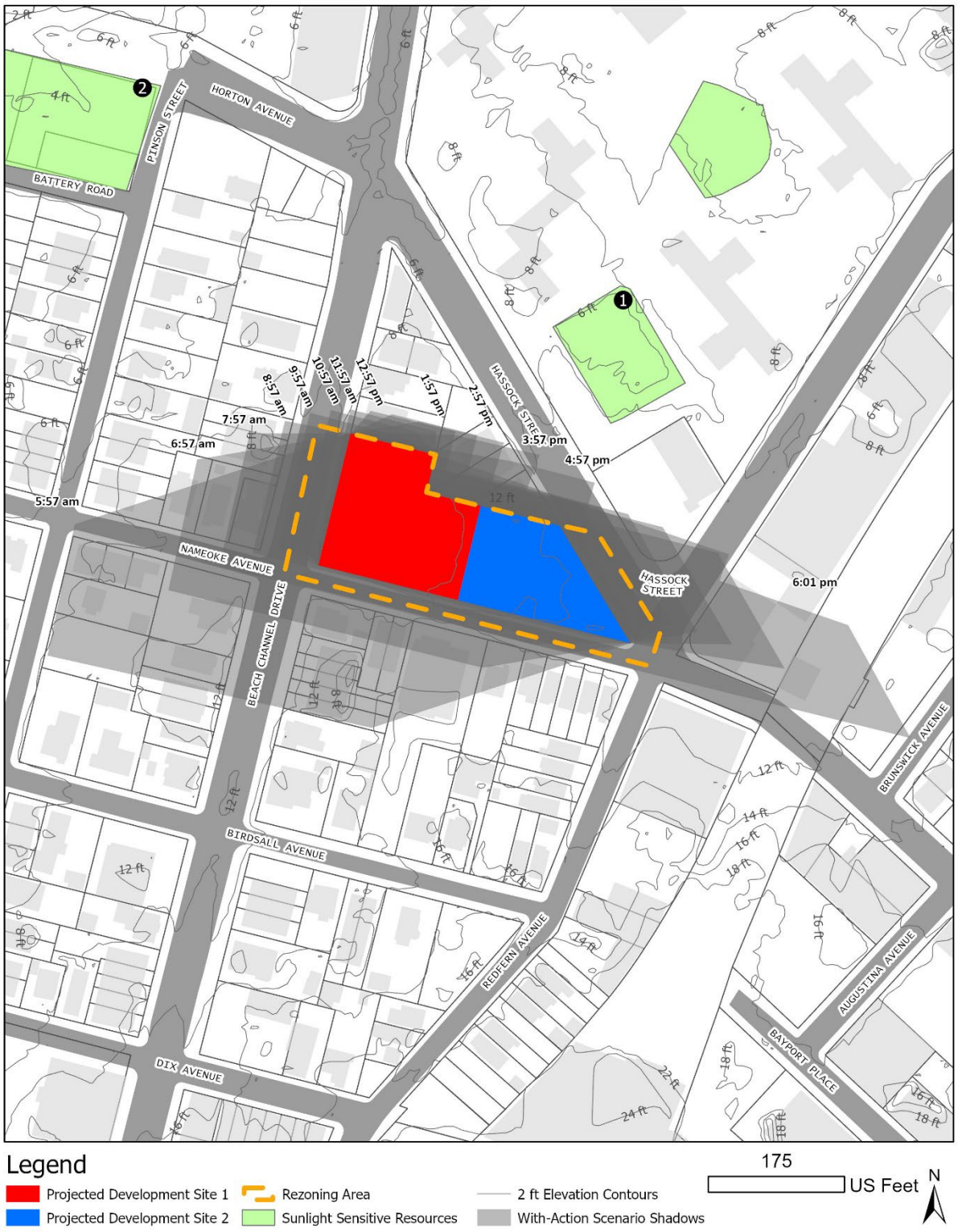


**Figure 2.4-6: Tier 3 Shadow Screening June 21st (Summer Solstice)**



### 2.4.4 Detailed Shadow Analysis

The *2021 CEQR Technical Manual* states that a detailed shadow analysis is warranted when the screening analyses do not rule out the possibility that project-generated shadows would reach any sunlight-sensitive resources. The detailed analysis aims to determine the extent and duration of shadows that fall on a sunlight-sensitive resource due to the proposed project. The results of the detailed shadow analyses on the identified resources of concern are summarized in **Table 2.4-1**. The incremental shadows cast by the Projected Development Sites are shown above in **Figure 2.4-3** to **Figure 2.4-6.**

Based on the Detailed Shadow Analysis findings, the Proposed Actions would cast shadows on the Redfern Housing Authority Playground (Resource 1) and Jamaica Bay Park (Resource 2). The detailed shadows analysis graphics showing the incremental shadows cast by the proposed developments are included in **Appendix F**.

*Redfern Housing Authority Playground*

Owned and managed by the New York City Housing Authority (NYCHA), the 0.4-acre Redfern Housing Authority Playground contains two basketball courts and seating areas.

*Jamaica Bay Park*

A portion of the 150-acre Jamaica Bay Park is located within the shadow study area. Owned and operated by the NYCDPR, Jamaica Bay Park provides waterfront access, natural areas, and general passive open space areas, but is generally unimproved. The portion of the park located within the shadow study area is unimproved but contains plantings and vegetation.

**Table 2.4-1: Detailed Shadow Analysis Results**

| Analysis Day | 21-Dec | March 21 / September 21 | May 6 / August 6 | 21-Jun |
|---|---|---|---|---|
| Timeframe Window | 8:51 a.m. - 2:53 p.m. | 7:36 a.m. - 4:29 p.m. | 6:27 a.m. - 5:18 p.m. | 5:57 a.m. - 6:01 p.m. |
| Sunlight Sensitive Resource 1 | Redfern Housing Authority Playgrounds | | | |
| Shadow enter - exit times | 12:10 pm - 2:53 pm | 3:45 pm - 4:29 pm | - | - |
| Incremental Shadow Duration | 2 Hours 43 Minutes | 44 Minutes | - | - |
| Sunlight Sensitive Resource 2 | Jamaica Bay Park | | | |
| Shadow enter - exit times | 8:51 am - 8:53 am | - | - | - |
| Incremental Shadow Duration | 2 Minutes | - | - | - |
| Note: Daylight savings time not used | | | | |

**Determination of Shadow Impact Significance**

The *2021 CEQR Technical Manual* states that the determination of significance of shadow on a sunlight-sensitive resource is based on: (1) the information resulting from the detailed shadow analysis describing the extent and duration of incremental shadows; and (2) an analysis of the resource's sensitivity to reduced sunlight. Determining whether this impact is significant or not, under CEQR, depends on the extent and duration of the incremental shadow and the specific context in which the impact occurs.

For open space and natural resources, the uses and features of a resource is an indicator of its sensitivity to shadows. Shadows occurring during the cold-weather months, for example, generally do not affect the growing season of outdoor vegetation. This sensitivity is assessed for warm-weather-dependent features such as vegetation that could be affected by a loss of sunlight during the growing season, and for features (such as benches) that could be affected by a loss of winter sunlight. Generally, four to six hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Where the incremental shadows from the project fall on sunlight-sensitive features or uses, the analysis assesses the loss of sunlight relative to sunlight that would be available without the project.

As stated in the *2021 CEQR Technical Manual*, to determine impact significance, an incremental shadow is generally not considered significant when its duration is no longer than 10 minutes at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of 10 minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- Vegetation - A substantial reduction in sunlight available to a sunlight-sensitive feature of the resource to less than the minimum time necessary for its survival (when there was sufficient sunlight in the future without the project). Or, a reduction in direct sunlight exposure where the sunlight-sensitive feature of the resource is already subject to substandard sunlight (i.e., less than minimum time necessary for its survival).
- Open Space Utilization - A substantial reduction in the usability of open space as a result of increased shadow.
- For Any Sunlight-Sensitive Feature of a Resource - Complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

### 2.4.5 Determination of Impacts

**Sunlight Sensitive Resource 1 (Redfern Housing Authority Playground)**

Sunlight Sensitive Resource 1, Redfern Housing Authority Playground, is an approximately 0.4-acre paved playground that features two basketball courts and seating areas.

Shadows cast from the projected developments in December for a 2-hour-43-minute period would leave approximately 3 hours and 15 minutes of direct sunlight. The incremental shadows cast by the projected development would enter the playground at 12:10 PM and exit the playground at 2:43 PM in the early afternoon, moving across the northwestern part of the playground and covering the paved basketball courts and several benches. The paved basketball courts are active resources utilized in warm-weather months. Therefore, the Open Space Utilization of this resource would not be significantly impacted for the December analysis period.

For the March 21st/September 21st analysis period of Sunlight Sensitive Resource 1, there would be 44 minutes of incremental shadows cast, leaving 8 hours and 53 minutes of direct sunlight. The shadows cast from the proposed development would intersect the southern corner of the playground toward the end of the analysis period. Therefore, no adverse impacts on the Open Space Utilization would be expected for the March 21st/September 21st analysis period.

No incremental shadows from the proposed developments would be cast on this resource on the May 6th/August 6th or June 21$^{st}$ analysis days.

**Sunlight Sensitive Resource 2 (Jamaica Bay Park)**

The portion of Jamaica Bay Park located within the shadow study area is unimproved but contains plantings and vegetation.

Shadows cast from the projected development in December for a 2-minute period would leave approximately 6 hours of direct sunlight. The incremental shadows cast by the projected development would enter the park at 8:51 AM and exit the park at 8:53 AM. In addition to the incremental shadow being cast on the park for only 2 minutes, the shadows would occur outside of the growing period in New York City (March through October). Therefore, the Open Space Utilization of this resource would not be significantly impacted for the December analysis period.

No incremental shadows from the proposed development would be cast on this resource on the March 21st/September 21$^{st}$, May 6th/August 6$^{th}$, or June 21$^{st}$ analysis days.

### 2.4.6 Conclusion

On two of the analysis days, the shadows cast from the proposed development would affect Sunlight Sensitive Resource 1, for a limited extent and duration. On one of the analysis days, the shadows cast from the proposed development would affect Sunlight Sensitive Resource 2 for a very limited time and outside of the growing season. Therefore, no significant adverse shadow impacts are expected as a result of the Proposed Actions.

## 2.5 Historic and Cultural Resources

An assessment of historic and cultural resources is usually necessary for projects that are located in close proximity to historic or landmark structures or districts, or for projects that require in-ground disturbance, unless such disturbance occurs in an area that has been formerly excavated, according to the *2021 CEQR Technical Manual*.

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

### Methodology

Archaeological and architectural resources usually need to be assessed for projects that would result in any in-ground disturbance. In-ground disturbance is any disturbance to an area not previously excavated, including new excavation that is deeper and/or wider than previous excavation on the same site.

For projects that may affect historic or cultural resources, the first step in evaluating a project's potential effects on historic resources is to consider what area the project might affect and then identify historic resources—whether officially recognized or eligible for such recognition—within that area. The area of subsurface work for the proposed project is considered the impact area for archaeological resources, while the Study Area for architectural resources is the area in which any resources may be affected by the project, which is defined by the radius of 400 feet from the borders of the project site for most proposals.

After the study areas have been established, all known archaeological and architectural resources within the study areas are identified, and the potential for unknown resources is investigated. It is recommended that lead agencies and applicants contact LPC for archaeological and architectural resources review. Based on the report from LPC, if any listed historic or cultural resources are located in the study areas, then further analysis of the project's impact on these resources must be performed. The proposed project's effects on any designated or potential archaeological and architectural resources are then analyzed under Existing, No-Action, and With-Action conditions. The assessment specifically considers whether the project may result in the disturbance or destruction of those archaeological and architectural resources as a result of the Proposed Actions.

### 2.5.1 Architectural Resources

Per *2021 CEQR Technical Manual* guidelines, impacts on historic resources are considered on those sites affected by the Proposed Action(s) and in the area surrounding identified development sites. The historic resources Study Area is defined as the project site plus an approximately 400-foot radius around the Proposed Action area.

According to the *2021 CEQR Technical Manual*, significant adverse impacts to historic and cultural resources could potentially result if a proposed action affects those characteristics that make a resource eligible for LPC designation or S/NR listing. This section assesses the potential for the proposed action to result in significant adverse impacts on identified historic and cultural resources. **Table 2.5-1** below provides information about possible direct, indirect and construction-related impacts on historic and cultural resources. Generally, architectural resources should be surveyed and assessed if the proposed project would result in any of the following, whether or not any known historic resources are located near the site of the project:

**Table 2.5-1: Possible Impacts to Historic and Cultural Resources**

| |
|---|
| Construction resulting in ground disturbance, including construction of temporary roads and access facilities, grading, and landscaping. |
| Below-ground construction, such as excavation or installation of utilities. |
| Physical destruction, demolition, damage, alteration or neglect of all or part of an historic property. |
| Changes to the architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features. |
| Isolation of the property from, or alteration of, its setting or visual relationship with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor. |
| Introduction of incompatible visual, audible, or atmospheric elements to a resource's setting. |
| Replication of aspects of the resource so as to create a false historical appearance. |
| Elimination or screening of publicly accessible views of the resource. |
| Construction-related impacts such as falling objects, vibration, dewatering, flooding, subsidence, or collapse. |
| Introduction of significant new shadows, or significant lengthening of the duration of existing shadows, over an historic landscape or an historic structure to the extent that the architectural details that distinguish that resource as significant are obscured. |

**Direct Impacts**

Historic resources could be directly affected by physical destruction, demolition, damage, alteration, or neglect of all or part of a historic resource. For example, alterations, such as the addition of a new wing to a historic building could result in significant adverse impacts, depending on the design. Direct impacts also include changes to an architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features.

NR-listed and eligible resources are given a measure of protection from the effects and impacts of projects sponsored, assisted, or approved by federal agencies under Section 106 of the National Historic Preservation Act. Although preservation is not mandated, federal agencies must attempt to avoid adverse impacts on such resources through a notice, review, and consultation process. S/NR-listed and eligible resources are similarly protected against impacts resulting from projects sponsored, assisted, or approved by State agencies under the State Historic Preservation Act. However, private owners of S/NR-listed and eligible resources using private funds can alter or demolish their properties without such a review process. Privately owned properties that are NYCLs, in LPC-designated historic districts, or pending designation as Landmarks by LPC are protected under the New York City Landmarks Law. The law requires LPC review and approval before any alteration or demolition occurs, regardless of whether the project is publicly or privately funded. Publicly owned resources are also subject to review and advisement by LPC before project implementation.

**Construction Impacts**

The assessment of construction impacts on historic and cultural resources considers the possibility of physical damage to any architectural or archaeological resources identified in the project's historic and cultural resources assessment.

Pursuant to Chapter 22, Section 300 of the *2021 CEQR Technical Manual*, if a project's construction activities are located within 400 feet of a historic or cultural resource, potential hazards should be assessed, such as whether certain character-defining elements of a structure, including but not limited to rooftops or stained-glass windows, could be impacted by falling objects from an adjacent construction site.

The City has two procedures for avoidance of damage to historic structures from adjacent construction.

1. All buildings are provided some protection from accidental damage through New York City Department of Buildings (DOB) controls that govern the protection of any adjacent properties from construction activities, under Building Code Section 27-166 (C26-112.4). For all construction work, Building Code section 27-166 (C26-112.4) serves to protect buildings by requiring that all lots, buildings, and service facilities adjacent to foundation

and earthwork areas be protected and supported in accordance with the code requirements.

2. The second protective measure applies only to designated NYCL and S/NR listed historic buildings that are located within 90 linear feet of a proposed construction site. For these structures, the DOB's Technical Policy and Procedure Notice (TPPN) #10/88 is applicable. The DOB's TPPN 10/88 supplements the standard building protections afforded by the Building Code C26-112.4 by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources (within 90 feet), and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

If the project is not located within 90 feet of a historic or cultural resource that is NYC-landmark eligible, eligible for the State and National Register of Historic Places, or within an eligible New York City Historic District, then no special protections apply. Therefore, the potential for physical disturbance and adverse impacts on those historic and cultural resources should be disclosed.

**Indirect Impacts**

As per the *2021 CEQR Technical Manual*, visual and contextual impacts on historic resources can include: the isolation of a property from or alteration of its setting or visual relationship with the streetscape; introduction of incompatible visual, audible, or atmospheric elements to a resource's setting; elimination or screening of publicly accessible views of a resource; or introduction of significant new shadows, over a historic landscape or on a historic structure (if the features that make the resource significant depend on sunlight) to the extent that the architectural details that distinguish that resource as significant are obscured.

**Architectural Resources within the Study Area**

To determine whether the Proposed Actions have the potential to affect nearby off-site historic or architectural resources, the Study Area was screened for historic and architectural resources.

The LPC was contacted for their initial review of the Proposed Actions potential to impact historic or architectural resources, and by letter dated December 3, 2020 indicated that no properties within the Affected Area have architectural significance (see **Appendix A**). Further, a review of the New York State Office of Parks, Recreation and Historic Preservation's (OPRHP's) Cultural Resources Information System (CRIS) online resource indicated that there are no designated or eligible architectural resources within the Study Area.

As such, there is no potential for direct or indirect impacts to historic architectural impacts associated with the Proposed Actions, and no further analysis is warranted.

### 2.5.2 Archaeological Resources

Unlike the architectural evaluation of a Study Area that extends beyond the footprint of a project's block and lot lines, the analysis of potential and/or projected impacts on archaeological

resources is controlled by the actual footprint of the limits of soil disturbance. Archeological resources are physical remains, usually subsurface, of the prehistoric and historic periods such as burials, foundations, artifacts, wells and privies. The *2021 CEQR Technical Manual* requires a detailed evaluation of a project's potential effect on the archeological resources if it would potentially result in an in-ground disturbance to an area not previously excavated.

The Proposed Actions would result in new in-ground construction on the Projected Development Sites. As noted, the LPC was contacted for their initial review of the project's potential to impact nearby cultural or archaeological resources, and a response was received on December 3, 2020 (see **Appendix A**). The LPC has indicated that no cultural resource of archaeological significance is associated with the Affected Area. Therefore, significant adverse impacts on archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

### 2.5.3 Conclusion

According to the *2021 CEQR Technical Manual*, significant adverse impacts to historic and cultural resources could potentially result if a Proposed Action affects those characteristics that make a resource eligible for LPC designation or S/NR listing. Based on the above analysis, the Proposed Actions would not introduce significant adverse impacts to architectural resources within the Surrounding Area. In addition, no archeological significance is associated with the Projected Development Sites. Accordingly, no further analysis is warranted.

## 2.6 Urban Design and Visual Resources

According to the *2021 CEQR Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements that play an important role in the pedestrian's experience include streets, buildings, visual resources, open space, and natural features, as well as wind as it relates to channelization and downwash pressure from tall buildings. Pursuant to the *2021 CEQR Technical Manual*, an assessment of Urban Design may be warranted when a Proposed Action may affect one or more of the elements that contribute to the pedestrian experience of an area, specifically the arrangement, appearance, and functionality of the built environment.

The proposed rezoning from the R5 to R6A and R6A/C2-4 zoning districts would alter permitted use and increase allowable area, bulk, and height within the Affected Area such that a preliminary analysis of Urban Design and Visual Resources is required. The differences between existing and proposed zoning, with regards to those aspects of zoning affecting urban design, are presented in the following **Table 2.7-1**.

**Table 2.7-1: No-Action and With-Action Zoning**

| | No-Action | With-Action | |
|---|---|---|---|
| **Zoning** | R5 | R6A | R6A/C2-4 |
| **Permitted Uses** | Res., CF | Res., CF | Res., CF, Com. |
| **Maximum FAR** | Res.: 1.25<br>CF: 2.00 | Res.: 3.60<br>CF: 3.00 | Res.: 3.60<br>CF: 3.00<br>Com: 2.00 |
| **Maximum Height** | 40 FT | Base Height: 65 FT | Base Height: 65 FT |
| | | Building Height: 85 feet (w/QGF) | Building Height: 85 feet (w/QGF) |
| **Lot Coverage** | 55% | 65% Interior Lot<br>100% - Corner Lot | 65% Interior Lot<br>100% - Corner Lot |

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

### 2.6.1 Existing Conditions

The Affected Area consists of multiple lots within Block 15525 fronting along Beach Channel Drive and Nameoke Avenue in the Far Rockaway neighborhood of Queens, New York, as described in **Section 1.4** of this EAS.

Projected Development Site 1 is comprised of two (2) parcels with a total lot area of 28,625 SF with 175 feet of frontage on Beach Channel Drive and 185 feet of frontage on Nameoke Avenue. Lot 1, with a total area of 19,250 SF, is developed with a one-story, 3,582 GSF community facility building with an approximate 15-fo ot building height and a one-story, 306 GSF commercial building with an approximate 13-foot building height, with a total built FAR of 0.20; both buildings have a height of approximately 15 feet. Lot 51 is paved and utilized as an unlicensed parking lot (0.0 built FAR).

Projected Development Site 2, comprised of four (4) parcels, featuring a total lot area of 20,031 SF with 228 feet of front along Nameoke Avenue and 176 feet of frontage along Hassock Street. The built form at each of these parcels is described below:

- Lot 40 is a 4,968 SF interior lot with frontages on Nameoke Avenue and Hassock Street. The lot is improved with a two-story, 2,500 GSF (0.50 built FAR) multi-family residential building with four (4) dwelling units, constructed in 1920. The building has an approximate building height of 27 feet.
- Lot 44 is a 5,063 SF interior lot with frontage on Nameoke Avenue. The lot is developed with a two-story, 1,600 GSF (0.32 built FAR) mixed-use multi-family residential and community facility building with three (3) dwelling units and a groundfloor religious use, constructed in 1931. The building has an approximate building height of 25 feet.
- Lots 47 is a 5,000 SF interior lot with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,382 GSF (0.48 built FAR) two-family residential structure constructed in 1920. The building has an approximate building height of 26 feet.
- Lot 49 is a 5,000 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,568 GSF (0.51 built FAR) multi-family residential structure with three (3) dwelling units, constructed in 1920. The building has an approximate building height of 32 feet.

Similar to land use in the Study Area, built form in the 400-foot Study Area is defined by those areas west and east of Redfern Avenue. West of Redfern Avenue built form is defined by one- to three-story residential development, including one- and two-family attached and detached buildings and multi-family buildings. This residential development is situated on smaller to medium sized lots (ranging in size from 1,350 to 11,000 SF with a mean of 3,894 SF), with built FARs ranging from 0.17 to 1.85 (with a mean built FAR of 0.71), and building heights ranging from 21 to 42 FT (29.7-foot average). It is noted that this residential development pattern changes in the northern study area; this area is defined by the NYCHA Redfern Houses, a large-scale public housing development situated on an 18.78-acre property. The housing development features nine (9) multi-family residential buildings ranging in height from six- to seven-stories (54 to 64 feet) as part of a campus-style development with various walking paths, landscaped areas, and active recreational facilities. Several community facility buildings, primarily in the form of houses of worship, intersperse the western and northern study area, as well as vacant / undeveloped land and parking lots. With the exception of the northern study area (defined by the Redfern Houses and vacant / undeveloped parcels, the overall development pattern creates a consistent built form, defined by low-rise residential structured uniformly setback from the street.

The eastern study area is generally defined by medium to large scale light industrial development and transportation infrastructure associated with the LIRR and vacant / undeveloped properties, primarily south of Nameoke Avenue, many of which feature active construction. The light

industrial development is situated in northeastern Study Area on relatively large lots ranging in size from approximately 12,000 to 51,000 SF with building sizes ranging from 2,600 to 37,300 GSF (built FAR ranging from 0.17 to 0.89) over one- to two-stories. These light industrial properties bookend rail infrastructure associated with the LIRR, including the Far Rockaway LIRR Station and tracks to and from that station. There is a cluster of one- and two-family residential development at the eastern extent of the Study Area of similar form and size to similar residential development in the western Study Area.

Active construction activities are also prevalent in the eastern and southeastern portions of the of the Study Area. Details regarding the nature of development planned at these sites is discussed in **Section 2.6.2** and **Table 2.6-2** below.

With the exception of the convergence of Hassock Street and Redfern Avenue in the northern Study Area, which delineates the Redfern Houses property, streets in the Study Area generally follows the New York City grid layout. Sidewalks were observed to be in fair condition, with paved surfaces, sufficient trees, and regular streetlights throughout the Study Area. However, it was observed that due to the narrowness of some streets within the Study Area, car utilizing curbside parking along these streets were often partially parked on sidewalks. All the intersections are controlled with properly functioning traffic lights and clear crossing markings, securing the safety of the pedestrians when crossing the streets.

The area is well served by transit with multiple transportation options in the vicinity of the Affected Area. The closest bus stop to the Affected Area is for the Q114 bus near the intersection of Beach Channel Drive and Nameoke Avenue. The Q114 bus operates between Seagirt Boulevard in Far Rockaway via Brewster Boulevard and Parsons Boulevard/Hillside Avenue in Jamaica via Brewster Avenue. The Affected Area is also served by the MTA-LIRR Far Rockaway Station located on Nameoke Avenue between Redfern Avenue and Brunswick Avenue. The MTA-LIRR Far Rockaway train line operates from Nameoke Avenue in Far Rockaway to Penn Station in Manhattan.

No visual resources (e.g., waterfront, public parks, public art, statues or sculptures, and landmark structures or districts, etc.) were identified with the Affected Area or its associated Study Area.

A photo key for all images is shown below in **Figure 2.6-1**. These ground-level photographs of the Affected Area and associated Study Area under the existing condition are shown in **Figure 2.6-2** to **Figure 2.6-9** below.

**Figure 2.6-1: Urban Design Study Area – Photomontage Locations**



**Figure 2.6-2: Existing Conditions Photos, Nos. 1 through 4**



**Photo No. 1:** Looking northwest along Hassock Street towards Beach Channel Drive



**Photo No. 2:** Looking north from Hassock St. at the NYCHA Redfern Houses



**Photo No. 3:** Looking southeast along Hassock St. towards Redfern Avenue



**Photo No. 4:** Looking south down Beach Channel Drive from Hassock St.

**Photographs taken January 8, 2023**

**Figure 2.6-3: Existing Conditions Photos, Nos. 5 through 8**




**Photo No. 5:** Looking north along Beach Channel Dr. from Hassock St.




**Photo No. 6:** Looking west down Norton Ave. from Beach Channel Dr.



**Photo No. 7:** Looking west at Jamaica Bay Park from Norton Ave.



**Photo No. 8:** Looking south down Pinson St. from Norton Ave.

**Photographs taken January 8, 2023**

**Figure 2.6-4: Existing Conditions Photos, Nos. 9 through 12**

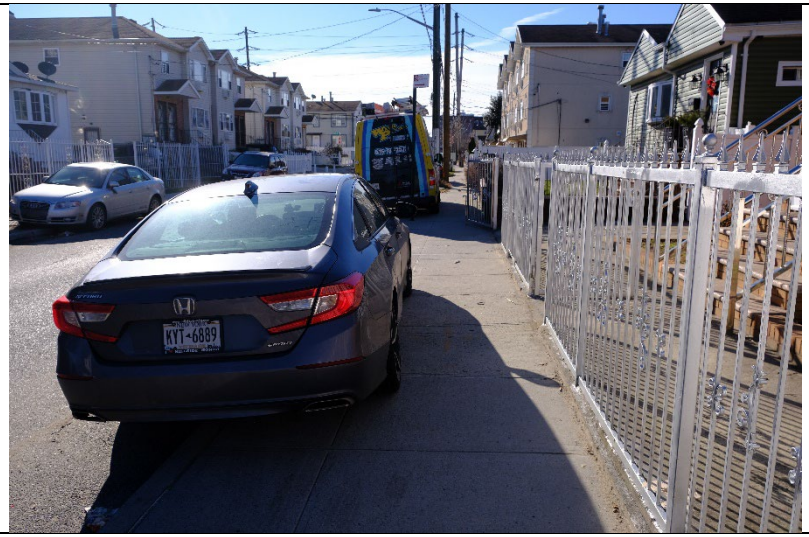


**Photo No. 9:** Looking south along Pinson St.



**Photo No. 10:** Looking west along Nameoke Ave. from Pinson St.



**Photo No. 11:** Looking east along Nameoke Ave. from Pinson St.




**Photo No. 12:** Looking south along Pinson St. from Nameoke Ave.

**Photographs taken January 8, 2023**

**Figure 2.6-5: Existing Conditions Photos, Nos. 13 through 16**



**Photo No. 13:** Looing east along Birdsall Ave. from Pinson St.



**Photo No. 14:** Looking east along Birdsall Ave. from Beach Channel Dr.



**Photo No. 15:** Looking north along Beach Channel Dr. from Pinson St.



**Photo No. 16:** Looking south along Beach Channel Dr. from Pinson St.

**Photographs taken January 8, 2023**

**Figure 2.6-6: Existing Conditions Photos, Nos. 17 through 20**



**Photo No. 17:** Looking south along Redfern Ave. from Birdsall Ave.



**Photo No. 18:** Looking north along Redfern Ave. from Birdsall Ave.



**Photo No. 19:** Looking north along Redfern Ave. from Nameoke Ave.




**Photo No. 20:** Looking west along Nameoke Ave. from Redfern Ave.

**Photographs taken January 8, 2023**

**Figure 2.6-7: Existing Conditions Photos, Nos. 21 through 24**



**Photo No. 21:** Looking east along Nameoke Ave. from Redfern Ave.



**Photo No. 22:** Looking north from Nameoke Ave. towards MTA-LIRR infrastructure




**Photo No. 23:** Looking north along Brunswick Ave. from Nameoke Ave.




**Photo No. 24:** Looking south along Augustina Ave. from Nameoke Ave.

**Photographs taken January 8, 2023**

**Figure 2.6-8: Existing Conditions Photos, Nos. 25 through 28**



**Photo No. 25:** Looking northeast at the future Nameoke Park from Nameoke Ave.



**Photo No. 26:** Looking west along Bayport Pl. from Village Ln.




**Photo No. 27:** Looking northwest from Nameoke Ave. towards properties comprising Projected Development Site 2.



**Photo No. 28:** Looking northwest from Nameoke Ave. towards properties comprising Projected Development Site 2.

**Photographs taken January 8, 2023**

**Figure 2.6-9: Existing Conditions Photos, Nos. 29 through 32**



**Photo No. 29:** Looking northwest from Nameoke Ave. towards properties comprising Projected Development Sites 1 and 2.



**Photo No. 30:** Looking northeast from Beach Channel Drive and properties comprising Projected Development Site 1.



**Photo No. 31:** Looking north along Beach Channel Drive from Nameoke Ave.; properties comprising Projected Development Site 1 are to the right.




**Photo No. 32:** Looking southeast from Beach Channel Drive at properties comprising Projected Development Site 1.

**Photographs taken January 8, 2023**

**Figure 2.6-10: Existing Conditions Photos, No. 33**



**Photo No. 33:** Looking south along Beach Channel Drive from Nameoke Ave.

**Photographs taken January 8, 2023**

### 2.6.2 Future No-Action Condition

In the future without the Proposed Actions (i.e., the Future No-Action Condition) it is expected that existing development, including residential and community facility buildings, within the Affected Area would remain unchanged. Future development within the Study Area would comply with existing zoning districts found in that geography, including mapped R3X, R5, R6 / C2-4, R7-1/C2-4, and M1-1 zoning districts.

Several Future No-Action Condition as-of-right developments within the 400-foot Study Area were identified sharing similarities to the Applicant's Proposed Project, indicated below in **Table 2.6-2** below.

**Table 2.6-2: Future No-Action Developments**

| Address | Type | Land Use | Proposed Floor Area (GSF) | Dwelling Units | Stories |
|---|---|---|---|---|---|
| 1605 Village Lane, Queens | NB | Res, Com | 155,602 | 129 | 15 |
| 1607 Village Lane, Queens | NB | Res, Com | 68,871 | 55 | 10 |
| 1626 Village Lane, Queens | NB | Res, Com | 409,493 | 354 | 12 |
| 20-50 Nameoke Avenue, Queens | NB | Res, CF | 81,350 | 117 | 9 |
| 21-05 Birdsall Avenue, Queens | NB | Res | 16,411 | 11 | 3 |
| 21-08 Birdsall Avenue, Queens | NB | Res | 5,354 | 7 | 4 |

GSF = Gross Square Feet; Res = Residential; Com = Commercial; CF = Community Facility; NB = New Building

Pedestrian activity within the Study Area under Future No-Action Condition would not experience dramatic changes compared to existing conditions. The sidewalks would be expected to remain in existing fair condition with street trees and lights. The surrounding area would primarily consist of one- and two-family and multi-family residences, houses of worship, and medium-scale light industrial development, the latter of which is concentrated east of Redfern Avenue.

Based on the foregoing, no significant changes to the urban design character of either the Affected Area or 400-foot Study Area are anticipated in the Future No-Action Condition. Further, no new visual resources with be introduced in the Future No-Action Condition.

### 2.6.3 Future With-Action Condition

**Projected Development Site 1 (Block 15525, Lots 1 and 51; Applicant-Owned Lots)**

The two (2) Applicant-owned lots would be combined into a 28,625-SF development site, which would be redeveloped with an eight-story, 85-foot-tall mixed residential, commercial, and community facility building with 110,964 GSF (103,050 ZSF, 3.6 FAR) of total floor area. There would be 4,576 GSF (4,400 ZSF, 0.15 FAR) of UG 4 community facility floor area and 4,013 GSF (3,859 ZSF, 0.13 FAR) of UG 6 local retail floor area on the ground floor and 102,374 GSF (94,791

ZSF, 3.31 FAR) of UG 2 residential floor area on the upper floors. Assuming 850 GSF per dwelling unit, there would be 120 dwelling units, 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Since the Applicant intends to pursue MIH Option 1, approximately 30 units would be reserved as affordable to households with incomes averaging 60 percent of the AMI. There would be 90 market-rate units. 53 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

There would be one (1) pedestrian entrance each for the residential, community facility, and commercial spaces (three [3] total, all of which would be located along Beach Channel Drive) as well as one (1) automobile entrance along Nameoke Avenue, providing access to the residential accessory spaces located in the cellar of the building. The sidewalk in front of the building along Nameoke Avenue would be widened approximately 12 feet.

**Projected Development Site 2 (Block 15525, Lots 40, 44, 47, 49; Non-Applicant-Owned Lots)**

The four (4) non-Applicant-owned lots would assemble in the 20,031-SF Projected Development Site 2, which would be redeveloped with a 79,322 GSF (72,111 ZSF, 3.6 FAR), eight-story, 85-foot-tall residential building would be constructed. Assuming 850 GSF per dwelling unit, Projected Development Site 2 would contain 93 residential dwelling units (UG 2), 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Since the Applicant intends to pursue MIH Option 1, approximately 23 units would be reserved as affordable to households with incomes averaging 60 percent of the AMI. There would be 70 market rate units. 41 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

There would one (1) pedestrian entrance and one (1) automobile entrance along Nameoke Avenue, the latter of which would provide access to the residential accessory parking spaces in the cellar of the building. The sidewalk in front of the building along Nameoke Avenue would be widened approximately 12 feet, consistent with the projected development at Projected Development Site 1.

A comparison of views of Projected Development Sites 1 and 2 from Beach Channel Drive and Nameoke Street and the Future No-Action and Future With-Action Conditions are shown in **Figure 2.6-11** and **Figure 2.6-12**, below. The proposed buildings on the two development sites are displayed in different colors for clear renderings: Projected Development Site 1 in white with a blue dashed outline while Projected Development Site 2 in white with an orange dashed outline. Future No-Action Condition development in the surrounding area, notably new development east of Redfern Avenue, have been added to illustrate a more comprehensive change of the urban design elements in the surrounding area in the 2028 build year.

No new visual resources would be created within the Affected Area or its associated Study Area under the Future With-Action Condition.

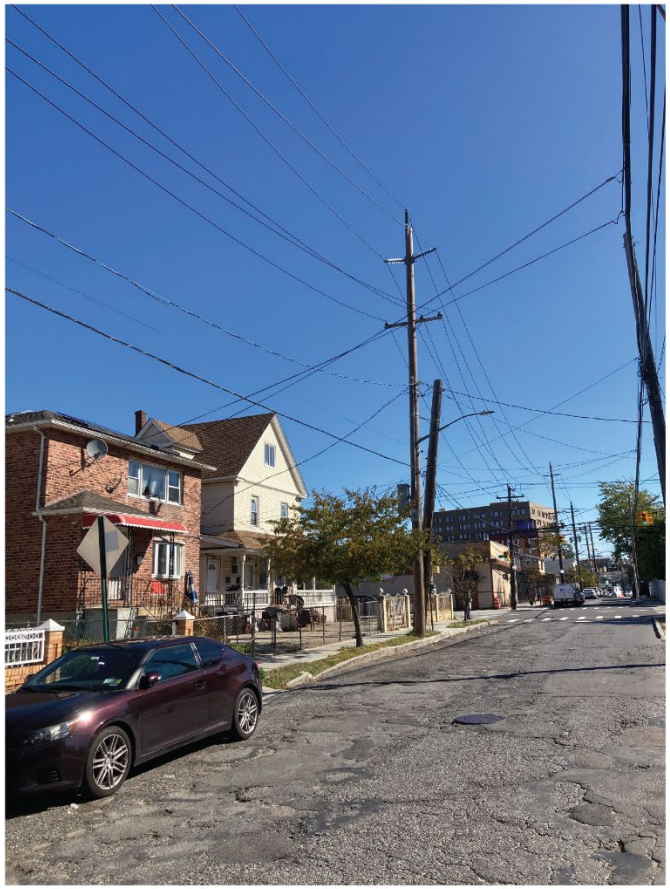
### 2.6.4 Conclusion

The development projected under the Future With-Action Condition within the Affected Area would not significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or the visual character of the area. Proposed sidewalk widening along Nameoke Avenue, in conjunction with retail and community facility spaces at the Projected Development Site 1, is anticipated to improve the overall pedestrian experience in the area. Groundfloor retail uses would improve walkability and the visual character of the area in addition to providing locally serving retail uses.

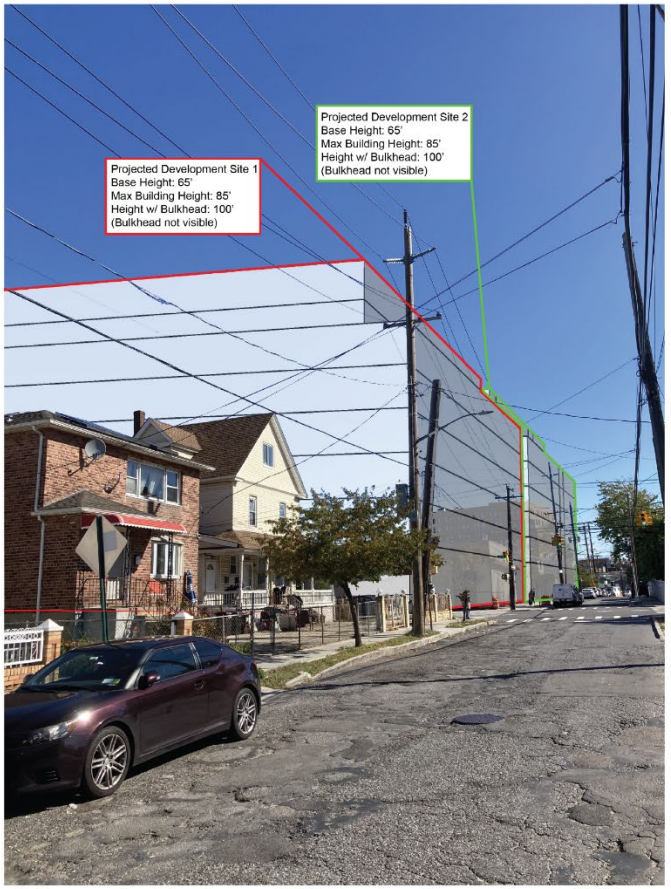
Development projected under the Proposed Actions would also be similar in use, bulk, and height to ongoing and planned Future No-Action Condition development in the Study Area, described in **Section 2.6.2**. As such, the Future With-Action Condition would reflect and reinforce development trends in the area that are trending toward mixed-use multi-family residential buildings with groundfloor retail and / or community facility spaces.

