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

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

Part I: GENERAL INFORMATION

PROJECT NAME Beach 79th Self-Storage Rezoning

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
20DCP138Q	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
200299ZMQ	

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
Department of City Planning			79 Averne Development LLC.		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Olga Abinador, Director, EARD			Uri Kaufman		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 220-46 73rd Avenue		
CITY New York	STATE NY	ZIP 10271	CITY Bayside	STATE NY	ZIP 11364
TELEPHONE 212-720-3493	EMAIL OABINAD@planning.nyc.gov		TELEPHONE 917-453-3384	EMAIL urikaufman50@gmail.com	

3. *Action Classification and Type*

SEQRA Classification

☐ UNLISTED ☒ TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended): 617.4(b)(10)

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

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

4. *Project Description*

The applicant, 79 Arverne Development LLC, seeks a zoning map amendment for the project area to modify the underlying zoning district from M1-1 to M1-2. The proposed action would facilitate a new self-storage facility. Building A would remain in its existing condition, with approximately 34,541-gsf (31,087 zsf) of light manufacturing uses. A new building - Building B - would be constructed as a 146,000 gsf/zsf self-service storage facility. However, for the purposes of a conservative environmental analysis, a larger With-Action scenario was analyzed, including Building B as a 204,465-gsf (184,019-zsf) self-storage facility. The proposed project would be constructed as-of-right in the proposed M1-2 zoning district and would meet the applicable zoning provisions, including parking and loading requirements, of the zoning district.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 14	STREET ADDRESS 350 Beach 79th Street
TAX BLOCK(S) AND LOT(S) Block 16100, Lots 14, 18, and 20 portions of Lots 24, 28, 29, 33, 34 and 175		ZIP CODE 11693

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The project area is bounded by an imaginary line located 80 feet west of and parallel to Beach 77th Street to the east, the Pierhead/Bulkhead line of the Barbadoes Basin of Jamaica Bay to the north, an imaginary line located 200 feet to the east of, and parallel to, Beach 80th Street to the west, and the centerline of Rockaway Freeway to the south.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1	ZONING SECTIONAL MAP NUMBER 30C

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

☐ LEGISLATION

☐ RULEMAKING

☐ CONSTRUCTION OF PUBLIC FACILITIES

☐ 384(b)(4) APPROVAL

☐ OTHER, explain:

☐ FUNDING OF CONSTRUCTION, specify:

☐ POLICY OR PLAN, specify:

☐ FUNDING OF PROGRAMS, specify:

☐ PERMITS, specify:

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

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

☐ LANDMARKS PRESERVATION COMMISSION APPROVAL

☐ OTHER, explain:

***State or Federal Actions/Approvals/Funding*:** ☒ YES ☐ NO If "yes," specify: NYSDEC Article 25 Tidal Wetlands Permit

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 107,553 sf (Projected Development Site 1); 130,603 sf (rezoning area)

Waterbody area (sq. ft.) and type: Portion of rezoning area: 10,458 sf (2,484 sf underwater and 7,974 sf wetlands; no direct disturbance)

Roads, buildings, and other paved surfaces (sq. ft.): 120,145

Other, describe (sq. ft.):

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 180,541

NUMBER OF BUILDINGS: 2

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): Building A- 34,541 gsf; Building B-204,465 gsf

HEIGHT OF EACH BUILDING (ft.): Building A- 32 ft; Building B- 104 ft

NUMBER OF STORIES OF EACH BUILDING: Building A- 2 stories; Building B- 7 stories

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: 107,553

The total square feet not owned or controlled by the applicant: 23,050

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO

If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):

AREA OF TEMPORARY DISTURBANCE: ~51,000 sq. ft. (width x length) VOLUME OF DISTURBANCE: 51,300 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: ~32,000 sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

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

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18 months

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

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

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

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

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
LAND USE				
Residential	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Describe type of residential structures				
No. of dwelling units				
No. of low- to moderate-income units				
Gross floor area (sq. ft.)				
Commercial	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Describe type (retail, office, other)				
Gross floor area (sq. ft.)				
Manufacturing/Industrial	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Type of use	warehouse and light manufacuring use	self storage and light manufacturing	self storage and light manufacturing	
Gross floor area (sq. ft.)	Building A: 34,541 gsf	Building A: 34,541 gsf Buidling B: 84,962 gsf	Building A: 34,541 gsf Building B: 204,465 gsf	119,503 gsf
Open storage area (sq. ft.)	0	0	0	
If any unenclosed activities, specify:				
Community Facility	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type				
Gross floor area (sq. ft.)				
Vacant Land	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
Publicly Accessible Open Space	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):				
Other Land Uses	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
PARKING				
Garages	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces		15 parking spaces	15 parking spaces	0
Operating hours				
Attended or non-attended				
Lots	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces				
Operating hours				
Other (includes street parking)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
POPULATION				
Residents	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify number:				

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Briefly explain how the number of residents was calculated:				
Businesses	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. and type	3 (warehouse and light manufacturing)	3 (light manufacturing and self storage)	1 (light manufacturing and self storage)	0
No. and type of workers by business	3 workers	8 workers	16 workers	+ 8 workers
No. and type of non-residents who are not workers				
Briefly explain how the number of businesses was calculated:	1 employee per 15,000 gsf of warehousing space or self storage space			
Other (students, visitors, concert-goers, *etc.*)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				
ZONING				
Zoning classification	M1-1	M1-1	M1-2	
Maximum amount of floor area that can be developed	107,553 sf	107,553 sf	215,106 sf	+ 107,553 sf
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Vacant, Industrial, Residential M1-1, R6	Vacant, Industrial, Residential M1-1, R6	Vacant, Industrial, Residential M1-1, R6	
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ 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 attached		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of more than 200 residential units *or* 200,000 square feet of commercial space?	☐	☒
▪ If "yes," answer *both* questions 2(b)(ii) and 2(b)(iv) below.		
○ Directly displace 500 or more residents?	☐	☒
▪ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
○ Directly displace more than 100 employees?	☐	☒
▪ If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
○ Affect conditions in a specific industry?	☐	☒
▪ If "yes," answer question 2(b)(v) below.		
(b) If "yes" to any of the above, attach supporting information to answer the relevant questions below. If "no" was checked for each category above, the remaining questions in this technical area do not need to be answered.		
i. Direct Residential Displacement		
○ If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	☐	☐
○ If "yes," is the average income of the directly displaced population markedly lower than the average income of the rest of the study area population?	☐	☐
ii. Indirect Residential Displacement		
○ Would expected average incomes of the new population exceed the average incomes of study area populations?	☐	☐
○ If "yes:"		
▪ Would the population of the primary study area increase by more than 10 percent?	☐	☐
▪ Would the population of the primary study area increase by more than 5 percent in an area where there is the potential to accelerate trends toward increasing rents?	☐	☐
○ If "yes" to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	☐	☐
iii. Direct Business Displacement		
○ Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	☐	☐
○ Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve,	☐	☐

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

	YES	NO
percent?		
○ If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:	☐	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year. See attached		
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. See Appendix B		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
(c) If "yes" to either of the above, please provide the information requested in Chapter 10.		
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☒	☐
○ If "yes," list the resources and attach supporting information on whether the project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☒	☐
○ If "yes," complete the Jamaica Bay Watershed Form and submit according to its instructions. See attached		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☐	☒
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☒	☐
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☐	☒
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☒	☐
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See attached	☐	☐
(i) Based on the Phase I Assessment, is a Phase II Investigation needed? See attached	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒

	YES	NO
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than that listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or contribute contaminated stormwater to a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
(i) If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation.		
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 1,000		
○ 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?	☐	☒
○ If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 25,848,498 MBTUs		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
○ 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 or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway/rail trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☒	☐
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. See attached		
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) Would the proposed project result in the development of 350,000 square feet or more?	☐	☒
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?	☐	☐

	YES	NO
○ If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-803 of the Administrative Code of the City of New York). Please attach supporting documentation.	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☐	☒
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation.		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☐	☒
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ 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.

Construction activities are expected to be standard in nature and would last approximately 18 months. As a result, any effects from the construction of the project would be considered short term and insignificant. All travel lanes would remain open during construction. In the event that any closure of any portion of sidewalk elements is needed, it would be fully addressed by a permit and a Pedestrian Access Plan as required by the New York City Department of Transportation's Office of Construction Mitigation and Coordination prior to the closure so that impacts would not occur. Because of these provisions and because the period of construction is short term, a preliminary construction assessment is not needed.

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	SIGNATURE	DATE

Abigail Rudow, AICP		6/4/2021

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

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

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

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

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

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

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

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

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

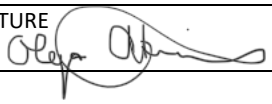
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result.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

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

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	City Planning Commission
NAME	DATE
Olga Abinader	June 4, 2021

SIGNATURE



NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The applicant, 79 Arverne Development LLC, seeks a zoning map amendment for the project area to modify the underlying zoning district from M1-1 to M1-2 in the Arverne neighborhood of Queens Community District 14. The proposed rezoning to an M1-2 district would facilitate a new self-storage facility that would not be permitted in the existing M1-1 district. In the future with the proposed actions, the project site (Block 16100, Lots 14, 16, and 18) will comprise two buildings. Building A (Block 16100, Lot 14) would remain in its existing condition, housing approximately 34,541 gross square foot (gsf) of light industrial uses, and a new building, Building B (Block 16100, Lots 16 and 18), would be constructed as an approximately 146,000 gsf self-service storage facility. The project area is bounded by an imaginary line located 80 feet west of and parallel to Beach 77th Street to the east, the Pierhead/Bulkhead line of the Barbadoes Basin of Jamaica Bay to the north, an imaginary line located 200 feet to the east of, and parallel to, Beach 80th Street to the west, and the centerline of Rockaway Freeway to the south. The proposed project would result in similar development as compared to the No-Action condition and would be constructed as-of-right in the proposed M1-2 zoning district. The proposed rezoning area is located within the coastal zone, and the proposed action would be consistent with all applicable policies of the Waterfront Revitalization Program (WRP # 18-091). The proposed actions would not result in significant adverse land use, zoning, or public policy impacts.

Shadows

A detailed analysis related to shadows is included in this EAS. The shadows screening analysis identified a total of four sunlight sensitive resources that are wholly or partially within the shadow study area, including two open space resources and two natural resources. The shadows analysis indicates that the proposed project could cast incremental shadows on Barbadoes Basin for up to 6 hours, 2 minutes on the December 21 analysis period, and on Brandreth Creek for up to 1 hour, 56 minutes on the March 21/September 21 analysis period. However, the analysis findings demonstrate that the usability and viability of each resource, both as a natural ecosystem and public recreation area, would not be jeopardized as a result of project-generated incremental shadows; and that large portions of the basin and creek, which are connected, would remain sunlit during the incremental shadow durations. Therefore, the proposed actions would not result in significant adverse shadow impacts.

Natural Resources

An analysis related to natural resources is included in this EAS. The analysis indicates that the With-Action condition would be compatible with the existing ecological conditions that occur within the project area and much of the surrounding area. The results also show that benefits would be achieved under the With-Action condition, including increased area of vegetated waterfront communities, increased native plant diversity, improved habitat opportunities for wildlife, a reduction in impervious surfaces, and a reduction in non-native/invasive plant species along the waterfront area. Adverse impacts to wetlands and surface waters are not anticipated, and based on the shadows analysis results, no adverse shading impacts are anticipated for protected and/or special-status species. The With-Action condition would further create a vegetated shoreline buffer between developed portions of the project area and Barbadoes Basin, and stormwater from the project area would be captured without conveyance to either water body. The proposed actions would also be subject to NYSDEC permitting conditions designed to protect Barbadoes Basin and Brandreth Creek from potential adverse impacts. Therefore, the proposed actions would not result in significant adverse impacts to natural resources.

Hazardous Materials and Air Quality

An (E) designation (E-624) related to hazardous materials and air quality would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials and air quality analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials or air quality.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Stacey Barron at +1 212-720-3419.

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME Olga Abinader	DATE June 4, 2021
SIGNATURE	

Project Name: Beach 79 Self Storage Rezoning
CEQR # 20DCP138Q
SEQRA Classification: Type I

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE June 7, 2021
SIGNATURE	

Project Name: Beach 79 Self Storage Rezoning
CEQR # 20DCP138Q
SEQRA Classification: Type I

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Queens	Block 16100, Lots 14, 18, and 20

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials and air quality, an (E) designation (**E-624**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

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

Hazardous Materials

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

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

Project Name: Beach 79 Self Storage Rezoning
CEQR # 20DCP138Q
SEQRA Classification: Type I

Air Quality

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

> ***Projected Development Site 1, Block 16100, Lot 14 (Building A):*** *Any new light manufacturing development on the above-referenced property must ensure that the heating, ventilating, and air conditioning (HVAC) systems and hot water equipment stack is located at the highest tier or at least 35 feet above to avoid any potential significant adverse air quality impacts.*
>
> ***Projected Development Site 1, Block 16100, Lots 18 and 20 (Building B):*** *Any new self-storage development on the above-referenced property must ensure that the heating, ventilation, and air conditioning (HVAC) systems and the hot water equipment stack is located at the highest tier or at least 107 feet above to avoid any potential significant adverse air quality impacts.*

Figure 1 Site Location Map



Figure 2 Tax Map

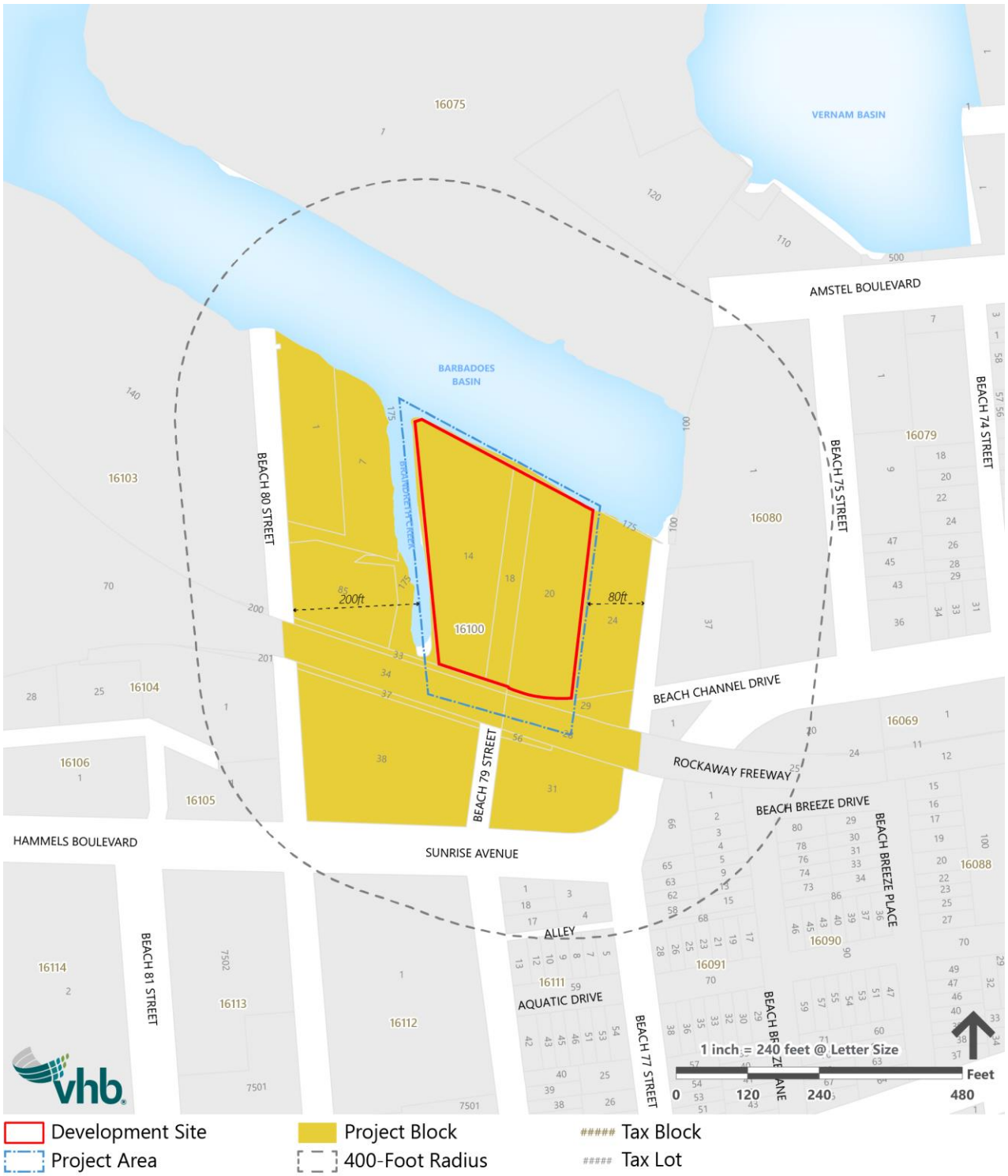
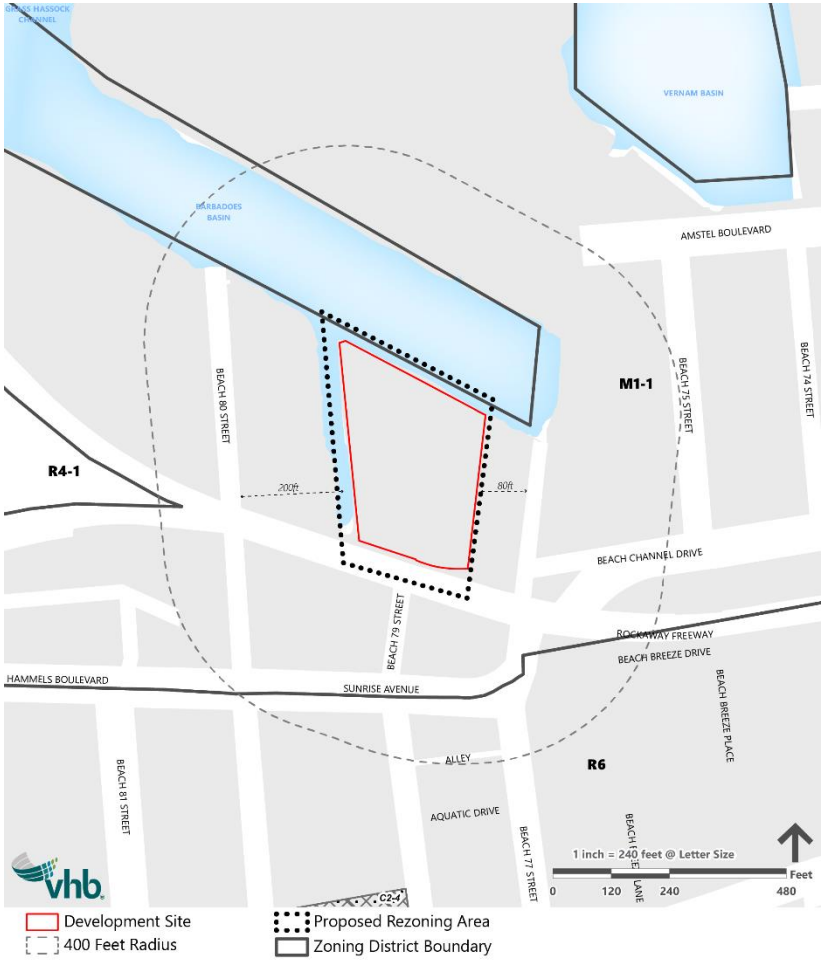


Figure 3 Zoning Map

Current Zoning Map



Proposed Zoning Map

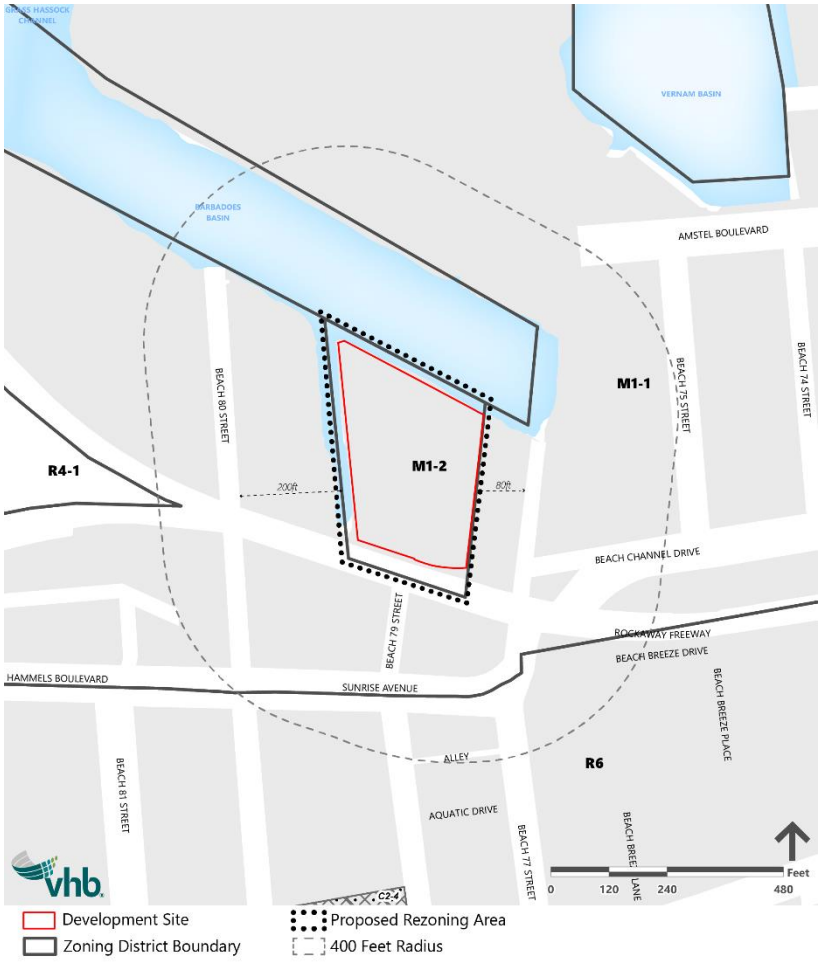


Figure 4 Land Use Map

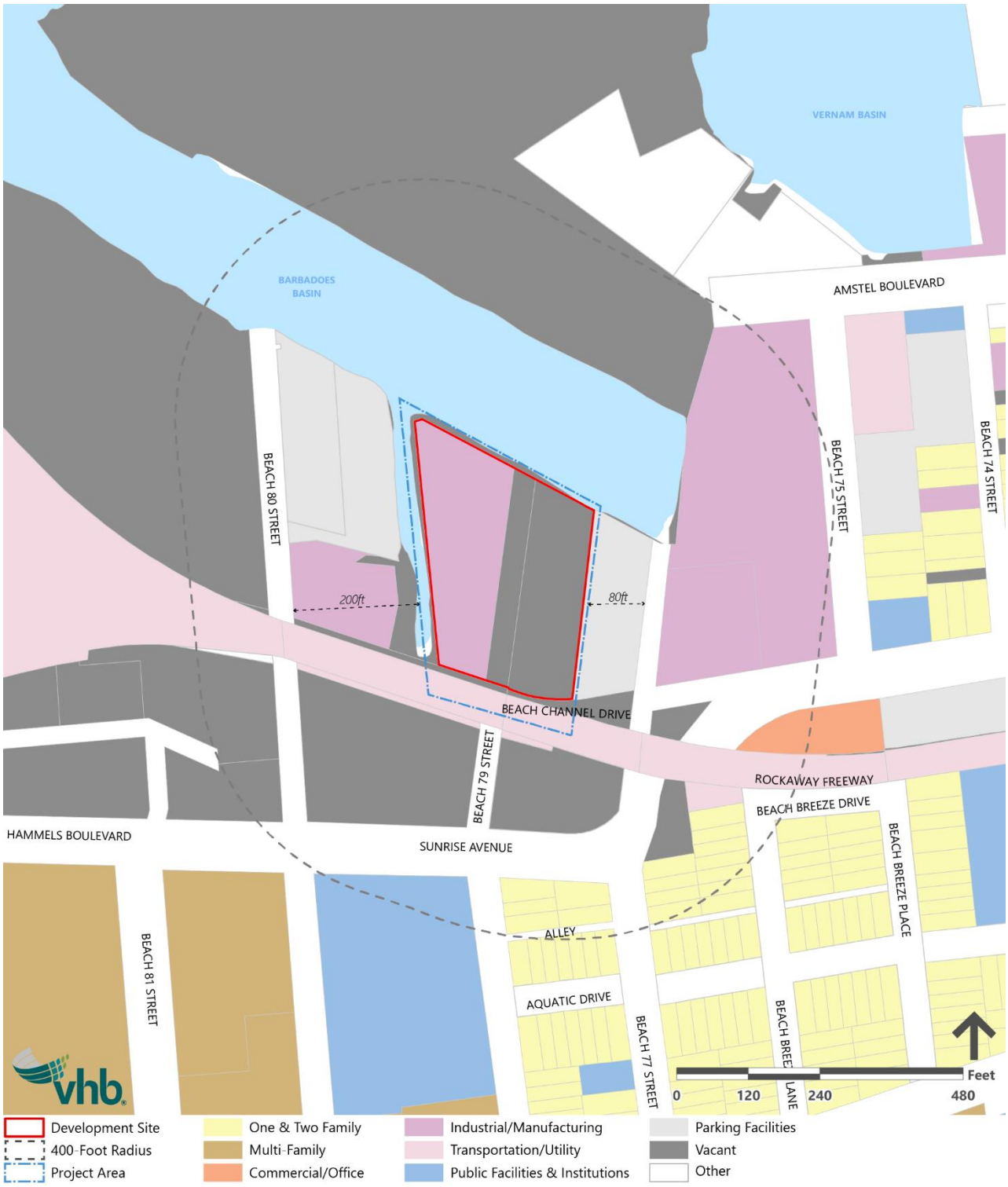


Figure 5 Development Site Photographs



Photos captured 11/5/20

Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8





1.0

Project Description

This section provides descriptive information about the requested discretionary land use actions and the proposed project that could be facilitated by the requested actions. The purpose of this section is to convey project information relevant to the environmental review.

1.1 Introduction

As described in further detail below, the applicant, 79 Arverne Development LLC, seeks a zoning map amendment to facilitate a new self-service storage facility at 350 Beach 79th Street in the Arverne neighborhood of Community District 14, Queens (the "proposed project").

1.2 Project Area and Projected Development Site 1

Project Area

The proposed zoning map amendment would encompass an area bounded by an imaginary line located 80 feet west of and parallel to the Beach 77th Street widening line to the east, the Pierhead/Bulkhead line of the Barbadoes Basin of Jamaica Bay to the north, an imaginary line located 200 feet to the east of, and parallel to, Beach 80th Street to the west, and the centerline of Rockaway Freeway to the south (the "project area," see ***EAS Figure 1***). The

project area contains Lots 14, 18, and 20, and part of Lots 24, 28, 29, 33, 34 and 175 of Queens Tax Block 16100.[1] It is located wholly within an M1-1 zoning district, the NYC Coastal Zone Boundary, and the 100-year and 500-year flood zone as indicated on the 2015 FEMA Preliminary Flood Insurance Rate Maps. The project area is outside Designated M Districts, as specified in Zoning Resolution (ZR) Appendix J, which allows for self-service storage facilities to be constructed as-of-right within M1 zoning districts.

Projected Development Site 1

Projected Development Site 1 is a single zoning lot composed of Lots 14, 18, and 20, and is currently improved with a one-story building (with a small two-story portion at the north end of the building), referred to as "Building A." Building A is on Lot 14 and contains 34,541 square feet (sf) of light industrial and warehousing uses (0.32 Floor Area Ratio (FAR)). Western portions of Projected Development Site 1 are within Brandreth Creek, while areas to the east of Building A are devoid of existing buildings and are relatively flat. The zoning lot has 107,553 sf of upland area.

Remainder of Project Area

Lots 28, 29, 33, 34 and 175 are owned by the City of New York. Lots 28, 29, 33, and 34 contain portions of Rockaway Freeway. Lot 175 includes Brandreth Creek. Lot 24 is adjacent to Projected Development Site 1 to the east, and is currently used for construction/maintenance materials storage and accessory parking. It is closed to public access.

1.3 Proposed Project

The applicant seeks a zoning map amendment to the project area to modify the underlying zoning district from M1-1 to M1-2, to facilitate the development of a new self-storage facility on Projected Development Site 1. Building A would remain in its existing condition, with 34,541 gross square feet (gsf) of light manufacturing uses. A new building - Building B - would be constructed as a six-story 146,000-gsf (and zsf) facility, accommodating self storage uses (Use Group 16D). Together, Buildings A and B represent the proposed project. The proposed project would be constructed as-of-right in the proposed M1-2 zoning district and would meet the applicable zoning provisions, including parking and loading requirements, of the zoning district.

The first floor of Building B would be elevated on 15-foot stilts to accommodate open parking on the ground level (34 spaces) and five loading berths at the rear of the building. Vehicular access to Projected Development Site 1 would be provided from Beach Channel Drive; the open ground floor on Building B would provide for through traffic to Building A and parking spaces.

[1] The NYC Department of Finance ("DOF") has approved an application to merge tax lots 18 and 20 into a single tax lot (to be known as Lot 18). As of the date of this application, DOF has not updated the City's official tax map to reflect this merger.

However, while the applicant is seeking to develop the proposed project as described, in order to provide a more conservative analysis, this EAS analyzes a larger With-Action Condition including a seven-story, 204,465-gsf Building B, as detailed below in Section 1.6.

The proposed project does not include bulkhead replacement or other shoreline improvements that would result in filling or other disturbances to waters of the United States, and therefore a USACE permit would not be required. The New York State Department of Environmental Conservation (NYSDEC) has assumed tidal wetland jurisdiction over portions of the upland project area, and a permit application has been submitted to the NYSDEC (Tidal Wetlands Permit Application No, 2-6308-00534/00007). Lots 18 and 20 were accepted into the NYS Brownfield Cleanup Program in 2018. Subsurface investigations have been conducted at both lots, and a Remedial Investigation Report (RIR) is currently under review by NYSDEC. Additionally, a Remedial Action Work Plan is under development.

1.4 Project Purpose and Need

The project area has been zoned M1-1 since zoning was introduced in 1961. There is very little new development in the area, and the existing uses in the surrounding area include auto repair, tire repair, vacant land/construction staging, a small church, a meal preparation and delivery service, and an outpost of the Rockaway Brewery.

In December 2017, New York City amended the Zoning Resolution (N 170425 (A) ZRY) to require a CPC special permit for development of self-storage facilities in "Designated Areas" (the "Self-Storage Text Amendment"), which largely overlap with the City's Industrial Business Zones ("IBZs"). The Environmental Impact Statement for the Self-Storage Text Amendment (the "EIS") assumed that the Self-Storage Text Amendment would cause a shift in the development and siting of self-storage facilities from Designated Areas to manufacturing and C8 districts outside of the Designated Areas. The EIS assumed the Self-Storage Text Amendment would not curb the development of self-storage facilities in the City because of the high demand for self-storage. As stated in the EIS, according to the New York Self-Storage Association, the City is underserved in terms of self-storage, with only two square feet of self-storage available per person in the City, compared to the national average of 7.5 sf per person.[2]

The project area is in a manufacturing district that is not in a Designated Area and is therefore in an area that the EIS assumed would be a potential location for new self-storage in the City. The Rockaways have very little self-storage capacity – a City Planning map included in the EIS identified only one self-storage facility in the Rockaways.[3] This is significant given the Rockaways' location on an island and in a flood zone, which largely eliminates the possibility of using residential cellar space for storage, and increases demand for this use.