Based on the foregoing, the Proposed Actions are not anticipated to result in significant adverse impacts to urban design and visual resources, and no further analysis is warranted.

**Figure 2.6-11: Urban Design Rendering View 1 - Looking East along Nameoke Avenue towards the Affected Area**



View 1: Future No-Action Condition




View 1: Future With-Action Condition

**Figure 2.6-12: Urban Design Rendering View 2 - Looking North along Beach Channel Drive towards the Affected Area**



View 2: Future No-Action Condition




View 2: Future With-Action Condition

## 2.7 Hazardous Materials

According to the *2021 CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when: (a) hazardous material exists on a site, and (b) an action would increase pathways to their exposure, or (c) an action would introduce new activities or processes using hazardous materials.

**Methodology**

The hazardous materials assessment begins with a Phase I Environmental Site Assessment (ESA), which is a qualitative evaluation of the environmental conditions present at a site, based on a review of available information, site observations, and interviews. Pursuant to the *2021 CEQR Technical Manual*, the Phase I ESA is conducted in accordance with the standards established by the current ASTM Phase I ESA Standard and includes research and field observations to determine whether the site may contain contamination from either past or present activities on the site or as a result of activities on adjacent or nearby properties. If a potential Recognized Environmental Conditions (RECs) is identified during this assessment, then building any subsurface investigations are usually conducted as part of a Phase II ESA to confirm the presence and extent of the contamination.

**Analysis**

Projected Development Site 1, consisting of Block 15525 Lots 1 and 51, comprising 28,625-SF, is owned by the Applicant. Lot 1 is a corner lot with 175 feet of frontage on Beach Channel Drive and 110 feet of frontage of Nameoke Avenue. The lot features two buildings, both constructed in 1930, including a one-story, 3,582 GSF community facility building (used as a church) and a 306 GSF, one-story commercial building used as an office for the associated car dealership. Lot 51 is an interior lot that is currently vacant, paved, and used as an unlicensed parking lot. Both lots comprising the Applicant's Development Site were acquired by the Applicant in July 2021.

Projected Development Site 2, consisting of Block 15525, Lots 40, 44, 47, and 49, each of which are independently owned, as described below.

- Lot 40 is a 4,968 SF triangular, interior lot with frontages on Nameoke Avenue and Hassock Street. The lot is improved with a two-story, 2,500 GSF multi-family residential building with four (4) dwelling units, constructed in 1920.
- Lot 44 is a 5,063 SF interior lot, rectangular in shape, with frontage on Nameoke Avenue. The lot is developed with a two-story, 1,600 GSF mixed-use multi-family residential and community facility building with three (3) dwelling units and a groundfloor religious use, constructed in 1931.
- Lots 47 is a 5,000 SF interior lot, rectangular in shape, with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,382 GSF two-family residential structure constructed in 1920.

- Lot 49 is a 5,000 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,568 GSF multi-family residential structure with three (3) dwelling units, constructed in 1920.

The Proposed Actions would facilitate the development of multi-family residential, commercial, and community facility uses at increased area, bulks, and height within the proposed R6A/C2-4 and R6A districts compared to the existing R5 district. Accordingly, a Phase I Environmental Site Assessment (ESA) was conducted for the Applicant-owned Projected Development Site 1 by Haley Aldrich in March 2020. Additionally, a Phase II Subsurface Investigation Report (SIR) was performed at the site on June 5, 2019, by PSG Engineering and Geology, D.P.C. (PSG) as part of an unrelated environmental investigation.

### 2.7.1 Phase I Environmental Site Assessment

The purpose of a Phase I ESA is to determine whether any type of environmental hazard exists within or adjacent to the project site. Environmental hazards may include, but are not limited to, hazardous/toxic wastes or raw chemicals stored, dumped, or spilled on the site, underground and above ground storage of petroleum or hazardous materials; asbestos within the building materials/structures; and identification of potential off-site sources of hazardous waste contamination, such as industrial facilities adjacent to the subject property.

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release, or a material threat of a release into structures on the property or into the ground, groundwater or surface waters of the property. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. All RECs, excluding de minimis RECs, were considered in the Phase I.

Haley Aldrich performed a Phase I ESA in March 2020, in conformance with the scope and limitations of ASTM Practice E 1527-13. No Recognized Environmental Condition (RECs), Controlled Recognized Environmental Condition (CRECs), or Historical Recognized Environmental Condition (HRECs) were identified as part of the Phase I ESA. Stained soil around a 55-gallon drum in the church parking lot was observed, considered a *De Minimis* condition.

The Phase I ESA disclosed other non-scope considerations, including:

- *Asbestos Containing Materials (ACMs)*: No ACMs observed or suspected;
- *Water Intrusion / Mold*: Pursuant to information provided by facility personnel, there have been no problems with water intrusion;
- *Lead-Based Paint*: Based on the construction date of the building in or around the early 1950s, it is possible that lead-based paint was used historically on facility structures.

There was no peeling paint observed as a majority of the building's interior appears to be refinished.

- *Radon*: According to Federal Area Radon Information for Queens County, the average radon value for 81 basements within the county was 0.870 pCI/L, well below the United States Environmental Protection Agency's suggested limit of 4.0 pCi/L.
- *Polychlorinated Biphenyls (PCBs)*: Several pole-mounted transformers were observed on the sidewalk in front of Projected Development Site 1 along Nameoke Avenue. A limited visual assessment of building materials was also undertaken and no PCB building materials were suspected or observed.

Based on the findings of the Phase I ESA, no RECs, CRECs, or HRECs were documented such that further environmental investigation was not recommended.

### 2.7.2 Phase II Subsurface Investigation Report

PSG conducted a Phase II Subsurface Investigation at Projected Development Site 1 to identify the location of on-site USTs, former tankholds, and/or other associated features and to evaluate the potential impact of VOCs, PAHs, and/or metals to soil and/or groundwater as a consequence of a release or releases from the former automotive repair use. The scope of the Phase II Subsurface Investigation included a geophysical survey and the advancement of six borings. Six soil samples were analyzed for VOCs and PAHs, and six groundwater samples were analyzed for VOCs, naphthalene, and 2-methylnaphthalene.

The geophysical investigation did not identify the presence of any metallic anomalies or potential excavations associated with current or former USTs in the accessible areas of Projected Development Site 1. Light automotive repair and detailing operations were observed within the Quonset hut utilized by Hi5 Cars; however, no evidence of current or former inground hydraulic lifts were observed within the hut. No evidence of current of former automotive repair operations were observed within the building occupied by Glory Light Tabernacle.

Subsurface lithology encountered on Projected Development Site 1 consisted predominately of brown, light tan, and/or tan medium to very coarse sand with varying amounts of medium to coarse pebbles from the ground surface to the terminal drilling depth of 15 feet below grade surface.

Neither VOCs nor PAHs were detected at concentrations above the most stringent Unrestricted Use Criteria in the soil samples collected from borings B1 through B6.

Neither VOCs nor PAHs were detected at concentrations above the TOGS 1.1.1 AWQS in the groundwater samples collected from borings B1 through B6.

Based on the Subsurface Investigation, there is no evidence of a release or releases of hazardous materials to soil and groundwater beneath the subject property from the current and historical operations. No further soil or groundwater investigation is recommended at this time.

### 2.7.3 Conclusion

Based on the findings and conclusions of Phase I ESA and Phase II Subsurface Investigation Report, no further investigation is warranted at this time. However, it is recommended that in the event any future excavation/construction activities are proposed, further assessment of the historic fill material should be conducted. In the event that impacted soil is identified, the oversight of the subsurface activities should be conducted by an environmental professional, and any impacted soil and groundwater should be handled and disposed in accordance with the applicable regulatory regulations. Because Projected Development Site 1 is improved with existing buildings that are currently habited by active businesses and community facility uses, further remedial investigation work is not possible. An E-Designation will therefore be required.

The E-Designation language related to Hazardous Materials is as follows:

E-Designation (E-XXX)

Projected Development Site 1: Block 15525, Lots 1 & 51 (Site under the control or ownership of the Applicant)

Based the conclusions of the Phase I ESA and Phase II Subsurface Investigation, DEP concurs with the EAS recommendation that an (E) (E-XXX) Designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property. The (E) (E-XXX) Designation will ensure that further testing and mitigation will 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.

Projected Development Site 2: Block 15525, Lots 40, 44, 47, & 49 (Site not under the control or ownership of the Applicant)

Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP recommends that an (E) Designation (E-XXX) for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties (Block 15525, Lots 40, 44, 47, & 49). The (E) Designation (E-XXX) will ensure that testing and mitigation will 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 (OER).

**E-XXX Requirements**

*Task 1-Sampling Protocol*

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

If remediation is indicated 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.

With this E-XXX designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted.

## 2.8 Transportation

Pursuant to *2021 CEQR Technical Manual* methodology, a transportation assessment may be necessary when a proposed action would alter the transportation network by closing, opening, or realigning an element of the transportation system such as a roadway, pedestrian way, or transit route, or if it would generate new trips on the transportation network. The objective of the transportation analyses is to determine whether a proposed project may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists and vehicles), on- and off-street parking, or goods movement.

**Methodology**

The *2021 CEQR Technical Manual* states that a preliminary Level 1 Trip Generation Screening Assessment should be prepared to determine whether a quantified analysis of any technical areas of the transportation system is necessary. Except in unusual circumstances, a further quantified analysis would typically not be needed for a technical area if the Proposed Development would result in fewer than the following increments:

- 50 peak hour vehicle trips;
- 200 peak hour subway/rail or bus transit riders (or 50 bus trips in a single direction on a single route during a peak hour);
- 50 CWFS Ferry Trips; or
- 200 peak hour pedestrian trips.

The *CEQR Technical Manual* also states that if the threshold for traffic is surpassed, a parking assessment may also be warranted.

This chapter assesses the potential for project-generated vehicle, transit, and pedestrian trips to affect the local transportation network.

**Analysis**

Future No-Action Condition

Existing conditions are expected to remain in the future No-Action Condition.

Future With-Action Condition

*Projected Development Site 1 (Block 15525, Lots 1 and 51; the Applicant-Owned Lots)*

On the combined 28,625-sf lot, it is assumed that the Applicant would construct an eight-story, 85-foot-tall mixed residential, commercial, and community facility building with 110,964 GSF (103,050 ZSF, 3.6 FAR) of total floor area. There would be 4,576 GSF (4,400 ZSF, 0.15 FAR) of UG 4 community facility floor area and 4,013 GSF (3,859 ZSF, 0.13 FAR) of UG 6 local retail floor area

on the ground floor and 102,374 GSF (94,791 ZSF, 3.31 FAR) of UG 2 residential floor area on the upper floors. Assuming 850 GSF per dwelling unit, there would be 120 dwelling units. 53 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

*Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49; Non-Applicant Lots)*

On the combined 20,031-SF site, it is assumed that a 79,322 GSF (72,111 ZSF, 3.6 FAR), eight-story, 85-foot-tall residential building would be constructed. Assuming 850 GSF per dwelling unit, Projected Development Site 2 would contain 93 residential dwelling units (UG 2). 41 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

The incremental change in land use from the future No-Action Condition to the future With-Action Condition are detailed below in **Table 2.8-1**.

**Table 2.8-1: Increment Summary Table**

| Use | No-Action Condition | With-Action Condition | Increment |
|---|---|---|---|
| Commercial GSF | 306 | 4,013 | +3,707 |
| Manufacturing GSF | 0 | 0 | No Change |
| Community Facility GSF | 4,382 | 4,576 | +194 |
| Residential GSF | 8,250 | 181,696 | +173,446 |
| Total GSF | 12,938 | 190,286 | +177,348 |
| Residential Dus | 11 | 213 | +202 |

### 2.8.1 Preliminary Assessment

Based on the Affected Area's location, it is within Traffic Zone 5. According to Table 16-1 of the *2021 CEQR Technical Manual*. In this zone, a residential development of fewer than 100 residential units, 40,000 square feet of office, 10,000 square feet of local retail, or 15,000 square feet of community facility space, or a weighted average below 1.00 of any of the above, typically does not warrant further assessment of the potential for adverse effects on Transportation.

The weighted average of the incremental development exceeds 1.0. Therefore, a Level 1 Trip Generation Screening is required.

### 2.8.2 Level 1 Trip Generation Screening Assessment

The *2021 CEQR Technical Manual* states that a preliminary Level 1 Trip Generation Screening Assessment should be prepared to determine whether a quantified analysis of any technical areas of the transportation system is necessary. Except in unusual circumstances, a further quantified analysis would typically not be needed for a technical area if the Proposed Development would result in fewer than the following increments:

- 50 peak hour vehicle trips;

- 200 peak hour subway/rail or bus transit riders (or 50 bus trips in a single direction on a single route during a peak hour);
- 50 CWFS Ferry Trips; or
- 200 peak hour pedestrian trips.

The *CEQR Technical Manual* also states that if the threshold for traffic is surpassed, a parking assessment may also be warranted.

**Transportation Planning Assumptions**

The *2021 CEQR Technical Manual*, East New York Rezoning FEIS, data provided by NYCDOT, and 2015 – 2019 ACS Journey to Work data were integrated for the traffic generation model. **Table 2.8-2** shows the travel factors. **Table 2.8-3** shows the person trips, vehicular trips, and pedestrian trips generated from the trip factors in **Table 2.8-2**.

## Table 2.8-2: Transportation Demand Factors

| | Local Retail | | Medical Office | | Residential | |
|---|---|---|---|---|---|---|
| **Trip Generation** | (1) | | (1) | | (1) | |
| **Weekday** | 329 | | 74.6 | | 8.18 | |
| **Saturday** | 358 | | 37 | | 9.08 | |
| | per 1,000 sf | | per 1,000 sf | | per dwelling unit | |
| **Temporal Distribution** | (1) | | (1) | | (1) | |
| **AM** | 4.80% | | 11.00% | | 9.30% | |
| **MD** | 8.00% | | 12.60% | | 5.60% | |
| **PM** | 10.90% | | 8.50% | | 8.50% | |
| **Sat MD** | 11.70% | | 16.60% | | 8.40% | |
| **Modal Splits** | (1) | | (1) | | (3) | |
| **Auto** | 11% | | 69% | | 53% | |
| **Taxi** | 0% | | 7% | | 2% | |
| **Bus** | 2% | | 6% | | 18% | |
| **Subway** | 3% | | 2% | | 20% | |
| **Walk/Other** | 84% | | 16% | | 7% | |
| **In/Out Splits** | In (1) | Out (1) | In (1) | Out (1) | In (1) | Out (1) |
| **AM** | 52% | 48% | 62% | 38% | 22% | 78% |
| **MD** | 50% | 50% | 53% | 47% | 50% | 50% |
| **PM** | 50% | 50% | 39% | 61% | 62% | 38% |
| **Sat MD** | 50% | 50% | 54% | 46% | 55% | 45% |
| **Vehicle Occupancy** | (4) | | (2) (5) | | (3)(2) | |
| **Auto** | 1.40 | | 1.50 | | 1.07 | |
| **Taxi** | 1.40 | | 1.50 | | 1.30 | |
| **Truck Trip Generation** | (1) | | (2) | | (1) | |
| **Weekday** | 0.35 | | 0.29 | | 0.06 | |
| **Saturday** | 0.04 | | 0.29 | | 0.02 | |
| **Temporal Distribution** | (1) | | (2) | | (1) | |
| **AM** | 8.00% | | 3.00% | | 12.00% | |
| **MD** | 11.00% | | 11.00% | | 9.00% | |
| **PM** | 2.00% | | 1.00% | | 2.00% | |
| **Saturday** | 11.00% | | 0.00% | | 9.00% | |
| **In/Out Splits** | In (2) | Out (2) | In (2) | Out (2) | In (2) | Out (2) |
| **AM/MD/PM/Sat** | 50.00% | 50.00% | 50.00% | 50.00% | 50.00% | 50.00% |

1 = 2021 CEQR Technical Manual

2 = East New York FEIS

3 = 5-year ACS Journey to Work (2015 - 2019) for Queens County Tracts 1008.01, 1008.02, 1032.01, 1032.02

4 = Data provided by NYC DOT for Local Retail uses

5 = Data provided by NYC DOT for Medical office Uses

6 = Data provided by NYC DOT for Residential uses

## Table 2.8-3: Total Project Generated Trips

| | Local Retail | | Medical Office | | Residential | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| **Size (gsf)** | 3,707 gsf | | 194 gsf | | 202 du | | | | |
| **Peak Hour Trips** | | | | | | | | | |
| **AM** | 59 | | 2 | | 154 | | 214 | | |
| **MD** | 98 | | 2 | | 93 | | 192 | | |
| **PM** | 133 | | 1 | | 140 | | 275 | | |
| **Sat MD** | 155 | | 1 | | 154 | | 311 | | |
| **Person Trips** | | | | | | | | | |
| **AM** | In | Out | In | Out | In | Out | In | Out | Total |
| **Auto** | 3 | 3 | 1 | 0 | 18 | 64 | 22 | 68 | 90 |
| **Taxi** | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 3 | 4 |
| **Bus** | 1 | 1 | 0 | 0 | 6 | 21 | 7 | 22 | 28 |
| **Subway** | 1 | 1 | 0 | 0 | 7 | 24 | 8 | 25 | 32 |
| **Walk/Other** | 26 | 24 | 0 | 0 | 2 | 8 | 28 | 32 | 59 |
| **Total** | 30 | 28 | 1 | 1 | 34 | 120 | 65 | 149 | 214 |
| **MD** | In | Out | In | Out | In | Out | In | Out | Total |
| **Auto** | 5 | 5 | 1 | 1 | 25 | 25 | 31 | 31 | 61 |
| **Taxi** | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 |
| **Bus** | 1 | 1 | 0 | 0 | 8 | 8 | 9 | 9 | 18 |
| **Subway** | 1 | 1 | 0 | 0 | 9 | 9 | 11 | 11 | 21 |
| **Walk/Other** | 41 | 41 | 0 | 0 | 3 | 3 | 44 | 44 | 88 |
| **Total** | 49 | 49 | 1 | 1 | 46 | 46 | 96 | 96 | 192 |
| **PM** | In | Out | In | Out | In | Out | In | Out | Total |
| **Auto** | 7 | 7 | 0 | 1 | 47 | 29 | 54 | 36 | 90 |
| **Taxi** | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 3 |
| **Bus** | 1 | 1 | 0 | 0 | 15 | 9 | 17 | 11 | 28 |
| **Subway** | 2 | 2 | 0 | 0 | 17 | 11 | 19 | 13 | 32 |
| **Walk/Other** | 56 | 56 | 0 | 0 | 6 | 3 | 62 | 59 | 121 |
| **Total** | 66 | 66 | 0 | 1 | 87 | 53 | 154 | 121 | 275 |
| **Saturday** | In | Out | In | Out | In | Out | In | Out | Total |
| **Auto** | 9 | 9 | 0 | 0 | 45 | 37 | 54 | 46 | 100 |
| **Taxi** | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 4 |
| **Bus** | 2 | 2 | 0 | 0 | 15 | 12 | 17 | 14 | 30 |
| **Subway** | 2 | 2 | 0 | 0 | 17 | 14 | 19 | 16 | 35 |
| **Walk/Other** | 65 | 65 | 0 | 0 | 6 | 5 | 71 | 70 | 141 |
| **Total** | 78 | 78 | 1 | 1 | 85 | 69 | 163 | 148 | 311 |
| **Vehicle Trips** | | | | | | | | | |
| **AM** | In | Out | In | Out | In | Out | In | Out | Total |
| **Auto** | 2 | 2 | 0 | 0 | 17 | 59 | 19 | 61 | 80 |
| **Taxi** | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 |
| **Taxi Balanced** | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 4 |
| **Truck** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 2 | 2 | 0 | 0 | 19 | 61 | 21 | 63 | 84 |
| **MD** | In | Out | In | Out | In | Out | In | Out | Total |
| **Auto** | 4 | 4 | 0 | 0 | 23 | 23 | 27 | 27 | 54 |
| **Taxi** | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 |
| **Taxi Balanced** | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 4 |
| **Truck** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 4 | 4 | 0 | 0 | 25 | 25 | 29 | 29 | 58 |
| **PM** | In | Out | In | Out | In | Out | In | Out | Total |
| **Auto** | 5 | 5 | 0 | 1 | 44 | 27 | 49 | 33 | 82 |
| **Taxi** | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 3 |
| **Taxi Balanced** | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 6 |
| **Truck** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 5 | 5 | 0 | 1 | 47 | 30 | 52 | 36 | 88 |
| **Saturday** | In | Out | In | Out | In | Out | In | Out | Total |
| **Auto** | 6 | 6 | 1 | 0 | 42 | 34 | 49 | 40 | 89 |
| **Taxi** | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 4 |
| **Taxi Balanced** | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 4 | 8 |
| **Truck** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 6 | 6 | 1 | 0 | 46 | 38 | 53 | 44 | 97 |

**Trip Generation Summary**

The *2021 CEQR Technical Manual* provides a methodology for evaluating the potential impacts of a Proposed Project on the transportation system. In accordance with the *2021 CEQR Technical Manual*, a Level 1 Screening Assessment includes a trip generation analysis to determine whether the project would result in more than 50 vehicle trip-ends, 200 subway/rail or bus transit riders, 50 CWFS ferry trips, or 200 pedestrian trip-ends in a peak hour.

The incremental project-generated trip ends determined based on the Level 1 Trip Generation Screening are summarized below in **Table 2.8-4**.

Traffic

As shown in **Table 2.8-4**, the Proposed Project would generate greater than 50 vehicle trips during all identified peak hours. Accordingly, further analysis of vehicular trips is warranted.

Subway

As shown in **Table 2.8-4**, the Proposed Project would generate fewer than 200 subway trips during all identified peak hours. Therefore, further transit analysis is not warranted.

Bus

As shown in **Table 2.8-4**, the Proposed Project would generate fewer than 200 MTA bus trips during all identified peak hours. Therefore, further transit analysis is not warranted.

Pedestrian

In addition to walk-only trips, all bus and subway trips generated by the Proposed Project would begin or end as pedestrian trips. The Proposed Project would exceed the Level 1 threshold of 200 trips during the Saturday Midday peak hour, as shown in **Table 2.8-4**. Therefore, a Level 2 screening assessment is warranted.

**Table 2.8-4: Project Generated Trip Ends**

| Peak Hour | AM Peak Hour | Midday Peak Hour | PM Peak Hour | Saturday Peak Hour |
|---|---|---|---|---|
| Total Subway Trip-Ends | 32 | 21 | 32 | 35 |
| Total MTA Bus Trip-Ends | 28 | 18 | 28 | 30 |
| Total Walk-Only Trip-Ends | 59 | 88 | 121 | 141 |
| **Total Pedestrian Trip-Ends** | 120 | 128 | 181 | 207 |
| **Total Vehicular Trip-Ends** | 84 | 58 | 88 | 97 |

**Highlighted** cells denote trips in exceedance of 200 transit/pedestrian trip ends or 50 vehicles per peak hour

### 2.8.3 Level 2 Screening Assessment

The Level 2 Screening Assessment assigns project-generated vehicular and pedestrian trips to specific intersections, bus routes, subway lines, CWFS ferry routes, or parking facilities. If the results of the analysis concludes that the Proposed Action(s) would result in intersections with 50 or more vehicle trips, pedestrian elements with 200 or more pedestrian trips, 50 or more bus trips in a single direction on a single route, 25 or more passenger ferry trips in a single direction on a single route, 50 or more passengers at a ferry landing, or 200 or more passengers at a subway station or on a subway line during any analysis peak hour, further detailed analysis may be needed for a particular technical area.

**Traffic**

As discussed above, incremental vehicle trip-ends resulting from the Proposed Project would exceed the CEQR Level-1 screening threshold during the Weekday AM peak hour. As such, a Level 2 Trip Assignment was prepared for all four peak hours, as shown below in **Figures 2.8-1** through **2.8-4**.

Site Access and Egress Assumptions

Per the architectural plans for Projected Development Site 1, the entrance and exit to/from the accessory parking below ground parking garage will be located on the Nameoke Avenue frontage, while the accessory ground floor parking is anticipated to have an entrance-only access point on Beach Channel Drive, and exit-only access point on Nameoke Avenue. As slightly more parking spaces are proposed below ground than on the ground floor level, 55% of the auto trips to and from Projected Development Site 1 were assigned to the below ground parking garage, while the remaining 45% of incoming and outgoing trips to / from Projected Development Site 1 were assigned to the ground floor parking access points on Beach Channel Drive and Nameoke Avenue, respectively. Taxi and truck trips generated by Projected Development Site 1 were similarly distributed to the two frontages on Beach Channel Drive and Nameoke Avenue. All vehicular trips generated by Projected Development Site 2 were assigned to the Hassock Street frontage, based on Hassock Street being wider and therefore more easily accommodating turning movements into and out the site than Nameoke Avenue.

Origin and Destination Assumptions

The most likely travel routes to and from the Projected Development Sites, prevailing travel patterns, commuter origin-destination (O-D) summaries from the most recent census data, the configuration of the roadway network, and the anticipated locations of site access and egress by site and land use were examined and utilized to perform vehicular trip assignments. As the majority of vehicle trips would be generated by the residential portions of the two Projected Development Sites, Census Transportation Planning Product (CTPP) Journey to Work (2012 – 2016) data were utilized to determine the relative O-D points of trips. Based on the O-D data point, it was estimated that approximately 65% of vehicle trips would access the two Projected Development Sites via the immediate street network to / from the north, with the remaining 35% approaching from / exiting to the south.

Conclusion

As shown in **Figures 2.8-1** through **2.8-4**, based on the assignment of vehicular trips, none of the intersections in the study area would exceed the 50 vehicular trips analysis threshold during any of the four peak hours. As such, a detailed Level of Service traffic analysis is not warranted.

**Pedestrians**

As discussed above, incremental pedestrian trips resulting from the proposed project would exceed the CEQR Level-1 screening threshold during the Saturday Midday peak hours. As such, a Level 2 Trip Assignment was prepared for this peak hour, as shown below in **Figure 2.8-5**.

The number of pedestrian trips shown in **Figure 2.8-5** include walk-only trips, which were be distributed throughout the pedestrian network surrounding the Projected Development Sites; trips by subway riders, which are assumed to all walk the shortest available routes to/from the Far Rockaway-Mott Av (A) subway station on Mott Avenue south of the sites; and trips by bus trips, which are assumed to walk to/from the Q114 bus stops on Beach Channel Drive.

All pedestrian trips generated by Projected Development Site 1 were conservatively assigned to the site's entrance(s) on Beach Channel Drive, while all pedestrian trips generated by Projected Development Site 2 were assigned to the Hassock Street frontage.

As shown in **Figure 2.8-5**, none of the sidewalks, crosswalks, or corners in the study area would exceed the 200 pedestrian trips analysis threshold. As such, a detailed Level of Service pedestrian analysis is not warranted.