Due to the unmet demand for self-storage uses that the applicant believes exists in the Arverne/Rockaway area and that the existing bulk restrictions are insufficient for meeting

[2] Self-Storage Text Amendment Draft Environmental Impact Statement, Executive Summary, Page 14

[3] Self-Storage Text Amendment Draft Environmental Impact Statement, Executive Summary, Page 8. Map dated December 2016.

that demand, a zoning map amendment is being proposed from M1-1 to M1-2. The proposed zoning district would increase the existing FAR from 1.0 to 2.0 in the project area and facilitate the applicant's proposed project to meet this demand.

1.5 Proposed Action

The applicant is seeking a zoning map amendment to rezone the project area from an M1-1 to an M1-2 zoning district.

1.6 Analysis Framework

Future No-Action Condition

Projected Development Site 1

Absent the proposed action (the future No-Action condition), the applicant would maintain Building A in its existing condition as a 34,541-gsf (31,087-zsf) light manufacturing facility. Building B would be constructed and would contain 84,962 gsf (76,466 zsf) of self-service storage use. Projected Development Site 1 would be constructed as-of-right in the future No-Action condition, to the maximum development potential of 1.0 FAR. See ***Figures 1-1*** and ***1-2*** for site plan and elevation diagrams of the future No-Action condition.

Building B would be constructed to a height of three stories, or 54 feet. The first floor would be elevated to allow for open parking at the ground level, accommodating 15 parking spaces and 4 loading berths. Building A would be maintained within its existing building envelope, with a majority of the building preserved at a single story (16 feet in height) and a small portion at the rear of the building preserved at two stories (32 feet in height). Access to Projected Development Site 1 would be maintained from Beach Channel Drive.

Remainder of Project Area

In the future No-Action condition, Lot 24 and the City-owned Lots 28, 29, 33 34 and 175 would continue to operate in their existing conditions.

Future With-Action Condition

Projected Development Site 1

In the future With-Action condition, as compared to the proposed project detailed above, Building B would be assumed as a larger 204,465-gsf (184,019-zsf) self-service storage facility for conservative analysis purposes. Building A would remain in its existing condition as a 34,541-gsf (31,087 zsf) light manufacturing building. In total, Projected Development Site 1 would contain 239,006 gsf and 215,106 zsf (2.0 FAR). A site plan and massing diagram for the future With-Action condition are provided in ***Figures 1-3*** through ***1-5***.

Building B would be constructed to a height of seven stories, or 104 feet. The first floor would be elevated to allow for open parking at the ground level, accommodating 15 parking

spaces and two loading berths. The other three required loading berths would be located adjacent to Building A and behind Building B. Building A would be maintained within its existing building envelope, with a majority of the building preserved at a single story (16 feet in height) and a small portion at the rear of the building preserved at two stories (32 feet in height). Access to Projected Development Site 1 would be maintained from Beach Channel Drive.

Remainder of Project Area

Only a small portion of Lot 24 is located within the project area and therefore this property is not anticipated to be redeveloped under the future With-Action condition. Lots 28, 29, 33, and 34 are mapped parkland and are owned by the City of New York, and therefore are not anticipated to change from existing conditions. As detailed above, Lot 175 is mostly composed of Brandreth Creek and therefore would not be developed. Therefore, in the future With-Action condition, Lot 24 and the City-owned Lots 28, 29, 33, 34 and 175 would remain in their existing conditions.

Increment for Analysis

In total, the future With-Action condition would result in a net increase of 119,503 gsf over the future No-Action condition.

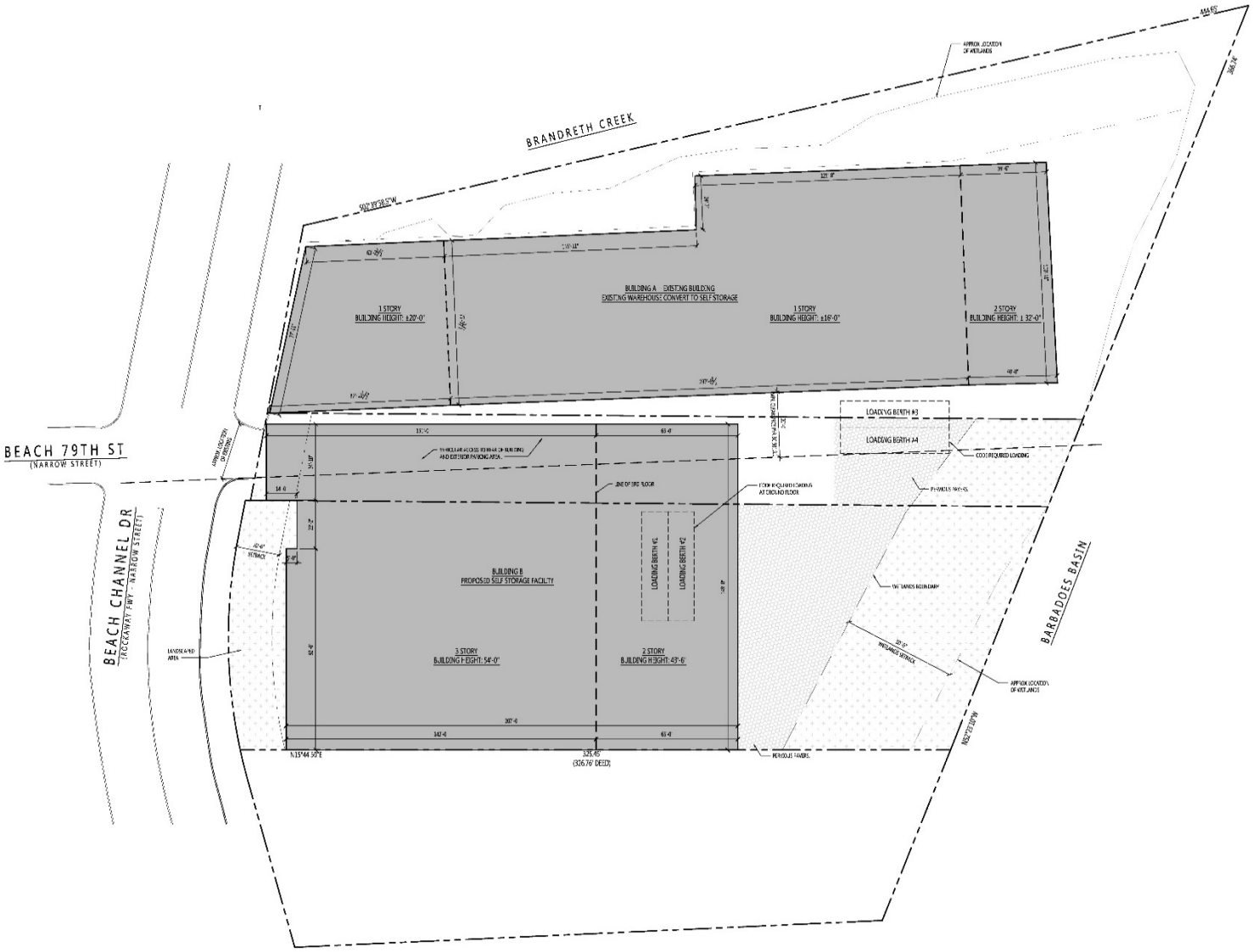
Table 1-1 Increment for Analysis

Use	No-Action	With-Action	Increment
Projected Development Site 1 (Lots 14, 18, 20)			
Manufacturing/Industrial gsf (zsf)			
Light Manufacturing	*34,541 (31,087)*	*34,541 (31,087)*	*-*
Self-Storage	*84,962 (76,466)*	*204,465 (184,019)*	*+ 119,503 (+ 107,553)*
Total gsf (zsf)	**119,503 (107,553)**	**239,006 (215,106)**	**+ 119,503 (+ 107,553)**
Accessory Parking Spaces	*15*	*15*	*-*
FAR	*1.0*	*2.0*	*+ 1.0*
Building A Height	*2 stories / 32 feet*	*2 stories / 32 feet*	*-*
Building B Height	*3 stories / 54 feet*	*7 stories / 104 feet*	*+ 4 stories / 50 feet*

Analysis (Build) Year

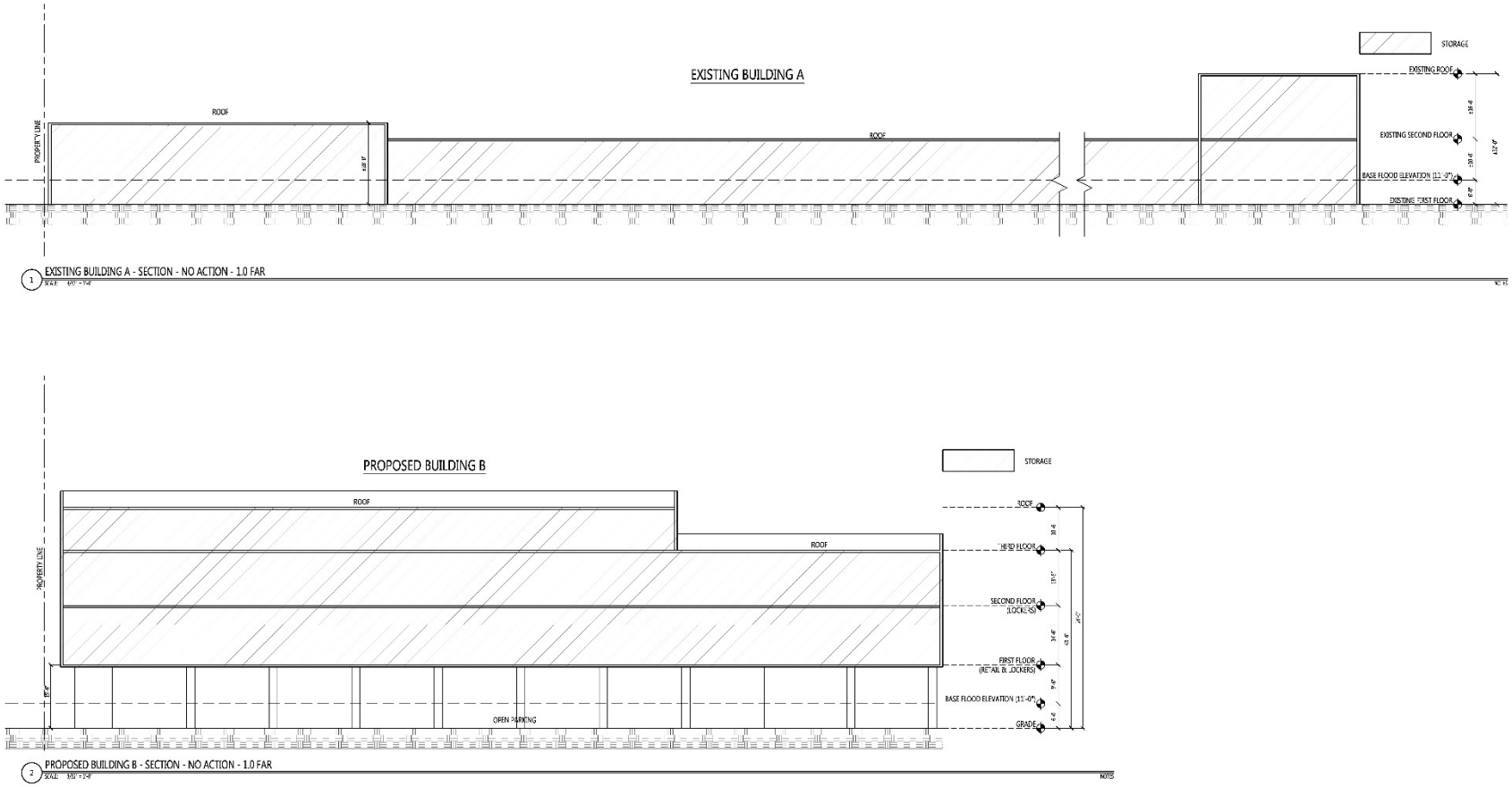
Assuming the proposed action is approved in 2021 and an anticipated construction period of up to 18 months, the proposed project would be completed by the year 2023.

Figure 1-1 No-Action Site Plan



Source: Frank G. Relf Architect, P.C.
For Illustrative Purposes Only

Figure 1-2 No-Action Elevation Drawings



Source: Frank G. Relf Architect, P.C.
For Illustrative Purposes Only

Figure 1-3 With-Action Site Plan

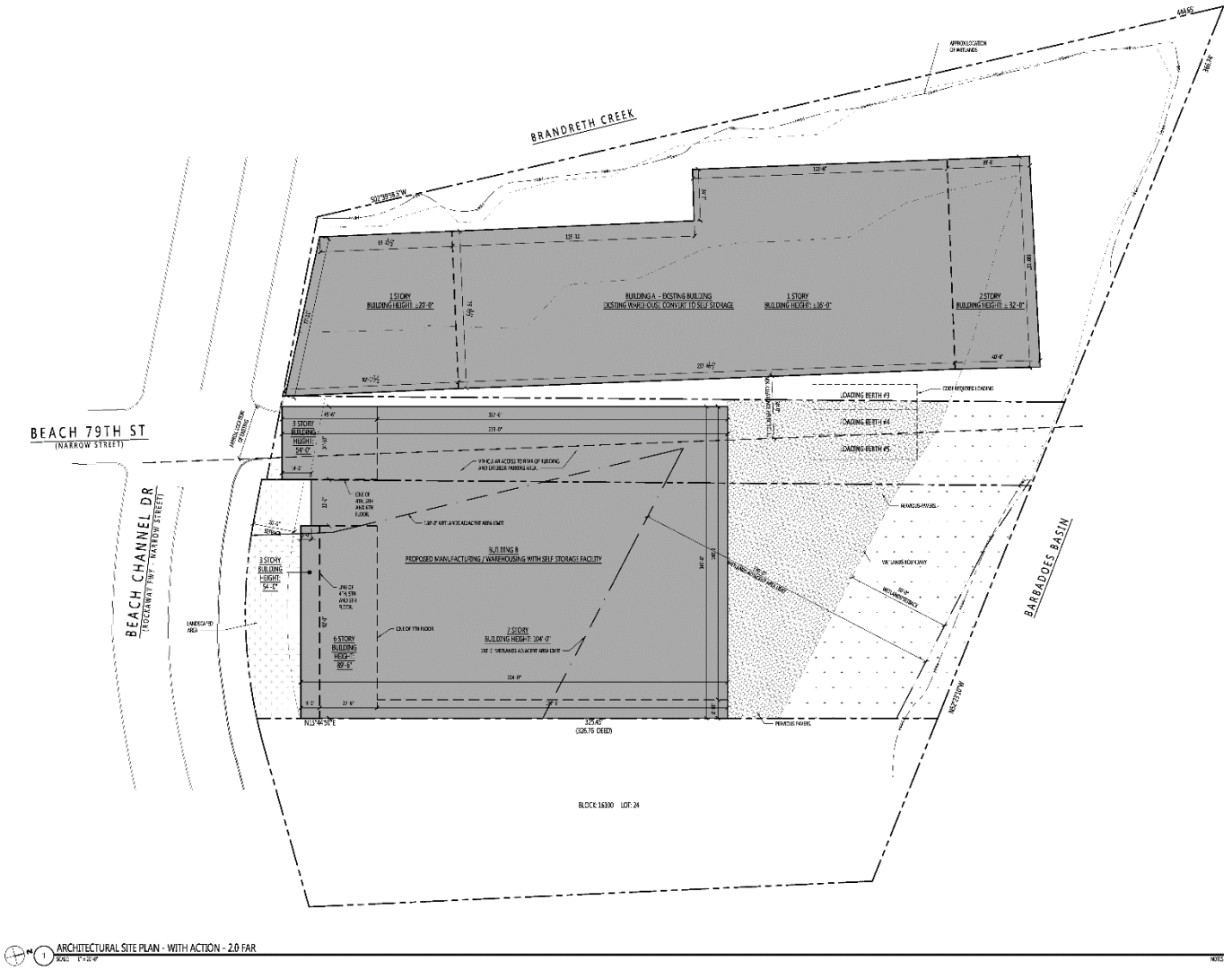
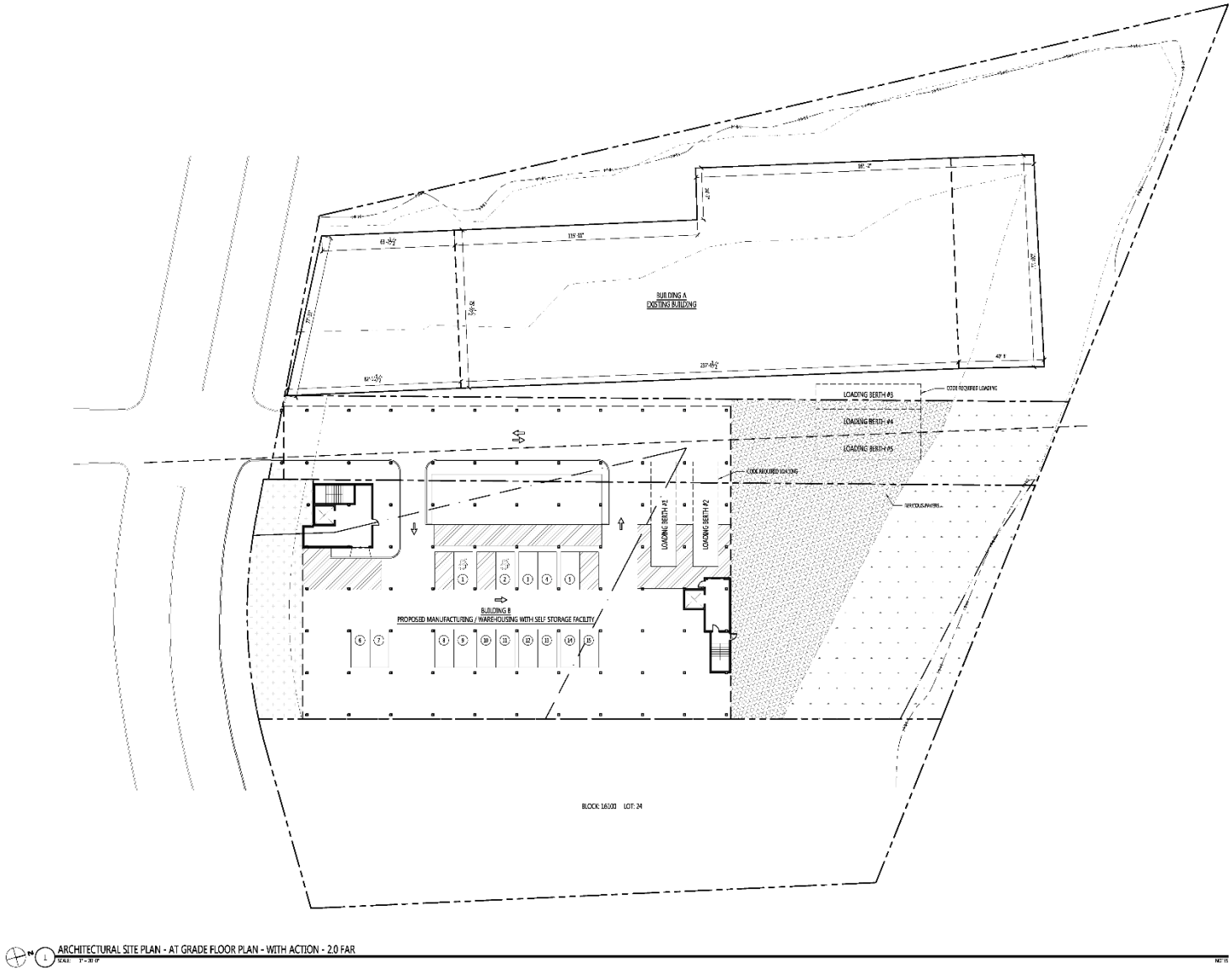
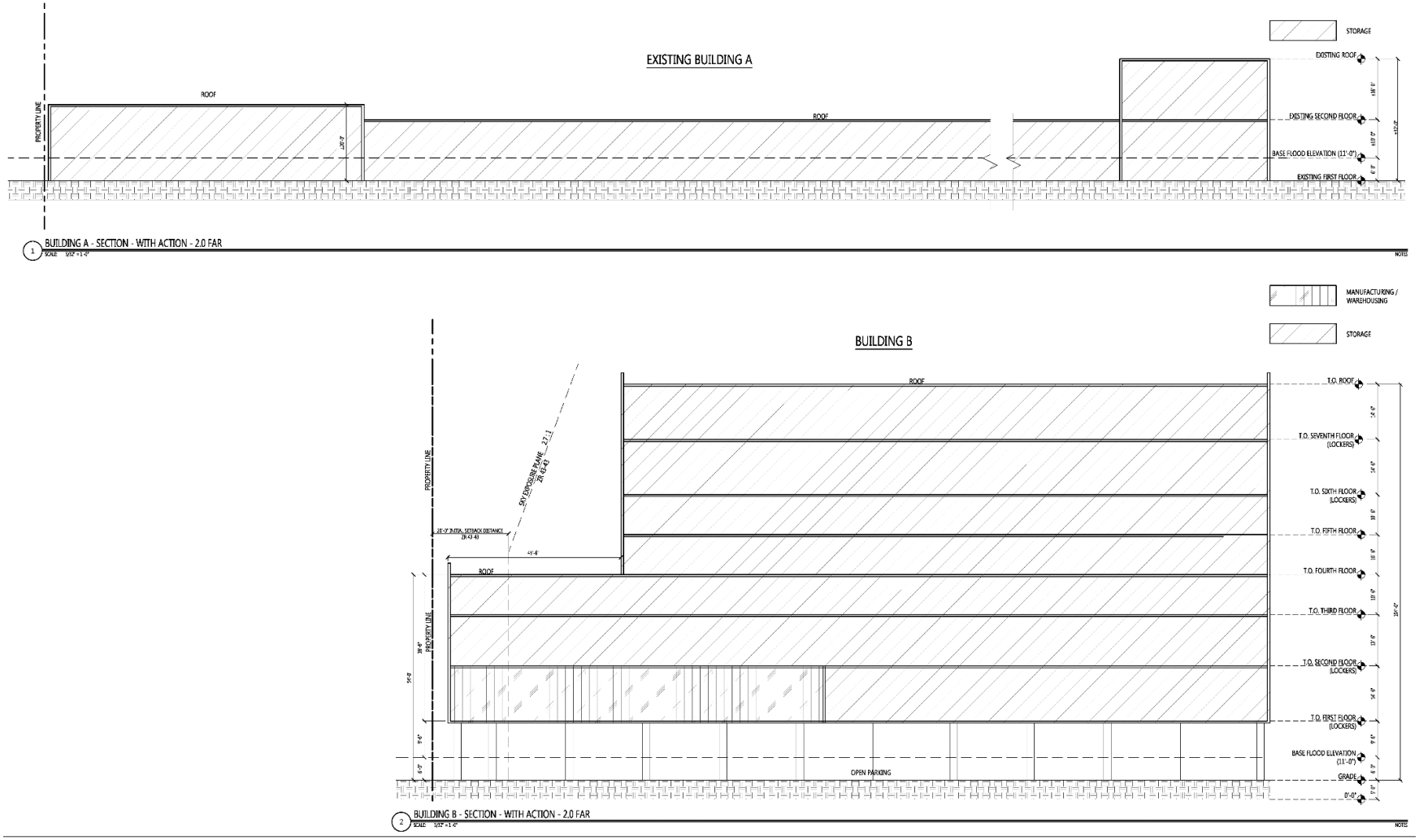


Figure 1-4 With-Action At-Grade Floor Plan

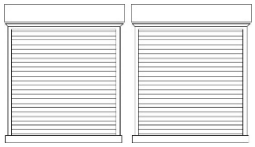


Source: Frank G. Relf Architect, P.C.
For Illustrative Purposes Only

Figure 1-5 With-Action Elevation Drawings



Source: Frank G. Relf Architect, P.C.
For Illustrative Purposes Only



2.0

Technical Screening

This section provides additional information for potential impacts as they relate to historic and cultural resources and construction.

2.1 Introduction

Provided below are preliminary screening analyses that were conducted for the proposed action based on the guidelines presented in the *2020 CEQR Technical Manual* to determine whether further analysis of a given technical area is necessary to determine the potential for significant adverse impacts to the environment in that area. This section is included for the technical areas of Historic and Cultural Resources and Construction. Technical areas that required more detailed analysis were excluded from this section and have designated sections for analysis within this document.

2.2 Historic and Cultural Resources

According to the *CEQR Technical Manual*, a historic and cultural resources assessment is warranted if there is the potential to affect either archaeological or architectural resources; the manual further recommends that a historic resources assessment be prepared if a proposed action would result in any of the following actions: in-ground disturbance; new construction, demolition, or significant physical alteration of any building, structure, or object; the change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature; or the screening or elimination of publicly accessible views, even if no known historic resources are located nearby. The New York City Landmarks

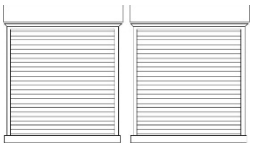
Preservation Commission reviewed the project area and, in a letter dated February 21, 2019, confirmed a finding of no architectural or archeological significance (see ***Appendix B***). Therefore, further analysis is not warranted.

2.3 Construction

Construction impacts, although temporary, can include disruptive and noticeable effects resulting from an action. Determination of their significance and need for mitigation is generally based on the duration and magnitude of the impacts. Construction impacts are considered when construction activity could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise levels, and area air quality conditions.

A construction assessment is typically warranted for construction activities (a) lasting longer than two years; (b) located along an arterial highway or major thoroughfare; (c) involving the closing, narrowing, or otherwise impeding of traffic, transit, or pedestrian elements; (d) involving multiple buildings; (e) involving the operation of several pieces of diesel equipment in a single location; (f) resulting in the closure or disruption of a community facility service; (g) located within 400 feet of a historic or cultural resource; (h) disturbing a site containing or adjacent to natural resources; and/or (i) occurring on multiple sites in the same geographic area.

Construction activities associated with the proposed project are expected to be standard in nature and would last approximately 18 months. The proposed project is not located along a major thoroughfare, and it is not anticipated that construction would impede traffic, transit, or pedestrian elements. Construction of the proposed project would not result in closure of a community facility or be located within 400 feet of a historic or cultural resource. While the project area is adjacent to natural resources, the applicant will adhere to the Environmental Conservation Law (ECL), all applicable regulations, and any conditions required through coordination with the New York State Department of Environmental Conservation (NYSDEC) and NYSDEC permitting process. Therefore, a construction analysis is not warranted.



2.1

Land Use, Zoning and Public Policy

This section considers the potential for the proposed project to result in significant adverse impacts to land use, zoning, and public policy. Under the guidelines of the *2020 City Environmental Quality Review (CEQR) Technical Manual*, this analysis evaluates the uses in the area that may be affected by the proposed project and determines whether the proposed project is compatible with land use, zoning, and public policy conditions, or may otherwise affect them. The analysis also considers the proposed project's compatibility with zoning regulations and other public policies applicable to the area.

2.1-1 Introduction

This analysis of land use, zoning and public policy follows the guidelines set forth in the *2020 CEQR Technical Manual*. It characterizes the existing conditions in the area surrounding Projected Development Site 1 and addresses potential impacts to land use, zoning, and public policy that would be associated with the proposed action.

2.1-2 Methodology

This preliminary analysis of land use, zoning, and public policy follows the guidelines set forth in the *CEQR Technical Manual* for a preliminary assessment (Section 320). According to

the *CEQR Technical Manual*, a preliminary land use and zoning assessment includes a basic description of existing and future land uses and zoning information and describes any changes in zoning that could result in changes in land use. It also characterizes the land use development trends in the area surrounding the development site that might be affected by the proposed action and determines whether the proposed project is compatible with those trends or may affect them.

For public policy, the *CEQR Technical Manual* stipulates that a preliminary assessment should identify and describe any public policies (formal plans, published reports) that pertain to the study area, and should determine whether the proposed project could alter or conflict with identified policies. If so, a detailed assessment should be conducted; otherwise, no further assessment is needed.

The following land use, zoning and public policy assessment follows this guidance and provides a description of existing conditions of the project area and its surroundings. This is followed by an assessment of the future No-Action condition and the future With-Action condition, and a determination that no further analysis is needed.

The study area for this analysis is the area within 400-feet of the project area which, for the proposed project, is generally bounded by Beach 75th Street to the east, the Vernam Barbadoes Preserve and Amstel Boulevard to the north, a line approximately 200 feet west of and parallel to Beach 80th Street to the west, and Aquatic Drive to the south (see ***EAS Figure 1***). This is the area in which the proposed project would be most likely to have effects in terms of land use, zoning, and public policy.

2.1-3 Assessment

Existing Conditions

Land Use

Project Area

The project area includes Projected Development Site 1 (detailed below), as well as parts of Lots 24, 28, 29, 33, 34 and 175 of Queens tax block 16100. It is bounded by the centerline of Beach 77th Street, the Pierhead/Bulkhead line of the Barbadoes Basin of Jamaica Bay, an imaginary line located 200 feet to the east of, and parallel to, Beach 80th Street, and the centerline of Rockaway Freeway. The project area is located wholly within an M1-1 zoning district and is outside Designated M Districts, as specified in Zoning Resolution (ZR) Appendix J, which allows for self-service storage facilities to be constructed as-of-right within M1 zoning districts.

Projected Development Site 1

Projected Development Site 1 is located at 350 Beach 79th Street and is composed of Lots 14, 18, and 20 of Queens tax block 16100.[1] The development site is bounded by Brandreth Creek to the west, Barbados Basin to the north, Lots 33 and 29 of Block 16100 to the south, and Lot 24 of the same block to the east. Projected Development Site 1 has a total area of approximately 107,553 square feet (sf) of upland area. An unmapped portion of Beach 79th Street intersects the development site (through Lot 18) and functions as a driveway to the site. Projected Development Site 1 is improved with a one-story building (with a small two-story portion at the north end of the building), referred to as "Building A." Building A, originally built in 1956, is on Lot 14 and contains 34,541 sf of light industrial and warehousing uses (0.32 Floor Area Ratio (FAR)). Parking is located on the eastern side of the building and is accessed from Rockaway Freeway (aka Beach Channel Drive). Projected Development Site 1 has access to the City's mapped street system via a 40-foot area between the development site and Rockaway Freeway.[2] This 40-foot area aligns with Lot 18, also known as Kane Avenue. Kane Avenue is an unmapped, private street that makes up a portion of Projected Development Site 1. Western portions of the development site are within Brandreth Creek, while areas to the east of Building A are devoid of existing buildings.