**Figure 2.8-1: Weekday AM Peak Hour Project Increment Traffic Volumes**

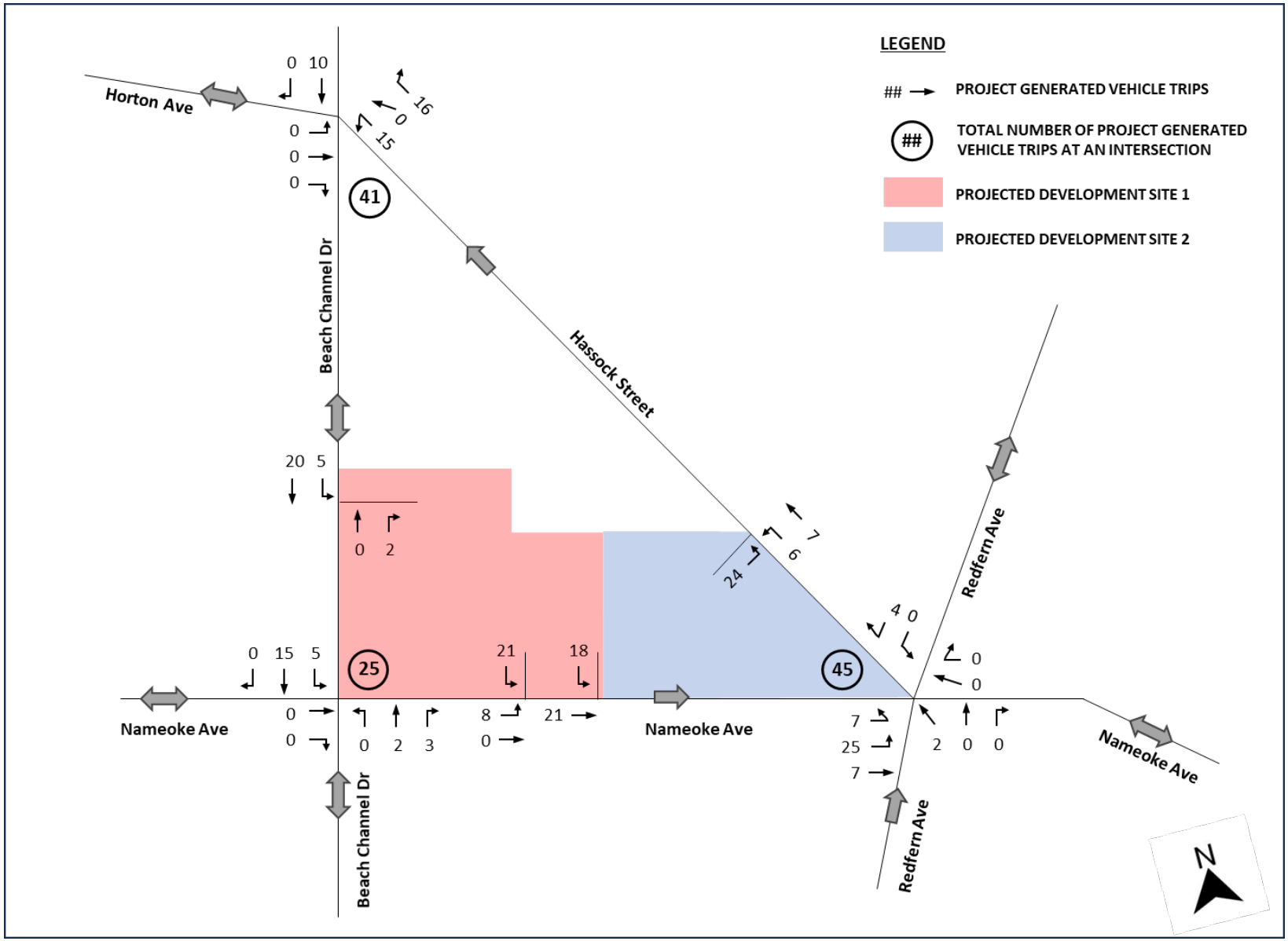


**Figure 2.8-2: Weekday Midday Peak Hour Project Increment Traffic Volumes**

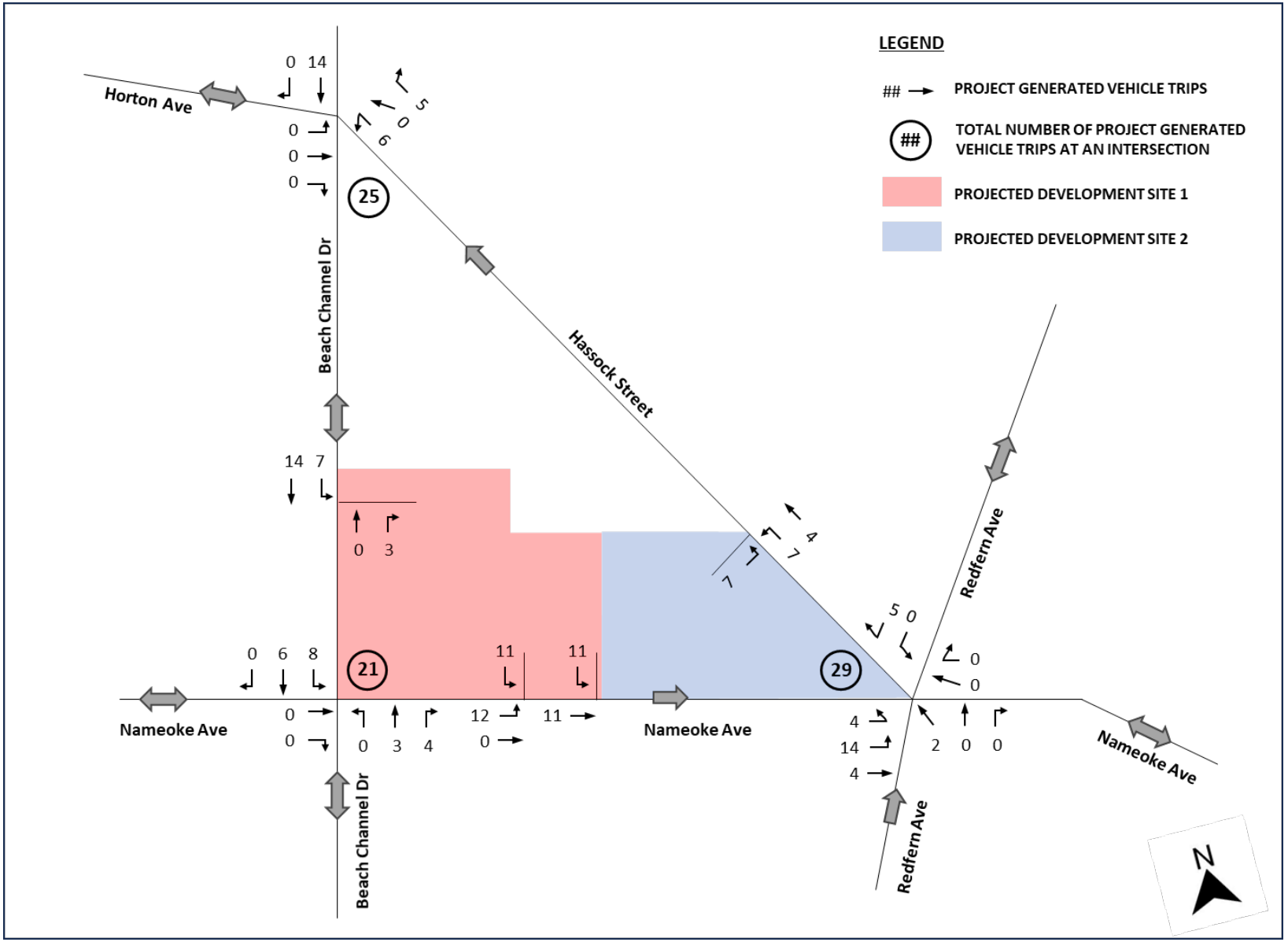


**Figure 2.8-3: Weekday PM Peak Hour Project Increment Traffic Volumes**

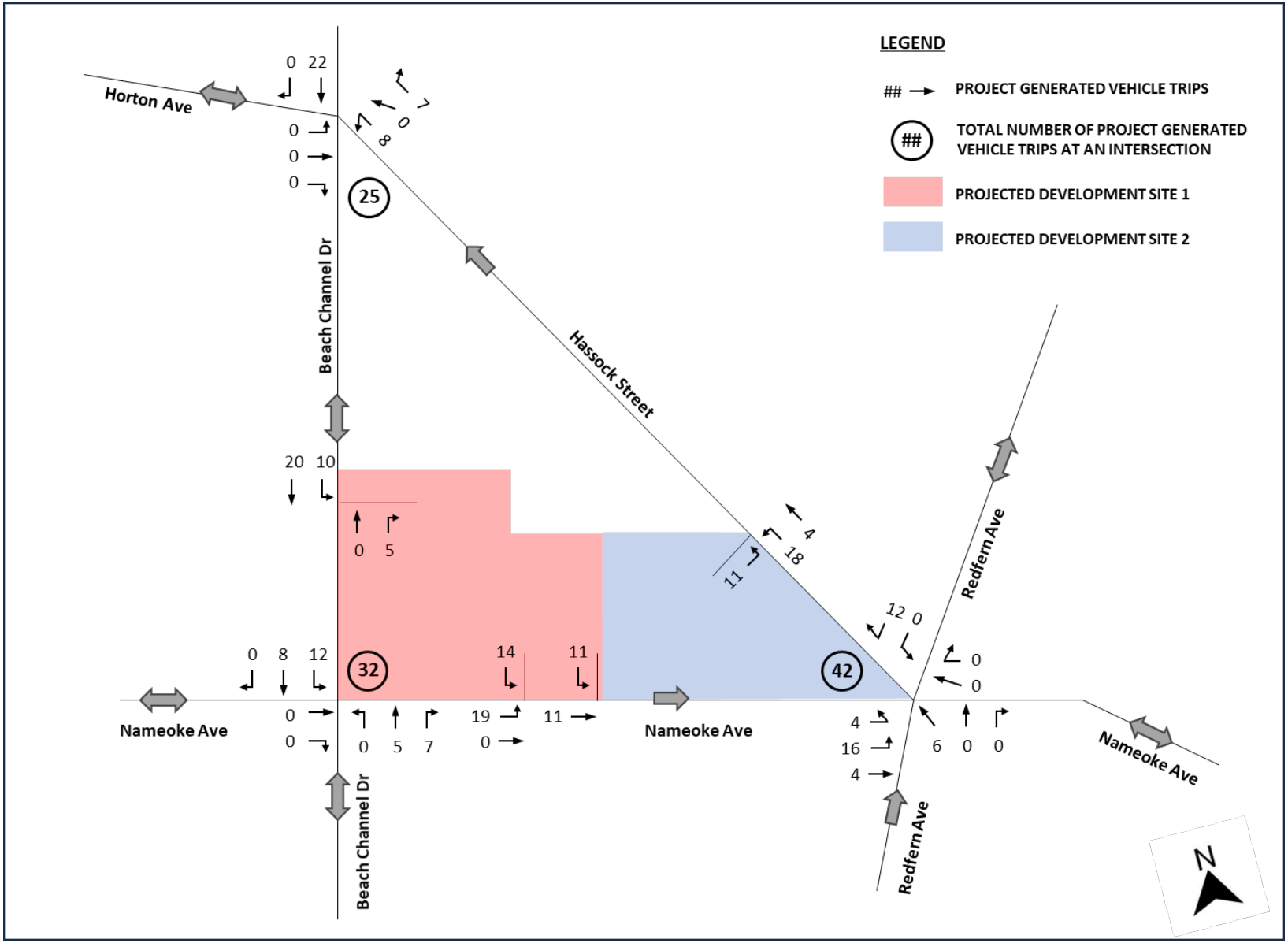


**Figure 2.8-4: Saturday Midday Peak Hour Project Increment Traffic Volumes**

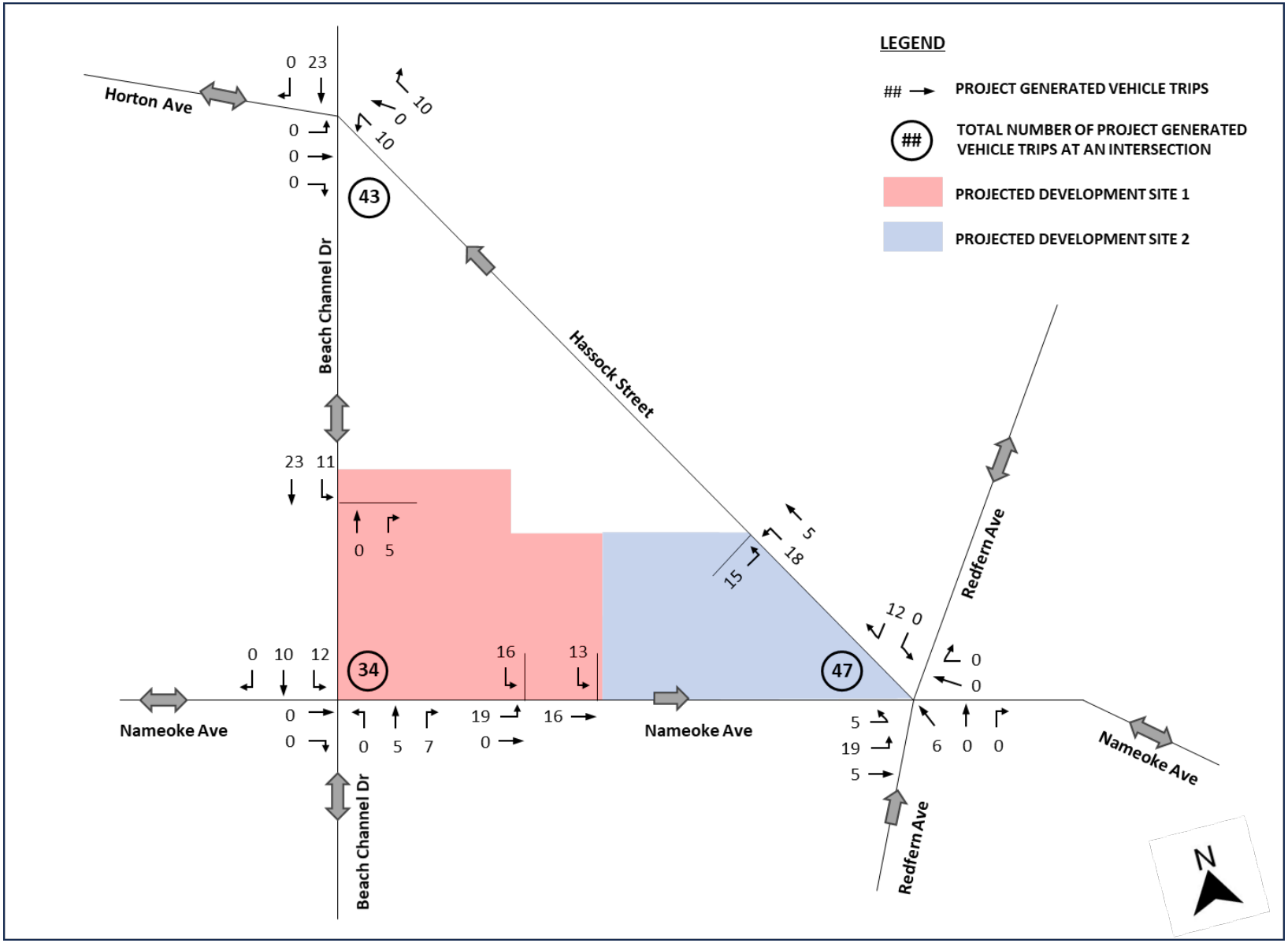
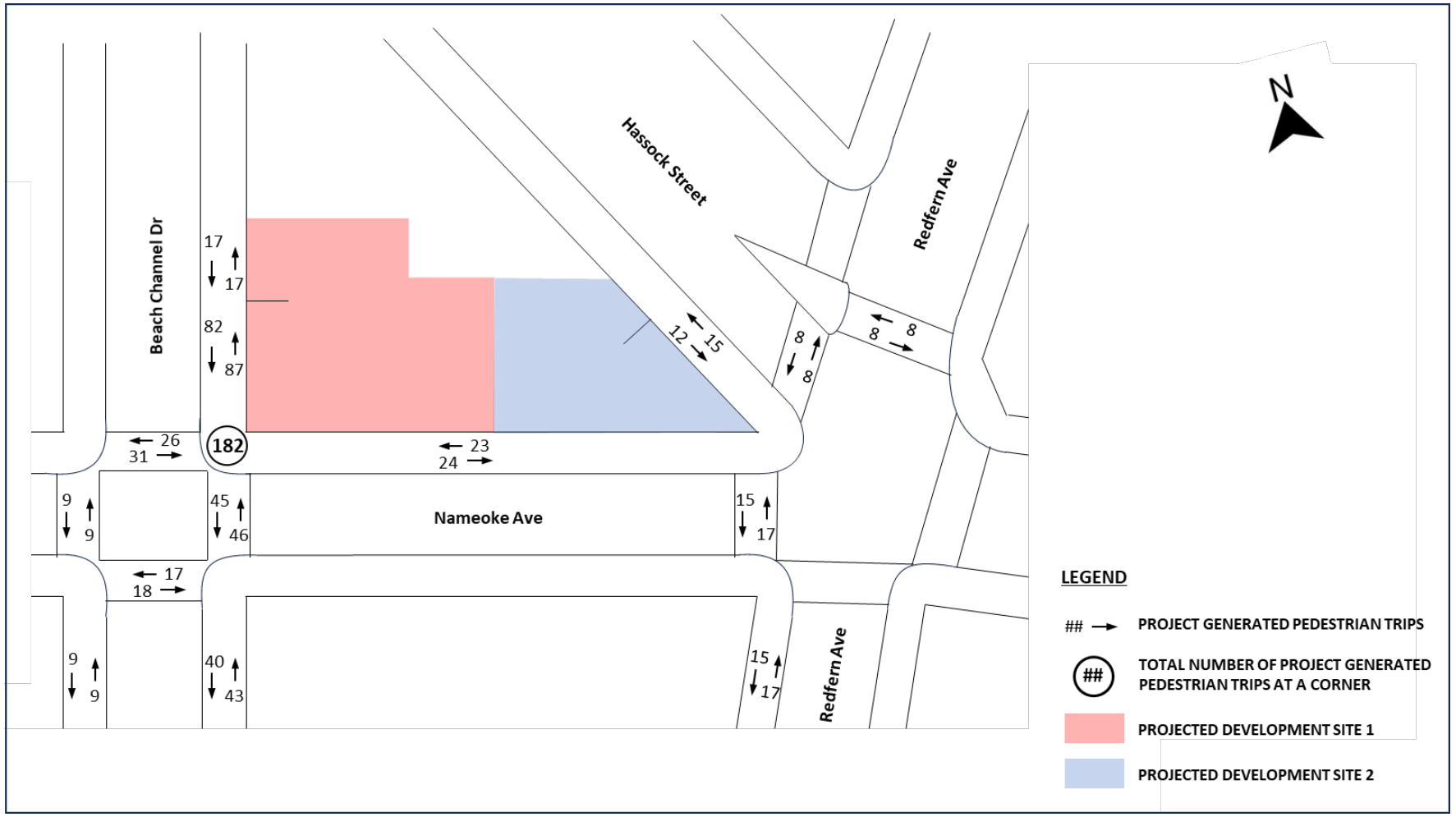


**Figure 2.8-5: Saturday Midday Peak Hour Project Increment Pedestrian Volumes**



## 2.9 Air Quality

When assessing the potential for air quality significant impacts, the *2021 CEQR Technical Manual* seeks to determine a Proposed Action's effect on ambient air quality, or the quality of the surrounding air. Ambient air can be affected by motor vehicles, referred to as "mobile sources," or by fixed facilities, referred to as "stationary sources." This can occur during operation and/or construction of a project being proposed. The pollutants of most concern are carbon monoxide, lead, nitrogen dioxide, ozone, relatively coarse inhalable particulates ($PM_{10}$), fine particulate matter ($PM_{2.5}$), and sulfur dioxide. The *2021 CEQR Technical Manual* generally recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., roadways, parking lots, garages). The *2021 CEQR Technical Manual* generally recommends assessments when new stationary sources of pollutants are created, when a new use might be affected by existing stationary sources, or when stationary sources are added near existing sources and the combined dispersion of emissions would impact surrounding areas.

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the Proposed Actions on ambient air quality and the ambient air quality effect on the proposed development are considered.

### 2.9.1 Analysis Framework

The Affected Area is located within Block 15525, comprised of all parcels at the block with frontage on Nameoke Avenue, including Lots 1, 40, 44, 47, 49, and 51. The Proposed Actions would result in an increase of development potential (including height, bulk, and total FAR) on the Applicant-controlled Projected Development Site 1 (Block 15525, Lots 1 and 51) and Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49).

The Proposed Actions are being requested to facilitate the Applicant's development of 14-10 Beach Channel Drive (Block 15525, Lots 1 and 51; the "Development Site" or "Project Site"). Specifically, the Applicant proposes to redevelop the 28,625-sf, rectangular Project Site with a 95,608-gross-square-foot (GSF) (3.33 floor area ratio [FAR]), 6-story (67-foot-tall) plus cellar mixed-use multi-family residential, commercial, and community facility building (the "Proposed Project").

Absent the Proposed Actions, it is assumed that Projected Development Site 1 and Projected Development Site 2 within the Affected Area would remain the same as the existing condition.

Under Future With-Action conditions, the Applicant-controlled Projected Development Site 1 (Block 15525, Lots 1 and 51) would be developed with a mixed-use, predominantly residential building. The Proposed Development would be a six-story, 67-foot-tall building, however, the

RWCDS for Projected Development Site 1 is assumed to be an eight-story, 85-foot-tall mixed residential, commercial, and community facility building with 110,964 GSF (103,050 ZSF, 3.6 FAR) of total floor area. There would be 4,576 GSF (4,400 ZSF, 0.15 FAR) of UG 4 community facility floor area and 4,013 GSF (3,859 ZSF, 0.13 FAR) of UG 6 local retail floor area on the ground floor and 102,374 GSF (94,791 ZSF, 3.31 FAR) of UG 2 residential floor area on the upper floors. Assuming 850 GSF per dwelling unit, there would be 120 dwelling units. 53 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49): On the combined 20,031-SF site, it is assumed that a 79,322 GSF (72,111 ZSF, 3.6 FAR), eight-story, 85-foot-tall residential building would be constructed. Assuming 850 GSF per dwelling unit, Projected Development Site 2 would contain 93 residential dwelling units (UG 2). 41 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

### 2.9.2 Air Pollutants and Applicable Standards/Guidelines

#### *2.9.2.1 Pollutants of Concern*

The Clean Air Act ("CAA") is a comprehensive federal law that regulates all sources of air emissions. The CAA requires the U.S. Environmental Protection Agency ("EPA") to set National Ambient Air Quality Standards ("NAAQS") for pollutants that are common in outdoor air, considered harmful to public health and the environment, and that come from numerous and diverse sources. The EPA has identified six key pollutants (described below) considered harmful to public health and the environment. In addition, national and state regulations identified numerous other pollutants, primarily due to industrial activities.

**Carbon monoxide ("CO"):** CO is a colorless, odorless gas, which is primarily formed by incomplete combustion of carbon-containing fuels and by photochemical reactions in the atmosphere. Nationally, particularly in urban areas, the majority of CO emissions to ambient air come from mobile sources. The majority of these on-road CO emissions are derived from gasoline-powered vehicles.[16] Because CO disperses quickly, its concentrations may vary greatly over relatively short distances. Elevated concentrations are usually limited to locations near congested intersections and along heavily traveled and congested roadways.

**Nitrogen Dioxide VOC and Ozone**: Nitrogen oxides ("NOx") are emitted from both mobile and stationary sources. Nitric Oxide ("NO") accounts for approximately 90% of the total oxidized nitrogen emitted. In the atmosphere, and in the presence of sunlight, NO reacts with free radicals and ozone ("$O_3$") to form mainly nitrogen dioxide ("$NO_2$").[17] Ground-level ozone is formed when

[16] EPA. *Integrated Science Assessment (ISA) for Carbon Monoxide (Final Report, Jan 2010)*. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-09/019F, 2010.

[17] EPA. *Integrated Science Assessment (ISA) for Oxide of Nitrogen – Health Criteria (Final Report, Jan 2010)*. U.S. Environmental Protection Agency, Washington, DC, EPA/ EPA/600/R-15/068, 2016.

volatile organic compounds ("VOCs"), also known as hydrocarbons, and NOx interact in the presence of sunlight. Because the reactions are slow and occur as the pollutants are transported downwind, elevated ozone levels are often found many miles from the sources of the precursor pollutants.

The zone of elevated $NO_2$ concentrations from vehicular emissions extends away from the roadway. Therefore, the effects of NOx ("NO and $NO_2$") emissions from mobile sources are generally examined on a regional basis. The Proposed Actions would not substantially increase the vehicle miles traveled or stationary source emissions at a regional scale. Therefore, mesoscale (regional) analysis for ozone precursors is not required for the Proposed Actions.

**Respirable Particulate Matter ($PM_{10}$ and $PM_{2.5}$):** Airborne particulate matter ("PM") is a mixture of substances suspended in air as small liquid and/or solid particles. In contrast to the other criteria pollutants, PM does not have a unique chemical composition. These individual particles range in size from less than 0.01 µm to more than 10 µm. $PM_{2.5}$ is the abbreviation for fine PM with a diameter smaller than 2.5 microns. $PM_{10}$ refers to particulates with diameters less than or equal to 10 micrometers. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen by the naked eye.

PM sources are both primary and secondary in nature. Primary sources are specific sources, such as particles produced by mechanical abrasion. Secondary PM sources originate from gas-phase chemical compounds that condensate with certain gasses or when different gasses react with each other. These small particles might then coagulate with other particles to form larger particles. Sulfur oxides, nitrogen oxides, and VOCs are examples of PM precursors.[18] The burning of fossil fuels can produce both primary and secondary PM. $PM_{2.5}$ is extremely persistent in the atmosphere and has the ability to reach the lower regions of the respiratory tract, delivering with it other compounds that adsorb to the surfaces of the particles.

Anthropogenic sources of PM are prevalent in many activities. Common sources include fuel combustion, such as in boilers or vehicular engines, industrial processes, such as spray painting or sanding of wood, and construction activities. Fugitive road dust that gets airborne when vehicles traverse roadways is also a common source.

**Sulfur Dioxide:** Fossil fuel combustion is the main anthropogenic source of primary sulfur dioxide ("$SO_2$"). The amount of $SO_2$ emitted is directly related to the amount of sulfur in the fuel. Therefore, fuels with low sulfur content produce little $SO_2$. Beginning in 2006, the EPA began to phase in more stringent regulations to lower the amount of sulfur in diesel fuel to 15 parts per million ("ppm"), known as ultra-low sulfur diesel ("ULSD"). $SO_2$ is also a precursor for the formation of $PM_{2.5}$. As such, controlling $SO_2$ emissions controls $PM_{2.5}$ concentrations.

[18] EPA. *Integrated Science Assessment (ISA) for Particulate Matter (Final Report, Dec 2019)*. U.S. Environmental Protection Agency, Washington, DC, EPA EPA/600/R-19/188, 2019.

**Lead:** Emissions of lead ("Pb") have dropped substantially over the past 40 years as a result of the phasing out of Pb as an anti-knock agent in gasoline for on-road vehicles, and later from enhanced controls of the metal processing industry.

**Noncriteria pollutants:** Also referred to as toxic air pollutants or air toxics, noncriteria pollutants are mainly associated with industrial sources. The CAA identifies 188 hazardous air pollutants ("HAPs") to be regulated by the EPA, where the EPA regulates their emissions. These are substances that cause or may cause cancer or other serious health effects. In addition, the New York State Department of Environmental Conservation ("NYSDEC") has identified numerous other pollutants ranging in toxicity levels, known as "noncriteria pollutants," for which the EPA has no established standards.

*2.9.2.2 Criteria Pollutants Standards*

As required by the CAA, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. Determination of significant impact related to criteria pollutants accounts for existing pollutant concentrations in the air (background concentrations). The NYSDEC measures concentrations of air pollutants at more than 50 sites across the state. The primary NAAQS and background concentrations of the pollutants that a detailed analysis was required for are shown in **Table 2.9-1**.

**Table 2.9-1: NAAQS and Background concentration**

| Pollutant | Averaging Period | National and State Standards | Background Concentration [3] |
|---|---|---|---|
| $NO_2$ [1] | Maximum 1-Hour Concentration | 100 ppb (188 μg/m$^3$) | 55.1 ppb (103.6 μg/m$^3$) |
| | Annual Arithmetic Average | 53 ppb (100 μg/m$^3$) | 14.18 ppb (26.8 μg/m$^3$) |
| $PM_{10}$ [2] | 24-Hour Concentration | 150 μg/m$^3$ | 28 μg/m$^3$ |
| $PM_{2.5}$ [2] | 24-Hour Concentration (average of 98$^{th}$ percentile for last 3 years) | 35 μg/m$^3$ | 17.7 μg/m$^3$ |
| | Average of last 3 years' Annual Means | 12 μg/m$^3$ | 7.0 μg/m$^3$ |

Note:
1. New York State Ambient Air Quality Report for 2019, dec.ny.gov/chemical/8406.html#Quality.
2. New York State Ambient Air Quality Report for 2020, dec.ny.gov/chemical/8406.html#Quality.
3. Queens College (Site No. 36-081-0124), the nearest federally-mandated monitoring station(s) to the Project Area.
4. μg/m$^3$ – microgram per meter cube; ppm – parts per million; ppb – parts per billion.

In addition to the NAAQS, the *2021 CEQR Technical Manual* requires that projects subject to CEQR apply $PM_{2.5}$ and CO significant impact criteria (*de minimis*). The *2021 CEQR Technical Manual de minimis* criteria set allowable incremental increases in CO and $PM_{2.5}$ concentrations that would result as a consequence of a proposed project. The *de minimis* for CO is:

- An increase of 0.5 parts per million (ppm) or more in the maximum 8-hour average CO concentration at a location where the predicted No-Action 8-hour concentration is equal to 8 ppm or between 8 ppm and 9 ppm; or
- An increase of more than half the difference between baseline (i.e., No-Action) concentrations and the 8-hour standard, when No-Action concentrations are below 8 ppm.

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

- Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources; or for mobile sources, at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations).
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

**Noncriteria Pollutants Standards**

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

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

### 2.9.3 Mobile Sources

According to the *2021 CEQR Technical Manual*, projects, whether site- specific or generic, may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic; create any other mobile sources of pollutants (such as diesel trains, helicopters etc.); or add new uses near mobile sources (roadways, garages, parking lots, etc.). Projects requiring further assessment include:

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

The Proposed Actions would not result in operable windows or air intakes within 200 feet of an atypical roadway. It would not result in creation of a covered roadway or affect any covered roadway. Peak hour trip generation is far below the 170-car threshold, as per the transportation section, as potentially warranting further assessment. The Proposed Actions would not create a new sensitive receptor adjacent to large parking facilities.

### 2.9.4 Stationary Sources

According to the *2021 CEQR Technical Manual*, projects may result in stationary source air quality impacts when one or more of the following occurs:

- New stationary sources of pollutants are created (e.g., emission stacks for industrial plants, hospitals, and other large institutional uses).
- Certain new uses near existing (or planned future) emissions stacks are introduced that may affect the use.
- Structures near such stacks are introduced so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected.

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

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

The Proposed Actions would introduce new uses within 400 feet of existing manufacturing processing facilities. As such, an air toxics analysis is required.

#### *2.9.4.1 Heating and Hot Water Systems*

The HVAC systems analysis evaluates if the project-increment buildings' HVAC system(s) could significantly impact other land uses in the area. Based on the *2021 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.
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. A detailed analysis is required if the screening assessment fails. In addition, as screening analysis

can only be applied to a single smokestack, for the cumulative screening analysis, emissions from multiple stacks were combined in a single stack situated as close as possible to the receiving building.

For analysis purposes, the Proposed Development building height (67-foot-tall building) was assumed for Projected Development Site 1. Projected Development Site 2 height is the RWCDS.

HVAC Screening Assessment - Project-on-Project

The Proposed Development on Projected Development Site 1 abuts Projected Development Site 2. Therefore, the screening analysis is not applicable, and a detailed analysis is required.

HVAC Screening Assessment - Project-on-Existing

For the project-on-existing screening assessment, the Projected Development Sites 1 and 2 were analyzed as a single building containing 190,286 GSF, which is the floor area of Projected Development Site 1 (110,964 GSF facilitate by the RWCDS) and Projected Development Site 2 (79,322 GSF) combined gsf. A height of 67 feet was assumed, which is the Proposed Development's building height. The nearest similar or greater in height building is the under construction 125-foot-tall development site associated with the Proposed Actions *Downtown Far Rockaway Redevelopment Project* (CEQR #16DME010Q), located 65 feet from the Projected Development Site 2. **Figure 2.9-1** shows existing building footprints and roof heights within 400 feet of the Projected Development Sites, including developments associated with other CEQR actions in the area.

**Figure 2.9-1: Existing building footprints and roof heights[19] in the surrounding area, including development(s) associated with other CEQR actions within 400 feet**

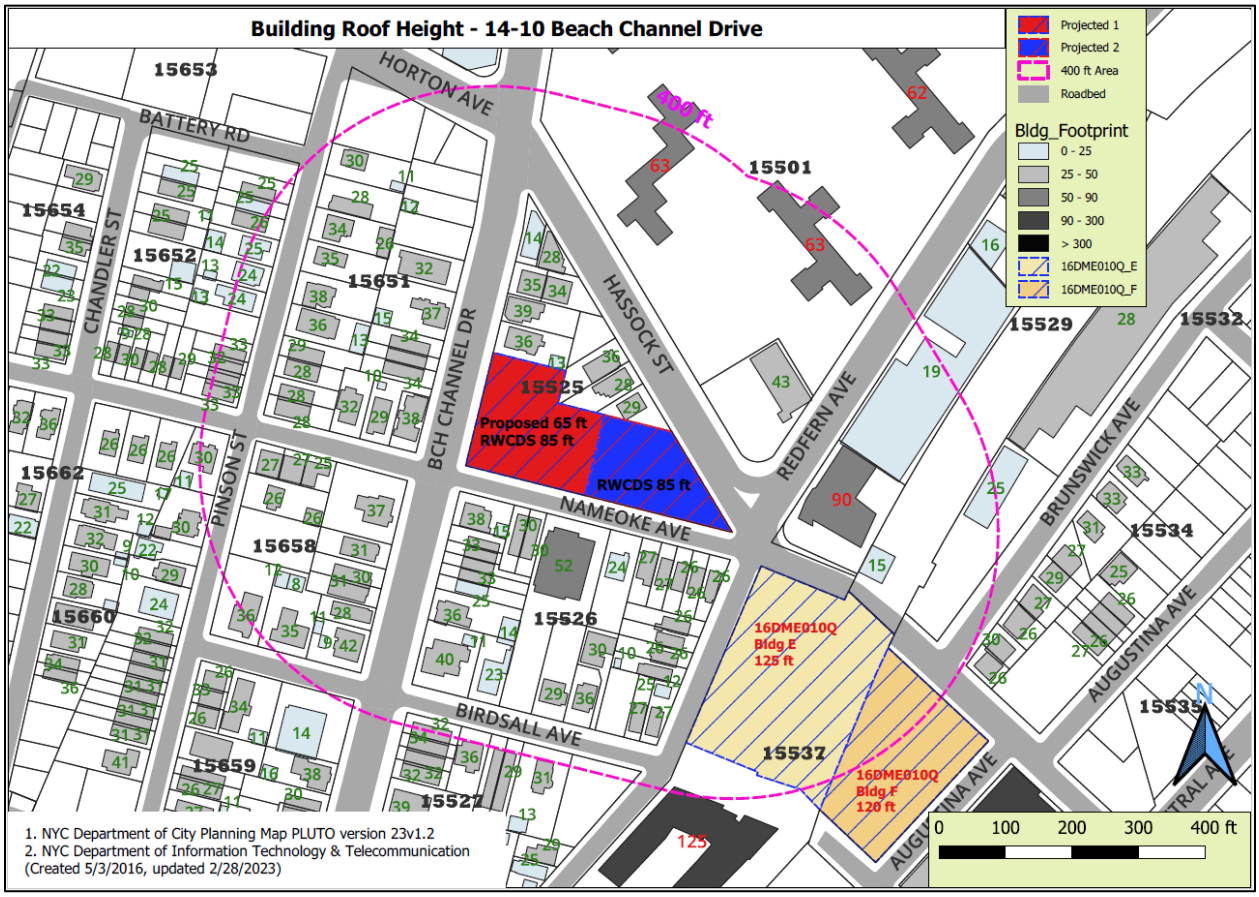


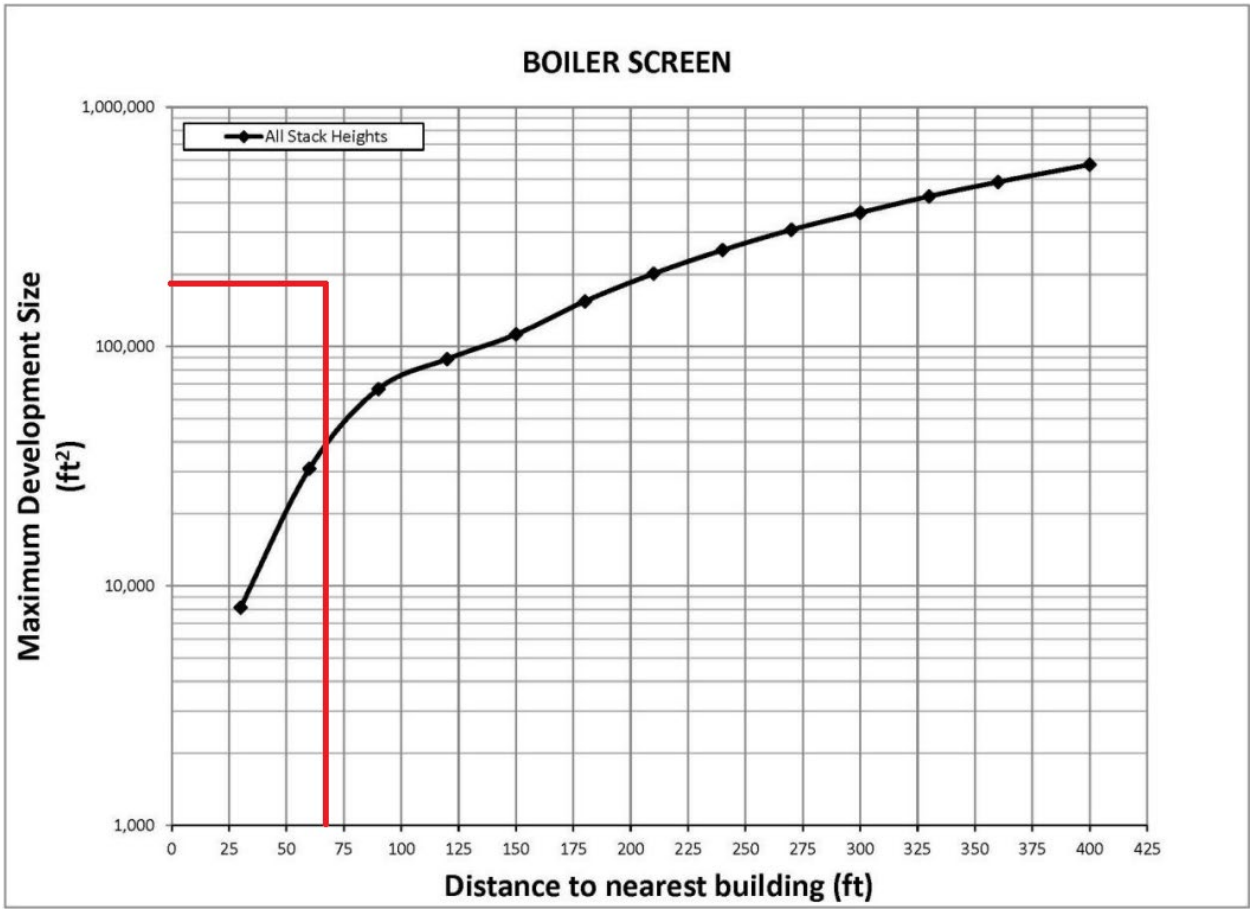

**Figure 2.9-2** shows the project-on-existing screening analysis. As seen in the project-on-existing screening analysis (see **Figure 2.9-2**), using the nomograph provided in the *CEQR Technical Manual*, the Projected Development Sites 1 and 2 combined gsf would fall above the curve for a fossil fuel-fired HVAC system. Therefore, a detailed analysis is required for the 125-foot-tall development (currently under construction) associated with the Proposed Actions *Downtown Far Rockaway Redevelopment Project* (CEQR #16DME010Q), located at the southeast corner of Redfern Avenue and Nameoke Avenue (see **Figure 2.9-2**) intersection.

In addition, the newly constructed 90-foot-tall building located at the northeast corner of Redfern Avenue and Nameoke Avenue (see **Figure 2.9-2**) intersection (this newly constructed building is also associated with the Proposed Actions *Downtown Far Rockaway Redevelopment Project*

[19] City of New York, Office of Technology and Innovation (2016). "Building-Footprints." opendata.cityofnewyork.us, Feb. 28, 2023.

(CEQR #16DME010Q)) is situated approximately 100 feet from the Projected Development Site 2, and therefore, a detailed analysis is also required for this building.

**Figure 2.9-2: Project on Existing – HVAC Screen**




Detailed Analysis

A detailed analysis was conducted for the following scenarios:

- Project-on-Existing: Projected Development Sites 1 and 2 potential for significant adverse impact on the development associated with the Proposed Actions *Downtown Far Rockaway Redevelopment Project* (CEQR #16DME010Q) and the newly constructed, 90-foot-tall building, at 20-50 Nameoke Avenue (Block 15529, Lot 10).
- Project-on-Project: The Proposed Project potential for significant adverse impact on the Project Development Site 2.

AERMOD, processor version 22112, was used in the analysis. AERMOD application incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources and simple and complex terrain. The model

was run with the regulatory default option, where applicable, and for both with and without downwash effects options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses used five consecutive years of meteorological data (2017-2021) obtained from NYSDEC. Surface data used in the analysis is from LaGuardia Airport, and upper air data is from Brookhaven station, New York. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period. Population in Kings County, obtained from the New York City Department of City Planning (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 was assumed to be the type of fossil fuel, if any, used in the Proposed Development and Projected Development Site 2 HVAC systems, and the HVAC system of the Proposed Development would be fitted with low-NOx (30 ppm) 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 and an energy consumption rate of 60.3 thousand Btu per GSF.[20] All fuel was assumed to be consumed during the 100-day heating season (2,400 hours) based on the *CEQR Technical Manual.* The NOx emission of the Projected Development Site 1 low-NOx equipment was calculated based on emission factor from the DCP. All pollutants emission rates were calculated based on emission factors published in the EPA AP-42 manual for external combustion sources (100 and 7.6 pounds per million square feet for NOx and $PM_{2.5}$, respectively). **Table 2.9-2** shows the pollutants emission rates of the Projected Development Sites 1 and 2 HVAC systems.

**Table 2.9-2: HVAC System(s) Short-term and Annual Emission Rates**

| Site ID | Floor Area and Building Height (1) | Fuel Used | Pollutant | Short-term Emission Rate (g/s) | Annual Emission Rate (g/s) |
|---|---|---|---|---|---|
| Projected Development Site 1 | 110,964 gsf; 67 ft | Natural Gas | $NO_2$ | 6.40E-03 | 1.75E-03 |
| | | | $PM_{2.5}$ | 2.62E-03 | 7.17E-04 |
| Projected Development Site 2 | 75,963 gsf; 85 ft | Natural Gas | $NO_2$ | 2.46E-02 | 6.74E-03 |
| | | | $PM_{2.5}$ | 1.87E-03 | 5.13E-04 |

Note:
1. Projected Development Site 1 was analyzed with the Proposed Development building height and the RWCDS GSF. Projected Development Site 2 is the RWCDS.

The boiler stacks' diameters and 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).[21] The boiler stack(s)

[20] 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.*
[21] DEP "CA Permit" database obtained from the New York City Department of City Planning, February 2020.

was initially placed 3 feet above the roofline and as close as possible to the receiving building. A stack setback distance was specified if an impact was predicted.

The Projected Development Sites 1 and 2 were modeled as buildings that cover their entire lot area (the wall façade located on the outer lot lines). Buildings in the surrounding area were accounted for in the downwash effect on plume dispersions (BPIP). Receptors on the receiving building(s) were placed on all wall façade from the ground floor to the rooftop height in spaced intervals (more congested near the stack(s) height and at wall façade(s) closer to the emission source). 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 the 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 the building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The $NO_2$ modeled concentrations were added to the background concentrations, and the result was evaluated with the NAAQS. $PM_{2.5}$ modeled concentrations were evaluated with the *de minimis* for stationary source. The HVAC dispersions analysis results are shown in **Table 2.9-3**.

**Table 2.9.-3: 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 |
|---|---|---|---|---|---|
| **Project-on-Project: Concentration at Projected Development Site 2** | | | | | |
| 1-hour $NO_2$ | 55.76 | 103.59 | **159.3** | **188** | NAAQS |
| Annual $NO_2$ | 0.68 | 26.8 | **27** | **100** | NAAQS |
| 24-hour $PM_{2.5}$ | 6.42 | 17.70 | **6.4** | **8.65** | *de minimis* |
| Annual $PM_{2.5}$ | 0.28 | 7.0 | **0.28** | **0.3** | *de minimis* |
| **Project-on-Existing: Highest concentration at the development associated with the Proposed Actions *Downtown Far Rockaway Redevelopment Project* (CEQR #16DME010Q) or the newly constructed, 90-foot-tall building, at 20-50 Nameoke Avenue (Block 15529, Lot 10)** | | | | | |
| 1-hour $NO_2$ | 79.90 | 103.59 | **183.5** | **79.90** | NAAQS |
| Annual $NO_2$ | 1.02 | 26.8 | **28** | **1.02** | NAAQS |
| 24-hour $PM_{2.5}$ | 1.70 | 17.70 | **1.7** | **1.70** | *de minimis* |
| Annual $PM_{2.5}$ | 0.08 | 7.0 | **0.08** | **0.08** | *de minimis* |

As seen in **Table 2.9-3**, 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 specific requirements to ensure that no impact(s) would occur. The air quality environmental requirement(s) (E-Designations) placed on the properties are specified in the Conclusion section of this chapter.

### 2.9.5 Industrial Sources

The Proposed Actions would introduce sensitive land uses into the area. Accordingly, a preliminary screening was conducted to determine if there are any potential sources of industrial process emissions that could affect project occupants. Industrial sources were identified through a site visit within a 400-foot Study Area, the DEP CATS database, and the NYSDEC database search (DECinfo Locator online map application).

400-Foot Study Area

The Affected Area is located within a R5 zoning district, and the surrounding area is a mixture of residential, commercial, and industrial properties. The 400-foot radius was screened for potential sources of industrial emissions and is shown below in **Figure 2.9-3** and **Table 2.9-4**. Based on field observations and reviews of DCP land use maps, several sites were identified as industrial/manufacturing land uses. Based on the review of the DEP CATS database, there were active permits identified at site 1. In addition, two facilities (sites 1 and 2) were identified as minor facilities (Air Facility Registration (AFR) Certificates) in the NYSDEC database. The results of the search were verified by DEP via the Air Permits email, and the appropriate DEP Air Permit Request form was submitted.

**Figure 2.9-1: Industrial Emissions Screening**



**Table 2.9-4: Industrial/Manufacturing within 400 feet of the Affected Area**

| Site ID | Block | Lots | Address | Current Use | Industrial Permit Search Results (1) |
|---|---|---|---|---|---|
| 1 | 15537 | 89, 94 | 20-09 Nameoke Avenue | Auto Body/Collision or Auto Repair (G2) | DEP: PB025414, PB064507; AFR: 2-6308-00264/00003 |
| | | 99 | 14-06 Augustina Avenue | Auto Body/Collision or Auto Repair | AFR: 2-6308-01113/00001 |

Note:
1. DEP – NYC Department of Environmental protection.
2. AFR – minor facility with an NYSDEC Air Facility Registration (AFR) certificate.

Current DEP processing permits PB025414 and PB064507 were issued to Arties Collision at 20-09 Nameoke Avenue (Block 15537, Lot 89) for two auto body spray booths. These DEP permits expire on 07/30/2024. A Freedom of Information (FOI) request was submitted to the DEP on 08/23/2023 for information regarding permits PB025414 and PB064507. Arties Collision, Inc. also has an NYSDEC AFR Certificate (Registration ID 2-6308-00264/00003, effective date 12/19/2007 and no expiration date) for two paint spray booths used to paint cars after they have been repaired. The Arties Collision facility is located within 400 feet of the Projected Development Sites 1 or 2. Information in the DEP permits PB025414 and PB064507 was used in the air toxics analysis.

NYSDEC AFR Certificate (Registration ID 2-6308-01113/00001, effective date 11/02/2021, expiration date 11/01/2031) was issued to Tristans Auto Repair, LLC at 14-06 Augustina Avenue (Block 15537, Lot 99) for an auto body shop. The shortest distance between the building at 14-06 Augustina Avenue (Block 15537, Lot 99) and Projected Development Sites 1 or 2 is approximately 360 feet (approximately 500 feet at its furthest point). Multiple facilities operate from the building at 14-06 Augustina Avenue (Block 15537, Lot 99). As the location of the Tristans Auto Repair, LLC facility in the building was not known, the facility was included in the air toxics analysis.

Industrial Source Dispersion Analysis

An air toxics analysis was conducted for the Arties Collision, Inc. and Tristans Auto Repair, LLC facilities. Emissions from spray-painting processing consist of solids (particulate) and solvents. Solvents are volatile organic compounds (VOCs). The solids bind to the sprayed article, giving it the desired look and color. However, some of the sprayed solids are over-sprayed and could be emitted to the outside air. The VOCs evaporate during the spraying activity and while the coating substance dries. VOC and particulate emission rates specified in the DEP permits PB025414 and PB064507, issued to Arties Collision, were applied in the analysis. **Table 2.9-5** show the particulate and VOC emissions specified in the DEP permits PB025414 and PB064507 and the spray-painting daily activity rate.

The Tristans Auto Repair, LLC facility operates with no DEP permit. The particulate and VOC emissions of the Tristans Auto Repair, LLC facility were based on a coating compound consumption rate of 0.125 gallon per hour during 4 hours per day and 250 days per year activity, based on DCP guidance on similar type of facilities operating with no DEP permit. Particulate and VOC short-term emissions were calculated using the DEP Emission Worksheet calculation. Using the DEP Emission Worksheet calculation, the coating compound consumption rate (in gallons) is multiplied by a weight fraction factor of 0.65, yielding uncontrolled particulate emission in pounds. As the Tristans Auto Repair, LLC facility has a NYSDEC AFR Certificate (Registration ID 2-6308-01113/00001), the surface coating processes were assumed to be controlled by a filter with at least 80 efficiency. For VOC emission, the coating compound consumption rate is multiplied by a weight fraction factor of 6.20, yielding total VOC emission in pounds. Using the DEP Emission Worksheet is based on DCP guidance on similar types of projects under CEQR. **Table 2.9-5** shows the Tristans Auto Repair, LLC facility particulate and VOC emissions, and activity rate.

**Table 2.9-5: Particulate and VOC Emissions by group from the spray-painting operation**

| Facility | Particulate | | VOC | | Activity Rate |
|---|---|---|---|---|---|
| | (lb/hr) | (lb/yr) | (lb/hr) | (lb/yr) | |
| Arties Collision, Inc. (DEP Permit PB064507) | 0.033 | 32.15 | 1.55 | 1,550 | 4 hr/day; 250 day/yr |
| Arties Collision, Inc. (DEP Permit PB025414) | 0.008 | 6.5 | 0.775 | 620 | 4 hr/day; 250 day/yr |
| Tristans Auto Repair, LLC | 0.01625 | 0.065 | 0.775 | 775 | 4 hr/day; 250 day/yr |

Particulate emissions shown in **Table 2.9-5** include p9articulate ranging in size. A particle size distribution of 46.7 percent and 28.6 percent for $PM_{10}$ and $PM_{2.5}$, respectively, obtained from the EPA *AP-42 Manual Appendix B.1-12, Automobile and Light-Duty Truck Surface Coating Operations: Automobile Spray Booths (Water-Base Enamel)*, was used to derive the $PM_{10}$ and $PM_{2.5}$ spray booths emissions. The particulate maximum 24-hour average emissions were derived from the 1-hour maximum emissions and the processing operations activity rates **Table 2.9-6** shows the $PM_{2.5}$ and $PM_{10}$ emissions from auto bodies' spray-painting operations.

**Table 2.9-6: $PM_{2.5}$ and $PM_{10}$ emission from spray painting operations**

| Facility | $PM_{2.5}$ | | $PM_{10}$ |
|---|---|---|---|
| | (lb/day) | (lb/yr) | (lb/day) |
| Arties Collision, Inc. (DEP Permit PB064507) | 0.038 | 9.2 | 0.062 |
| Arties Collision, Inc. (DEP Permit PB025414) | 0.015 | 1.9 | 0.015 |
| Tristans Auto Repair, LLC | 0.019 | 4.6 | 0.030 |

Note:

1. Particle size distribution of 28.6% and 46.7% were used to calculate the $PM_{2.5}$ and $PM_{10}$ emissions, respectively.

The Tristans Auto Repair, LLC VOC emissions by chemical type presented in **Table 2.9-6** are estimated based on DEP permits (Permit Numbers PW001217) from representative automotive

repair shops located at 2250 McDonald Avenue (Block 7103, Lot 32), 2256 McDonald Avenue (Block 7103, Lot 56), and 2260 McDonald Avenue (Block 7103, Lot 36) in Brooklyn for a total of 9,374 gsf facility. The chemicals that make up the VOC group by percent weight, listed in permit PW001217, correspond to the PPG coating compounds. PPG is a major international coating compound manufacturer that many autobody facilities in New York City, based on general fieldwork observations, use their products. As such, the chemicals composition (chemicals by percent weight) specified in the DEP permit PW001217 was deemed to be a good representative for the surface coating processes of Tristans Auto Repair, LLC facility. **Table 2.9-7** shows the estimated Tristans Auto Repair, LLC facility chemicals that make up the VOC emission.

The DEP permits PB025414 and PB064507, issued to Arties Collision, did not provide the VOC chemical composition of the paint used in spray-painting process operation(s). However, Spies Hecker paint is listed in the DEP permits PB025414 and PB064507 as the type of coating used in the processing operation. As such, a representative VOC chemical composition (chemicals by percent weight) was derived from a Material Safety Data Sheet (MSDS) for a Spies Hecker automotive topcoat. **Table 2.9-7** shows the VOC chemical composition by percent weight and the chemical emission rates applied in the analysis.

**Table 2.9-7: Tristans Auto Repair, LLC and Arties Collision, Inc. estimated VOC emissions from the spray-painting operations**

| Chemical | CAS No. | Percent Weight | Emission | |
|---|---|---|---|---|
| | | | lb/hr | lb/yr |
| **Tristans Auto Repair, LLC** | | | | |
| Isopropyl Alcohol | 67-63-0 | 1.43% | 0.0111 | 11.1 |
| Acetone | 67-64-1 | 16.99% | 0.1317 | 131.7 |
| Methyl Ethyl Ketone | 78-93-3 | 6.21% | 0.0481 | 48.1 |
| Butyl Benzyl Phthalate | 85-68-7 | 0.80% | 0.0062 | 6.2 |
| Ethylbezene | 100-41-4 | 0.72% | 0.0055 | 5.5 |
| Methyl Isobutyl Ketone | 108-10-1 | 0.48% | 0.0037 | 3.7 |
| Methoxypropylacetate | 108-65-6 | 3.63% | 0.0281 | 28.1 |
| Methylcyclohexane | 108-87-2 | 2.15% | 0.0166 | 16.6 |
| Toluene | 108-88-3 | 12.74% | 0.0988 | 98.8 |
| Isopropyl Acetate | 110-19-0 | 2.65% | 0.0206 | 20.6 |
| Methyl Amyl Ketone | 110-43-0 | 0.24% | 0.0018 | 1.8 |
| Butyl Acetate | 123-86-4 | 36.28% | 0.2812 | 281.2 |
| Heptane. N- | 142-82-5 | 6.21% | 0.0481 | 48.1 |
| Ethyl 3-Ethoxypropionate | 763-69-9 | 1.24% | 0.0096 | 9.6 |
| Xylenes | 1330-20-7 | 3.72% | 0.0288 | 28.8 |
| Ligroine | 8032-32-4 | 3.63% | 0.0281 | 28.1 |
| 2-(2H-Benzotriazol-2-yl)-4,6-Ditertpentylphenol | 25973-55-1 | 0.48% | 0.0037 | 3.7 |
| Naphtha Light Aliphatic | 64742-89-8 | 0.95% | 0.0074 | 7.4 |
| **Arties Collision, Inc.** | | | | |

| | | | | |
|---|---|---|---|---|
| N-Butyl Acetate | 123-86-4 | 30.94% | 0.7194 | 671.4 |
| Hydrocarbons, C9, aromatics | 128601-23-0 | 30.94% | 0.7194 | 671.4 |
| Xylol [(1)] | 1330-20-7 | 30.94% | 0.7194 | 671.4 |
| 2-methoxy-1-methylethyl acetate | 108-65-6 | 6.19% | 0.1439 | 134.3 |
| methyl methacrylate | 80-62-6 | 0.37% | 0.0086 | 8.1 |
| methacrylic acid, monoester with propane-1,2-diol | 27813-02-1 | 0.37% | 0.0086 | 8.1 |
| n-butyl methacrylate | 97-88-1 | 0.25% | 0.0058 | 5.4 |
| Note:<br>1. Reaction mass of ethylbenzene & xylene (EC: 905-588-0) identified as Xylol, a substance containing 75% Xylene, 25% ethylbenzene, 0.5% toluene. Xylol was analyzed as Xylene. | | | | |

The *CEQR Technical Manual* Industrial Source Screen methodology was used to predict pollutant concentrations. The *CEQR Technical Manual* Industrial Source Screen can be used to predict a pollutant concentration emitted from a single source at various distances (from 30 to 400 feet). The spray booth stacks of Arties Collision, Inc. is located approximately 350 feet from the Projected Development Site 2. The Tristans Auto Repair, LLC facility is located at least 360 feet from the Projected Development Site 2. A distance shorter or equal to the distance between the spray booth stack(s) and Projected Development Site 2 was used in the screening analysis. The criteria pollutants dispersion analysis results are presented in **Table 2.9-8**.

**Table 2.9-8: Criteria pollutants dispersion analysis result**

| | Concentration | | |
|---|---|---|---|
| | **$PM_{2.5}$ 24-Hour ($\mu g/m^3$)** | **$PM_{2.5}$ Annual ($\mu g/m^3$)** | **$PM_{10}$ 24-Hour ($\mu g/m^3$)** |
| Increment Conc. | 0.17 | 0.01 | 0.28 |
| Background Conc. | 17.7 | 7.0 | 28 |
| With- Action Ambient Conc. | 17.9 | 7.01 | 31 |
| NAAQS | 35 | 12 | 150 |

As seen in **Table 2.9-8**, $PM_{10}$ and $PM_{2.5}$ concentrations are within the NAAQS. **Table 2.9-9** shows the 1-hour and annual noncriteria pollutant increment concentration.

**Table 2.1-9: Noncriteria pollutants concentrations**

| **Contaminant** | **CAS No.** | **1-Hour ($\mu g/m^3$)** | | **Annual ($\mu g/m^3$)** | |
|---|---|---|---|---|---|
| | | **Conc.** | **SGC** | **Conc.** | **AGC** |
| Isopropyl Alcohol | 67-63-0 | 1.6 | 98000.0 | 0.009 | 7000.0 |
| Acetone | 67-64-1 | 19.1 | 180000.0 | 0.1 | 30000.0 |
| Butanone | 78-93-3 | 7.0 | 13000.0 | 0.04 | 5000.0 |
| Methyl methacrylate ** | 80-62-6 | 1.4 | 41000.0 | 0.007 | 700.000 |

| | | | | | |
|---|---|---|---|---|---|
| Benyzl Butyl Phthalate *** | 85-68-7 | 0.9 | --- | 0.005 | 0.42 |
| N-butyl methacrylate | 97-88-1 | 0.9 | --- | 0.005 | --- |
| Ethylbezene ** | 100-41-4 | 0.8 | --- | 0.004 | 1000.0 |
| 4-Methylpentan ** | 108-10-1 | 0.5 | 31000.0 | 0.003 | 3000.0 |
| 2-Methoxy-1-Methylethyl Acetate | 108-65-6 | 27.3 | 36850.0 | 0.1 | 2000.0 |
| Methylcyclohexane | 108-87-2 | 2.4 | --- | 0.01 | 3800.0 |
| Toluene ** | 108-88-3 | 14.4 | 37000.0 | 0.1 | 5000.0 |
| Isopropyl Acetate | 110-19-0 | 3.0 | 71300.0 | 0.02 | 565.0 |
| Heptan-2-one | 110-43-0 | 0.3 | --- | 0.001 | 550.0 |
| N-Butyl Acetate | 123-86-4 | 157.2 | 71300.0 | 0.8 | 565.0 |
| Heptane | 142-82-5 | 7.0 | 210000.0 | 0.04 | 3900.0 |
| Ethyl 3-Ethoxypropionate ** | 763-69-9 | 1.4 | 140.0 | 0.008 | 64.0 |
| Xylenes ** | 1330-20-7 | 120.5 | 22000.0 | 0.6 | 100.0 |
| Ligroine | 8032-32-4 | 4.1 | --- | 0.02 | 900.0 |
| 2-(2H-Benzotriazol-2-yl)-4,6-Ditertpentylphenol | 25973-55-1 | 0.5 | --- | 0.003 | --- |
| Methacrylic acid, monoester with propane-1,2-diol | 27813-02-1 | 1.4 | --- | 0.007 | --- |
| Solvent Naphtha | 64742-89-8 | 1.1 | --- | 0.006 | 3200.0 |
| Hydrocarbons, C9, aromatics | 128601-23-0 | 116.3 | --- | 0.6 | --- |
| Note:<br>Indicates a HAP: **<br>Indicates an NYSDEC DAR-1 AGC equivalent to one in a million excess cancer risk: *** | | | | | |

As seen in **Tables 2.1-9**, the noncriteria pollutant concentrations are within the SGC/AGC standard. In addition, the cumulative inhalation cancer risk is 0.02 (less than 1), and the multi-chemical hazardous index is 0.002 (less than 1). Therefore, no significant adverse air quality impact is expected in the future with the Proposed Actions from manufacturing processing facilities operating within 400 feet of the Projected Development Sites 1 or 2.

1,000-Foot Study Area

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

### 2.9.6 Conclusion

Based on the analysis, conditions associated with the Proposed Actions would not result in any violations of the ambient air quality standards. Therefore, there is no reason to believe that the Proposed Actions would result in any potentially significant adverse stationary air quality

impact(s), and further assessment is not warranted. The summary results of the analysis are as follows:

- There are manufacturing processing facilities within 400 feet of the Projected Development Site 2, for which an air toxics analysis was conducted. No significant adverse air quality impact was predicted in the air toxics analysis. Contaminant concentrations would be below the threshold criteria (NAAQS, SGC/AGC, and cumulative risk assessments). Additionally, no "major" or "large" source is located within a 1,000-foot of the Projected Development Sites 1 or 2; thus, no analysis was warranted.
- No significant adverse impact was predicted in the HVAC analysis with the project-increment buildings adhering to the environmental requirement specified in the Air Quality E-Designation(s) below.

Accordingly, based on the results of the analyses described above, the following (E) Designation would be required:

**(E) Designation**

**Block 15525, Lots 1, and 51 (Projected Development Site 1): Any new residential, commercial, or community facility 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 (30 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 70 feet above grade, and that the stack is located at least 60 feet from the eastern lot line of Block 15525, Lot 51 to avoid any potential significant adverse air quality impacts.**

**Block 15525, Lots 40, 44, 47, and 49 (Projected Development Site 2): Any new residential 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 88 feet above grade, and that the stack is located at least 20 feet from the northeastern lot line facing Hassock Street to avoid any potential significant adverse air quality impacts.**

## 2.10 Noise

### Introduction

This Noise Analysis was conducted to assess the potential for adverse noise impacts related to the Future With-Action Condition, associated with the Proposed Actions, including an eight (8) story multi-family residential building with ground floor commercial retail and community facility uses at Projected Development Site 1 (Block 15525, Lots 1 and 51) and an eight (8) story multi-family residential building at Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49).

Both Projected Development Sites 1 and 2 comprise the entirety of the Affected Area to which the Proposed Actions apply, located in the Far Rockaway neighborhood of Queens Community District 14. The Affected Area is bounded by Beach Channel Drive to the west, Nameoke Avenue to the south, Hassock Street to the east, and residential properties to the north. Beach Channel Drive is considered a minor arterial street while Nameoke Avenue and Hassock Street are considered local roads. Parking is generally provided on either side of all of these roads (with the exception of the south side of Nameoke Avenue).

This noise analysis is limited to an assessment of ambient noise that could adversely affect building occupants of the development at Projected Development Sites 1 and 2, as well as an evaluation of the potential impact associated with project-generated Noise Passenger Car Equivalents (PCEs) on adjacent receptors.

### Framework of Noise Analysis

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

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

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz) and are most sensitive to frequencies in the 1,000- to 5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common frequency weightings used are the A- and C-

weightings. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighting is the most commonly used for environmental measurements, and sound levels measured using this weighting are denoted as dBA. The letter "A" indicates that the sound has been filtered to reduce the strength of very low and very high-frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high-frequency bands are significantly affected by C-weighting. **Table 2.10-1** notes the decibel levels of common noise sources.

**Table 2.10-1: Noise Levels of Common Sources[22]**

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

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

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

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law. In a large open area with no obstructive or reflective surfaces, it is a general rule that at distances greater than 50 feet, the SPL from a point source of noise drops off at a rate of 6 dB with each doubling of distance away from the source. For "line" sources, such as vehicles on a street, the SPL drops off at a rate of 3 dBA with each doubling of the distance from the source. Sound energy is absorbed in the air as a function of temperature, humidity, and the

[22] Source: *2021 CEQR Technical Manual*

frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. The drop-off rate also will vary with both terrain conditions and the presence of obstructions in the sound propagation path.

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

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

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

**Noise Standards and Guidelines**

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the CEQR noise exposure guidelines for exterior noise levels. As shown in **Table 2.10-2** below, noise standards classify noise exposure into four categories based on noise level limits and land use, for vehicular traffic, rail, and aircraft noise sources: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable, Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior $L_{10}$ noise levels of 45 dB(A) or below or interior Ldn noise levels of 40 dB(A) or below depending on the noise source, as shown below in **Table 2.10-3**.

## Table 2.10-2: 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 ≤ 60 dBA---------- | | ----------60 < DNL ≤ 65 dBA---------- | | (I) 65 < DNL ≤ 75 dBA | | ---------- 75 dBA < DNL ---------- |
| 2. Hospital, nursing home | | $L_{10} \leq 55$ dBA | | 55 < $L_{10} \leq 65$ dBA | | 65 < $L_{10} \leq 80$ dBA | | $L_{10} > 80$ dBA | |
| 3. Residence, residential hotel, or motel | (7 AM to 10 PM) | $L_{10} \leq 65$ dBA | | 65 < $L_{10} \leq 70$ dBA | | 70 < $L_{10} \leq 80$ dBA | | $L_{10} > 80$ dBA | |
| | (10 PM to 7 AM) | $L_{10} \leq 55$ dBA | | 55 < $L_{10} \leq 70$ dBA | | 70 < $L_{10} \leq 80$ dBA | | $L_{10} > 80$ dBA | |
| 4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | |
| 5. Commercial or office | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | |
| 6. Industrial, public areas only[4] | Note 4 | Note 4 | | Note 4 | | Note 4 | | Note 4 | |

**Notes:**

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

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

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

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

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

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

**Table 2.10-3: Attenuation Values to Achieve Acceptable Interior Noise Levels**

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

Note:

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

### 2.10.1 Initial Impact Screening

**Future No-Action Condition**

No redevelopment of any lots comprising the Affected Area is projected occur under the Future No-Action Condition, such that existing conditions at both Projected Development Sites 1 and 2, as described above, would remain.

**Future With-Action Condition**

This Future With-Action Scenario was determined by assuming a maximum FAR and height buildout for both Projected Development Sites, as follows:

*Projected Development Site 1 (Block 15525, Lots 1 and 51; the Applicant-Owned Lots)*

On the combined 28,625-sf lot, it is assumed that the Applicant would construct an eight-story, 85-foot-tall mixed residential, commercial, and community facility building with 110,964 GSF (103,050 ZSF, 3.6 FAR) of total floor area. There would be 4,576 GSF (4,400 ZSF, 0.15 FAR) of UG 4 community facility floor area and 4,013 GSF (3,859 ZSF, 0.13 FAR) of UG 6 local retail floor area on the ground floor and 102,374 GSF (94,791 ZSF, 3.31 FAR) of UG 2 residential floor area on the upper floors. Assuming 850 GSF per dwelling unit, there would be 120 dwelling units, 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Since the Applicant intends to pursue MIH Option 1, approximately 30 units would be reserved as affordable to households with incomes averaging

60 percent of the AMI, resulting in 90 market-rate units. 53 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

*Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49; Non-Applicant Lots)*

On the combined 20,031-SF site, it is assumed that a 79,322 GSF (72,111 ZSF, 3.6 FAR), eight-story, 85-foot-tall residential building would be constructed. Assuming 850 GSF per dwelling unit, Projected Development Site 2 would contain 93 residential dwelling units (UG 2), 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Consistent with Projected Development Site, use of MIH Option 1 is assumed, resulting in approximately 23 units reserved as affordable to households with incomes averaging 60 percent of the AMI, leaving a balance of 70 market rate units. 41 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

The *2021 CEQR Technical Manual* recommends an analysis of two principal types of noise sources: mobile sources; and stationary sources. Both types of noise sources are examined in the following sections. The initial impact screening considers whether the project would:

(1) generate any mobile or stationary sources of noise; and/or

(2) be located in an area with existing high ambient noise levels.

As discussed above, this noise analysis is limited to an assessment of ambient noise that could adversely affect building occupants of the proposed development.

### 2.10.2 Noise Monitoring Results

**Measurement Location and Equipment**

Because the predominant noise sources in vicinity of the Affected Area consist of vehicular traffic and rail movements, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day for a 24-hour period and 20-minute periods. Noise Monitoring Location One (1) was located at an elevated level approximately 40 feet above ground with a direct line of sight to the nearby rail line within Projected Development Site 1 and was collected for a 24-hour period (this was considered representative for Projected Development Site 2 as well); Noise Monitoring Location Two (2) was located on street level on the east side of Beach Channel Drive between Hassock Street and Nameoke Avenue, and was collected for 20-minute periods; Noise Monitoring Location Three (3) was located on street level on the north side of Nameoke Avenue between Beach Channel Drive and Redfern Avenue; and was collected for 20-minute periods; Noise Monitoring Location Four (4) was located on street level on the southwest side of Hassock Street between Beach Channel Drive and Nameoke Street, and was collected for 20-minute periods. The noise monitoring locations are shown in **Figure 2.10-1** through **Figure 2.10-5** below.

**Figure 2.10-1: Noise Monitoring Locations**



**Figure 2.10-2: Location 1 – 40 Foot Lift within Project Development Site 1**



**Figure 2.10-3: Location 2 – Beach channel Drive between Hassock Street and Nameoke Avenue**

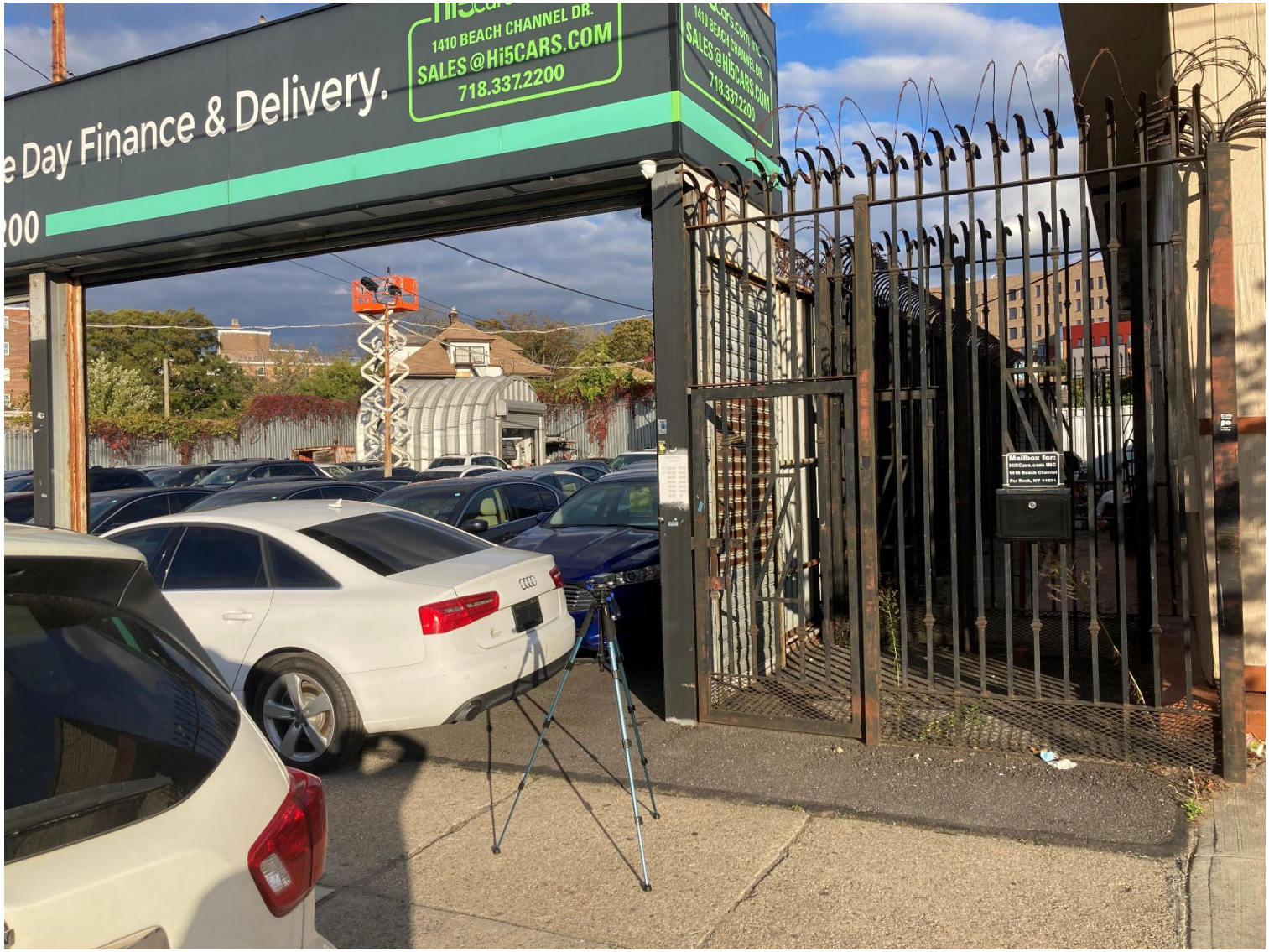


**Figure 2.10-4: Location 3 – Nameoke Avenue between Beach Channel Drive and Redfern Avenue**



**Figure 2.10-5: Location 4 – Nameoke Avenue between Beach Channel Drive and Redfern Avenue**



Noise monitoring was conducted using a Type 1 Casella CEL-633 sound level meters with wind screens. The monitors were placed on a tripod at a height of approximately four feet above the ground, away from any other noise-reflective surfaces. The monitors were calibrated prior to and following each monitoring session Periods of peak vehicular around the subject site constitute a worst-case condition for noise at the project site. Noise meter calibration certification and back up data are provided in **Appendix F**.

**Existing Conditions**

Monitoring was conducted during typical midweek conditions, on Wednesday October 19 through Thursday October 20, 2022. The weather was dry and wind speeds were moderate during all monitoring periods. The sound meters were calibrated before and after each monitoring session. **Tables 2.10-4** through **2.10-7** below contain the results for the measurements taken at Location 1 to Location 4, respectively.

The traffic volumes (vehicle counts) and vehicle classifications taken at the Affected Area during peak vehicular travel periods [morning (AM), noon (MD), and evening (PM)] concurrent with noise monitoring at Location 2 through 4 are shown below in **Table 2.10-8** through **Table 2.10-10** below.

**Table 2.10-4: Noise Levels in dBA at Location 1**

| Start Date & Time | LAeq | LAS 10% | LAS 50% | LAS 90% | LASmin | LASmax |
|---|---|---|---|---|---|---|
| 10/19/2022 10:54 | 60.2 dB | 61.0 dB | 57.5 dB | 54.5 dB | 51.6 dB | 79.7 dB |
| 10/19/2022 11:54 | 57.6 dB | 60.0 dB | 56.5 dB | 52.5 dB | 48.9 dB | 72.9 dB |
| 10/19/2022 12:54 | 59.7 dB | 61.0 dB | 56.5 dB | 53.0 dB | 49.5 dB | 83.1 dB |
| 10/19/2022 13:54 | 59.2 dB | 61.0 dB | 57.5 dB | 53.5 dB | 48.7 dB | 81.2 dB |
| 10/19/2022 14:54 | 58.5 dB | 60.0 dB | 56.0 dB | 52.0 dB | 47.6 dB | 81.9 dB |
| 10/19/2022 15:54 | 58.6 dB | 61.5 dB | 56.5 dB | 52.5 dB | 48.6 dB | 75.6 dB |
| 10/19/2022 16:54 | 61.3 dB | 62.5 dB | 60.0 dB | 54.5 dB | 46.8 dB | 81.3 dB |
| 10/19/2022 17:54 | 57.8 dB | 60.5 dB | 56.5 dB | 52.5 dB | 48.3 dB | 71.8 dB |
| 10/19/2022 18:54 | 57.1 dB | 59.0 dB | 55.5 dB | 51.5 dB | 46.7 dB | 77.6 dB |
| 10/19/2022 19:54 | 56.1 dB | 58.5 dB | 55.5 dB | 51.0 dB | 45.8 dB | 64.6 dB |
| 10/19/2022 20:54 | 56.3 dB | 59.0 dB | 55.5 dB | 51.5 dB | 46.6 dB | 70.8 dB |
| 10/19/2022 21:54 | 62.7 dB | 60.0 dB | 56.0 dB | 52.0 dB | 47.5 dB | 85.9 dB |
| 10/19/2022 22:54 | 56.7 dB | 59.0 dB | 55.0 dB | 50.5 dB | 45.1 dB | 75.1 dB |
| 10/19/2022 23:54 | 54.2 dB | 57.0 dB | 52.5 dB | 47.5 dB | 43.7 dB | 68.2 dB |
| 10/20/2022 0:54 | 53.9 dB | 57.0 dB | 52.0 dB | 47.5 dB | 44.4 dB | 70.7 dB |
| 10/20/2022 1:54 | 53.6 dB | 56.5 dB | 51.0 dB | 47.0 dB | 43.6 dB | 71.7 dB |
| 10/20/2022 2:54 | 51.1 dB | 54.5 dB | 47.5 dB | 44.0 dB | 42.1 dB | 65.7 dB |
| 10/20/2022 3:54 | 51.1 dB | 55.5 dB | 47.0 dB | 43.5 dB | 41.6 dB | 67.7 dB |
| 10/20/2022 4:54 | 53.4 dB | 57.0 dB | 50.0 dB | 45.0 dB | 43.0 dB | 71.6 dB |
| 10/20/2022 5:54 | 56.6 dB | 59.5 dB | 55.5 dB | 50.5 dB | 44.6 dB | 68.6 dB |
| 10/20/2022 6:54 | 61.0 dB | 61.5 dB | 57.5 dB | 54.0 dB | 50.4 dB | 84.5 dB |
| 10/20/2022 7:54 | 62.6 dB | 62.0 dB | 57.5 dB | 54.5 dB | 50.7 dB | 88.9 dB |
| 10/20/2022 8:54 | 58.4 dB | 61.0 dB | 57.0 dB | 53.5 dB | 49.7 dB | 71.5 dB |
| 10/20/2022 9:54 | 62.3 dB | 62.0 dB | 58.0 dB | 55.0 dB | 51.1 dB | 83.3 dB |
| **Ldn** | | | | | | **63.5** |

**Table 2.10-5: Noise Levels in dBA at Location 2**

| October 19, 2022 | | | |
|---|---|---|---|
| **Time** | **7:31 am – 7:51 am** | **12:00 pm – 12:20 pm** | **4:31 pm – 4:51 pm** |
| $L_{max}$ | 82.1 | 79.8 | 86.4 |
| $L_{10}$ | **70.5** | 67.5 | 67.5 |
| $L_{eq}$ | 66.9 | 64.7 | 65.7 |
| $L_{50}$ | 64.5 | 62 | 62 |
| $L_{90}$ | 58 | 57 | 55 |
| $L_{min}$ | 56 | 55.1 | 51.2 |

**Table 2.10-6: Noise Levels in dBA at Location 3**

| October 19, 2022 | | | |
|---|---|---|---|
| **Time** | **8:01 am – 8:21 am** | **12:23 pm – 12:44 pm** | **4:53 pm – 5:13 pm** |
| $L_{max}$ | 84.5 | 70.7 | 71 |
| $L_{10}$ | 65.5 | 60 | 59 |
| $L_{eq}$ | 63.4 | 56.9 | 55.7 |
| $L_{50}$ | 59 | 54.5 | 53 |
| $L_{90}$ | 55 | 51 | 50 |
| $L_{min}$ | 52.1 | 49.3 | 48.1 |

**Table 2.10-7: Noise Levels in dBA at Location 4**

| October 19, 2022 | | | |
|---|---|---|---|
| **Time** | **8:25 am – 8:45 am** | **12:49 pm – 1:09 pm** | **5:15 pm – 5:35pm** |
| $L_{max}$ | 80.2 | 74.6 | 89.2 |
| $L_{10}$ | 62.5 | 64.5 | 66.5 |
| $L_{eq}$ | 60.9 | 61.2 | 65.9 |
| $L_{50}$ | 58.5 | 59 | 59 |
| $L_{90}$ | 56 | 56 | 52 |
| $L_{min}$ | 54.1 | 51.5 | 48.8 |

**Table 2.10-8: Traffic Volumes and Vehicle Classifications Noise Location 2**

| October 12, 2022 | | | |
|---|---|---|---|
| | **7:31 am – 7:51 am** | **12:00 pm – 12:20 pm** | **4:31 pm – 4:51 pm** |
| **Car/ Taxi** | 142 | 101 | 127 |
| **Van/Light Truck/SUV** | 112 | 72 | 99 |
| **Medium Truck** | 20 | 11 | 9 |
| **Heavy Truck** | 1 | 1 | 0 |
| **Bus** | 8 | 3 | 5 |

**Table 2.10-9: Traffic Volumes and Vehicle Classifications Noise Location 3**

| October 12, 2022 | | | |
|---|---|---|---|
| | **8:01 am – 8:21 am** | **12:23 pm – 12:44 pm** | **4:53 pm – 5:13 pm** |
| **Car/ Taxi** | 17 | 10 | 13 |
| **Van/Light Truck/SUV** | 10 | 6 | 7 |
| **Medium Truck** | 1 | 0 | 0 |
| **Heavy Truck** | 0 | 0 | 0 |
| **Bus** | 1 | 0 | 0 |

**Table 2.10-10: Traffic Volumes and Vehicle Classifications Noise Location 4**

| October 12, 2022 | | | |
|---|---|---|---|
| | **8:25 am – 8:45 am** | **12:49 pm – 1:09 pm** | **5:15 pm – 5:35pm** |
| **Car/ Taxi** | 23 | 20 | 24 |
| **Van/Light Truck/SUV** | 15 | 14 | 19 |
| **Medium Truck** | 0 | 2 | 2 |
| **Heavy Truck** | 0 | 0 | 0 |
| **Bus** | 1 | 1 | 1 |

### 2.10.3 Conclusion

The *2021 CEQR Technical Manual* sets external noise exposure standards, which are classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 40 dB(A) or lower where train movements are the noise source. For a residential use such as what would occur under the Proposed Actions, an $L_{10}$ of between 65 and 75 dB(A) is identified as marginally unacceptable general external exposure.

- The $L_{dn}$ at Location 1 was 63.5.
- The highest recorded $L_{10}$ at Location 2 was 70.5 dB(A) during the AM monitoring period.
- The highest recorded $L_{10}$ at Location 3 was 65.5 dB(A) during the AM monitoring period.
- The highest recorded $L_{10}$ at Location 4 was 66.5 dB(A) during the PM monitoring period.

The following noise attenuation measures would be required as written below (formalized as E-Designation language) and as shown in **Figure 2.10-5** below.

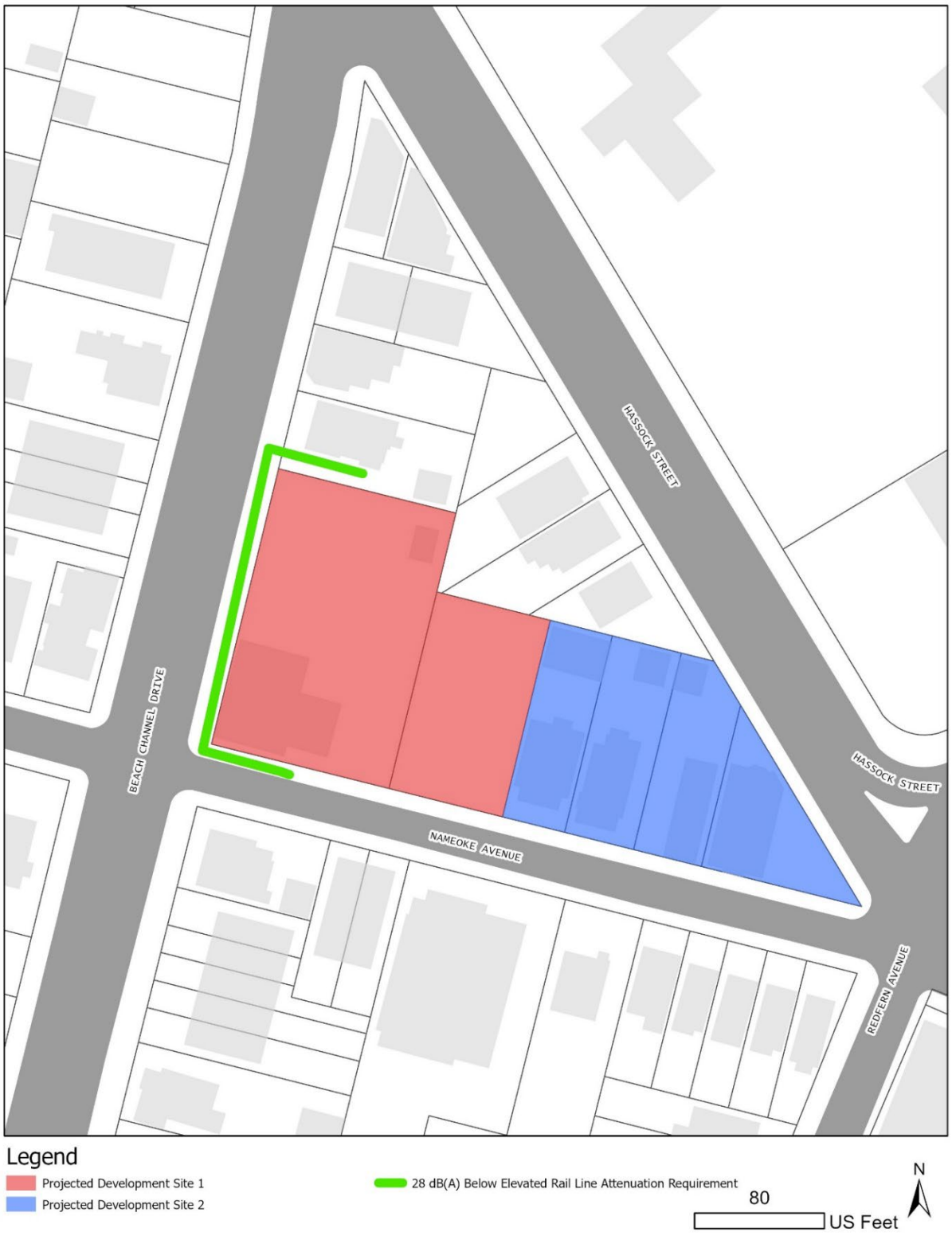
**The text for E-Designation would be as follows:**

**E-XXX**

**Block 15525, Lots 1 and 51 (Projected Development Site 1**): In order to ensure an acceptable interior noise environment, future community facility/commercial office uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation would be required the façade below the elevated rail line facing Beach channel Drive (west), the Nameoke Street façade (south) for 50’ from Beach Channel Drive, and the northern façade for 50 feet from Beach Channel Drive.

With these provisions in place, there is no potential for significant adverse impacts on project occupants due to noise exposure.

**Figure 2.10-6: Noise Attenuation Requirements***




*The above attenuation requirements are for community facility uses. Commercial office uses would require attenuation 5 dBA less.

## 2.11 Neighborhood Character

According to the *2021 CEQR Technical Manual*, a neighborhood character assessment considers how elements of the environment combine to create the context and feeling of a neighborhood and how a project may affect that context and feeling. Thus, to determine a project's effects on the neighborhood character, the elements that contribute to a neighborhood's context and feeling are considered together. These elements may include land use, zoning, public policy, socioeconomic conditions, open space, historic and cultural resources, urban design, visual resources, shadows, transportation, and noise. The Study Area for a preliminary analysis of neighborhood character is typically consistent with the Study Areas of the relevant technical areas under CEQR that contribute to the defining elements of the neighborhood. The study area should generally extend to a 400-foot radius around the Affected Area.

### 2.11.1 Preliminary Analysis

**Existing Conditions**

The 400-foot Study Area is generally bounded by the Redfern Houses to the north, Pinson Street to the west, Birdsall Avenue to the south, and Augustina Avenue to the east; Redfern Avenue bisects the Study Area north-south, with the eastern half defined by light residential development interspersed with community facility uses (i.e., religious institutions) and western half by light industrial / manufacturing, vacant lots currently being redeveloped with mixed-use multi-family residential and commercial / community facility spaces, as well as with the MTA-LIRR Far Rockaway station and associated tracks. Buildings throughout the Study Area range from one (1) to three (3) stories in height, with the exception of the Redfern Houses to the north (nine [9] buildings ranging from six [6] to seven [7] stories) and new mixed-use development at the southeastern Study Area (12 stories).