Remainder of Project Area

Lots 29, 33 and 175 are owned by the City of New York (the City) and contain easements with five-foot sidewalks that line Rockaway Freeway. Lots 28 and 34 are also part of Rockaway Freeway. Lot 24 is currently used for construction/maintenance materials storage and accessory parking and is closed to public access. Lot 29, is vacant and contains a portion of Rockaway Freeway and adjoining sidewalks.

Study Area

Projected Development Site 1 is located in the Arverne neighborhood of the Rockaways in Queens. As shown in ***EAS Figure 4***, the study area is predominantly characterized by industrial manufacturing, parking, and vacant land with small amounts of parkland use to the north and residential to the southeast. Other than the development site lots, the project block contains a one-story warehouse to the west on Lot 85 that functions as a garbage removal business. To the east on Lot 24 and what was once Beach 77th Street (aka Old Street) is a lot containing a parking facility. To the south are two lots (34 and 28) that contain the A subway line along elevated tracks over Rockaway Freeway. Just beyond the subway tracks to the south in the project block are two vacant lots (Lot 38 and 31) owned by New York City Housing Preservation and Development.

Block 16080, immediately east of the project block, contains an industrial manufacturing use with a vacant two-story building, a Penske Truck Rental, and scrap yard. Across the street to the south of this block is a small commercial area with an auto parts business and a garage that functions both as part of the business and as the Light of God church. More

[1] The NYC Department of Finance ("DOF") has approved an application to merge tax lots 18 and 20 into a single tax lot (to be known as Lot 18). As of the date of this application, DOF has not updated the City's official tax map to reflect this merger.

[2] See CP-12587 (January 16, 1957)

transportation and parking use is located across Beach 75th street to the east, under ownership of the New York City Department of Parks and Recreation (NYC Parks).

Vacant land is prevalent in the study area outside of the project block, including on Blocks 16103, 16104, 16105 and an easement near the subway tracks (Block 16090, Lot 1) that are empty with some vegetative cover and owned by the City. Another vacant parcel along Beach 77th south of Rockaway Freeway has been fenced in and improved with a yard to be used by the nearby residential uses.

Outside of industrial and vacant land uses in the study area, there are also institutional and residential uses along Sunrise Avenue and Beach 77th Street to the south of Projected Development Site 1. The institutional use (located on Block 16112, Lot 1) contains PS 183 Dr. Richard R. Green, a three-story public school with 478 students in pre-kindergarten through eighth grade. To the east of the school is a residential area characterized by two-family, semi-attached homes with garages. They are part of a development built in 2004 with private streets and alleys, sidewalks, and small adjoining yards. This pattern of mixed residential and community facility uses also continues on the block between Beach 75th Street and Beach 74th Street, where there are some single-family homes and a church.

The study area contains a small amount of parkland to the north across Barbadoes Basin that is not accessible to the public.[3] This block contains vacant land owned by NYC Parks and the Vernam Barbadoes Preserve, which is part of the 64,000-acre Gateway National Recreation Area established in 1972. It was acquired by NYC Parks to stop illegal dumping and preserve the wildlife in the area; however there still appears to be abandoned construction equipment and scrap material in the area from the adjacent equipment rental business. The only publicly accessible parkland is located just outside the study area; it is the Rockaway Freeway Dog Run which has dog park amenities, trees, open space and walkways with benches.

Barbadoes Basin, Brandreth Creek, and the project area are located within the boundaries of the proposed USACE Mid-Rockaway High Frequency Flood Risk Reduction Measures (HFFRRM) project, which is currently in the design phase and is a portion of the larger USACE East Rockaway Inlet to Rockaway Inlet and Jamaica Bay study area. As detailed in the USACE Integrated Hurricane Sandy General Reevaluation Report and Environmental Impact Statement (HSGRR/EIS),[4] the aforementioned USACE study area, including the project area, was devastated by the impacts of Hurricane Sandy in 2012. Accordingly, the goal of the HSGRR/EIS is to address coastal resiliency and long-term sustainability by identifying and developing long-term solutions that will reduce vulnerability of the Atlantic Ocean shoreline and Jamaica Bay system to storm damage over time.

According to the HSGRR/EIS, the preliminary design for the Mid-Rockaway HFFRRM in the vicinity of the project area includes construction of a 1,400 linear-foot low floodwall running from east to west along the north side of Beach Channel Drive. Portions of the floodwall would occur along the southern boundary of the project area, and a road ramp would be constructed in order to maintain the existing access to the project area from Beach Channel Drive. Existing stormwater outlets in the vicinity of the project area would be modified or

[3] This area is zoned M1-1, not as park, but is owned by NYC Parks.

[4] Available at: https://www.nan.usace.army.mil/Portals/37/docs/civilworks/projects/ny/coast/Rockaway/Rockaway%20Final%20Report/Rock%20Jam%20Bay%20Final%20Report%20HSGRR%205-9-19.pdf?ver=2019-05-29-124532-717, Accessed May 28, 2021.

replaced to increase capacity and to prevent high tides or storm surge from flooding through the drainage system. Additional stormwater outlets may also be installed. Drainage along the landward side of the floodwall would be provided by a small ditch or drainage collection pipe that would connect to existing or additional stormwater outlets.

Zoning

Project Area

The project area is located in an M1-1 light industrial zoning district (see ***EAS Figure 3***). The district is bounded by Hessler Avenue and Jamaica Bay to the north, Rockaway Freeway and Hammel's Boulevard to the south, Beach 72nd Street and Beach Channel Drive to the east, and Beach 84th Street and Block 16103 to the west.

The M1-1 district allows for a maximum FAR of 1.0 for light manufacturing, but also allows for commercial and community facilities uses. M1 districts typically include light industrial uses such as woodworking shops, repair shops, and wholesale service and storage facilities, and most commercial uses and several community facility uses, such as hospitals and places of worship, are permitted as of right. The maximum FAR in M1-1 districts is 1.0 for commercial and manufacturing uses and 2.4 FAR for community facility uses. Building base heights must be 30 feet or two stories (whichever is less) and then must be set back to a depth of 20 feet on a narrow street or 15 feet on a wide street. Maximum building heights are governed by a sky exposure plane and tower regulations do not apply. Parking in M1-1 districts depends on use. For example, parking for manufacturing or semi-industrial uses must be provided at a rate of 1 space per 1,000 sf or 1 space per 3 employees, whichever is more, and parking for storage facilities must be provided at a rate of 1 space per 2,000 sf or 1 space per 3 employees, whichever is less.

Study Area

The study area is also dominated by M1-1 zoning, with an area of R6 zoning in the southern portion of the study area. R6 districts are medium-density residential districts that range in building type from walk up townhouses to taller apartment buildings with a "tower in the park" design. R6 districts have the option to adhere to the Quality Housing Program, which promotes shorter, wider buildings. Community facilities are the only other use allowed in R6 districts. R6 districts are subject to the height factor regulations and permit a maximum FAR of 2.43 for residential buildings and 4.8 for community facilities. Building heights and envelopes are regulated by the sky exposure plane starting at 60 feet. Quality Housing regulations permit an FAR of 3.0 within 100 feet of a wide street and 2.2 FAR beyond 100 feet of a wide street. Quality Housing buildings in an R6 district can have up to 65 percent lot coverage within 100 feet of a wide street or 60 percent beyond 100 feet of a wide street (except corner lots, which can have 100 percent lot coverage). In an R6 district in Queens Community Board 14, parking is required for 85 percent of dwelling units.

Public Policy

Self-Storage Text Amendment

The Self-Storage Text Amendment (N 170425A ZRY), which was approved on December 19, 2017, introduced a Special Permit under the jurisdiction of the City Planning Commission (CPC) to be required for all new self-storage development in Designated Areas in M districts. The Environmental Impact Statement for the Self-Storage Text Amendment (the "EIS") assumed that the Self-Storage Text Amendment would cause a shift in the development and siting of self-storage facilities from Designated Areas, as specified in Zoning Resolution (ZR) Appendix J, to manufacturing and C8 districts outside of the Designated Areas. The project area is in a manufacturing district that is not in a Designated Area, and therefore development of self-storage is permitted as-of-right.

Vision 2020: New York City's Comprehensive Waterfront Plan

The Comprehensive Waterfront Plan presents a 10-year plan to expand the use of the waterfront for parks, housing and economic development, and waterways for transportation, recreation, and natural habitats. The Comprehensive Waterfront Plan, issued in 2011 and building on the original 1992 plan, identifies eight goals for the New York City waterfront: to expand public access to the waterfront and waterways on public and private property for all New Yorkers and visitors alike; enliven the waterfront with a range of attractive uses integrated with adjacent upland communities; support economic development activity on the working waterfront; improve water quality through measures that benefit natural habitats, support public recreation, and enhance waterfront and upland communities; restore degraded natural waterfront areas, and protect wetland and shorefront habitats; enhance the public experience of the waterways that surround New York; improve government regulation, coordination, and oversight of the waterfront and waterways; and identify and pursue strategies to increase the city's resilience to climate change and sea level rise. The plan identifies strategies and projects to achieve these goals. One of the neighborhood reach strategies for Jamaica Bay/Rockaway calls for support of proposed commercial and marina development at Beach 80th St., which falls within the project area. This strategy is meant to restore wetlands and provide public access to and a boat launch into the Barbadoes Basin.

Waterfront Revitalization Program

The project area is located within the Coastal Zone Boundary. Therefore, policies related to the Waterfront Revitalization Program (WRP) apply to the proposed project.

The WRP is the City's principal Coastal Zone management tool and establishes a broad range of public policies for the City's coastal areas. The guiding principle of the WRP is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront, while minimizing the conflicts among these objectives. The WRP was originally adopted in 1982. The recent revisions include incorporation of climate change and sea level rise considerations to increase the resiliency of the waterfront area, promotion of waterfront industrial development as well as commercial and recreational waterborne activities, increased restoration of ecologically significant areas, and best practices for the design of waterfront open spaces. Because the project is located in the

Coastal Zone, and requires local, State, and/or Federal discretionary actions or review, an assessment of the project's consistency with applicable WRP policies is required, and can be found in ***Appendix A***.

Zoning for Coastal Flood Resiliency

On May 12, 2021, the Zoning for Coastal Flood Resiliency text amendment went into effect to advance the reconstruction of storm-damaged properties and enable new and existing buildings to comply with flood-resistant construction standards set forth in Appendix G of the New York City Building Code. The text amendment included updates to the Flood Resilience Zoning Text (the "2013 Flood Text") and Special Regulations for Neighborhood Recovery ("2015 Recovery Text"), which were adopted on an emergency-basis after Hurricane Sandy and were set to expire. The updated and permanent Zoning for Coastal Flood Resiliency rules do the following:

1. Expand the geography where optional zoning rules apply to the 0.2% annual chance floodplain, in addition to the 1% annual chance floodplain, to facilitate buildings to make investments in small resiliency improvements or otherwise proactively meet or exceed flood-resistant construction standards;
2. Allow optional flexibility to measure the building envelope from a reference plane that can be placed anywhere between the Design Flood Elevation (DFE) and 10 feet above grade (for lots where at least a portion is located within the 1% annual chance floodplain) or a reference plane that can be placed anywhere between grade and 5 feet above grade (for lots where at least a portion is located within the 0.2% annual chance floodplain), so building owners can accommodate projected sea level rise when designing new buildings or retrofitting existing ones;
3. Allow wet-floodproofed ground floors to be exempted from floor area, and a portion of dry floodproofed non-residential ground floors to be exempted from floor area under certain circumstances, to better create accessible and inviting streetscapes;
4. Allow flexibility for existing non-compliant and/or non-conforming buildings to be retrofitted or reconstructed to meet or exceed flood-resistant construction standards, under certain circumstances;
5. Allow more flexibility with permitted obstruction rules for buildings to locate mechanical, electrical and plumbing equipment above the DFE, including emergency generators, and allow flood protection measures as permitted obstructions on open areas;
6. Create rules that facilitate the reconstruction of damaged buildings to allow the City to more quickly recover from future disasters and limit the growth of nursing homes with residents who have negative health consequences when subject to mandatory evacuation would be adopted.
7. Require buildings utilizing the allowances in the text amendment to meet streetscape mitigation regulations to help alleviate the effects of elevated access and potential blank walls caused by resiliency needs;
8. Modify provisions applying in the waterfront areas to ensure that existing waterfront regulations allow sites to incorporate flood risk and sea level by giving flexibility in grading and shoreline design.

No-Action Condition

As described in ***Section 1.0, Project Description***, absent the proposed action (the future No-Action condition), the applicant would maintain Building A in its existing condition as a 34,541-gsf (31,087-zsf) light manufacturing facility. A second, three-story elevated building would be constructed ("Building B") and would contain 84,962 gsf of as-of-right self-service storage use. Projected Development Site 1 would be developed with a total of 119,503 gsf, to a maximum potential of 1.0 FAR.

There is no anticipated development expected to be completed in the study area by the 2023 analysis year.

Land Use

Projected Development Site 1

The future No-Action condition would introduce a manufacturing/industrial use, self-storage, that is not currently on Projected Development Site 1. As discussed under existing conditions, the project area and study area are predominantly characterized by industrial manufacturing, parking, and vacant land with small amounts of parkland use to the north and residential to the southeast. The Rockaway Freeway separates the residential uses to the south from Projected Development Site 1, making it an appropriate site for a light industrial use like storage. Therefore, this manufacturing/industrial use proposed under the No-Action condition is consistent with the land use of the lots in the immediate area and is in keeping with the land use character of the study area.

Zoning

Under the future No-Action condition, there are no known zoning changes that are anticipated to affect Projected Development Site 1 or the study area. The future No-Action condition would conform to zoning in full by following all existing bulk and use regulations of the current M1-1 district. The project area and study area would continue to be governed by the various zoning regulations found in the area, as described above.

Public Policy

Under the future No-Action condition, there are no known public policy changes that are anticipated to affect Projected Development Site 1 or the study area.

With-Action Condition

In the future With-Action condition, Building B on Projected Development Site 1 would be constructed as a 204,465-gsf self-storage facility. As in the future No-Action condition, Building A would remain in its existing condition as a 34,541-gsf (31,087 zsf) light manufacturing building. In total, Projected Development Site 1 would contain 239,006 gsf and 215,106 zsf (2.0 FAR).

The first floor of Building B would be elevated on 15-foot stilts to accommodate open parking on the ground level (15 spaces) and two loading berths at the rear of the building.

Three additional loading berths would be located at the rear of Building B. Vehicular access to Projected Development Site 1 would be provided from Beach Channel Drive; the open ground floor on Building B would provide for through traffic to Building A and parking spaces.

Land Use

Projected Development Site 1

The proposed use for Projected Development Site 1 would not change from the future No-Action condition. The proposed action would increase the amount of self-storage proposed for the development site from the No-Action condition to meet the demand of self-storage in the area, while maintaining the warehouse use on-site. As discussed in ***Section 1.0, Project Description,*** demand for self-storage is high given the Rockaways' location on an island and in a flood zone, which largely eliminates the possibility of using residential cellar space for storage. In addition, there is only one self-storage facility in the Rockaways. Similar to the No-Action condition, the proposed manufacturing/industrial use is consistent with the land use of the waterfront lots in the area which are predominantly characterized by industrial manufacturing, parking, and vacant land, and is in keeping with the land use character of the area. Therefore, the proposed project is expected to have no impact on the land use of Projected Development Site 1.