The area is well served by transit with multiple transportation options in the vicinity of the Affected Area. The closest bus stop to the Affected Area is for the Q114 bus near the intersection of Beach Channel Drive and Nameoke Avenue. The Q114 bus operates between Seagirt Boulevard in Far Rockaway via Brewster Boulevard and Parsons Boulevard/Hillside Avenue in Jamaica via Brewster Avenue. The Affected Area is also served by the MTA-LIRR Far Rockaway Station located on Nameoke Avenue between Redfern Avenue and Brunswick Avenue. The MTA-LIRR Far Rockaway train line operates from Nameoke Avenue in Far Rockaway to Penn Station in Manhattan.

The Applicant-Owned Development Site is located at 14-10 Beach Channel Drive (Block 15525, Lots 1 and 51), with a total area of 28,625 SF. Lot 1 is a corner lot with 175 feet of frontage on Beach Channel Drive and 110 feet of frontage of Nameoke Avenue. The lot features two buildings, both constructed in 1930, including a one-story, 3,582 GSF community facility building (used as a church) and a 306 GSF, one-story commercial building used as offices associated with a car dealership. Lot 51 is an interior lot that is currently vacant, paved, and used as an unlicensed

parking lot with 75 feet on frontage along Nameoke Avenue. Both lots comprising the Applicant's Development Site were acquired by the Applicant in July 2021.

The other lots within the Affected Area are Lots 40, 44, 47, and 49, each of which are independently owned, as described below.

- Lot 40 is a 4,968 SF triangular, interior lot with frontages on Nameoke Avenue and Hassock Street. The lot is improved with a two-story, 2,500 GSF multi-family residential building with four (4) dwelling units, constructed in 1920.
- Lot 44 is a 5,063 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 1,600 GSF mixed-use multi-family residential and community facility building with three (3) dwelling units and a groundfloor religious use, constructed in 1931.
- Lots 47 is a 5,000 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,382 GSF two-family residential structure constructed in 1920.
- Lot 49 is a 5,000 SF interior lot, rectangular in shape, and with frontage on Nameoke Avenue. The lot is developed with a two-story, 2,568 GSF multi-family residential structure with three (3) dwelling units, constructed in 1920.

**Future No-Action Condition**

No changes in use or development conditions at any of the lots comprising the Affected Area is anticipated under the Future No-Action Condition, such that all existing conditions described above would remain.

Pursuant to the NYC Active Major Construction Database[23] and NYCDCP Housing Database Project Level Files there are six (6) approved or permitted developments within the 400-foot Study Area, including multi-family residential and mixed-use multi-family residential and commercial or community facility development (see **Table 2.1-1** above). These projects are generally clustered east and southeast of the Affected Area, and are being developed in accordance with their respective underlying zoning, mapped as part of the Downtown Far Rockaway Rezoning.

Based on the foregoing, for the purposes of this analysis, it is assumed that existing and planned constituent elements of neighborhood character in the No-Action Condition are generally consistent with the existing conditions.

[23] https://www1.nyc.gov/assets/buildings/html/active-major-construction.html, accessed December 23, 2022

**Future With-Action Condition**

The proposed R6A/C2-4 and R6A zoning districts would permit medium to high density mixed-use residential, commercial, and community facility development with a permanent affordable housing set aside pursuant to the MIH program, which, the Applicant believes, would fit in with the existing zoning districts within the Study Area, particularly those districts to the east of the Affected Area mapped as part of the Downtown Far Rockaway Rezoning in 2017.

Under this Future With-Action Condition, the proposed R6A zoning district would permit a maximum FAR of 3.6 for residential uses and 3.00 for community facility uses, with a minimum rear yard requirement of 30 feet. The minimum base building height within the district ranges from 40 to 65 feet, with a maximum overall building height of 85 feet over eight (8) stories. The district requires parking for 50 percent of market rate dwelling units and 25 percent of income-restricted dwelling units.

As previously discussed, C2-4 commercial overlay districts are commercial overlays mapped within residence districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use. As the proposed C2-4 district would be mapped in conjunction with an R6A district, it would permit a maximum commercial FAR of 2.0.

In comparison with the existing mapped R5 zoning district the Affected Area is located within, the proposed R6A/C2-4 and R6A districts would permit moderately denser residential development, including larger bulk, area, and building heights, as well as groundfloor commercial uses at those lots within the proposed C2-4 overlay district.

To Projected Development Sites are anticipated under the Proposed Actions, including Projected Development Site 1 (the Applicant's site, Block 15525, Lots 1 and 51) and Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49).

On the combined 28,625-sf lot at Projected Development Site 1, an eight-story, 85-foot-tall mixed residential, commercial, and community facility building with 110,964 GSF (103,050 ZSF, 3.6 FAR) of total floor area would be constructed. There would be 4,576 GSF (4,400 ZSF, 0.15 FAR) of UG 4 community facility floor area and 4,013 GSF (3,859 ZSF, 0.13 FAR) of UG 6 local retail floor area on the ground floor and 102,374 GSF (94,791 ZSF, 3.31 FAR) of UG 2 residential floor area on the upper floors. Assuming 850 GSF per dwelling unit, there would be 120 dwelling units, 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Since the Applicant intends to pursue MIH Option 1, approximately 30 units would be reserved as affordable to households with incomes averaging 60 percent of the AMI. There would be 90 market-rate units. 53 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

On the combined 20,031-SF lot at Projected Development Site 2, it is assumed that a 79,322 GSF (72,111 ZSF, 3.6 FAR), eight-story, 85-foot-tall residential building would be constructed would be constricted. Assuming 850 GSF per dwelling unit, Projected Development Site 2 would contain 93 residential dwelling units (UG 2), 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Since the Applicant intends to pursue MIH Option 1, approximately 23 units would be reserved as affordable to households with incomes averaging 60 percent of the AMI. There would be 70 market rate units. 41 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

In order to determine the potential effects of the Proposed Actions on neighborhood character, the elements that contribute to a neighborhood's context and feeling are considered both separately and cumulatively. The examination focuses on whether a defining feature of the neighborhood's character may be significantly affected, as further described below:

- **Land Use, Zoning, and Public Policy:** The Proposed Actions would not adversely impact the neighborhood in terms of land use, zoning, or public policy. Though the proposed rezoning would effectuate developments of residential, commercial, and community facility uses at a higher density than that is currently allowed within the Study Area, the permitted uses would be in character with the existing mixed residential, commercial, and institutional uses and the density would be consistent with the existing R6/C2-4 and R7-1/C2-4 zoning districts in the area. Accordingly, the Proposed Actions would not alter the overall land use patterns in the area or jeopardize the intent of the zoning resolution.

- **Socioeconomic Conditions:** Induced development resulting from the Proposed Actions would continue established trends of population growth in the area, would not add new population with much higher average incomes compared to the average incomes of the existing populations, and would not significantly affect socioeconomic conditions.

- **Open Space:** The Proposed Actions would reduce the OSR by 1.6 percent from 0.187 acres per 1,000 residents under No-Action conditions to 0.184 acres per 1,000 residents under With-Action conditions. Though the area has a relatively low OSR, the increase in demand from the Proposed Actions would not result in significant decreases in open space ratios that result in overburdening existing and future facilities or significantly exacerbating deficiencies in open space. Further, existing open space resources within the study area were found to be in acceptable condition and contain a variety of active and passive recreation uses. Further, dedicated open spaces for residents of the Redfern Houses and the presence of the Rockaway Beach and Boardwalk slightly south of the study area alleviate its low OSR.

- **Shadows:** The shadows derived from the Projected Development Sites associated with the Proposed Actions would reach the sunlight-sensitive resource, Redfern Housing Authority Playground, on two analysis days in December and March/September. On

December 21st and March 21st/September 21st, the shadows derived from the Projected Buildings would only affect the sunlight-sensitive resource for a 2-hour-43-minute and 44-minute period in the afternoon, respectively with limited extent and duration. No adverse impact is expected on the Open Space Utilization and therefore, no further analysis is warranted.

The shadows derived from the Projected Development Sites associated with the Proposed Actions would reach the sunlight-sensitive resource, Jamaica Bay Park, on one analysis days in December. On December 21st, the shadows derived from the Projected Buildings would only affect the sunlight-sensitive resource for a 3-minute period in the morning, with limited extent and duration. No adverse impact is expected on the vegetation and plantings of this resource and therefore, no further analysis is warranted.

- **Historic and Cultural Resources:** LPC review did not identify properties with either architectural or archaeological significance associated with Projected Development Site 1 (i.e., the Applicant's site). Further, based on a review of available public resources (e.g., the New York State Office of Parks, Recreation and Historic Preservation's Cultural Resources Information System), there are no known architectural or archaeological resources of significance at the remaining lots comprising the Affected Area or within the surrounding 400-foot Study Area. Therefore, significant adverse impacts to such resources are not expected because of the Proposed Actions, and further analysis is not warranted.

- **Urban Design and Visual Resources:** The development facilitated by the Proposed Actions would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood as it would not significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or the visual character of the area. The development with ground floor commercial and community facility uses would improve walkability and the visual character of the area, and would also provide needed local serving retail uses.

- **Hazardous Materials:** A Phase I ESA was prepared for Projected Development Site 1 (i.e., the Applicant's site) in March 2020, which did not identify RECs, HRECs, or CRECs. Further, a Phase II ESI performed in June 2019, which included a geophysical survey and the advancement of six borings for soil and groundwater samples in order to identify the location of onsite USTs, former tankholds, and/or other associated features and to evaluate the potential impact of VOCs, PAHs, and/or metals to soil and/or groundwater as a consequence of a release or releases from the former automotive repair use at Projected Development Site 1. That Phase II ESI did not identify the presence of current or historical USTs or evidence of a release or releases of hazardous materials to soil or groundwater from current or historical operations, and no further environmental investigations were recommended. However, it is recommended that in the event any

future excavation/construction activities are proposed, further assessment of the historic fill material should be conducted. Therefore, an E-Designation will be mapped on Projected Development Site 1. Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, an E-Designation would also be mapped on Projected Development Site 2 to ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. With the E-designations in place, no significant adverse impacts related to hazardous materials are expected.

- **Transportation:** The Proposed Actions would not result in a development that would have significant adverse impact on transportation.
- **Air Quality:** The Proposed Actions would not result in a development that would have significant adverse impact on the air quality within the Study Area or would receive industrial emissions that would have significant adverse impact on the project occupants.
- **Noise:** Though the Proposed Actions would result in two mixed-use developments composed of residential, commercial, and community facility uses that may be impacted by the ambient noise, a composite window-wall attenuation of 45 dB(A) would be required along Beach Channel Drive for residential and community facility uses. No attenuation is required on the remainder of the façades. With this level of attenuation, there would be no potential for adverse impacts related to ambient noise.

**Combination of Moderate Effects:**

Based on the above findings, there would be no combination of moderate effects to several elements that cumulatively may affect neighborhood character.

### 2.11.2 Conclusion

As discussed above, the Proposed Actions would not, in whole or from a specific technical study standpoint, result in a significant impact on the neighborhood character, nor would have cumulative effects of two or more of the above technical areas have any significant impacts on the 400-foot Study Area.

## 2.12 Construction

According to the *2021 CEQR Technical Manual*, construction impacts may be analyzed for any project that involves construction or could induce construction. For construction activities not related to in-ground disturbance, short-term construction generally does not warrant a detailed construction analysis. For example, the use of a property for construction staging activities is likely to only warrant analysis if this activity continues for a period of several years. Consideration of several factors, including the location and setting of the project in relation to other uses and intensity of construction activities are used to determine if a project's construction activities warrant analysis in one or more of the following technical areas:

- Transportation
- Air Quality or Noise
- Historic and Cultural Resources
- Hazardous Materials
- Natural Resources
- Open Space
- Socioeconomic Conditions
- Community Facilities
- Land Use and Public Policy
- Neighborhood Character
- Infrastructure

A preliminary construction analysis may be required because the proposed development would result in the following:

- Construction activities are considered long-term (Last longer than two years); or
- Short term construction activities would directly affect a technical area, such as impeding the operation of a community facility.
- Result in the closing, narrowing, impeding of traffic, transit, or obstruction of pedestrian or vehicular routes in proximity to critical land uses.
- 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.
- 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.

**Analysis**

Future No-Action Condition

In the Future No-Action Scenario existing conditions would be expected to remain. No redevelopment or construction-related activities would be expected to occur.

Future With-Action Condition

*Projected Development Site 1 (Block 15525, Lots 1 and 51)*

On the combined 28,625-sf lot, it is assumed that the Applicant would construct an eight-story, 85-foot-tall mixed residential, commercial, and community facility building with 110,964 GSF (103,050 ZSF, 3.6 FAR) of total floor area. There would be 4,576 GSF (4,400 ZSF, 0.15 FAR) of UG 4 community facility floor area and 4,013 GSF (3,859 ZSF, 0.13 FAR) of UG 6 local retail floor area on the ground floor and 102,374 GSF (94,791 ZSF, 3.31 FAR) of UG 2 residential floor area on the upper floors. Assuming 850 GSF per dwelling unit, there would be 120 dwelling units, 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Since the Applicant intends to pursue MIH Option 1, approximately 30 units would be reserved as affordable to households with incomes averaging 60 percent of the AMI, resulting in 90 market-rate units. 53 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

*Projected Development Site 2 (Block 15525, Lots 40, 44, 47, and 49; Non-Applicant Lots)*

On the combined 20,031-SF site, it is assumed that a 79,322 GSF (72,111 ZSF, 3.6 FAR), eight-story, 85-foot-tall residential building would be constructed. Assuming 850 GSF per dwelling unit, Projected Development Site 2 would contain 93 residential dwelling units (UG 2), 25 to 30 percent of which would be classified as affordable dwelling units at an average of 60 to 80 percent AMI depending on the MIH Option selected. Consistent with Projected Development Site, use of MIH Option 1 is assumed, resulting in approximately 23 units reserved as affordable to households with incomes averaging 60 percent of the AMI, leaving a balance of 70 market rate units. 41 required residential accessory parking spaces would be provided at the cellar of the building per R6A zoning district guidelines.

**Build Year**

The anticipated Build Year for the purposes of the analysis framework is 2028, which assumes receipt of all required approvals (e.g., ULURP) by Spring 2024. After receipt of approvals, construction of Projected Development Site 1 would commence in October 2024 and is projected to take 18 months, finishing in early Spring 2026. Concurrently, the assemblage, finance, and design of Projected Development Site 2 would occur (anticipated 16-month duration) with construction commencing in Summer 2027 and lasting 16 months. Based on the foregoing, estimated completion and operation date for all development sites within the Affected Area is Fall / Winter 2028.

**Analysis**

The Applicant's development of Projected Development Site 1 is anticipated to commence in October 2024 with exterior work being completed by December 2025 and TCO/punch list completion in April 2026. The development of Potential Development Site 2 could be expected to commence in July 2027, and exterior work could be completed by September 2028, and TCO/punch list completion by November 2028.

The exterior construction activities for Projected Development Site 1 would last for 14 months (October 2024 to December 2025) while construction activities associated with Projected Development Site 2 would last from July 2027 to September 2027 (14 months). This would result in a 19-to-20-month gap between the end of exterior construction activities associated with Projected Development Site 1 and the start of exterior construction activities associated with Projected Development Site 2. As such, there would not be a continuous construction period of 24 months or longer within the Affected Area such that the Proposed Actions are not expected to result in significant construction schedule impacts to the adjacent community.

<u>Transportation</u>

According to the *2021 CEQR Technical Manual*, a number of factors should be considered before determining whether a preliminary assessment of the effect of construction on transportation is needed including:

- Whether the project's construction would be located in a Central Business District (CBD) or along an arterial or major thoroughfare;
- Whether the project's construction activities would require closing, narrowing, or otherwise impeding moving lanes, roadways, key pedestrian facilities, parking lanes and/or parking spaces, bicycle routes and facilities, bus lanes or routes, or access points to transit; and
- Whether the project would involve construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap, and last for more than two years overall.

Projected Development Sites 1 and 2 each have frontage along Nameoke Avenue (a local road), while Projected Development Site 1 has frontage along Beach Channel Drive (considered a minor arterial road). The construction of the development sites may require the temporary closing of the sidewalks adjacent to Projected Development Sites 1 and 2. As part of the Proposed Actions the sidewalks will be reconstructed and widened along the Nameoke Avenue frontage of Projected Development Site 1, which may temporarily impact pedestrian flow and the availability of parking spaces along these streets. However, changes to moving traffic lanes are not expected.

There are several religious institutions within a 400-foot radius of the Affected Area, however none of them are directly accessed by sidewalk frontages along Projected Development Sites 1 and 2. Therefore sidewalk closures would have minimal effects on the surrounding area. Nearby residential, commercial, and industrial uses would not be particularly sensitive to such sidewalk closures as they are not in an area with high pedestrian activity, and the sidewalks and roadways affected by the proposed construction would not be considered to be near capacity. Any potential closure of the sidewalks adjacent to construction activities would be considered a routine closure that would be addressed by a permit and pedestrian access plan issued by NYC DOT Office of Construction Mitigation and Coordination at the time of closure.

Although the Proposed Actions would result in construction on multiple development sites on the same block, their exterior construction activities, the primary driver of construction traffic and sidewalk / street closures, would not overlap and be separated by a 19-to-20-month gap.

Considering the above, construction of the development sites would not be expected to result in significant adverse impacts on transportation.

Air Quality and Noise

According to the *2021 CEQR Technical Manual*, an assessment of air quality and noise for construction activities is likely not warranted if the project's construction activities:

- Are considered short-term (less than two years);
- Are not located near sensitive receptors; and
- Do not involve construction of multiple buildings where there is a potential for on-site receptors in buildings to be completed before the final build-out.

The development sites are located near sensitive receptors as they all adjoin or are very close to existing residential development. Noise from the construction of Projected Development Site 2 would impact residents of Projected Development Site 1, as construction and occupation of Projected Development Site 1 is projected to be completed before the commencement of construction activities at Projected Development Site 2. Exterior construction activities (i.e., construction activities with the most noise generation) associated with Projected Development Site 2 are anticipated to take 14 months, which is considered short term.

The *2021 CEQR Technical Manual* states that if a project meets one or more of the criteria above, a preliminary air quality or noise assessment is not automatically required. Instead, various factors should be considered, such as the types of construction equipment (e.g., gas, diesel, electric), the nature and extent of any commitment to use the Best Available Technology (BAT) for construction equipment, the physical relationship of the project site to nearby sensitive receptors, the type of construction activity, and the duration of any heavy construction activity. These measures are discussed below.

Demolition, excavation, and foundation activities, which often generate the highest levels of air emissions, would be temporary and limited in duration and would take approximately 14 months at each site. These activities would be spread out over two separate locations on the block and would not overlap. In addition, any heavy equipment associated with the construction of the buildings (such as a crane) would operate from at least three different locations during construction.

Air Quality

The Proposed Project would make use of the Best Available Technology to minimize impacts to the residential and community facility buildings in the vicinity of the Affected Area as further discussed below.

As with most construction projects in the City, the Proposed Project would require the operation of several pieces of diesel equipment at one time during the heavier periods of construction, such as demolition and excavation. The Applicant would implement the following measures that would minimize air quality and noise impacts on the surrounding community.

- *Diesel Equipment Reduction:* Construction of the proposed project would minimize the use of diesel engines and use electric engines, to the extent practicable. This would reduce the need for on-site generators, and require the use of electric engines in lieu of diesel where practicable.
- *Clean Fuel:* To the extent practicable, ultra-low sulfur diesel (ULSD) would be used for diesel engines on the development sites.
- *Best Available Tailpipe Reduction Technologies:* To the extent practicable, non-road diesel engines with a power rating of 50 horsepower (hp) or greater would utilize the best available tailpipe (BAT) technology for reducing diesel particulate matter (DPM) emissions. Diesel particle filters (DPF) have been identified as being the tailpipe technology currently proven to have the highest PM reduction capability.
- To the extent practicable, construction contracts would specify that all diesel non-road engines rated at 50 hp or greater would utilize DPFs, either installed on the engine by the original equipment manufacturer (OEM) or retrofit with a DPF verified by EPA or the

California Air Resources Board, and may include active DPFs if necessary; or other technology proven to reduce DPM by at least 90 percent.

- *Utilization of Newer Equipment:* To the extent practicable, all non-road construction equipment in the project would meet at least the Tier 2 emissions standard, and construction equipment meeting Tier 3 and/or Tier 4 emissions standards would be used where conforming equipment is widely available, and the use of such equipment is practicable.

- *Dust Control:* Fugitive dust control plans will be implemented as part of the construction process. For example, stabilized truck exit areas would be established for washing off the wheels of all trucks that exit the construction sites. Truck routes within the sites would be watered as needed to avoid the re-suspension of dust. All trucks hauling loose material will be equipped with tight fitting tailgates and their loads securely covered prior to leaving the sites. In addition to regular cleaning by the City, streets adjacent to the site would be cleaned as frequently as needed by the construction contractor. Water sprays will be used for all transfer of spoils to ensure that materials are dampened as necessary to avoid the suspension of dust into the air.

- *Restrictions on Vehicle Idling:* In addition to adhering to local laws restricting unnecessary idling on roadways, on-site vehicle idle time will also be restricted to three minutes, to the extent practicable, for all equipment and vehicles that are not using their engines to operate a loading, unloading, or a processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine.

Overall, these air emission controls would significantly reduce DPM emissions to a level otherwise achieved by applying the currently defined best available control technologies under NYC Local Law 77. In addition, as stated in the *2021 CEQR Technical Manual*, all the necessary measures would be implemented to ensure compliance with the NYC Air Pollution Control Code regulating construction-related dust emissions. Based on the project size and the construction work involved, construction activities for the Proposed Actions would not be considered out of the ordinary or exceptional in terms of intensity and would be of a relatively short duration (less than 2 years). Therefore, based on the above and with the implementation of emissions control measures that are required by local law, the construction of the development sites would not result in any significant adverse impacts on air quality.

Noise

While increases in ambient noise levels due to construction exceeding the CEQR impact criteria for two years or less may be noisy and intrusive, they are not considered to be significant adverse noise impacts. The exterior construction activities, including demolition, excavation, and foundation, superstructure activities (considered the noisiest construction activities), of both development sites are projected be 14 months, with a gap of 19-20 months between them.

Construction noise is regulated by the NYC Noise Control Code and by EPA's noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7AM and 6PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. If weekend or after hour work is necessary, permits would be required to be obtained, as specified in the NYC Noise Control Code. Therefore, no significant noise impacts are expected to occur as a result of the project construction.

### 2.12.1 Conclusion

Exterior construction activities at Projected Development Sites 1 and 2 would each be completed in approximately 14 months, from October 2024 to December 2025 and from July 2027 to September 2028, respectively. Interior construction fit-outs at Projected Development Site 1 would last until April 2026 and until November 2028 at Projected Development Site 2. Construction would be performed subject to relevant EPA, DEP, DOT and DOB codes and regulations to ensure minimal construction impacts. With the construction control and protective measures identified above, no impacts on transportation, air quality, or noise.

Based on the above analysis, the Proposed Actions would not have any significant adverse construction impacts, and further analysis is not required.

# APPENDIX A

## AGENCY CORRESPONDENCE

Landmarks Preservation Commission

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

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

# ENVIRONMENTAL REVIEW

**Project number:** DEPARTMENT OF CITY PLANNING / LA-CEQR-Q
**Project:** BEACH CHANNEL DRIVE
**Date Received:** 11/30/2020

**Properties with no Architectural or Archaeological significance:**
1) 14-10 BEACH CHANNEL DRIVE, BBL: 4155250001
2) NAMEOKE AVENUE, BBL: 4155250051

Gina Santucci 12/3/2020

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

**File Name:** 35308_FSO_DNP_12032020.docx

# APPENDIX B

## PROPOSED ARCHITECTURAL PLANS

## ZONING ANALYSIS

ZONE: R6A MAP No.: 25b
BLOCK: 15525 LOT: 1 & 51
LOT AREA = IRREGULAR = 28,625.00 SF

F.A.R. (ZR 23-154(d(2)(i)(b)) = 3.60 MANDATORY INCLUSIONARY HOUSING
3.60 x 28,625.00 SF = 103,050.00 SF
F.A.R. (ZR 24-11) = 3.0 COMMUNITY FACILITY
3.0 x 28,625.00 = 85,875.00 SF
F.A.R. (ZR 24-11) = 2.0 COMMERCIAL
2.0 x 28,625.00 = 57,250.00 SF

PROPOSED FLOOR AREA (COMMUNITY FACILITY)

| | | |
|---|---|---|
| FIRST FLOOR | = | 4,440.00 SF |
| TOTAL | = | 4,440.00 SF |

4,440.00 SF / 28,625 SF = 0.155 F.A.R.

PROPOSED FLOOR AREA (COMMERCIAL)

| | | |
|---|---|---|
| FIRST FLOOR | = | 4881.25 SF |
| TOTAL | = | 4881.25 SF |

4,881.25 SF / 28,625 SF = 0.17 F.A.R.

PROPOSED MAXIMUM RESIDENTIAL FLOOR AREA
MAX. RESIDENTIAL FLOOR AREA =
MAX ALLOWED - COMMERCIAL AREA - COMMUNITY FACILITY =
103,050 SF - 4,881.25SF - 4,440.00 SF = 93,728.75 SF

93,728.75 SF / 28,625 SF = 3.27 (MAX. RESIDENTIAL F.A.R.)

PROPOSED FLOOR AREA (RESIDENTIAL)
SEE DIAGRAMS ON THIS SHEET FOR AREA

| | | |
|---|---|---|
| CELLAR | = | 18,796.00 SF (NIC) |
| FIRST FLOOR | = | 992.00 SF |
| SECOND FLOOR | = | 18,796.00 SF |
| THIRD FLOOR | = | 18,796.00 SF |
| FOURTH FLOOR | = | 18,796.00 SF |
| FIFTH FLOOR | = | 16,576.00 SF |
| SIXTH FLOOR | = | 12,331.00 SF |
| SUBTOTAL | = | 86,287.00 SF |

**APPROX. 1,000.00 SF OF FLOOR AREA DEDUCTIONS
(I.E. PARKING, MECHANICAL, ETC...)**

86,287.00 / 28,625.00 SF = 3.01 F.A.R. < 3.27 F.A.R. THEREFORE OK.

PROPOSED TOTAL COMBINED FLOOR AREA

| | | |
|---|---|---|
| TOTAL C.F. FLOOR AREA | = | 4,440.00 SF (0.155 F.A.R.) |
| TOTAL COMMERCIAL FL AREA | = | 4,881.25 SF (0.17 F.A.R.) |
| TOTAL RESIDENTIAL FLOOR AREA | = | 86,287.00 SF (3.01 F.A.R.) |
| TOTAL COMBINED FLOOR AREA | = | 95,608.25 SF (3.33 F.A.R.) |

95,608.25 SF (3.33 F.A.R.) < 103,050.00 SF (3.60 F.A.R.); THEREFORE OK.

MAX. LOT COVERAGE (ZR 23-153): 65% & 100% (CORNER LOT)
WITHIN 100' FROM THE CORNER
10,000.00 SF x 1.00 = 10,000.00 SF

ACTUAL LOT COVERAGE (CORNER PORTION) = 8,954.00 SF < 10,000.00 SF
BEYOND 100' FROM THE CORNER @ BEACH CHANNEL DRIVE
8,250.00 SF x 0.65 = 5,362.50 SF

ACTUAL LOT COVERAGE = 4,810.00 SF < 5,362.50 SF; THEREFORE O.K.
BEYOND 100' FROM THE CORNER @ NAMEOKE AVENUE
10,625.00 SF x 0.65 = 6,906.25 SF

ACTUAL LOT COVERAGE = 5,555.00 SF < 6,906.25 SF; THEREFORE O.K.

MAX. NUMBER OF D.U's DENSITY (ZR 23-22)
FACTOR FOR R7A = 680 SF
MAX. ALLOW RES. F.A = 93,728.75 SF
93,728.75 SF / 680 SF = 137.83 OR 138 DWELLING UNITS

PROPOSED 96 TOTAL DWELLING UNITS < 138 DWELLING UNITS
97 DWELLING UNITS x 25% = 24.25 OR 24 MIH UNITS

BEACH CHANNEL DRIVE YARDS

| YARDS | REQUIRED | PROVIDED |
|---|---|---|
| FRONT (ZR 23-661(a)) | ALIGN | @ PPL |
| SIDE (ZR 23-462(c)) | NONE REQ. | 10'-0" |
| REAR (ZR 23-47) | SEE PLOT PLAN | SEE PLOT PLAN |

NAMEOKE STREET TYARDS

| YARDS | REQUIRED | PROVIDED |
|---|---|---|
| FRONT (ZR 23-661(a)) | ALIGN | ALIGN |
| SIDE (ZR 23-462(c)) | NONE REQ. | 10'-0" |
| REAR (ZR 23-47) | SEE PLOT PLAN | SEE PLOT PLAN |

HEIGHT& SETBACK REGULATIONS (ZR 23-664(b))
MINIMUM BASE HEIGHT @ 40'-0"
MAXIMUM BASE HEIGHT @ 65'-0"
MAXIMUM BUILDING HEIGHTS @ 80'-0"

PARKING REQUIREMENT (ZR 25-027, 25-23)
85% OF DWELLING UNITS
72 MR DWELLING UNITS x 85% = 61.2 OR 61 PARKING SPACES REQUIRED

PARKING REQUIREMENT (ZR 25-251)
25% OF MIH DWELLING UNITS
24 MIH DWELLING UNITS x 25% = 6 PARKING SPACES REQUIRED
6 PARKING SPACES PROVIDED; THEREFORE OK.

1:1 PARKING SPACES PROVIDED (100%) 97 SPACES; THEREFORE OK.

PARKING REQUIREMENT FOR COMMERCIAL SPACE (ZR 36-21)
1 PER 1,000.00 SF OF FLOOR AREA
4,881.25 / 1,000.00 = 4.88 OR 5 PARKING SPACES REQUIRED
5 PARKING SPACES PROVIDED; THEREFORE OK.

TOTAL PARKING = 61 + 6 + 5 = 72 TOTAL PARKING SPACES
102 PARKING SPACES PROVIDED; THEREFORE OK.

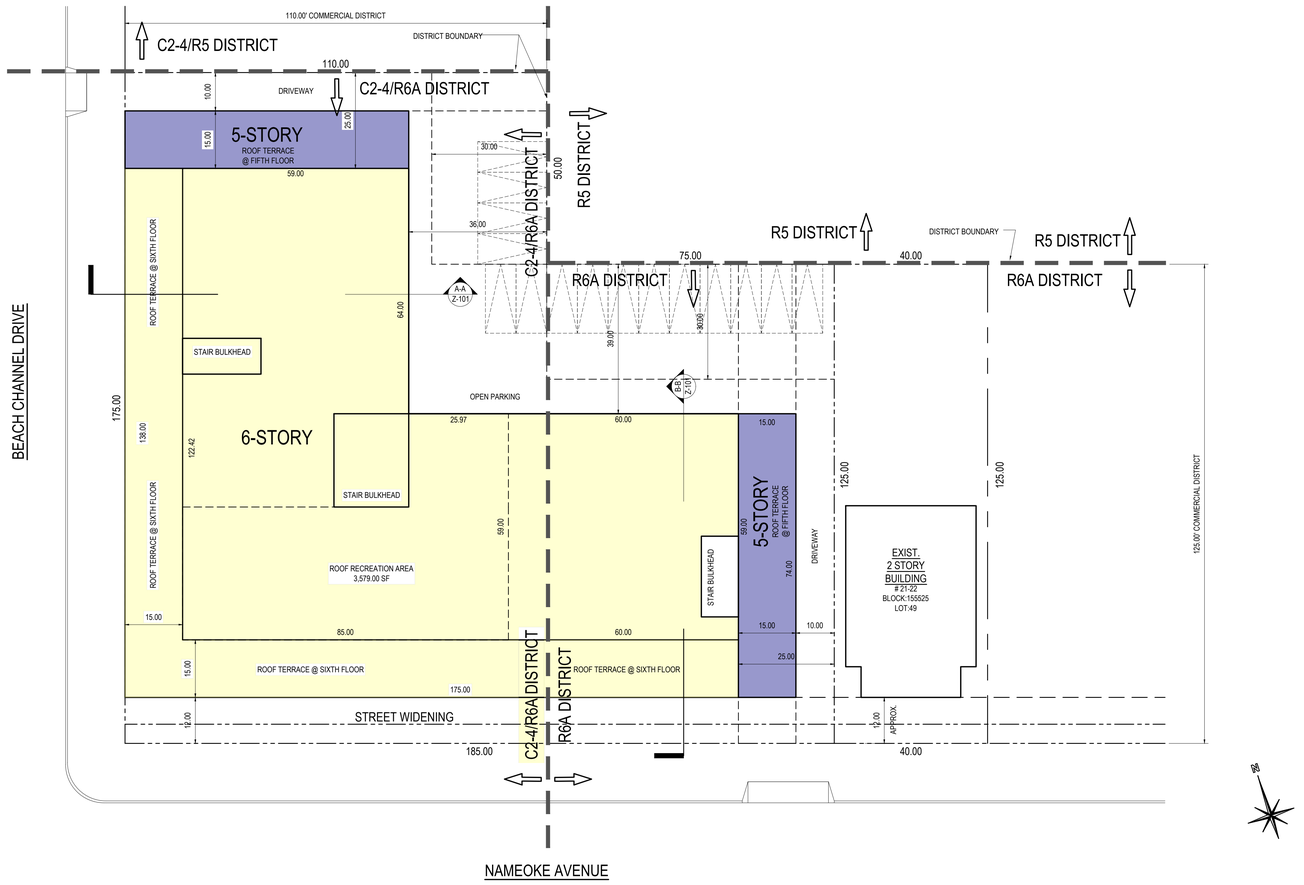
PARKING REQUIREMENT FOR HOUSE OF WORSHIP (25-31)
NONE REQUIRED

ENCLOSED BICYCLE PARKING SPACES (ZR 25-811)
1 PER 2 DWELLING UNITS

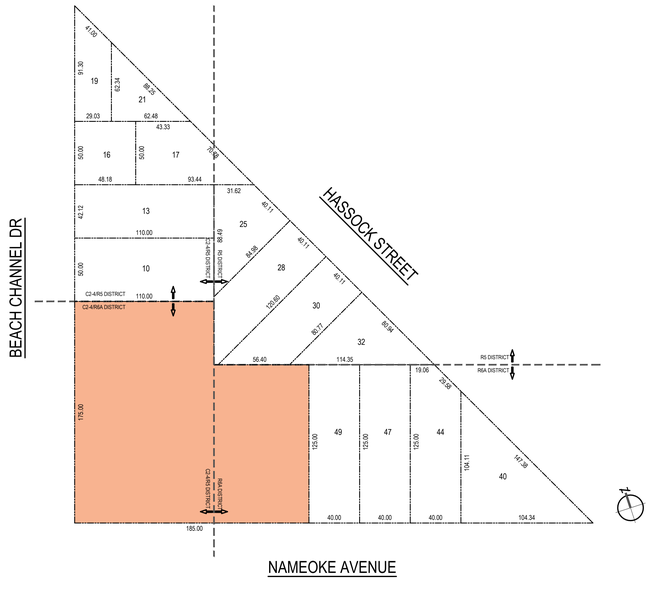
STREET TREE PLANTING REQUIREMENTS (ZR 26-41)
LOT FRONTAGE - 360.00'
360.00' / 25.00' = 14.40 = 14 TREES REQUIRED

REQUIRED RECREATION SPACE (ZR 28-21)
REQUIRED FLOOR AREA @ 3.3% OF TOTAL RESIDENTIAL FLOOR AREA.
TOTAL RESIDENTIAL FLOOR AREA = 93,723.00 SF
86,287.00 SF x 3.3% = 2,847.47 SF MINIMUM REQUIRED RECREATION SPACE
3,579.00 SF RECREATION SPACE REQUIRED @ ROOF PROVIDED
3,579.00 SF > 2,847.47 SF; THEREFORE OK.

## SITE PLAN SCALE: 1/16" = 1'-0"




## KEY PLAN SCALE: N.T.S.




## UNIT BREAKDOWN

2nd - 4th FLOOR

| | |
|---|---|
| STUDIOS | = 12 (4 per floor) |
| 1 BED | = 45 (15 per floor) |
| 2 BED | = 6 (2 per floor) |
| TOTAL 2nd-4th FLOOR | = 63 |

5th FLOOR

| | |
|---|---|
| STUDIOS | = 1 |
| 1 BED | = 16 |
| 2 BED | = 1 |
| TOTAL 5th FLOOR | = 18 |

6th FLOOR

| | |
|---|---|
| STUDIOS | = 3 |
| 1 BED | = 13 |
| 2 BED | = 0 |
| TOTAL 6th FLOOR | = 16 |

| | |
|---|---|
| TOTAL STUDIOS | = 16 (16.5 %) |
| TOTAL 1 BED | = 74 (76.29%) |
| TOTAL 2 BED | = 7 (7.21%) |
| TOTAL | = 97 (100%) |

## COMMERCIAL SPACE

1st FLOOR
COMMERCIAL = 4,881.25 SF

## COMMUNITY FACILITY

1st FLOOR
COMMUNITY = 4,444.00 SF

## LEGEND

REFERENCE RESIDENTIAL LIVING SPACES
- STUDIO APARTMENT
- ONE BEDROOM APARTMENT
- TWO BEDROOM APARTMENT

REFERENCE OTHER SPACES
- UTILITIES
- ACCESSORY USE
- CIRCULATION
- TERRACE AREA
- LOBBY
- COMMUNITY AREA


FRANK J. QUATELA
ARCHITECT, P.C.

36-07 169th STREET
FLUSHING, NY 11358
TEL: 718.886.1600

FRANK@QUATELA-ARCHITECTS.COM
WWW.QUATELA-ARCHITECTS.COM



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| NO. | DATE | REVISION |
|---|---|---|
| | | |

DRAWING TITLE:

PLOT PLAN,
ZONING CALCULATIONS

PREMISES:

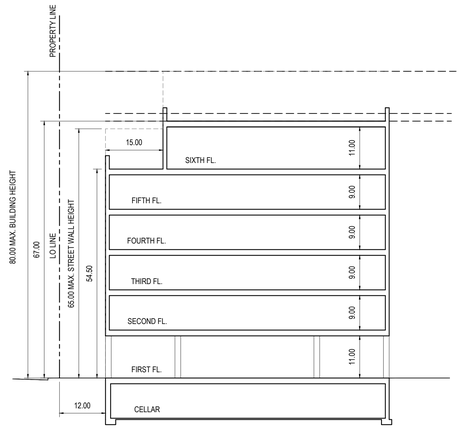
14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

| | |
|---|---|
| DRAWN: | R.C. |
| CHECKED: | FJQ |
| JOB NO.: | 20022 |
| SCALE: | AS NOTED |
| DATE: | 08/18/2021 |

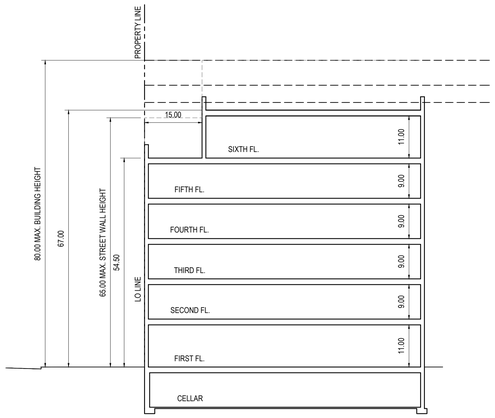
SEAL:

DRAWING: 1 OF 9

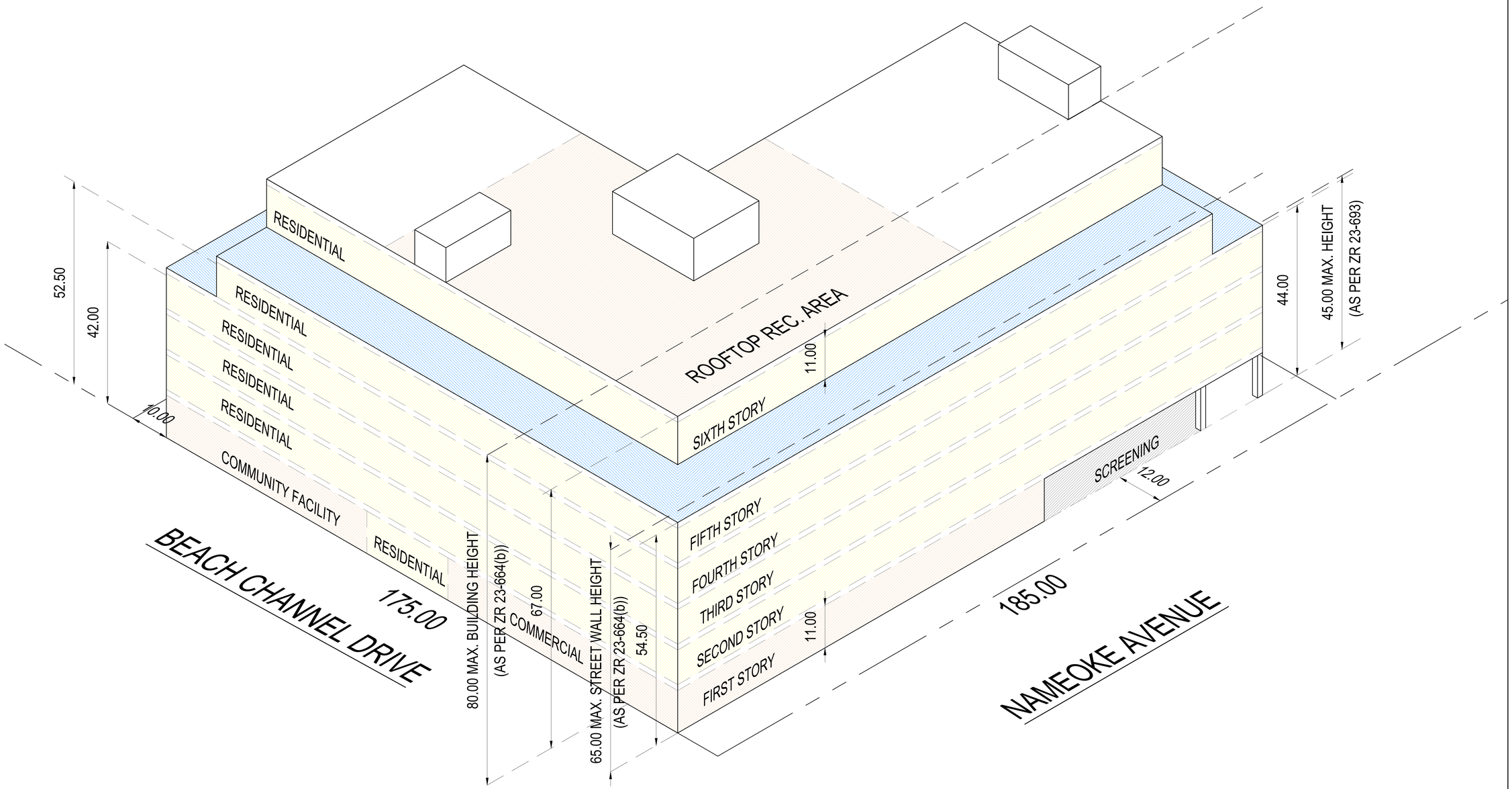
Z-001.00




SECTION B-B SCALE: 1/16" = 1'-0"




SECTION A-A SCALE: 1/16" = 1'-0"

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ARCHITECT, P.C.

36-07 169th STREET
FLUSHING, NY 11358
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| NO. | DATE | REVISION |
|---|---|---|
| | | |

DRAWING TITLE:

SECTIONS
PERPECTIVE AND STREET VIEWS

PREMISES:

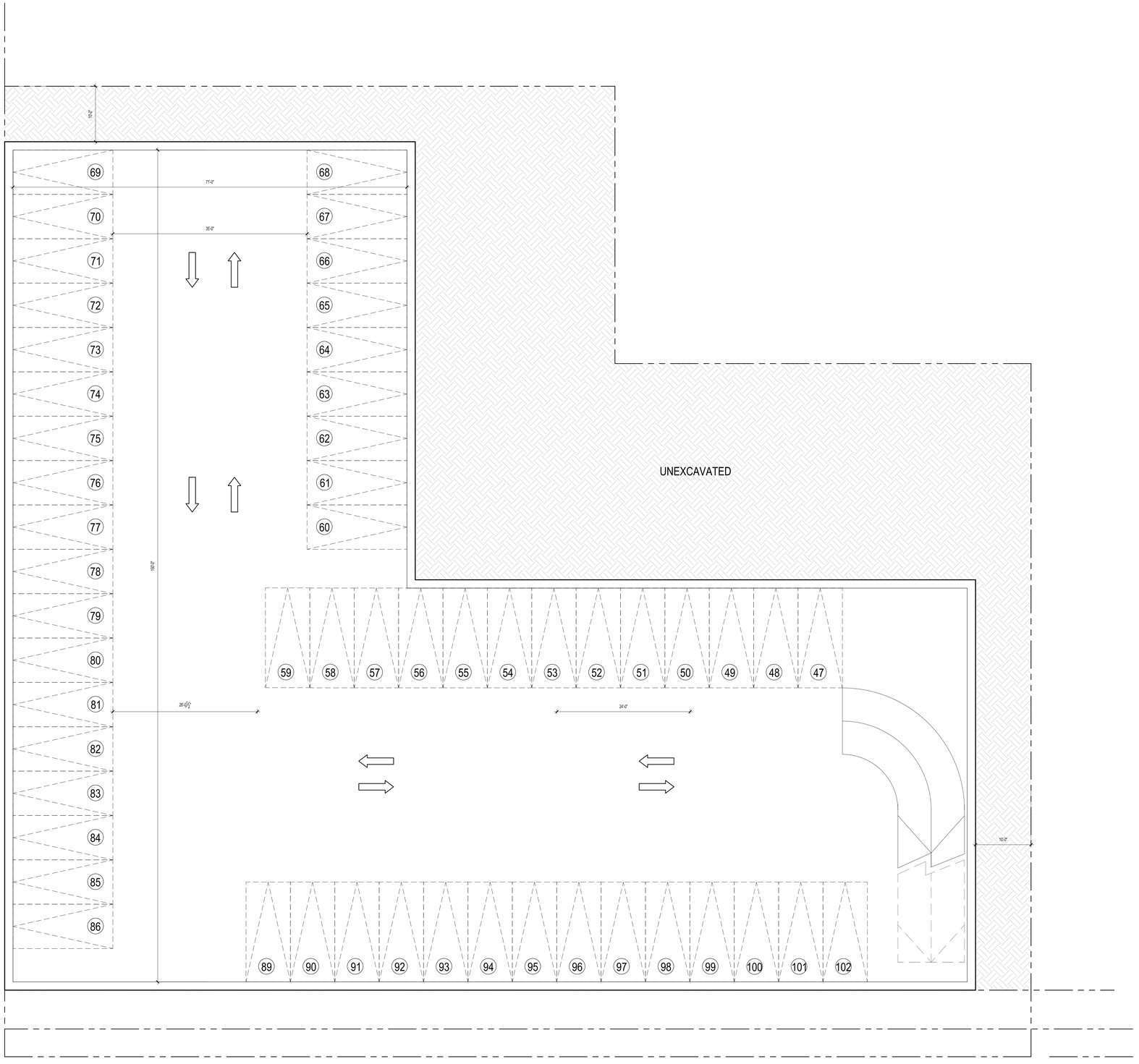
14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

| | |
|---|---|
| DRAWN: | M.V./P.H./A.G |
| CHECKED: | F.JQ |
| JOB NO.: | 20022 |
| SCALE: | AS NOTED |
| DATE: | 08/18/2021 |

SEAL:

DRAWING: 2 OF 9

Z-002.00




SCHEMATIC CELLAR FLOOR PLAN RESIDENTIAL
SCALE : 1/8=1'-0"
TOTAL AREA: 18,796.00 SF (NIC)

FRANK J. QUATELA
ARCHITECT, P.C.

36-07 169th STREET
FLUSHING, NY 11358
TEL: 718.886.1600

FRANK@QUATELA-ARCHITECTS.COM
WWW.QUATELA-ARCHITECTS.COM

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| NO. | DATE | REVISION |
|---|---|---|
| 1 | 03/07/23 | remove utilities |

DRAWING TITLE:

FLOOR PLANS

PREMISES:

14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

| | |
|---|---|
| DRAWN: | M.V.P |
| CHECKED: | F.JQ |
| JOB NO.: | 20022 |
| SCALE: | AS NOTED |
| DATE: | 08/18/2021 |

SEAL:

DRAWING: 3 OF 9

A-101.00

BEACH CHANNEL DRIVE

CURB CUT

110'-0"

74'-0"

DRIVEWAY

1 ST FLOOR
COMMUNITY FACAILITY
"HOUSE OF WORSHIP"
4,440.00 SF

MAIN COMMUNITY FACILITY ENTRANCE

60'-0"

FLOOD GATE

FLOOD GATE

STORAGE
892.76 SQ. FT.

LOBBY
992.12 SQ. FT.

FLOOD GATE

ELEVATOR

CORRIDOR
234.00 SF

FLOOD GATE

ELEVATOR

FLOOD GATE

ACCESS TO RES. AREA

92'-1 3/8"

1 ST FLOOR
COMMERCIAL SPACE
4,881.25 SF

50'-0"

30 29
28 27
26 25
24 23

75'-0"

22 20 18 16 14 12 10 08 06 04 02
21 19 17 15 13 11 09 07 05 03 01

LINE OF BUILDING ABOVE

LINE OF BUILDING ABOVE

46 45 44 43 42 41 40

39

38 37 36 35 34 33 32

LINE OF BUILDING ABOVE

LINE OF BUILDING ABOVE

125'-0"

74'-0"

10'-0"

EXIST.
2 STORY
BUILDING

# 21-22
BLOCK:155525
LOT:49

FLOOD GATE

FLOOD GATE

95'-0"

FLOOD GATE

80'-0"

PARKING ACCESS

1'-0"

APPROX.

CURB CUT

NAMEOKE AVENUE

SCHEMATIC 1st FLOOR PLAN RESIDENTIAL & COMMUNITY FACILITY
SCALE : 1/8=1'-0"
TOTAL AREA: 18,796.00 SF


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ARCHITECT, P.C.

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FLUSHING, NY 11358
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| NO. | DATE | REVISION |
|---|---|---|
| 1 | 03/07/23 | remove utilities |

DRAWING TITLE:
FLOOR PLANS

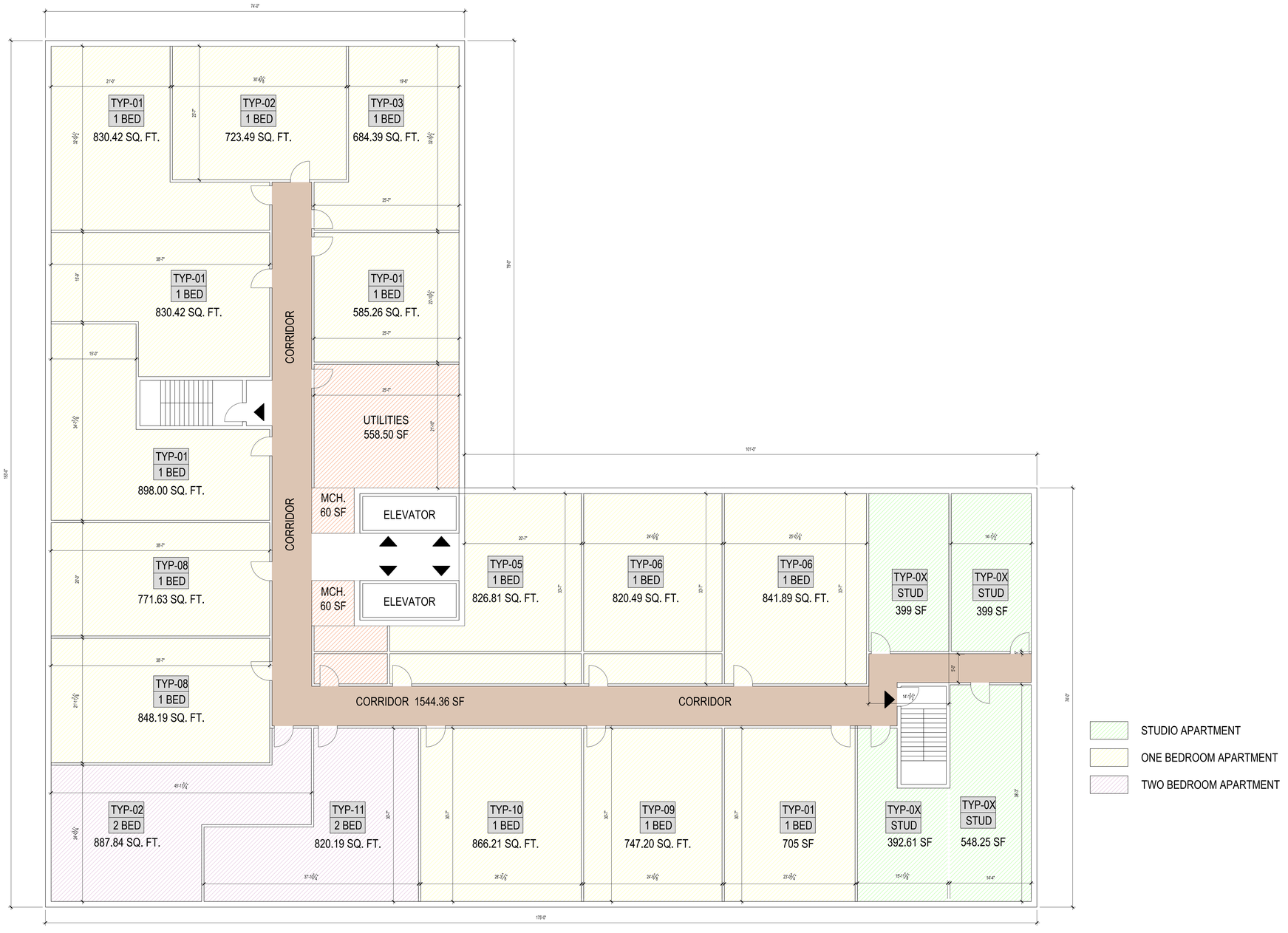
PREMISES:
14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

DRAWN: M.V.P
CHECKED: FJQ
JOB NO.: 20022
SCALE: AS NOTED
DATE: 08/18/2021

SEAL:

DRAWING: 4 OF 9

A-102.00




STUDIO APARTMENT

ONE BEDROOM APARTMENT

TWO BEDROOM APARTMENT

SCHEMATIC 2nd FLOOR PLAN RESIDENTIAL
SCALE : 1/8=1'-0"
TOTAL AREA: 18,796.00 SF

FRANK J. QUATELA
ARCHITECT, P.C.

36-07 169th STREET
FLUSHING, NY 11358
TEL: 718.886.1600

FRANK@QUATELA-ARCHITECTS.COM
WWW.QUATELA-ARCHITECTS.COM

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| NO. | DATE | REVISION |
|---|---|---|
| 1 | 03/07/23 | add utilities |

DRAWING TITLE:

FLOOR PLANS

PREMISES:

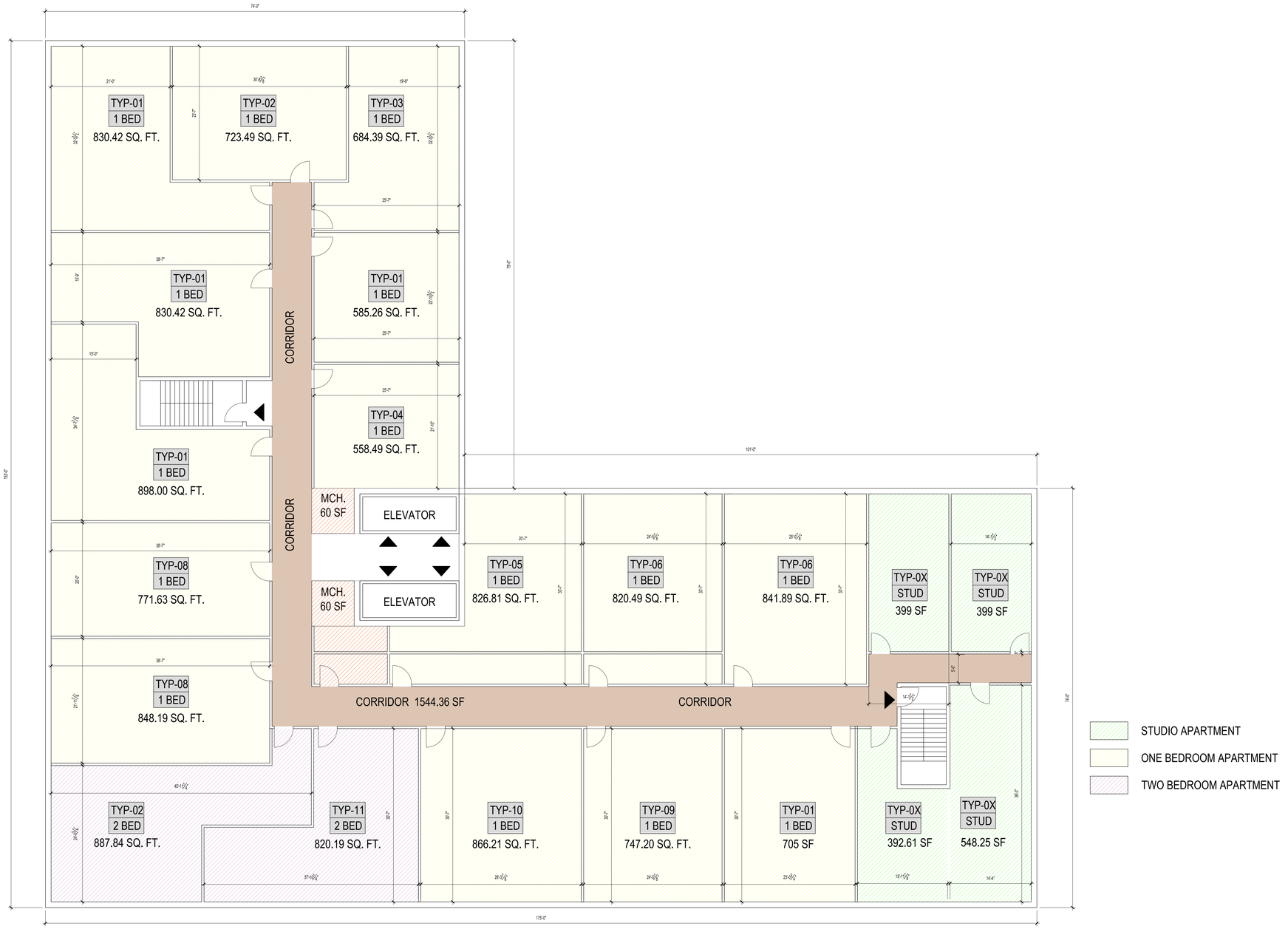
14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

DRAWN: M.V.P
CHECKED: F.JQ
JOB NO.: 20022
SCALE: AS NOTED
DATE: 08/18/2021

SEAL:

DRAWING: 5 OF 9

A-103.00




SCHEMATIC 3rd - 4th FLOOR PLANS RESIDENTIAL
SCALE : 1/8=1'-0"
TOTAL AREA: 18,796.00 SF

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| NO. | DATE | REVISION |
|---|---|---|
| | | |

DRAWING TITLE:
FLOOR PLANS

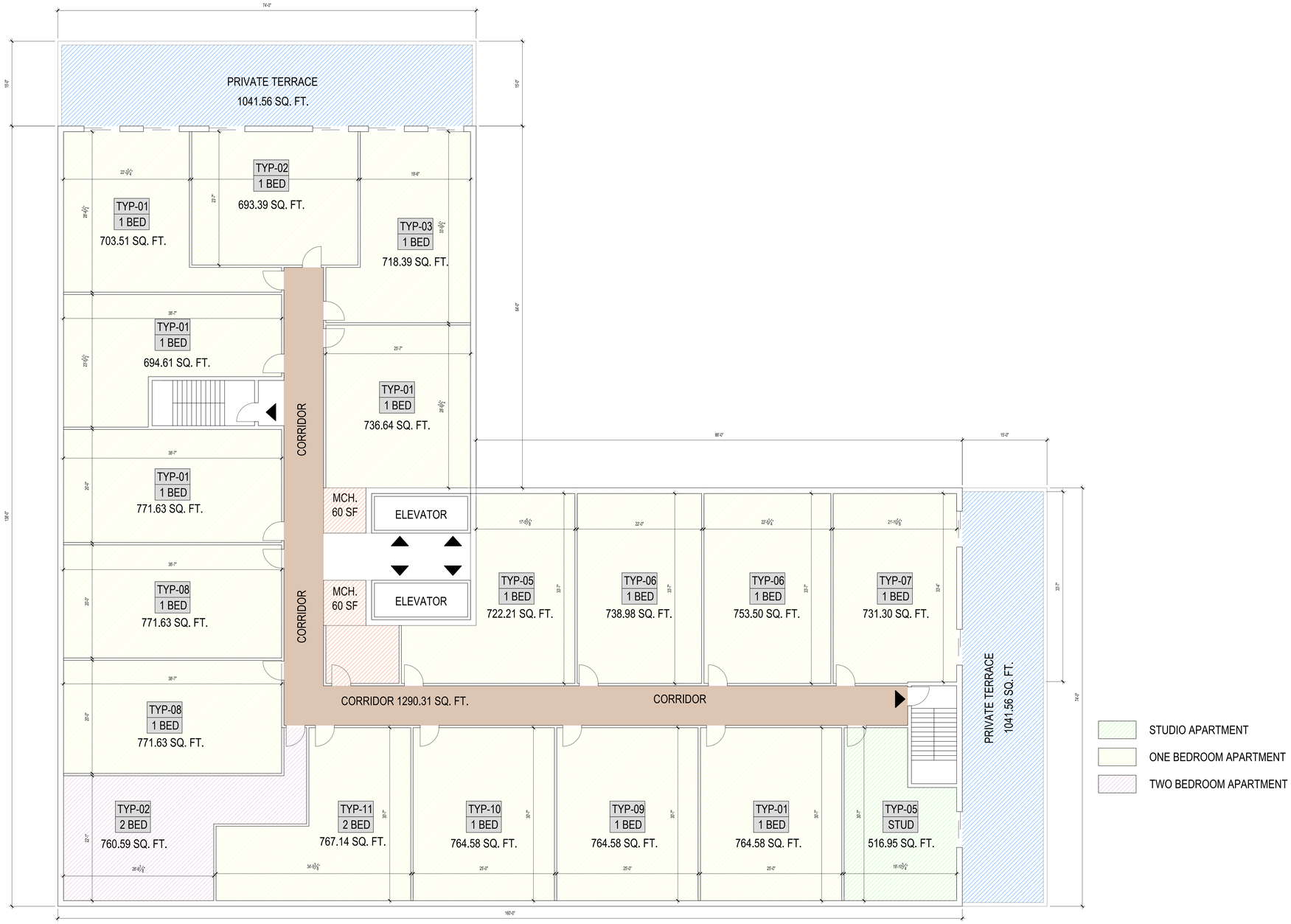
PREMISES:
14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

| | |
|---|---|
| DRAWN: | M.V.P |
| CHECKED: | F.J.Q |
| JOB NO.: | 20022 |
| SCALE: | AS NOTED |
| DATE: | 08/18/2021 |

SEAL:

DRAWING: 6 OF 9

A-104.00




STUDIO APARTMENT

ONE BEDROOM APARTMENT

TWO BEDROOM APARTMENT

SCHEMATIC 5th FLOOR PLAN RESIDENTIAL

SCALE : 1/8=1'-0"

TOTAL AREA: 16,576.00 SF

FRANK J. QUATELA
ARCHITECT, P.C.

36-07 169th STREET
FLUSHING, NY 11358
TEL: 718.886.1600

FRANK@QUATELA-ARCHITECTS.COM
WWW.QUATELA-ARCHITECTS.COM

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| NO. | DATE | REVISION |
|---|---|---|
| | | |

DRAWING TITLE:

FLOOR PLANS

PREMISES:

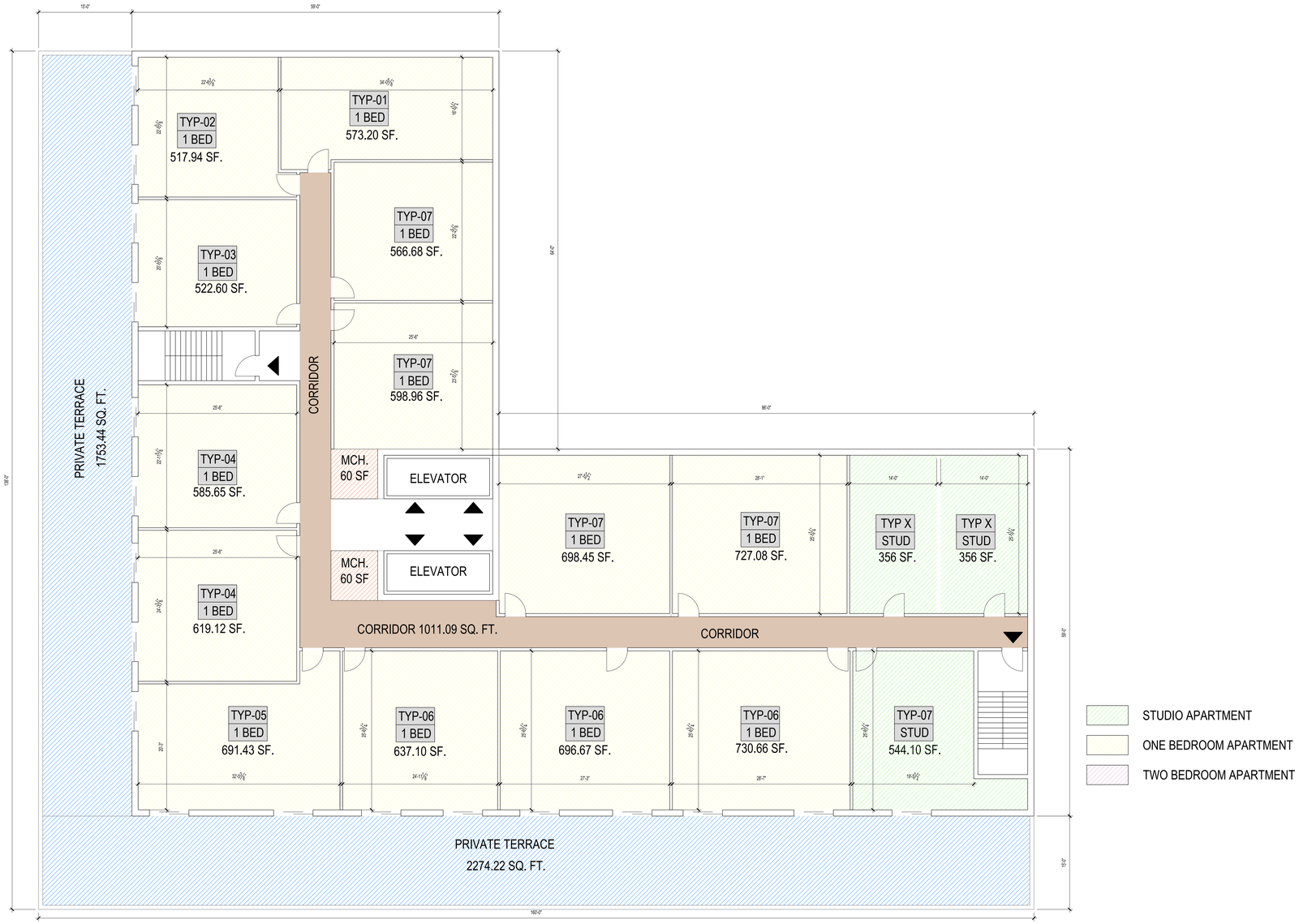
14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

| | |
|---|---|
| DRAWN: | M.V.P |
| CHECKED: | F.J.Q |
| JOB NO.: | 20022 |
| SCALE: | AS NOTED |
| DATE: | 08/18/2021 |

SEAL:

DRAWING: 7 OF 9

A-105.00




SCHEMATIC 6th FLOOR PLAN RESIDENTIAL

SCALE : 1/8=1'-0"

TOTAL AREA: 16,576.00 SF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| NO. | DATE | REVISION |
|---|---|---|
| | | |

DRAWING TITLE:

FLOOR PLANS

PREMISES:

14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

| | |
|---|---|
| DRAWN: | M.V.P |
| CHECKED: | F.J.Q |
| JOB NO.: | 20022 |
| SCALE: | AS NOTED |
| DATE: | 08/18/2021 |

SEAL:

DRAWING: 8 OF 9

A-106.00




ELEVATION THROUGH BEACH CHANNEL DRIVE

SCALE: 1/8" = 1'-0"

BASEPLANE: AVERAGE EXISTING NATURAL GRADE @ PROPERTY LINE

$$\text{BASEPLANE} = \frac{\left[\frac{(A+B)}{2} \times a\right] + \left[\frac{(B+C)}{2} \times b\right]}{a+b}$$

$$\text{BASEPLANE} = \frac{\left[\frac{(8.47'+10.83')}{2} \times 175.00'\right] + \left[\frac{(10.83'+12.70')}{2} \times 185.00'\right]}{175.00' + 185.00'}$$

$$\text{BASEPLANE} = \frac{1,688.75' + 2,176.53'}{360.00'} = \frac{3,865.28'}{360.00'} = \mathbf{\pm 10.73'}$$




ELEVATION THROUGH NAMEOKE AVENUE

SCALE: 1/8" = 1'-0"

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| NO. | DATE | REVISION |
|---|---|---|
| 1 | 03/07/23 | flood zone elevations |

DRAWING TITLE:

ELEVATIONS

PREMISES:

14-10 BEACH CHANNEL DRIVE
QUEENS NEW YORK

| | |
|---|---|
| DRAWN: | I.A.G |
| CHECKED: | F.J.Q |
| JOB NO.: | 20022 |
| SCALE: | AS NOTED |
| DATE: | 08/18/2021 |

SEAL:

DRAWING: 9 OF 9

A-201.00

# APPENDIX C

## WATERFRONT REVITALIZATION PROGRAM CONSISTENCY ASSESSMENT FORM AND FLOOD EVALUATION WORKSHEET

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

# NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
## Consistency Assessment Form

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

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

### A. APPLICANT INFORMATION

Name of Applicant: 14-10 Beach LLC

Name of Applicant Representative: Kevin Williams, Equity Environmental Engineering

Address: 14-10 Beach Channel Drive

Telephone: 973.527.7451 Email: _____

Project site owner (if different than above): kevin.williams@equityenvironmental.com

### B. PROPOSED ACTIVITY

*If more space is needed, include as an attachment.*

1. Brief description of activity

The Applicant, 14-10 Beach LLC, is seeking a zoning map amendment from an R5 zoning district to R6A and R6A/C2-4 zoning districts and a zoning text amendment to Appendix F of the NYC Zoning Resolution to map an MIH area, collectively known as the "Proposed Actions". The Proposed Actions would facilitate the development of a new 6-story plus cellar, 67-foot tall, 95,608 GSF (3.33 FAR) mixed-use residential, commercial, and community facility building. The proposed commercial and community facility spaces would be located on the groundfloor of the proposed building and would house local retail and religious uses, respectively. Floors 2 through 6 would feature 96 dwelling units total, 25 to 30 percent (24 to 29 units) of which would be affordable pursuant to the Mandatory Inclusionary Housing (MIH) program, at an average of 60 to 80 percent Area Median Income (AMI) depending on the MIH Option selected. The Applicant intends to pursue MIH Option 1, which would result in 24 affordable units. 97 residential accessory parking spaces and 5 commercial accessory parking spaces would be provided as part of the Proposed Project, which would exceed the minimum accessory parking requirements of the proposed R6A/C2-4 zoning district, including 56 spaces at the cellar level and 46 spaces on the ground floor.

2. Purpose of activity

Current zoning will not permit the Applicant to develop the Proposed Project, as the existing R5 zoning district does not permit the proposed commercial uses and floor area as-of-right. Mapping the proposed R6A/C2-4 district would be consistent with the City's goals as specified in the Downtown Far Rockaway Rezoning application by promoting development on underutilized property. Further, it would build on the existing middle-density residential community and would improve the local retail experiences and support the nearby public transit links. The Affected Area is an underutilized area primarily used for parking with a modest low-rise building and would benefit from the development of a mixed-use residential building to help meet the demand for additional housing. The Proposed Actions would provide new opportunities for affordable and market-rate housing development, adding 96 new housing units to help meet the housing demand in the area. Furthermore, 25 to 30 percent of the proposed dwelling units would be affordable pursuant to MIH at an average of 60 to 80 percent AMI, dependent on the MIH Option selected. Overall, this would improve the housing conditions in a neighborhood where 31.2 percent of the population lives below the poverty level.

## C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): Block 15525, Lots 1 and 51

Street Address: 14-10 Beach Channel Drive

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

## D. REQUIRED ACTIONS OR APPROVALS

*Check all that apply.*

### City Actions/Approvals/Funding

***City Planning Commission*** ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

***Board of Standards and Appeals*** ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

***Other City Approvals***

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

### State Actions/Approvals/Funding

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

### Federal Actions/Approvals/Funding

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

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

## E. LOCATION QUESTIONS

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

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

## F. WRP POLICY ASSESSMENT

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

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

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

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

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

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

## G. CERTIFICATION

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

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

Applicant/Agent's Name: Kevin Williams, Equity Environmental Engineering

Address: 500 International Drive, Suite 150, Mount Olive, NJ 07828

Telephone: 973.527.7451 Email: kevin.williams@equityenvironmental.com

Applicant/Agent's Signature: _____

Date: _____

## Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

**New York City Department of City Planning**
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

**New York State Department of State**
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

### Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☐ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

**NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet**

**COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp**

*Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.*

| Background Information | |
|---|---|
| Project Name | 14-10 Beach Channel Drive Rezoning |
| Location | 14-10 Beach Channel Drive Rezoning |
| Type(s) | ▪ Residential, Commercial, ▪ Parkland, Open Space, and ▪ Tidal Wetland Restoration ▪ Critical Infrastructure or ▪ Industrial Uses<br>▪ Over-water Structures ▪ Shoreline Structures ▪ Transportation ▪ Wastewater ▪ Coastal Protection |
| Description | The Applicant, 14-10 Beach LLC, is seeking a zoning map amendment from an R5 zoning district to the R6A and R6A/C2-4 zoning districts and a zoning text amendment to Appendix F of the NYC Zoning Resolution to map a Mandatory Inclusionary Housing (MIH) area coterminous to the proposed rezoning area, collectively known as the "Proposed Actions." The Proposed Actions would facilitate the development of a new 6-story plus cellar, 67-foot tall, 95,608 gross square foot (GSF) (3.33 FAR) mixed-use residential, commercial, and community facility building (the "Proposed Project"). The proposed commercial and community facility spaces would be located on the ground floor of the proposed building and would house local retail and |
| Planned Completion Date | 2026 |
| Expected Project Lifespan | 100 Years + |

*The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.*

**For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."**

***Last update: Sept. 7, 2018***

## Establish current tidal and flood heights.

| | FT (NAVD88) | Feet | Datum | Source |
|---|---|---|---|---|
| MHHW | 2.43 | **2.43** | **NAVD88** | *Beach Channel Station adjusted* |
| 1% flood height | 9.00 | **9.00** | **NAVD88** | *2015 PFIRMs nearest 1% flood height* |
| Design flood elevation | 11.00 | **11.00** | **NAVD88** | *Nearest 1% BFE + 2 feet* |
| *As relevant:* | | | | |
| 0.2% flood height | 12.00 | 12.00 | **NAVD88** | *Estimate based on 1% flood elevation* |

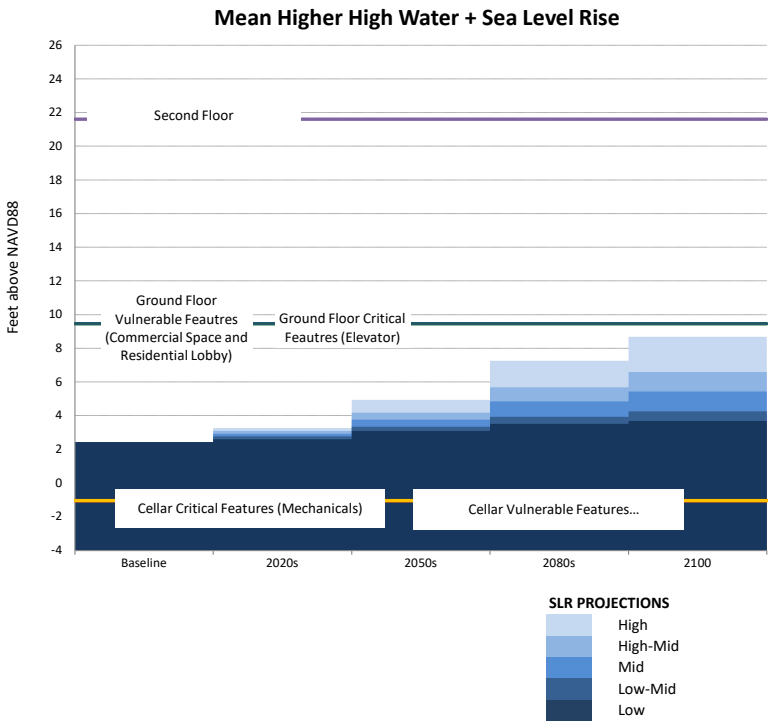
*Data will be converted based on the following datums:*

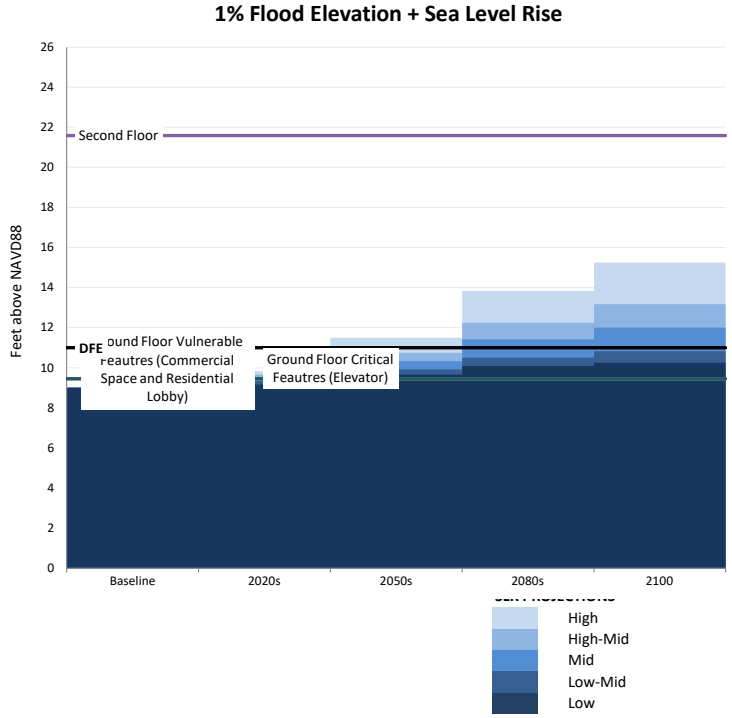
| Datum | FT (NAVD88) |
|---|---|
| NAVD88 | *0.00* |
| NGVD29 | *-1.10* |
| Manhattan Datum | *1.65* |
| Bronx Datum | *1.51* |
| Brooklyn Datum (Sewer) | *0.61* |
| Brooklyn Datum (Highway) | *1.45* |
| Queens Datum | *1.63* |
| Richmond Datum | *2.09* |