Zoning

Projected Development Site 1

The applicant seeks a zoning map amendment to the project area to modify the underlying zoning district from M1-1 to M1-2 to facilitate the development of a new light industrial/warehousing and self-storage facility in two buildings on Projected Development Site 1. This amendment would allow for a facility that contains four more floors than would be developed under the future No-Action condition, for a total FAR of 2.0, an increase of 1.0 FAR over the No-Action condition. The proposed project would be constructed as-of-right in the proposed M1-2 zoning district and would meet the applicable zoning provisions, including parking and loading requirements, of the zoning district.

The area is well suited for manufacturing uses with higher bulk because it is well separated from residential areas by the transportation network and currently vacant land. The rezoning would maintain the industrial nature of the area. Therefore, the rezoning of the area containing Projected Development Site 1 would not have a significant adverse impact to zoning.

Public Policy

Self-Storage Text Amendment

The development of a self-storage facility in this location would be consistent with the goals of the Self-Storage Text Amendment by shifting development of self-storage facilities from Designated Areas to more suitable areas. The project area is suitable because it is in a

manufacturing area outside of the Designated Areas and Industrial Business Zones, in a neighborhood prone to flooding where demand for storage outside the home is high.

Vision 2020: New York City's Comprehensive Waterfront Plan

One of the goals of the Comprehensive Waterfront Plan is to support economic development activity on the working waterfront and the Reach neighborhood strategies specifically target Beach 80th Street within the study area for commercial development. The proposed project would aid in these goals by increasing development in the area, maintaining working waterfront industrial uses, and increasing commercial activity in the area surrounding Beach 80th Street. The proposed project would incorporate new buildings that are elevated above the base flood elevation and are therefore resilient to flooding.

Waterfront Revitalization Program

Given that the project area is located within the New York City Coastal Zone, the proposed action is subject to review for its consistency with the City's WRP. In accordance with the guidelines of the *CEQR Technical Manual*, a preliminary evaluation of the proposed action's potential for inconsistency with the WRP policies was undertaken. This preliminary evaluation requires completion of the WRP Consistency Assessment Form (CAF), which contains a series of questions designed to screen out those policies that would have no bearing on a consistency determination for a proposed action (see ***Appendix A***). The CAF lists the WRP policies and indicates whether the proposed project would promote or hinder that policy, or if that policy would not be applicable. For any policies which may be affected, the analysis provides additional information. As detailed in ***Appendix A***, the proposed action would be consistent with WRP policies.

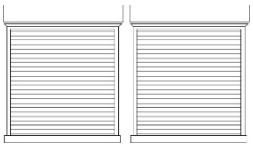
Zoning for Coastal Flood Resiliency

The implementation of Zoning for Coastal Flood Resiliency (ZCFR) allows developers to opt to measure height from a Reference Plane up to 10' above the Design Flood Elevation, which could result in a building up to 10' taller. The proposed development is consistent with the ZCFR given that the first floor is elevated above the design flood elevation but still meets its needs by providing ground floor loading. Therefore, the design of the proposed building will meet resiliency needs and the purpose of the proposed project, and is consistent with this policy.

2.1-3 Conclusion

The future With-Action condition would fully activate Projected Development Site 1 and would not change the land use as compared to the No-Action condition. Additionally, the proposed action would facilitate a similar, yet improved, development as compared to the No-Action condition, by providing more self-storage space, which is in high demand in the area. The applicant believes it would also be consistent with the purpose and goals of the underlying zoning and waterfront regulations by maintaining the manufacturing use in the area and removing new development from risk of storm surge, recurrent flooding, and sea level rise now and into the future. The With-Action condition would also be consistent with and support the goals of all applicable public policies affecting the project area. Therefore,

there would be no significant adverse land use, zoning, or public policy impacts as a result of the proposed action and further analysis is not necessary.



2.2

Shadows

A shadow is defined in the *2020 CEQR Technical Manual* 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. The purpose of this section is to assess whether new structures may cast shadows on sunlight sensitive publicly accessible resources or other resources of concern such as natural resources, and to assess the significance of their impact.

2.2-1 Introduction

According to the *CEQR Technical Manual*, a shadows assessment is required for proposed actions that would result in new structures greater than 50 feet in height or located adjacent to, or across the street from, a sunlight-sensitive resource. Such resources include publicly-accessible open spaces, important sunlight-sensitive natural features, or historic resources with sun-sensitive features. A significant adverse shadow impact occurs when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

As described in ***Section 1.0, Project Description***, the proposed action is projected to create a development site with two buildings (one existing building and one new building – Building B) with the following development scenario:

> ***Projected Development Site 1 (Lots 14, 18 and 20):*** construction of a new seven-story, 104-foot self-storage facility (Building B), representing a 50-foot incremental increase over the No-Action condition

Based on the identified incremental height increase above, further assessment is warranted for Projected Development Site 1.

2.2-2 Methodology

In accordance with the *CEQR Technical Manual*, a preliminary screening assessment is conducted to ascertain whether shadows resulting from a project could reach any sunlight-sensitive resource at any time of year. This preliminary screening assessment consists of three tiers of analysis:

- **Tier 1 Screening:** The first tier determines a simple radius around the proposed building representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier.
- **Tier 2 Screening:** The second-tier analysis reduces the area that could be affected by project-generated shadows by accounting for a specific range of angles that can never receive shade in New York City due to the path of the sun in the northern hemisphere. According to the *CEQR Technical Manual*, shadows cannot be cast within New York City within 108 degrees from True North.
- **Tier 3 Screening:** If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by new shadows by looking at specific representative days of the year and determining the maximum extent of shadow over the course of each representative day. For the Tier 3 screening, three-dimensional modeling software with the capacity to model shadows is used, and the maximum building envelope that could be achieved as a result of the proposed project is modeled and geo-located within the program. Terrain provided by the modeling software is also incorporated into the model to account for how changes in elevation throughout the study area can influence shadows that could be cast by the proposed project. The representative days are December 21 (winter solstice), June 21 (summer solstice), March 21/September 21 (vernal/autumnal equinox), and May 6/August 6 (halfway between summer solstice and the equinoxes). The modeling software is also used to approximate times that shadows cast from the proposed project could enter and exit a resource.

If the Tier 3 screening indicates that, in the absence of intervening buildings, shadows from the proposed project would reach a sunlight sensitive resource on any of the representative analysis days, a detailed shadow analysis would be warranted. Because existing buildings may already cast shadows on a sun-sensitive resource (or a future building could be expected to cast shadows), the proposed project may not result in additional (incremental) shadows upon that resource. The detailed shadow analysis models a baseline condition

(future No-Action condition) that is compared to the future condition resulting from the proposed project (future With-Action condition) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the project.

As in the Tier 3 analysis, for the purposes of a conservative analysis, the detailed analysis considers the maximum building envelope, including the bulkhead zone, that could be achieved as a result of the proposed action.

2.2-3 Preliminary Assessment

Tier 1 and 2 Screening Assessment

Projected Development Site 1

The maximum shadow screening radius for Projected Development Site 1 is based on the maximum shadow screening radii of 447.2 feet, based on a maximum Building B building height of 104 feet. ***Figure 2.2-1*** shows the potential sunlight-sensitive resources identified in the Tier 1 and Tier 2 screening assessment for Projected Development Site 1.

As shown in ***Figure 2.2-1***, there are a total of four sunlight sensitive resources that are wholly or partially within the shadow study area for the proposed project, including two open space resources and two natural resources, described as follows:

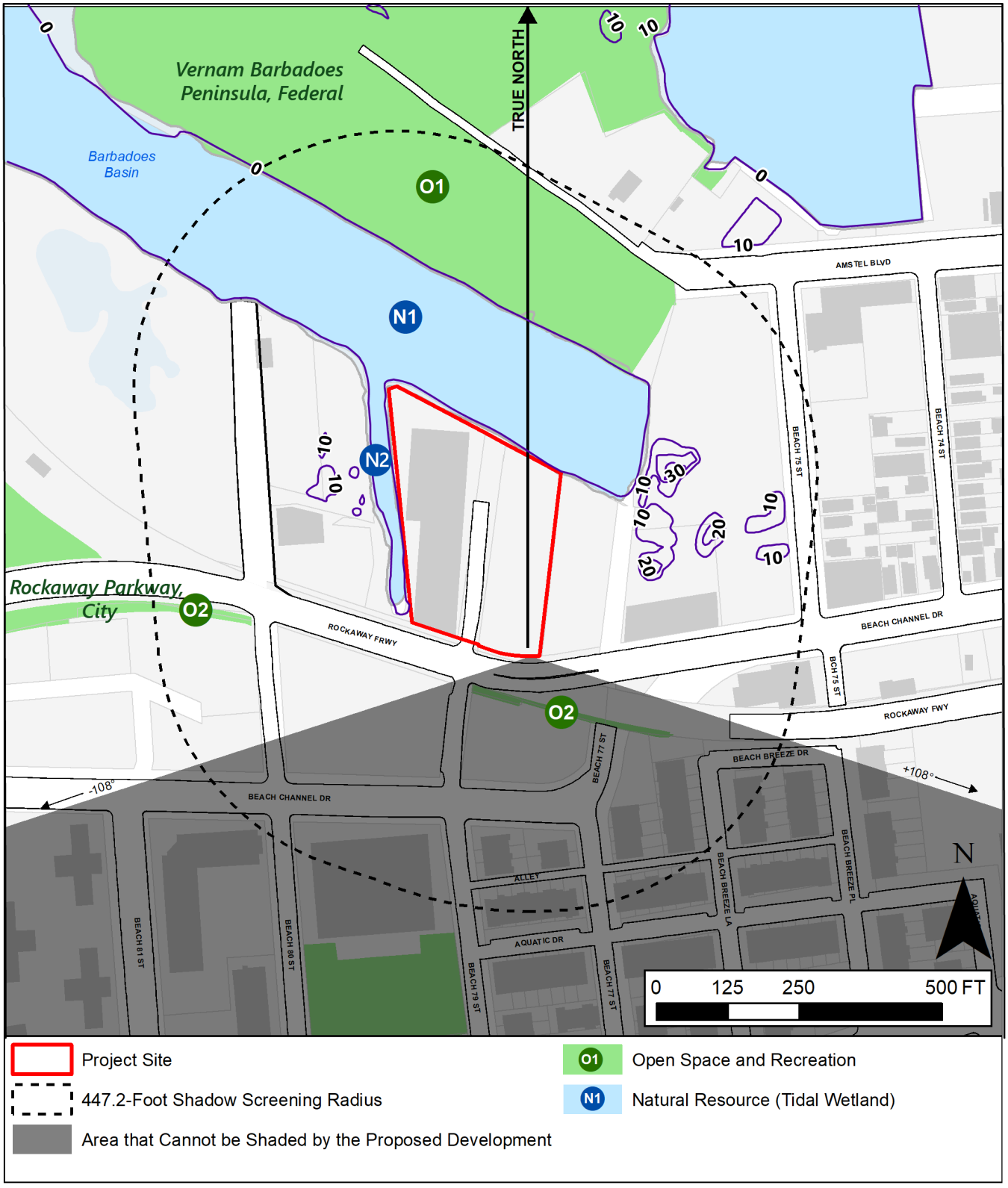
1. Vernam Barbadoes Peninsula (O1) – A 27.48-acre nature preserve that is a mixed coastal dune (also known as a scrub meadow and saltwater marsh matrix) with a variety of marshland grasses and sea lavender on the western shore of the peninsula, and beach heather, bayberry thickets, and woodland species further upland. The preserve also hosts various breeding songbirds, nesting kingfishers, and black-crowned night herons. Along with natural features in the Jamaica Bay Parks and Wildlife Refuge, the Vernam Barbadoes Preserve is part of the 64,000-acre Gateway National Recreation Area that was established in 1972.
2. Rockaway Parkway (O2) – Two separate parkway landscaping areas associated with the Rockaway Freeway are found within the shadow study area, the purpose of which is to beautify the roadside in those communities the freeway travels through.
3. Barbadoes Basin (N1) – A New York State Department of Environmental Conservation (NYSDEC)-designated Tidal Wetland, specifically a "Littoral Zone," which are zones that include all lands under tidal waters which are not included in any other category, extending seaward from shore to a depth of six feet at mean low water. Approximately 4.7 acres of the basin is located within Projected Development Site 1's shadow study area.
4. Brandreth Creek (N2)- An approximately 12,450-sf creek adjoining Barbadoes Basin with shallow waters. It is designated as a wetland, and has been defined as an essential fish habitat (EHF) by the National Oceanic and Atmosphere Administration (see ***Section 2.4, Natural Resources***).

The eastern portion of the Rockaway Parkway is completely within the area that cannot be shadowed by the proposed project. Therefore, no further analysis is warranted for this eastern portion of that resource.

As described in ***Section 2.4, Natural Resources***, native plantings are proposed for Projected Development Site 1 along the waterfront, and the species included in the proposed native plantings are generally tolerant of partially shaded conditions. Therefore, they are not investigated further as part of the shadows analysis. Any potential impacts are detailed in ***Section 2.4, Natural Resources.***

In summary, the Tier 1 and Tier 2 screenings could not rule out the potential for significant adverse impacts to two open space resources and one natural resource, which warranted analysis in a Tier 3 screening.

Figure 2.2-1 Projected Development Site 1 Tier 1 and Tier 2 Screening



Tier 3 Screening Assessment

In accordance with the *CEQR Technical Manual,* Tier 3 screening assessments were performed because the Tier 1 and Tier 2 assessments identified multiple sunlight-sensitive resources within ±108 degrees of True North and within the area of the longest shadow that could be cast by the projected development.

The Tier 3 screening assessments were performed for the four representative days of the year set forth in the *CEQR Technical Manual*: December 21, the winter solstice and shortest day of the year; March 21 / September 21, the equinoxes; May 6 / August 6, the midpoints between the summer solstice and the equinoxes; and June 21, the summer solstice and the longest day of the year.

In accordance with the *CEQR Technical Manual*, a model of Projected Development Site 1 Building B in the future With-Action condition was developed in a three-dimensional computer program (Sketchup). The model was geo-located and the surrounding terrain was imported into the model to account for differences in topography. As noted above, the Tier 3 shadow screening shows the shadows that could be cast as a result of the proposed project Building B but does not account for existing buildings which may already cast shadows on the identified open space resource. The Tier 3 analysis also does not account for shadow that would be expected in the future No-Action condition from development of the as-of-right building on Projected Development Site 1. ***Figures 2.2-3a*** to ***2.2-3d*** below show the Tier 3 screening results for Projected Development Site 1.