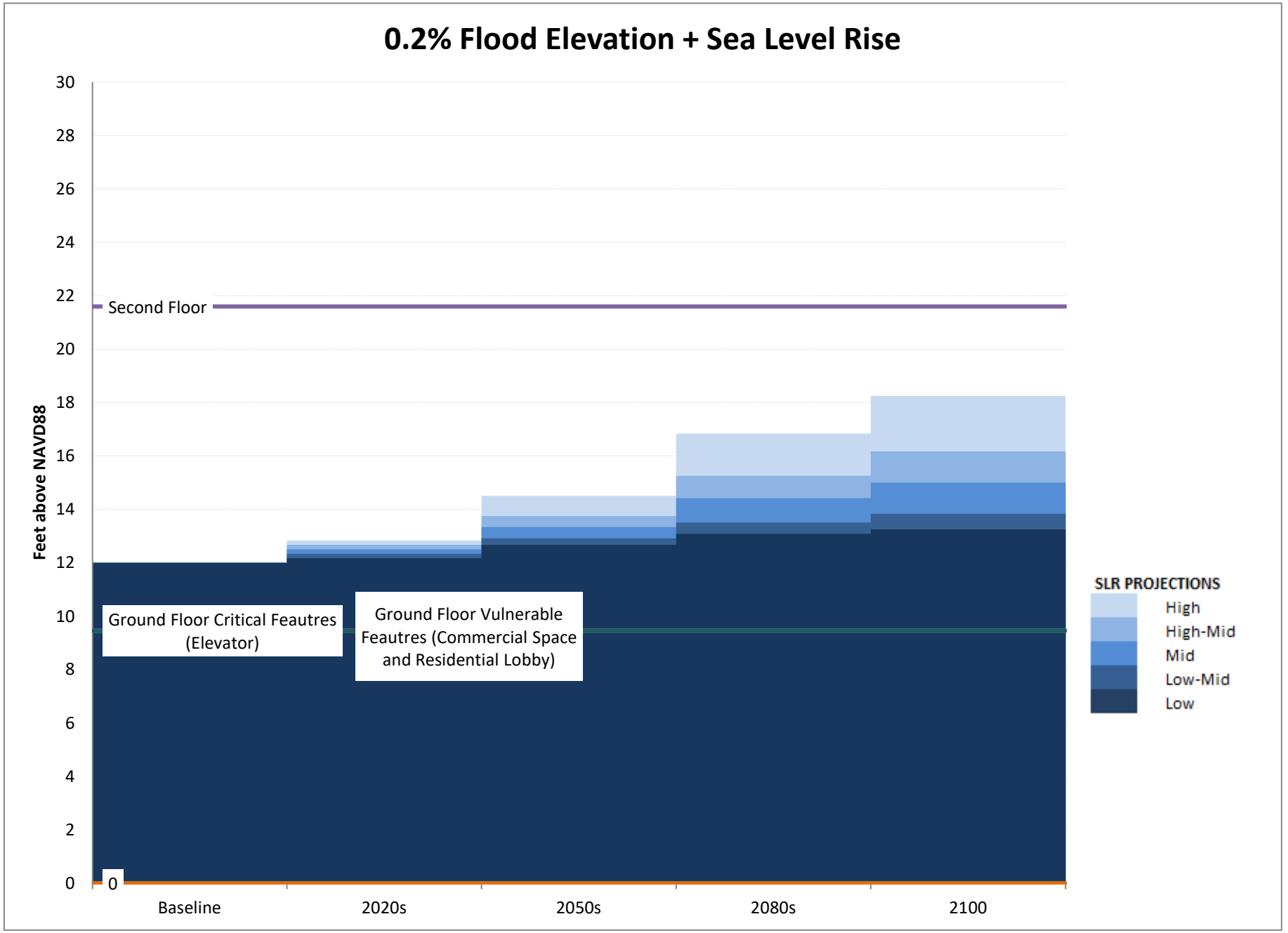
**Describe key physical features of the project.**

| Feature *(enter name)* | Feature Category | Lifespan | Elevation | Units | Datum | Ft | Ft Above NAVD88 | Ft Above MHHW | Ft Above 0.2% flood height |
|---|---|---|---|---|---|---|---|---|---|
| Cellar Critical Features (Mechanical) | ▫ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other | 100 Years | -1.0 | Feet | NAVD88 | -1.0 | -1.0 | -3.5 | -13.0 |
| | | | | | | | | | |
| Cellar Vulnerable Features (Parking, Service R | ▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other | 100 Years | -1.0 | Feet | NAVD88 | -1.0 | -1.0 | -3.5 | -13.0 |
| *Enclosed walls, flooring, vehicle parking and bicycle parking* | | | | | | | | | |
| Ground Floor Vulnerable Feautres (Commerc | ▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other | 100 Years | 9.5 | Feet | NAVD88 | 9.5 | 9.5 | 7.0 | -2.5 |
| *Ground floor commercial, community facility (house of worship), residential lobby, parking, storage.* | | | | | | | | | |
| Ground Floor Critical Feautres (Elevator) | ▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other | 100 Years | 9.5 | Feet | NAVD88 | 9.5 | 9.5 | 7.0 | -2.5 |
| *Elevator* | | | | | | | | | |
| Second Floor | ▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other | 100 Years | 21.6 | Feet | NAVD88 | 21.6 | 21.6 | 19.2 | 9.6 |
| *Enclosed walls, flooring, electrical within residential Dus, utilities, mechanical* | | | | | | | | | |
| | ▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other | | | Feet | NAVD88 | | | | |
| *Description of Planned Uses and Materials* | | | | | | | | | |
| | ▫ Vulnerable ▪ Critical ▫ Potentially Hazardous ▪ Other | | | Feet | NAVD88 | | | | |
| *Description of Planned Uses and Materials* | | | | | | | | | |
| | ▫ Vulnerable ▪ Critical ▫ Potentially Hazardous ▪ Other | | | Feet | NAVD88 | | | | |
| *Description of Planned Uses and Materials* | | | | | | | | | |

**Assess project vulnerability over a range of sea level rise projections.**




0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
Second Floor
Ground Floor Critical Feautres (Elevator)
Ground Floor Vulnerable Feautres (Commercial Space and Residential Lobby)
0
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

| | SLR (ft) | | | | | |
|---|---|---|---|---|---|---|
| | **Low** | **Low-Mid** | **Mid** | **High-Mid** | **High** | |
| **Baseline** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | **2014** |
| **2020s** | 0.17 | 0.33 | 0.50 | 0.67 | 0.83 | **2020s** |
| **2050s** | 0.67 | 0.92 | 1.33 | 1.75 | 2.50 | **2050s** |
| **2080s** | 1.08 | 1.50 | 2.42 | 3.25 | 4.83 | **2080s** |
| **2100** | 1.25 | 1.83 | 3.00 | 4.17 | 6.25 | **2100** |

| | MHHW+SLR (ft above NAVD88) | | | | |
|---|---|---|---|---|---|
| | **Low** | **Low-Mid** | **Mid** | **High-Mid** | **High** |
| **Baseline** | 2.43 | 2.43 | 2.43 | 2.43 | 2.43 |
| **2020s** | 2.60 | 2.76 | 2.93 | 3.10 | 3.26 |
| **2050s** | 3.10 | 3.35 | 3.76 | 4.18 | 4.93 |
| **2080s** | 3.51 | 3.93 | 4.85 | 5.68 | 7.26 |
| **2100** | 3.68 | 4.26 | 5.43 | 6.60 | 8.68 |

| | 1%+SLR (ft above NAVD88) | | | | |
|---|---|---|---|---|---|
| | **Low** | **Low-Mid** | **Mid** | **High-Mid** | **High** |
| **Baseline** | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 |
| **2020s** | 9.17 | 9.33 | 9.50 | 9.67 | 9.83 |
| **2050s** | 9.67 | 9.92 | 10.33 | 10.75 | 11.50 |
| **2080s** | 10.08 | 10.50 | 11.42 | 12.25 | 13.83 |
| **2100** | 10.25 | 10.83 | 12.00 | 13.17 | 15.25 |

| | 0.2%+SLR (ft above NAVD88) | | | | |
|---|---|---|---|---|---|
| | **Low** | **Low-Mid** | **Mid** | **High-Mid** | **High** |
| **Baseline** | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| **2020s** | 12.17 | 12.33 | 12.50 | 12.67 | 12.83 |
| **2050s** | 12.67 | 12.92 | 13.33 | 13.75 | 14.50 |
| **2080s** | 13.08 | 13.50 | 14.42 | 15.25 | 16.83 |
| **2100** | 13.25 | 13.83 | 15.00 | 16.17 | 18.25 |

| | | |
|---|---|---|
| | 0 | 1 |
| Cellar Critical Features (Mecha | -1 | -1.04 |
| Cellar Vulnerable Features (Pa | -1 | -1.04 |
| Ground Floor Vulnerable Feau | 9.46 | 9.46 |
| Ground Floor Critical Feautres | 9.46 | 9.46 |
| Second Floor | 21.6 | 21.6 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| DFE | 11.00 | 11.00 |

| SLR (in) | | | | |
|---|---|---|---|---|
| **Low** | **Low-Mid** | **Mid** | **High-Mid** | **High** |
| 0 | 0 | 0 | 0 | 0 |
| 2 | 4 | 6 | 8 | 10 |
| 8 | 11 | 16 | 21 | 30 |
| 13 | 18 | 29 | 39 | 58 |
| 15 | 22 | 36 | 50 | 75 |

**NOAA Tide Station Data**

*(to be used only when a site survey is unavailable)*

| *Station ID* | *Station Name* | *Source MHHW (Feet, NAVD88)** | *Adjusted MHHW (Feet, NAVD88)** |
|---|---|---|---|
| 8518687 | Queensboro Bridge | 2.27 | 2.60 |
| 8530095 | Alpine | 2.11 | 2.44 |
| 8516614 | Glen Cove | 3.72 | 4.05 |
| 8516990 | Willets Point | 3.72 | 4.05 |
| 8518639 | Port Morris | 3.33 | 3.66 |
| 8518699 | Williamsburg Bridge | 2.14 | 2.47 |
| 8518750 | The Battery | 2.28 | 2.61 |
| 8531680 | Sandy Hook | 2.41 | 2.74 |
| 8518490 | New Rochelle | 3.71 | 4.04 |
| 8531545 | Keyport | 2.66 | 2.99 |
| 8516891 | Norton Point | 2.08 | 2.41 |
| 8517201 | North Channel | 2.72 | 3.05 |
| 8517137 | Beach Channel | 2.10 | 2.43 |
| 8517756 | Kingsborough | 2.13 | 2.46 |
| 8519436 | Great Kills | 2.22 | 2.55 |
| 8531142 | Port Reading | 2.82 | 3.15 |
| 8519483 | Bergen Point | 2.56 | 2.89 |
| 8519050 | USCG | 2.28 | 2.61 |
| 8518902 | Dyckman St | 2.01 | 2.34 |
| 8517251 | Worlds Fair Marina | 3.59 | 3.92 |
| 8518668 | Horns Hook | 2.54 | 2.87 |
| 8518643 | Randalls Island | 2.60 | 2.93 |
| 8518526 | Throggs Neck | 3.68 | 4.01 |

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-20

| *Source* |
|---|
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
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| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA VDATUM |
| NOAA VDATUM |
| NOAA VDATUM |
| NOAA Tides and Currents |

01 tidal epoch.




Alpine
8530095
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Rochelle
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Dyckman St
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Glen Cove
8516614
Randalls
Island
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Morris
8518639
Throggs
Neck
8518526
Willets
Point
8516990
Worlds Fair
Marina
8517251
Queensboro
Bridge
8518687
Horns Hook
8518668
Williamsburg
Bridge
8518699
The Battery
8518750
North
Channel
8507201
Norton
Point
8516891
CG
9050
Beach
Channel
8517137
Kingsborough
8517756
Sandy Hook
8531680

# APPENDIX D

## JAMAICA BAY WATERSHED PROTECTION PLAN

## TRACKING FORM

Print Form

# Jamaica Bay Watershed Protection Plan
# Project Tracking Form

The Jamaica Bay Watershed Protection Plan, developed pursuant to Local Law 71 of 2005, mandates that the New York City Department of Environmental Protection (DEP) work with the Mayor's Office of Environmental Coordination (MOEC) to review and track proposed development projects in the Jamaica Bay Watershed (http://www.nyc.gov/html/oec/downloads/pdf/ceqr/Jamaica_Bay_Watershed_Map.jpg) that are subject to CEQR in order to monitor growth and trends. If a project is located in the Jamaica Bay Watershed, (the applicant should complete this form and submit it to DEP and MOEC. This form must be updated with any project modifications and resubmitted to DEP and MOEC.

*The information below will be used for tracking purposes only. It is not intended to indicate whether further CEQR analysis is needed to substitute for the guidance offered in the relevant chapters of the CEQR Technical Manual.*

## A. GENERAL PROJECT INFORMATION

1. CEQR Number: Pending  1a. Modification ☐
2. Project Name: 14-10 Beach Channel Drive Rezoning
3. Project Description:

The Applicant, 14-10 Beach LLC, is seeking a zoning map amendment from an R5 zoning district to the R6A and R6A/C2-4 zoning districts and a zoning text amendment to Appendix F of the NYC Zoning Resolution to map an Mandatory Inclusionary Housing (MIH) area coterminous to the proposed rezoning area.

4. Project Sponsor: Equity Environmental Engineering, a Division of GZA
5. Required approvals: Zoning map amendment and zoning text amendment
6. Project schedule (build year and construction schedule): 2027

## B. PROJECT LOCATION:

1. Street address: 14-10 Beach Channel Drive
2. Tax block(s): Block 15525  Tax Lot(s): Lots 1 and 51
3. Identify existing land use and zoning on the project site: Commercial auto sales, office, institution; R
4. Identify proposed land use and zoning on the project site: Residential and community facility; R6A
5. Identify land use of adjacent sites (include any open space): One & Two Family, Multi-family (elev
6. Describe existing density on the project site and the proposed density:

| Existing Condition | Proposed Condition |
|---|---|
| 0.27 FAR | 3.6 FAR |

7. Is project within 100 or 500 year floodplain (specify)? ☒ **100 Year** ☒ **500 Year** ☐ **No**

## C. GROUND AND GROUNDWATER

1. Total area of in-ground disturbance, if any (in square feet): 14,000 s.f.
2. Will soil be removed (if so, what is the volume in cubic yards)?
3. Subsurface soil classification:
   (per the New York City Soil and Water Conservation Board): Pavement & buildings-Flatbush-Riv
4. If project would change site grade, provide land contours (**attach** map showing existing in 1' contours and proposed in 1' contours).
5. Will groundwater be used (list volumes/rates)? ☐ **Yes** ☒ **No**

   Volumes: Rates:
6. Will project involve dewatering (list volumes/rates)? ☐ **Yes** ☐ **No**

   Volumes: Rates:
7. Describe site elevation above seasonal high groundwater:

   >80 inches below land surface

## D. HABITAT

1. Will vegetation be removed, particularly native vegetation? ☐ **Yes** ☒ **No**

   If YES,
   - **Attach** a detailed list (species, size and location on site) of vegetation to be removed (including trees >2" caliper, shrubs, understory planting and groundcover).
   - **List** species to remain on site.
   - **Provide** a detailed list (species and sizes) of proposed landscape restoration plan (including any wetland restoration plans).
2. Is the site used or inhabited by any rare, threatened or endangered species? ☐ **Yes** ☒ **No**
3. Will the project affect habitat characteristics? ☐ **Yes** ☒ **No**

   If YES, describe existing wildlife use and habitat classification using "Ecological Communities of New York State." at http://www.dec.ny.gov/animals/29392.html.
4. Will pesticides, rodenticides or herbicides be used during construction? ☐ **Yes** ☒ **No**

   If YES, estimate quantity, area and duration of application.
5. Will additional lighting be installed? ☐ **Yes** ☒ **No**

   If YES and near existing open space or natural areas, what measures would be taken to reduce light penetration into these areas?

## E. SURFACE COVERAGE AND CHARACTERISTICS

(describe the following for both the existing and proposed condition):

| | Existing Condition | Proposed Condition |
|---|---|---|
| 1. ***Surface area:*** | | |
| Roof: | 4,200 s.f. | 12,331 s.f. |
| Pavement/walkway: | 24,000 s.f. | 5,300 s.f. |
| Grass/softscape: | 0 s.f | 0 s.f. |
| Other (describe): | No vegetation | 14 street trees proposed |

2. ***Wetland*** (regulated or non-regulated) area and classification:

| | |
|---|---|
| NA | |

3. ***Water surface area:***

| | |
|---|---|
| None | |

4. ***Stormwater management*** (describe):

Existing – how is the site drained?

MS4 - city street storm drain

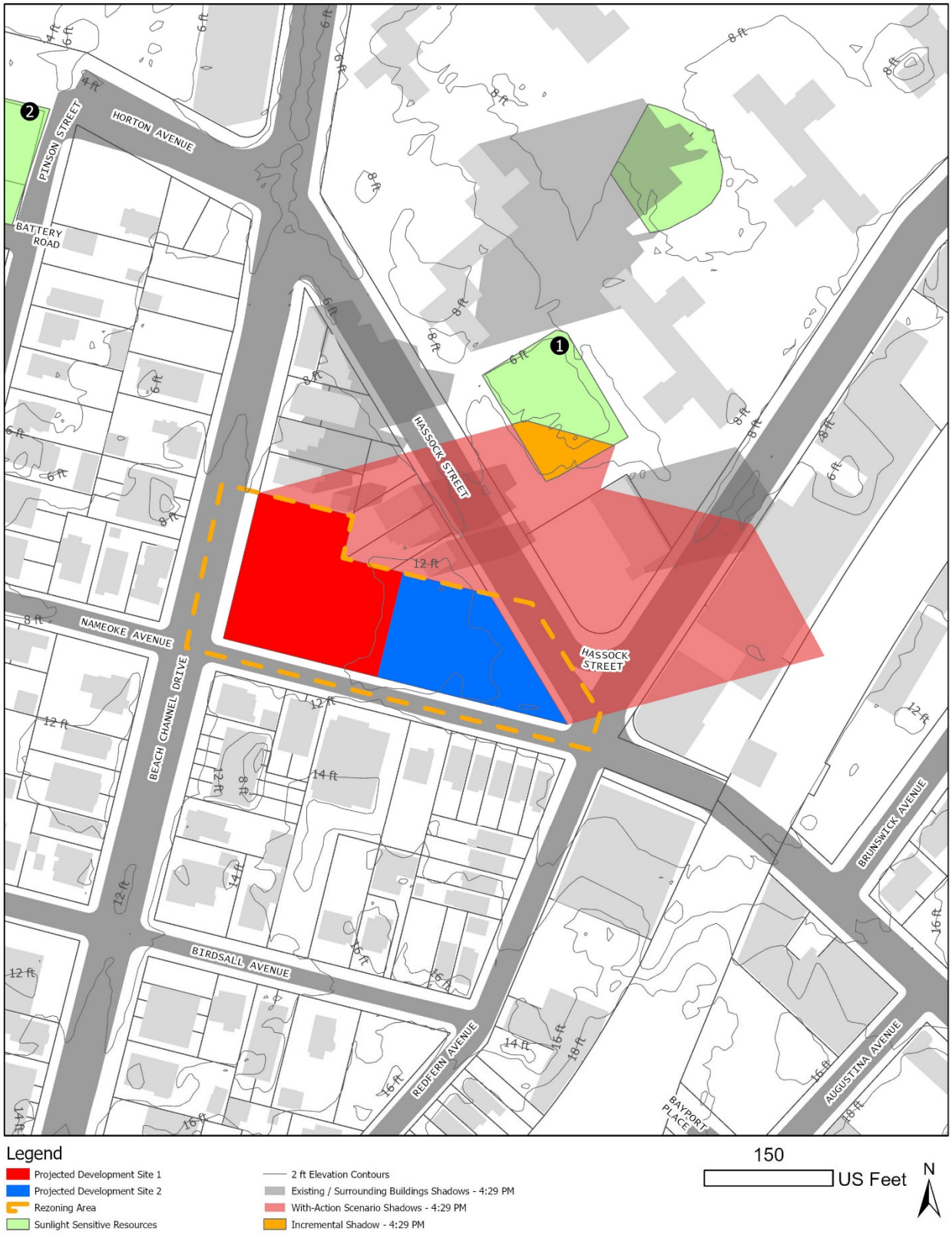
Proposed – describe, including any infrastructure improvements necessary off-site:

None

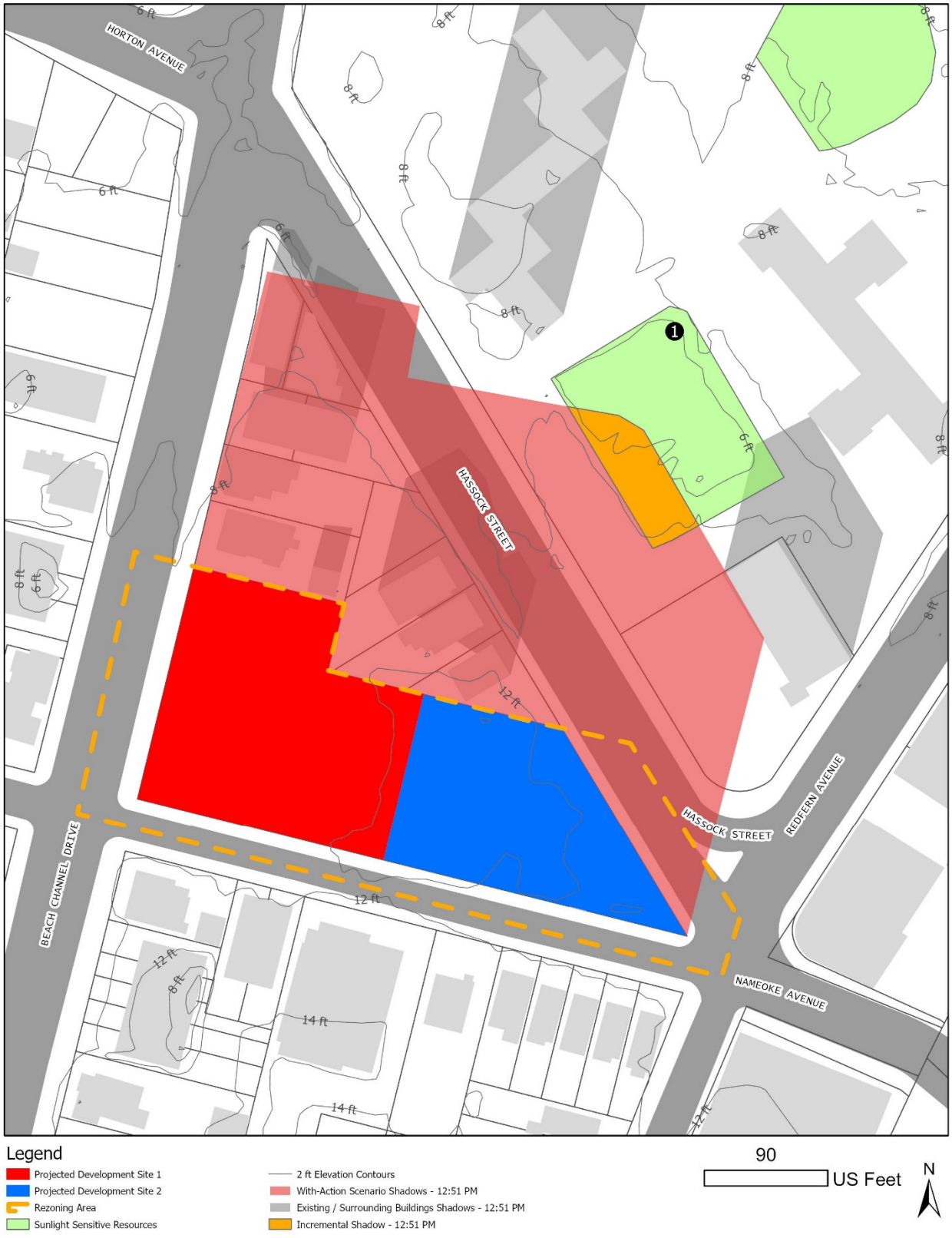
# APPENDIX E

## DETAILED SHADOW ANALYSIS FIGURES

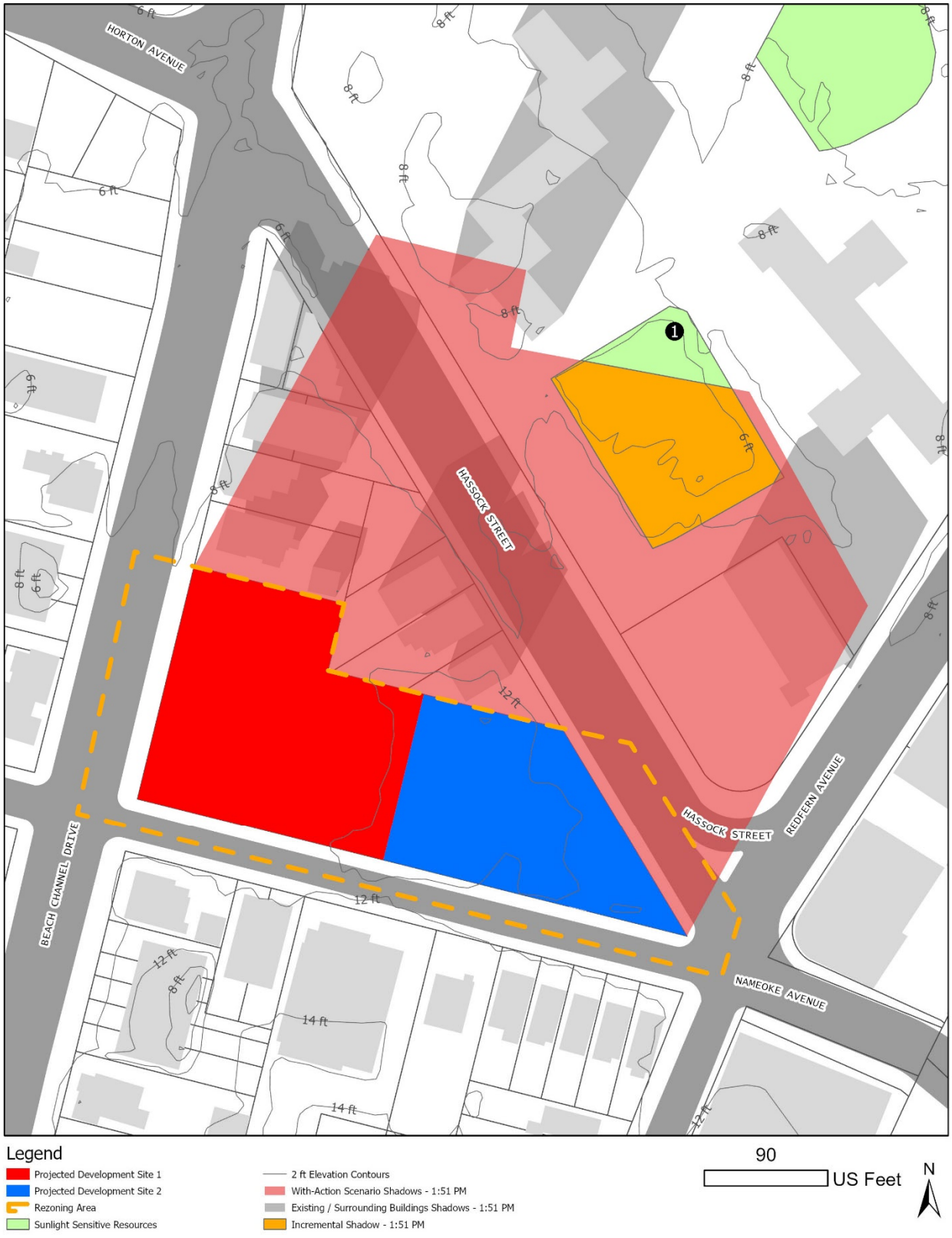
## Detailed Shadows Analysis: March 21/September 21



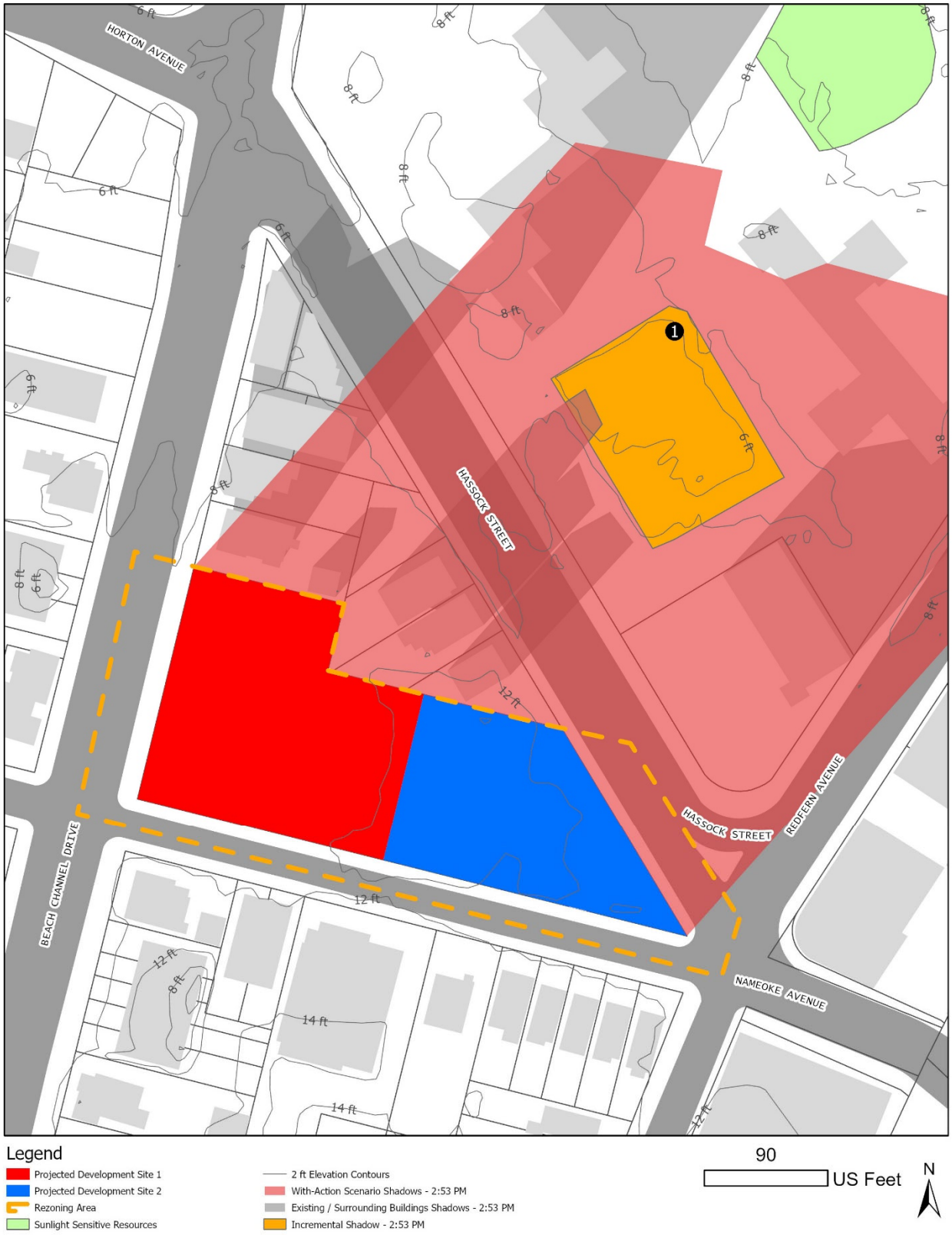
## Detailed Shadows Analysis: December 21



## Detailed Shadows Analysis: December 21



## Detailed Shadows Analysis: December 21



# APPENDIX F

## NOISE BACKUP

# Certificate of Conformity and Calibration



| | | | |
|---|---|---|---|
| **Instrument Model:-** | **CEL-633C** | | |
| Serial Number | 1274486 | | |
| Firmware revision | V006-05 | | |
| **Microphone Type:-** | **CEL-251** | **Preamplifier Type:-** | **CEL-495** |
| Serial Number | 5784 | Serial Number | 003987 |
| **Instrument Class/Type:-** | 1 | | |

## Applicable standards:-

IEC 61672: 2013 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

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

| | | | |
|---|---|---|---|
| **Test Conditions:-** | 24 °C | **Test Engineer:-** | Paul Blackwell |
| | 43 %RH | **Date of Issue:-** | August 3, 2022 |
| | 1006 mBar | | |

## Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2015 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

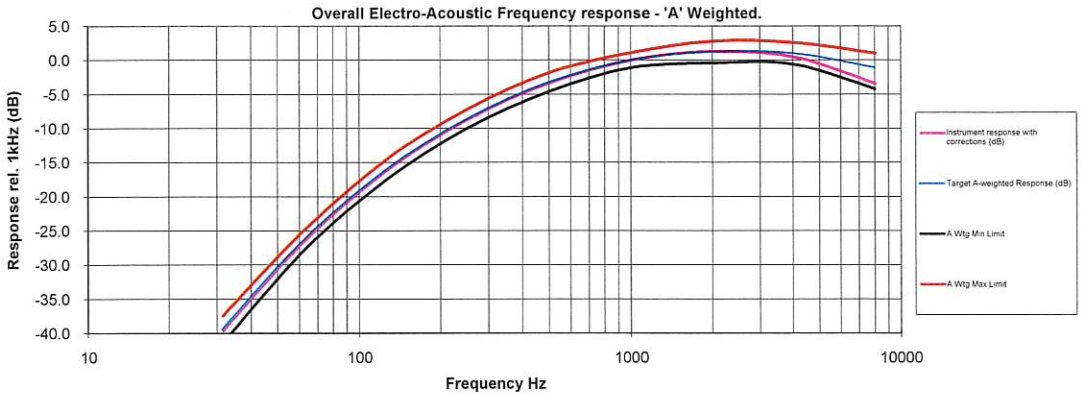
## Test Summary:-

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

## Combined Electro-Acoustic Frequency Response - A Weighted

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

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




**Casella UK**
Regent House, Wolseley Road, Kempston, Bedford MK42 7JY United Kingdom
Tel: +44 (0) 1234 844100
Fax: +44(0) 1234 841490
E-mail: info@casellasolutions.com

**Casella USA**
415 Lawrence Bell Drive, Unit 4 Buffalo, NY 14221, USA
Toll Free (800) 366-2966
Tel: +1 (716) 276 3040
E-mail: info@casellausa.com

**Casella India**
Ideal Industries India Pvt.Ltd.
229-230, Spazedge, Tower -B Sohna Road, Sector-47, Gurgaon-122001, Haryana , India.
Tel: +91 124 4495100
E-mail: casella.sales@ideal-industries.in

**Casella China**
Ideal Industries China
Room 305, Building 1, No.1279, Chuanqiao Rd, Pudong New District, Shanghai, China
Tel: +86-21-31263188
Fax: +86-21-61605906
Email: info@casellasolutions.cn

Tested to CEL-63X test sheet TP444 revision 02-00

# Certificate of Conformity and Calibration



| | | | |
|---|---|---|---|
| **Instrument Model:-** | **CEL-633C** | | |
| Serial Number | 4278006 | | |
| Firmware revision | V006-05 | | |
| **Microphone Type:-** | **CEL-251** | **Preamplifier Type:-** | **CEL-495** |
| Serial Number | 4372 | Serial Number | 005389 |
| **Instrument Class/Type:-** | **1** | | |

## Applicable standards:-

IEC 61672: 2013 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

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

| | | | |
|---|---|---|---|
| **Test Conditions:-** | 25 °C | **Test Engineer:-** | Paul Blackwell |
| | 38 %RH | **Date of Issue:-** | July 27, 2022 |
| | 1015 mBar | | |

## Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2015 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

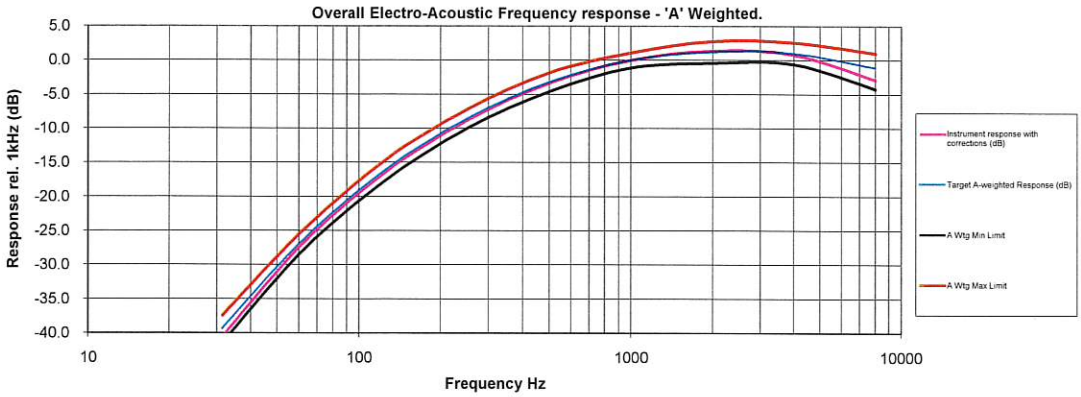
## Test Summary:-

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

## Combined Electro-Acoustic Frequency Response - A Weighted

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

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




**Casella UK**
Regent House, Wolseley Road,
Kempston, Bedford
MK42 7JY
United Kingdom
Tel: +44 (0) 1234 844100
Fax: +44(0) 1234 841490
E-mail: info@casellasolutions.com

**Casella USA**
415 Lawrence Bell Drive, Unit 4
Buffalo, NY 14221, USA
Toll Free (800) 366-2966
Tel: +1 (716) 276 3040
E-mail: info@casellausa.com

**Casella India**
Ideal Industries India Pvt.Ltd.
229-230, Spazedge, Tower -B Sohna Road,
Sector-47, Gurgaon-122001, Haryana , India.
Tel: +91 124 4495100
E-mail: casella.sales@ideal-industries.in