Figure 2.2-2a Tier 3 Screening: December 21 Analysis Day

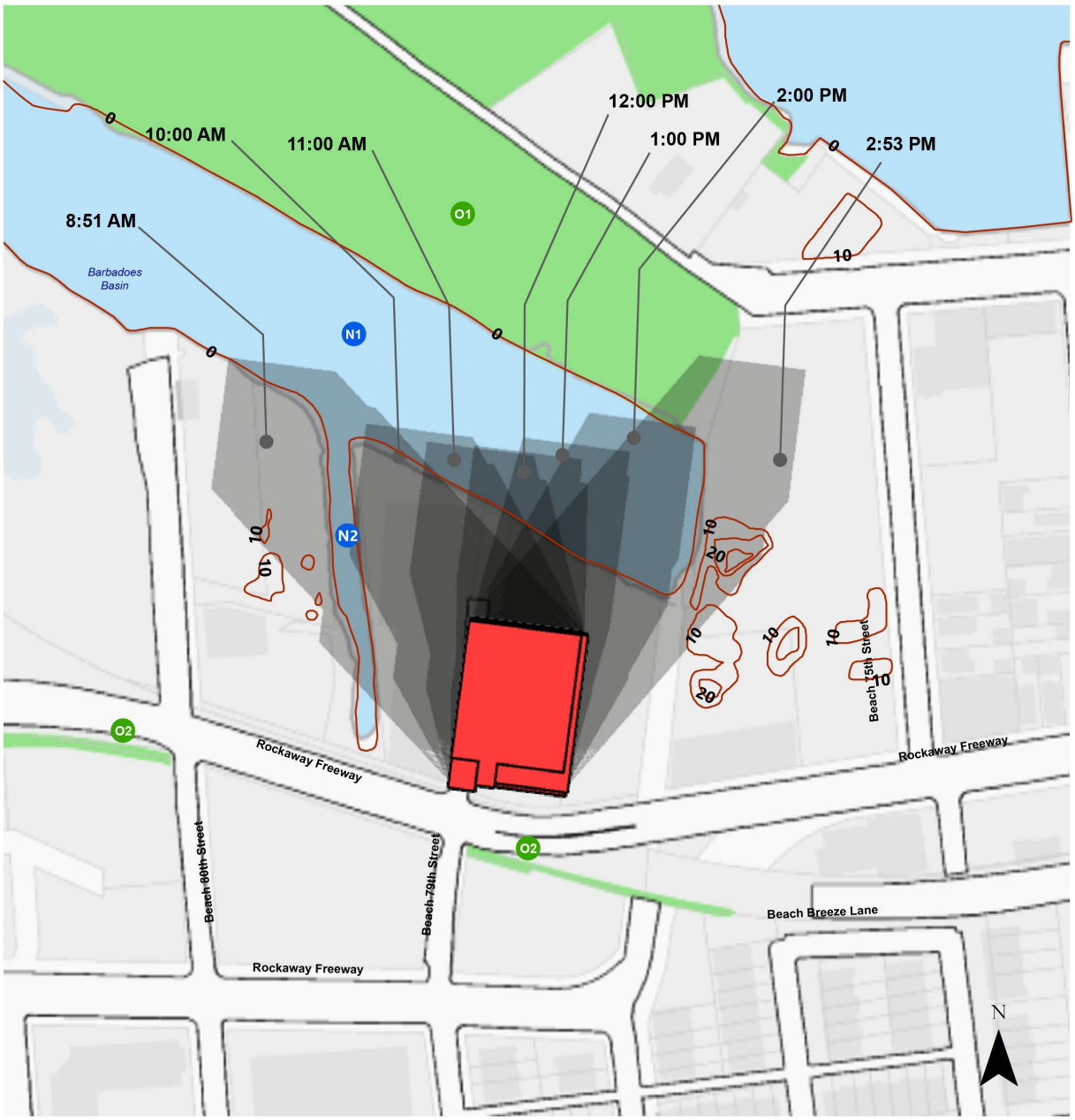
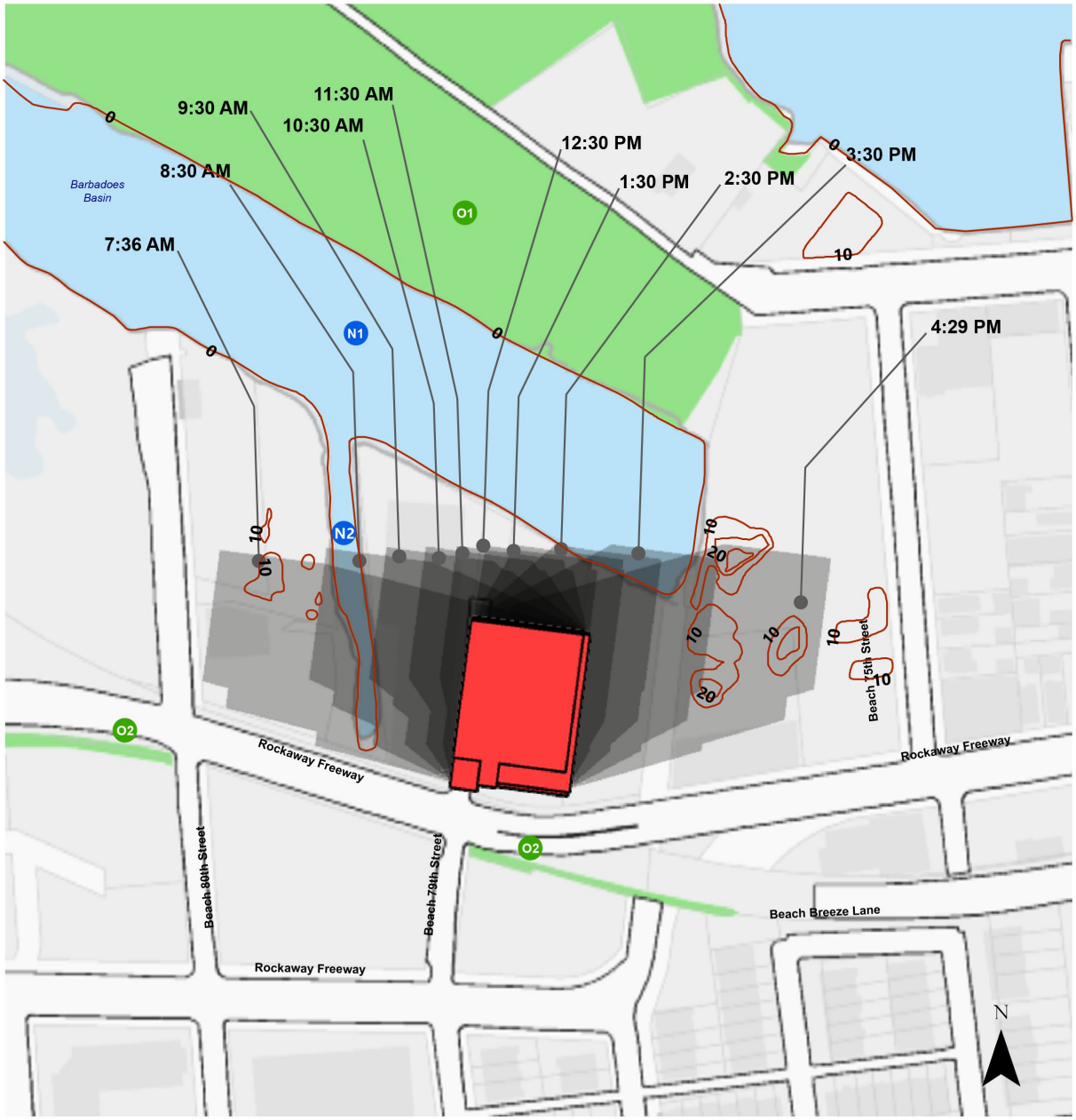
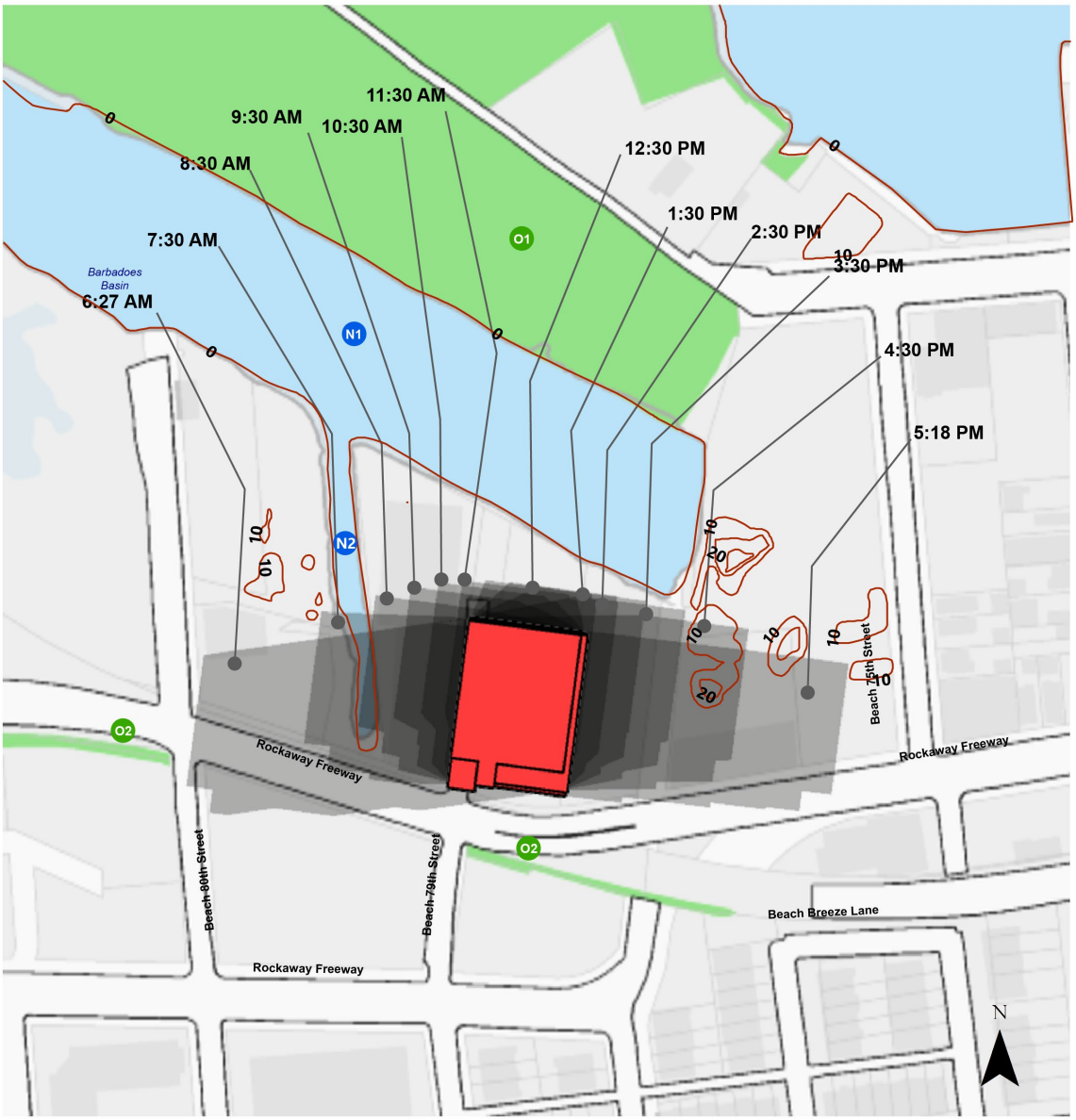


Figure 2.2-2b Tier 3 Screening: March 21 / September 21 Analysis Day



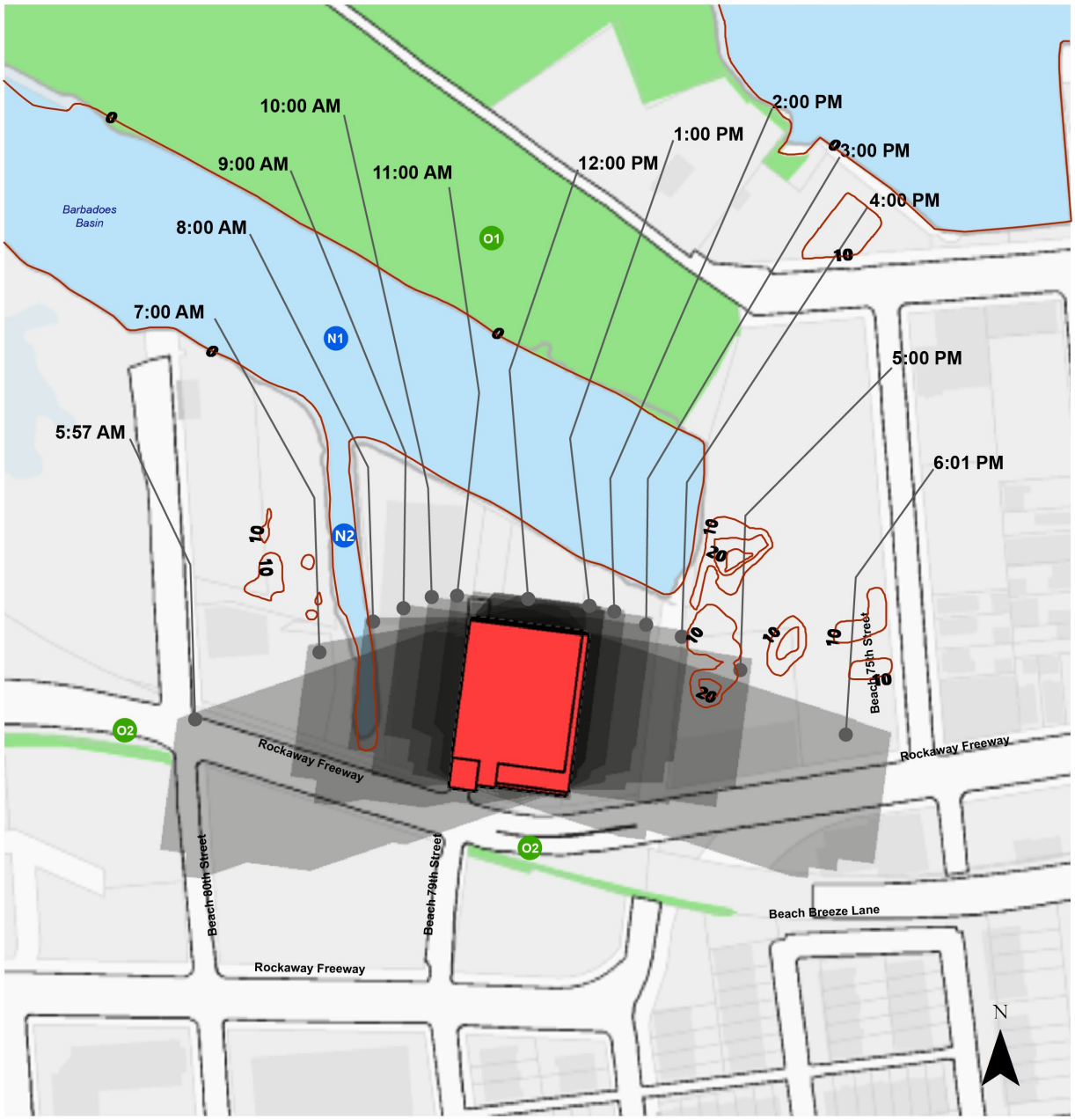
Development Site Building B only
Projected Tier 3 Shadow
Topographic Lines
O1 Open Space and Recreation
N1 Natural Resource

Figure 2.2-2c Tier 3 Screening: May 6 / August 6 Analysis Day



Development Site Building B only
Projected Tier 3 Shadow
Topographic Lines
O1 Open Space and Recreation
N1 Natural Resource

Figure 2.2-2d Tier 3 Screening: June 21 Analysis Day



Development Site Building B only
Projected Tier 3 Shadow
Topographic Lines
O1 Open Space and Recreation
N1 Natural Resource

Table 2.2-1 below identifies the potential Tier 3 shadow durations on all of the sunlight-sensitive resources carried forward from the Tier 2 analysis as discussed above.

Table 2.2-1 Tier 3 Shadow Durations by Sunlight Sensitive Resource

	Analysis Day			
Resource	**Dec 21**	**Mar 21/Sept 21**	**May 6/Aug 6**	**Jun 21**
O1: Vernam Barbadoes Peninsula	1:54PM - 2:53PM (59m)	N/A	N/A	N/A
O2: Rockaway Parkway	N/A	N/A	N/A	N/A
N1: Barbadoes Basin	8:51AM - 2:53PM (6h, 2m)	1:00PM - 4:29PM (3h, 29m)	N/A	N/A
N2: Brandreth Creek	8:51AM- 10:00AM (1h, 9m)	7:36AM-9:30AM (1h, 54m)	6:27AM – 8:56 AM (2h, 29m)	5:57 AM – 8:39 AM (2h, 42m)

A discussion of the findings of the Tier 3 screening analysis on a resource-by-resource basis is provided below.