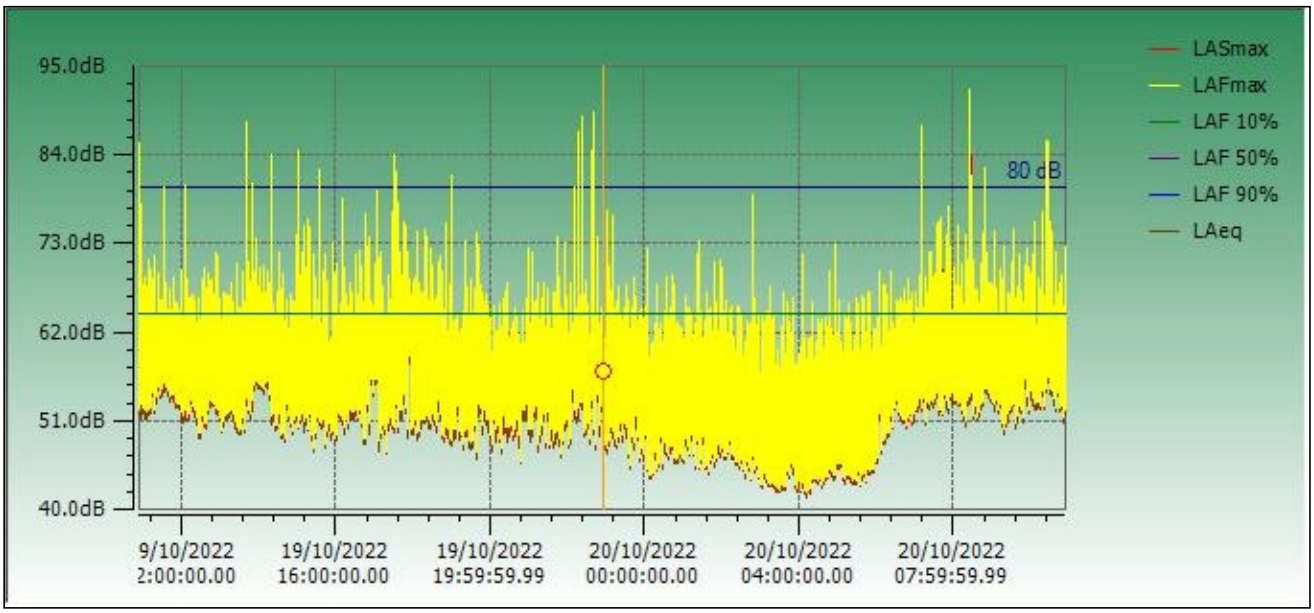
**Casella China**
Ideal Industries China
Room 305, Building 1, No.1279, Chuanqiao
Rd, Pudong New District,
Shanghai, China
Tel: +86-21-31263188
Fax: +86-21-61605906
Email: info@casellasolutions.cn

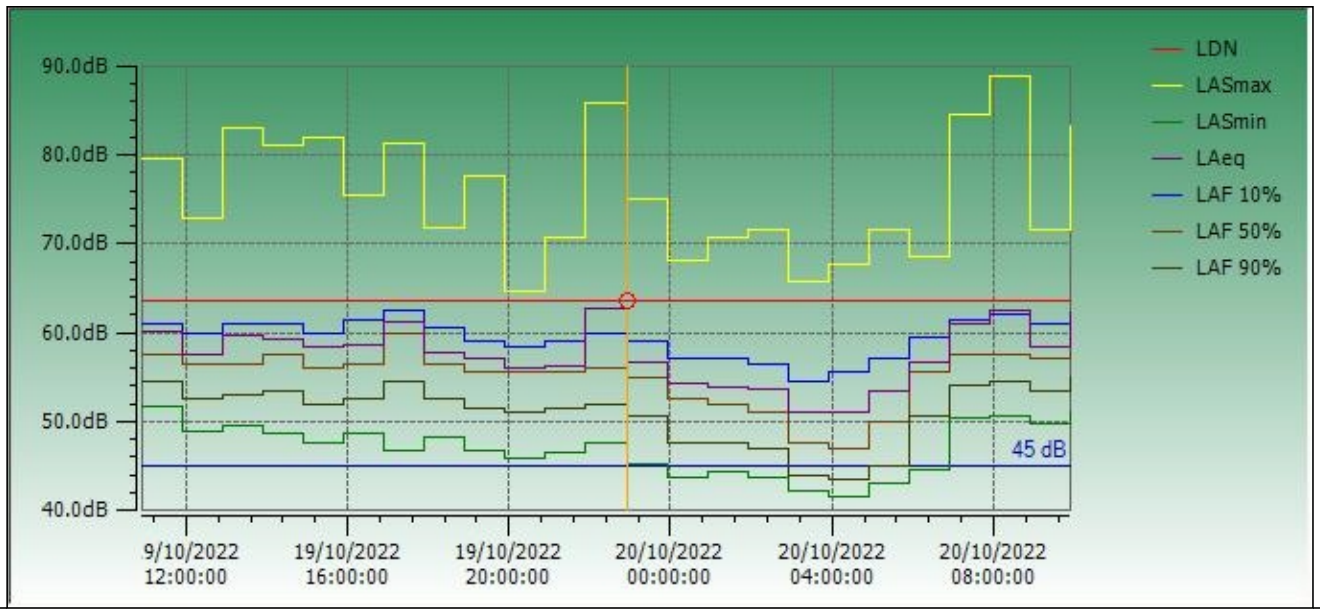
Tested to CEL-63X test sheet TP444 revision 02-00

**Casella CEL Ltd.**

**Report On CEL-63X**

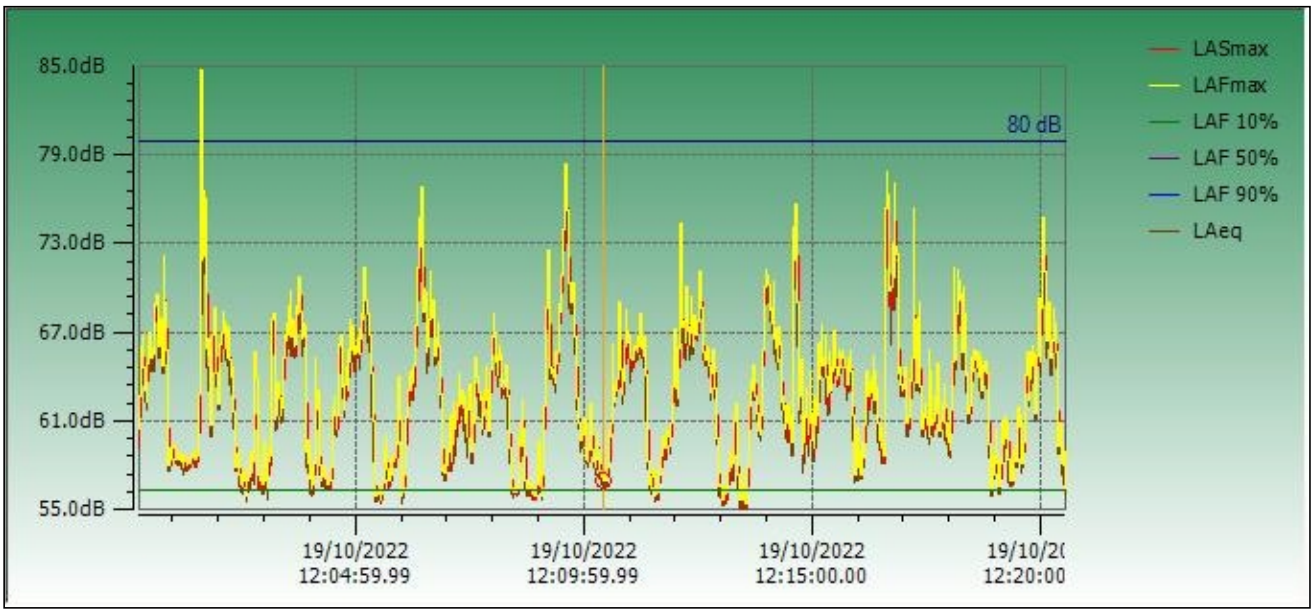
| | | | |
|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | |
| Serial Number | 1274486 | LAS 10% | N/A |
| LDN | 63.5 | LAS 50% | N/A |
| LASmax | 88.9 dB | LAS 90% | N/A |
| LASmin | 41.6 dB | Calibration (Before) Date | 10/19/2022 10:52:22 AM |
| Start Date & Time | 10/19/2022 10:54:30 AM | Calibration (After) Date | 10/20/2022 11:40:42 AM |
| Duration | 24:00:00 HH:MM:SS | Calibration Drift | -0.1 dB |
| LAeq | 58.7 dB | Battery Low | No |
| End Date & Time | 10/20/2022 10:54:30 AM | Result | Period |
| Notes | | | |



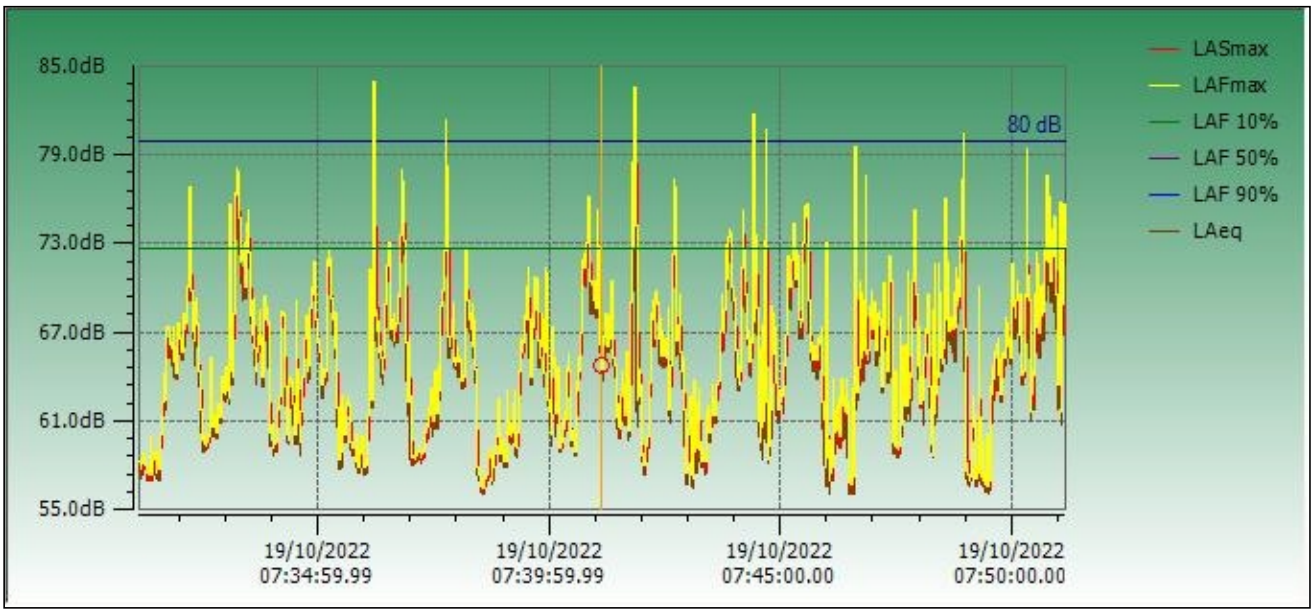
| | |
|---|---|
| **Instrument Model** | **CEL-633C** |
| Serial Number | 4278006 |
| LDN | 0 |
| LASmax | 79.8 dB |
| LASmin | 55.1 dB |
| Start Date & Time | 10/19/2022 12:00:15 PM |
| Duration | 00:20:17 HH:MM:SS |
| LAeq | 64.7 dB |
| End Date & Time | 10/19/2022 12:20:32 PM |
| Notes | |

| | |
|---|---|
| LAS 10% | 67.5 dB |
| LAS 50% | 62 dB |
| LAS 90% | 57 dB |
| Calibration (Before) Date | 10/19/2022 11:55:06 AM |
| Calibration (After) Date | 10/19/2022 12:20:53 PM |
| Calibration Drift | 0.3 dB |
| Battery Low | No |
| Result | Cumulative |



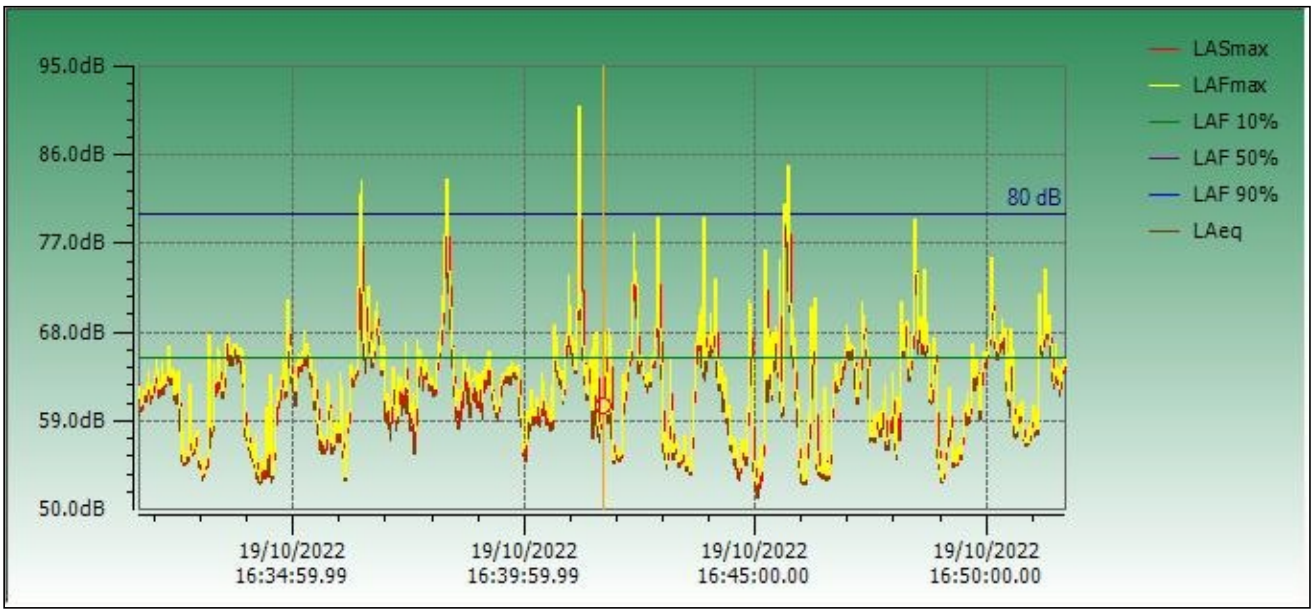
| | |
|---|---|
| **Instrument Model** | **CEL-633C** |
| Serial Number | 4278006 |
| LDN | 0 |
| LASmax | 82.1 dB |
| LASmin | 56 dB |
| Start Date & Time | 10/19/2022 7:31:08 AM |
| Duration | 00:20:02 HH:MM:SS |
| LAeq | 66.9 dB |
| End Date & Time | 10/19/2022 7:51:10 AM |
| Notes | |

| | | |
|---|---|---|
| LAS | 10% | 70.5 dB |
| LAS | 50% | 64.5 dB |
| LAS | 90% | 58 dB |
| Calibration (Before) Date | | 10/19/2022 7:25:37 AM |
| Calibration (After) Date | | 10/19/2022 8:00:16 AM |
| Calibration Drift | | 0.2 dB |
| Battery Low | | No |
| Result | | Cumulative |

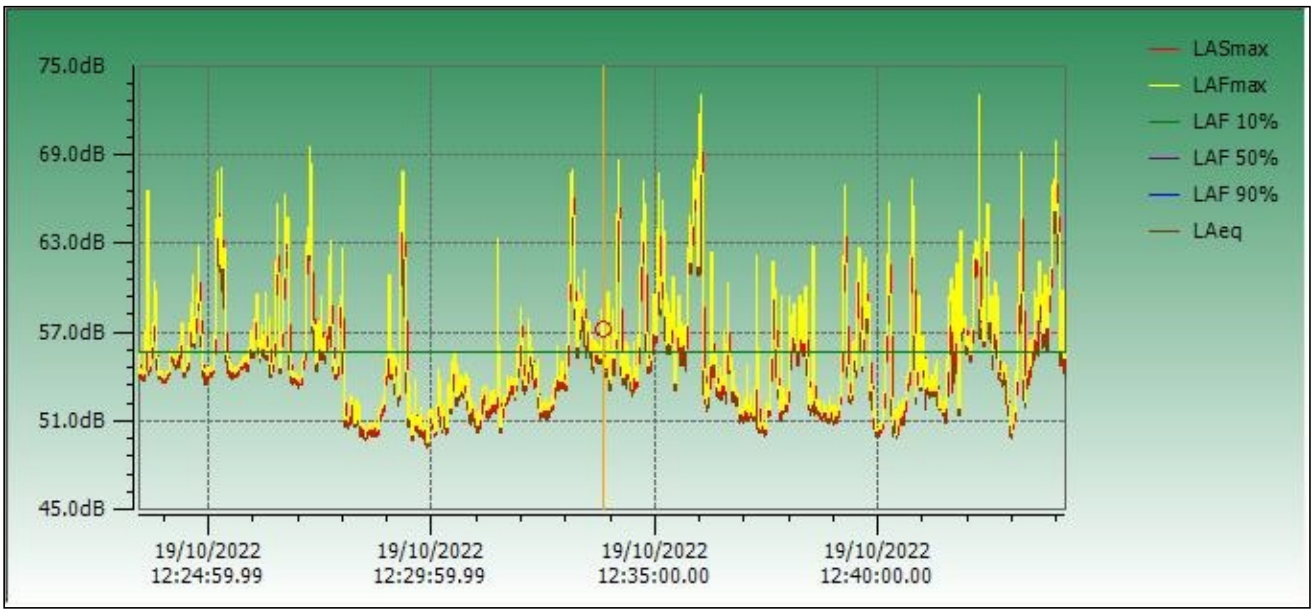


| | |
|---|---|
| **Instrument Model** | **CEL-633C** |
| Serial Number | 4278006 |
| LDN | 0 |
| LASmax | 86.4 dB |
| LASmin | 51.2 dB |
| Start Date & Time | 10/19/2022 4:31:39 PM |
| Duration | 00:20:03 HH:MM:SS |
| LAeq | 65.7 dB |
| End Date & Time | 10/19/2022 4:51:42 PM |
| Notes | |

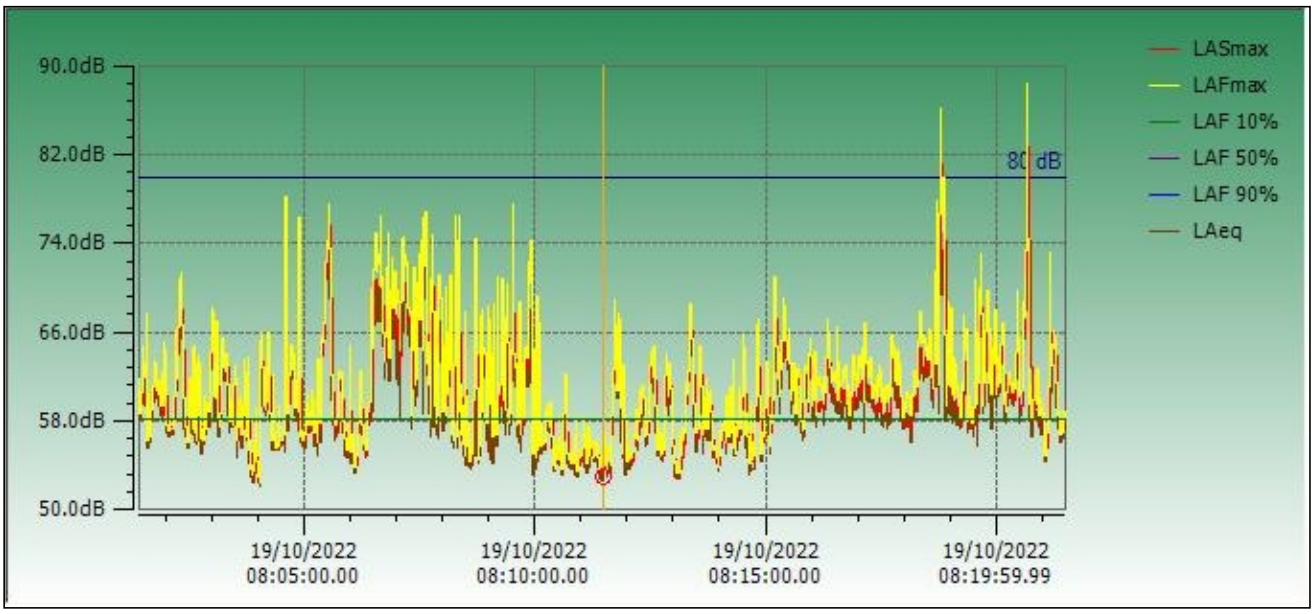
| | |
|---|---|
| LAS 10% | 67.5 dB |
| LAS 50% | 62 dB |
| LAS 90% | 55 dB |
| Calibration (Before) Date | 10/19/2022 4:29:54 PM |
| Calibration (After) Date | 10/19/2022 4:51:56 PM |
| Calibration Drift | 0.1 dB |
| Battery Low | No |
| Result | Cumulative |



| | | | |
|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | |
| Serial Number | 4278006 | LAS 10% | 60 dB |
| LDN | 0 | LAS 50% | 54.5 dB |
| LASmax | 70.7 dB | LAS 90% | 51 dB |
| LASmin | 49.3 dB | Calibration (Before) Date | 10/19/2022 12:21:02 PM |
| Start Date & Time | 10/19/2022 12:23:27 PM | Calibration (After) Date | 10/19/2022 12:44:24 PM |
| Duration | 00:20:45 HH:MM:SS | Calibration Drift | -0.2 dB |
| LAeq | 56.9 dB | Battery Low | No |
| End Date & Time | 10/19/2022 12:44:12 PM | Result | Cumulative |
| Notes | | | |

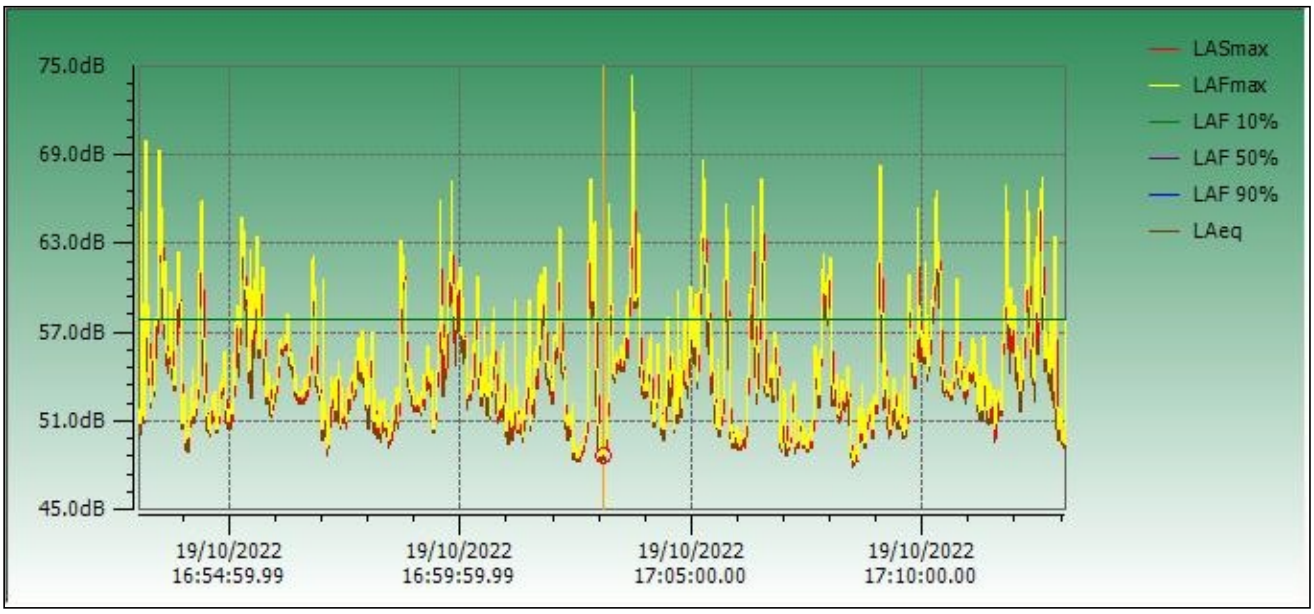


| | | | |
|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | |
| Serial Number | 4278006 | LAS 10% | 65.5 dB |
| LDN | 0 | LAS 50% | 59 dB |
| LASmax | 84.5 dB | LAS 90% | 55 dB |
| LASmin | 52.1 dB | Calibration (Before) Date | 10/19/2022 8:00:27 AM |
| Start Date & Time | 10/19/2022 8:01:26 AM | Calibration (After) Date | 10/19/2022 8:21:53 AM |
| Duration | 00:20:04 HH:MM:SS | Calibration Drift | -0.4 dB |
| LAeq | 63.4 dB | Battery Low | No |
| End Date & Time | 10/19/2022 8:21:30 AM | Result | Cumulative |
| Notes | | | |

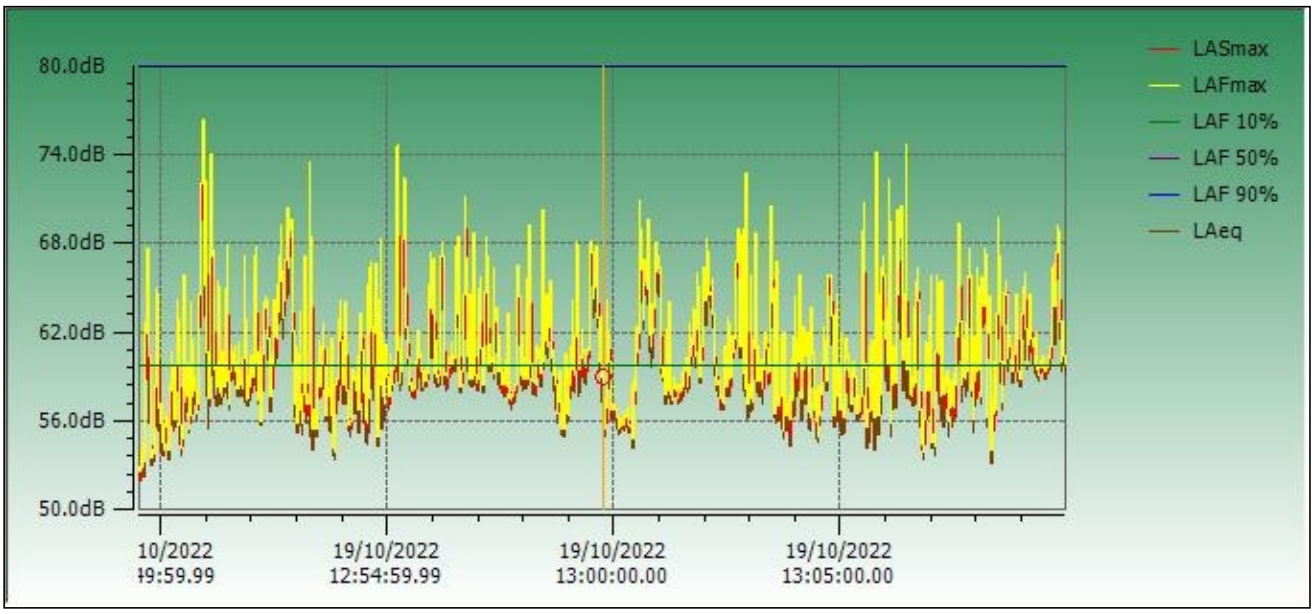


| | |
|---|---|
| **Instrument Model** | **CEL-633C** |
| Serial Number | 4278006 |
| LDN | 0 |
| LASmax | 71 dB |
| LASmin | 48.1 dB |
| Start Date & Time | 10/19/2022 4:53:03 PM |
| Duration | 00:20:03 HH:MM:SS |
| LAeq | 55.7 dB |
| End Date & Time | 10/19/2022 5:13:06 PM |
| Notes | |

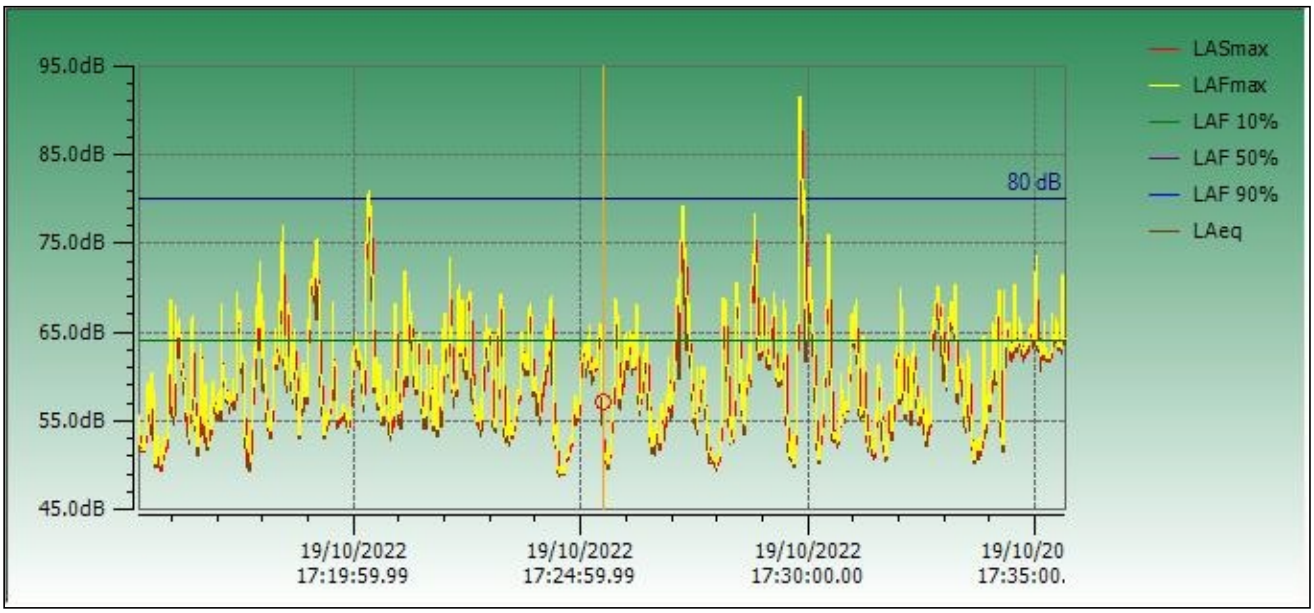
| | | |
|---|---|---|
| LAS | 10% | 59 dB |
| LAS | 50% | 53 dB |
| LAS | 90% | 50 dB |
| Calibration (Before) Date | | 10/19/2022 4:52:03 PM |
| Calibration (After) Date | | 10/19/2022 5:13:19 PM |
| Calibration Drift | | 0.1 dB |
| Battery Low | | No |
| Result | | Cumulative |



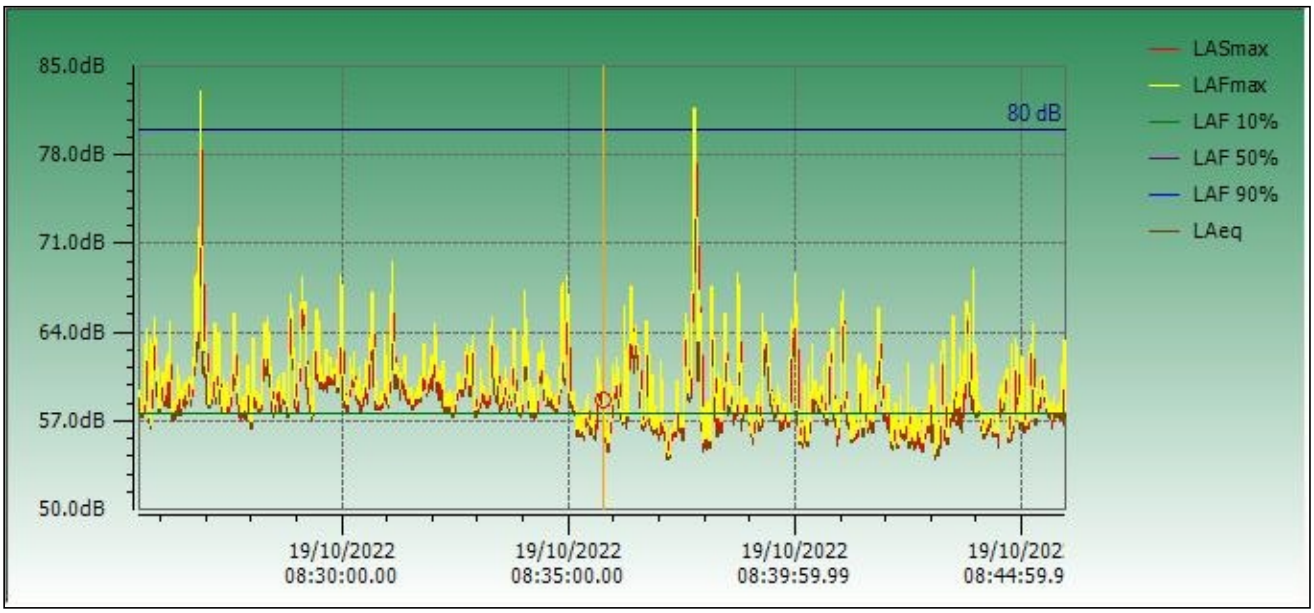
| | | | |
|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | |
| Serial Number | 4278006 | LAS 10% | 64.5 dB |
| LDN | 0 | LAS 50% | 59 dB |
| LASmax | 74.6 dB | LAS 90% | 56 dB |
| LASmin | 51.5 dB | Calibration (Before) Date | 10/19/2022 12:44:36 PM |
| Start Date & Time | 10/19/2022 12:49:31 PM | Calibration (After) Date | 10/19/2022 1:10:12 PM |
| Duration | 00:20:27 HH:MM:SS | Calibration Drift | -0.3 dB |
| LAeq | 61.2 dB | Battery Low | No |
| End Date & Time | 10/19/2022 1:09:58 PM | Result | Cumulative |
| Notes | | | |



| | | | | |
|---|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | | |
| Serial Number | 4278006 | LAS | 10% | 66.5 dB |
| LDN | 0 | LAS | 50% | 59 dB |
| LASmax | 89.2 dB | LAS | 90% | 52 dB |
| LASmin | 48.8 dB | Calibration (Before) Date | | 10/19/2022 5:13:36 PM |
| Start Date & Time | 10/19/2022 5:15:17 PM | Calibration (After) Date | | 10/19/2022 5:39:07 PM |
| Duration | 00:20:23 HH:MM:SS | Calibration Drift | | -0.1 dB |
| LAeq | 65.9 dB | Battery Low | | No |
| End Date & Time | 10/19/2022 5:35:40 PM | Result | | Cumulative |
| Notes | | | | |



| | | | |
|---|---|---|---|
| **Instrument Model** | **CEL-633C** | | |
| Serial Number | 4278006 | LAS 10% | 62.5 dB |
| LDN | 0 | LAS 50% | 58.5 dB |
| LASmax | 80.2 dB | LAS 90% | 56 dB |
| LASmin | 54.1 dB | Calibration (Before) Date | 10/19/2022 8:22:39 AM |
| Start Date & Time | 10/19/2022 8:25:32 AM | Calibration (After) Date | 10/19/2022 8:46:25 AM |
| Duration | 00:20:26 HH:MM:SS | Calibration Drift | -0.2 dB |
| LAeq | 60.9 dB | Battery Low | No |
| End Date & Time | 10/19/2022 8:45:58 AM | Result | Cumulative |
| Notes | | | |



each Channel Drive
's

# NOISE FIELD SHEET

## I. Start of Noise Monitoring Day

Arrival Time: 7:05 10/14/22

Weather Conditions (temp, wind speed, precipitation): 90's - 50's, dry, sunny, low wind

Were Photos Taken of Each Location? Yes

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

## II. Morning Session 7:30 AM – 9:00 AM

**Meter Type:** Casella **Meter Serial #:** 4278006 **Meter Location:** 2, 3, +4

**Before Measurement:** Calibrator # 3574243 @ all locations + times (including 24 hr location)

Meter Serial #: 4278006 Time: 7:25 Calibration Passed at 114 dB? Y
Meter Serial #: " Time: 8:00 Calibration Passed at 114 dB? Y
Meter Serial #: " Time: 8:22 Calibration Passed at 114 dB? Y

**After Measurement:**

Meter Serial #: 4278006 Time: 8:00 Calibration Passed at 114 dB? Y
Meter Serial #: " Time: 8:22 Calibration Passed at 114 dB? Y
Meter Serial #: " Time: 8:46 Calibration Passed at 114 dB? Y

| Location # | Start Time | End Time |
|---|---|---|
| 2 | 7:31 | 7:51 |
| 3 | 8:01 | 8:21 |
| 4 | 8:25 | 8:45 |

| Location # | Car | SUV | Medium Truck | Heavy Truck | Bus | Train |
|---|---|---|---|---|---|---|
| 2 | 142 | 112 | 20 | 1 | 8 | 0 |
| 3 | 17 | 10 | 1 | 0 | 1 | 0 |
| 4 | 23 | 15 | 0 | 0 | 1 | 0 |

- Music playing from vehicle near Loc. 3 @ 8:15 - 8:20

500 International Drive, Suite 150, Mount Olive, NJ 07828
973-527-7451(v) 973-858-0280(f)
www.equityenvironmental.com

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

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

**Meter Type:** Cesella **Meter Serial #:** 427806 **Meter Location:** 2,3,4

**Before Measurement:**

Meter Serial #: 427806 Time: 11:54 Calibration Passed at 114 dB? Y
Meter Serial #: " Time: 12:20 Calibration Passed at 114 dB? Y
Meter Serial #: " Time: 12:44 Calibration Passed at 114 dB? Y

**After Measurement:**

Meter Serial #: " Time: 12:20 Calibration Passed at 114 dB? Y
Meter Serial #: " Time: 12:44 Calibration Passed at 114 dB? Y
Meter Serial #: " Time: 13:09 Calibration Passed at 114 dB? Y

| Location # | Start Time | End Time |
|---|---|---|
| 2 | 12:00 | 12:20 |
| 3 | 12:21 | 12:43 |
| 4 | 12:44 | 13:09 |

| Location # | Car | SUV | Medium Truck | Heavy Truck | Bus | Train |
|---|---|---|---|---|---|---|
| 2 | 101 | 72 | 11 | 1 | 3 | 0 |
| 3 | 15 | 6 | 0 | 0 | 0 | 0 |
| 4 | 20 | 14 | 2 | 0 | 1 | 0 |

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):
construction across the st from loc. 4 12:44 - 13:09

## IV. Evening Session 4:30 PM – 6:00 PM

**Meter Type:** Casella **Meter Serial #:** 4278006 **Meter Location:** 2, 3, 4

**Before Measurement:**

Meter Serial #: 4278006 Time: 16:29 Calibration Passed at 114 dB? Y
Meter Serial #: " " Time: 16:51 Calibration Passed at 114 dB? Y
Meter Serial #: " " Time: 17:12 Calibration Passed at 114 dB? Y

**After Measurement:**

Meter Serial #: " " Time: 16:51 Calibration Passed at 114 dB? Y
Meter Serial #: " " Time: 17:12 Calibration Passed at 114 dB? Y
Meter Serial #: " " Time: 17:39 Calibration Passed at 114 dB? Y

| Location # | Start Time | End Time |
|---|---|---|
| 2 | 16:31 | 16:51 |
| 3 | 16:52 | 17:12 |
| 4 | 17:15 | 17:35 |

| Location # | Car | SUV | Medium Truck | Heavy Truck | Bus | Train |
|---|---|---|---|---|---|---|
| 2 | 127 | 99 | 9 | 0 | 5 | 0 |
| 3 | 13 | 7 | 0 | 0 | 0 | 0 |
| 4 | 24 | 14 | 2 | 0 | 1 | 0 |

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

## V. 24-Hour Monitoring Session

**Meter Type:** Casella **Meter Serial #:** 1274486 **Meter Location:** 1

**Before Measurement:** 10/19/22

Meter Serial #: ~~[illegible]~~ 1274486 Time: 10:52 Calibration Passed at 114 dB? Y

**After Measurement:** 10/20/22

Meter Serial #: 1274486 Time: 11:40 Calibration Passed at 114 dB? Y

| Location # | Start Time | End Time |
|---|---|---|
| 1 | 10:54 10/19/22 | 10:54 10/20/22 |
| | | |
| | | |

## VI. End of Noise Monitoring Day

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

Anything of note/concern for the day:

Departure Time:

Return Time:

**Noise Monitoring Location Map**