O1: Vernam Barbadoes Peninsula

As illustrated in ***Figure 2.2-2a*** and indicated in ***Table 2.2-1***, the Vernam Barbadoes Peninsula could receive up to 59 minutes of shadow from the proposed project on portions of its southern area during the December 21 analysis periods, from 1:54 PM to 2:53 PM. However, these shadows are projected during the winter months, when resident vegetation would either be dead or dormant and utilization would be at its lowest, such that these shadows would not jeopardize the viability of vegetation or the public's use and enjoyment of this resource.

As illustrated in ***Figures 2.2-2b*** through ***2.2-2d*** and indicated in ***Table 2.2-1***, this resource is not projected to receive any Tier 3 shadows during the March 21 / September 21, May 6 / August 6, or June 21 analysis days.

Based on the foregoing, the proposed project is not expected to result in significant adverse shadows impacts on this open space resource and no further analysis is necessary.

O2: Rockaway Parkway

As illustrated in ***Figures 2.2-2a*** through ***2.2-2d*** and indicated in ***Table 2.2-1***, this resource is not projected to receive any Tier 3 shadows during the December 21, March 21 / September 21, May 6 / August 6, or June 21 analysis days. Based on the foregoing, the proposed project is not expected to result in significant adverse shadows impacts on this open space resource and no further analysis is necessary.

N1: Barbadoes Basin

Based on the results of the Tier 3 screening analysis, the Barbadoes Basin could potentially receive new shadow coverage for up to 6 hours, 2 minutes during the December 21 analysis day and 3 hours, 29 minutes during the March 21 / September 21 analysis day (see ***Figures***

2.2-2a through ***2.2-2d*** and ***Table 2.2-1***). Based on the results of this analysis, a detailed analysis is warranted to take into account the No-Action condition.

N2: Brandreth Creek

Based on the results of the Tier 3 screening analysis, Brandreth Creek could potentially receive new shadow coverage on all four analysis days for a maximum of between 1 hour and 9 minutes and 2 hours and 42 minutes depending on the day (see ***Figures 2.2-2a*** through ***2.2-2d*** and ***Table 2.2-1***). Based on the results of this analysis, a detailed analysis is warranted to take into account the No-Action condition.

Detailed Assessment

The detailed shadow analysis builds on the three-dimensional modeling used in the Tier 3 analysis to reflect the presence of existing structures and any new structures expected to be constructed in the future No-Action condition. After accounting for these structures, any new shadows projected to be cast onto the identified resources by the proposed project are considered "incremental shadows."

As discussed in the Tier 3 analysis, a detailed analysis was warranted for the Barbadoes Basin on two analysis days (including December 21 and March 21 / September 21) and on Brandreth Creek on all four analysis days. The detailed analysis for each of these representative analysis days is presented below by resource, and shows the projected shadow conditions throughout the analysis timeframes applicable to each analysis day. ***Table 2.2-2*** below details projected new incremental shadow entry and exit times at the resources of concern under the proposed project.

Table 2.2-2 Detailed Analysis Summary of Shadow Entry / Exit Times at Barbadoes Basin

	Analysis Day			
Resource	**Dec 21**	**Mar 21/Sept 21**	**May 6/Aug 6**	**Jun 21**
N1: Barbadoes Basin	8:51AM - 2:53PM (6h, 2m)	1:00PM - 4:29PM (3h, 29m)	-	-
N2: Brandreth Creek	8:51AM- 10:02 AM (1h, 11m)	7:36AM- 9:32AM (1h, 56m)	7:14AM - 8:39AM (1h, 25m)	7:08AM - 8:24AM (1h, 16m)

Note: Daylight savings time was not used during the analysis

N1: Barbadoes Basin

Through detailed analysis, it was determined that the Barbadoes Basin could receive incremental shadow on two analysis days- December 21 and March 21/September 21. ***Figure 2.2-3a through Figure 2.2-4c*** (appended to the end of this section) provide a representation of the projected incremental shadows for the December 21 and March 21/September 21 analysis days in 1-hour intervals.

December 21 Analysis Day

This detailed analysis for the December 21 analysis day demonstrated that while new incremental shadows from the proposed project would cover relatively large areas of the Barbadoes Basin over the course of this analysis day, even larger portions of this resource would remain sunlit. Further, new incremental shadows would sweep across this resource in a clockwise manner, such that no specific portion of the natural resource would remain shadowed for an extended period of time. Additionally, these shadows would fall during winter months, when public utilization (if any) would be lowest. As such, the usability and viability of this resource, either as a public recreation area or natural ecosystem, would not be significantly reduced or jeopardized.

March 21 / September 21 Analysis Day

The detailed analysis for the March 21/September 21 analysis day demonstrated that new incremental shadows from the proposed project would cover a very limited area of the eastern portion of Barbadoes Basin, such that the usability and viability of the resource (as a public recreational area or natural ecosystem) would not be jeopardized during any of these three analysis days as a result of the proposed project. Further, large portions of this natural resource would remain sunlit during these periods.

As such, based on the foregoing, the proposed action is not expected to result in any significant adverse shadows impacts to the Barbadoes Basin during any analysis day and no further investigation is necessary.

N2: Brandreth Creek

Brandreth Creek could experience incremental shadow on all four of the analysis days. The extent of that shadow is summarized in ***Table 2.2-3*** and described in each section below. ***Figures 2.2-3 through 2.2-6*** (appended to the end of this section) provide a representation of the projected incremental shadows for these analysis days in one hour intervals.

Table 2.2-3 – Brandreth Creek Shading Area Comparison

Date/Time		Shading Under the No-Action Condition (SF)	Percent Area Shaded (%)*	Incremental Shading Area (With-Action Condition) (SF)	Percent Area Shaded (%)*	Incremental Change (%)
December 21	9:00A	8,691	70	8,922	72	+2
	10:00A	2,629	21	2,734	22	+1
March/Sept 21	7:45A	6,876	55	7,055	57	+2
	8:15A	5,196	42	6,329	51	+9
	8:45A	3,480	28	5,478	44	+16
	9:15A	1,833	15	2,681	22	+7
May/August 6	7:30A	4,441	36	4,635	37	+1
	8:00A	3,127	25	3,730	30	+5
	8:30A	1,602	13	1,796	14	+1
June 21	7:15A	4,176	34	4,247	34	<1
	7:45A	3,242	26	3,932	32	+6
	8:15A	1,593	13	1,849	15	+2

Source: Department of Information Technology and Telecommunications shapefiles via NYC Open Data
*Indicates shaded area of Brandreth Creek as a percent of the total creek area (12,438 sf).

December 21 Analysis Day

On the December 21 analysis day, the detailed analysis demonstrated that Brandreth Creek could receive incremental shadow from 8:51 AM to 10:02 AM (a total duration of 1h, 11m). During this time, the shadow increment would have a very limited extent covering only 1 to 2 percent of the total creek area, which for most of this period would have the majority of its area already in shade from the No-Action condition. A portion of the creek would remain in sun throughout this analysis day.

March 21 / September 21 Analysis Day

On the March 21/September 21 analysis day, the detailed analysis demonstrated that Brandreth Creek could receive incremental shadow from 7:36 AM to 9:32 AM (a total duration of 1h, 56m). During this time, the shadow increment would have a limited extent covering a maximum of 16 percent of the total creek area. During the period of incremental shadow, other portions of the creek would continue to receive direct sunlight.

May 6/August 6 Analysis Day

On the May6/August 6 analysis day, the detailed analysis demonstrated that Brandreth Creek could receive incremental shadow from 7:14 AM to 8:39 AM (a total duration of 1h, 25m). During this time, the shadow increment would have a limited extent covering a maximum of

5 percent of the total creek area. During the period of incremental shadow, other parts of the creek would continue to receive direct sunlight.

June 21 Analysis Day

On the June 21 analysis day, the detailed analysis demonstrated that Brandreth Creek could receive incremental shadow from 7:08 AM to 8:24 AM (a total duration of 1h, 16m). During this time, the shadow increment would have a limited extent covering a maximum of 6 percent of the total creek area. During the period of incremental shadow, other parts of the creek would continue to receive direct sunlight.

Conclusion

On all analysis days, as demonstrated in the figures and increment areas, the With-Action condition would not result in any temporal increase to the duration of daily shading of Brandreth Creek beyond that which currently occurs or would occur under the No-Action condition due to the existing site building located adjacent to the creek. Similar to existing conditions, under the With-Action Condition, portions of the creek would experience brief periods of morning shading on the representative analysis days and would then experience shade-free conditions for the remaining daylight hours. Moreover, during the brief morning time periods on the representative analysis days when incremental shading of the creek would occur under the With-Action Condition, the percent increases in the area of shading as compared to the No-Action Condition would be minimal, with all but one increase being less than 10 percent.

In summary, no change in the duration of morning shading of Brandreth Creek would occur under the With-Action Condition. Moreover, incremental shading to Brandreth Creek under the With-Action Condition would be minimal. Accordingly, no significant adverse impacts to aquatic fauna and Essential Fish Habitats within Brandreth Creek are anticipated as a result of the Proposed Action. Further analysis is not warranted.

2.2-4 Conclusion

The proposed action could result in one new building greater than 50 feet in height on Projected Development Site 1 (with an existing building on Projected Development Site 1 to remain in its existing built condition), and therefore a preliminary shadows assessment (Tiers 1, 2 and 3 assessments) was undertaken. The Tiers 1 and 2 analyses indicated that there are two open space resources (Vernam Barbadoes Peninsula and the Rockaway Parkway) and two natural resources (Barbadoes Basin and Brandreth Creek) that could potentially receive shadows as a result of proposed project. Therefore, a Tier 3 assessment was conducted. The Tier 3 analysis, which does not account for either existing buildings or the future No-Action condition, indicated that the proposed project could cast shadows on the relevant resources.

The Tier 3 analysis indicated that the proposed project could cast shadows on the Barbadoes Basin during the December 21 and March 21 / September 21 analysis periods and on Brandreth Creek on all four analysis days. These shadows were identified as long in duration on the Barbadoes Basin and Brandreth Creek natural resources; therefore, a detailed shadows analysis was undertaken for these resources. New shadows on the Barbadoes

Peninsula identified in the Tier 3 analysis only fell during the December 21 analysis day, which were not considered significant.

The detailed shadows analysis indicated that new incremental shadow durations would fall on the Barbadoes Basin during the December 21 analysis period (for 6 hours, 2 minutes) and the March 21 / September 21 analysis period (for 3 hours, 29 minutes). Brandreth Creek would receive incremental shadow during the December 21 analysis (for 1 hour and 11 minutes), the March 21/September 21 analysis period (1 hour, 56 minutes), the May 6 / August 6 analysis period (for 1 hour, 25 minutes), and during the June 21 analysis period (for 1 hour, 16 minutes). In all cases, it was found that these natural resource's usability and viability, both as a natural ecosystem and public recreation area, would not be jeopardized as a result of these projected new incremental shadows and that large portions of the basin and creek, which are connected, would remain sunlit during the incremental shadow durations.

Therefore, it was determined that project-generated incremental shadows would not result in significant adverse shadow impacts to the sunlight-sensitive resources identified, and no further analysis is warranted.

Figure 2.2-3a Detailed Analysis, Barbadoes Basin and Brandreth Creek: December 21 Analysis Day



Figure 2.2-3b Detailed Analysis, Barbadoes Basin and Brandreth Creek: December 21 Analysis Day (Continued)

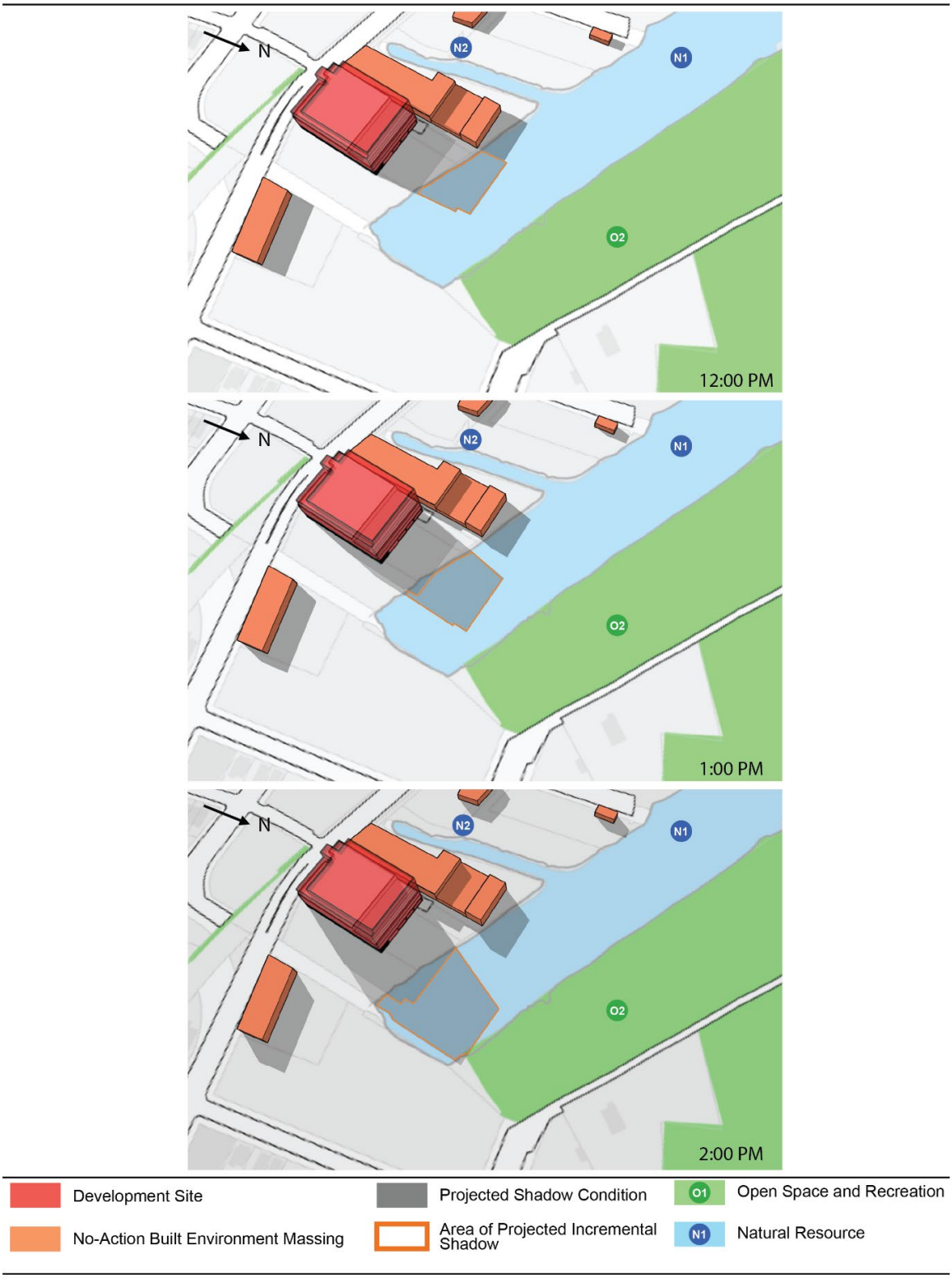


Figure 2.2-3c Detailed Analysis, Barbadoes Basin and Brandreth Creek: December 21 Analysis Day (Continued)



Development Site
No-Action Built Environment Massing
Projected Shadow Condition
Area of Projected Incremental Shadow
O1 Open Space and Recreation
N1 Natural Resource

Figure 2.2-4a Detailed Analysis, Barbadoes Basin and Brandreth Creek: March 21 / September 21 Analysis Day

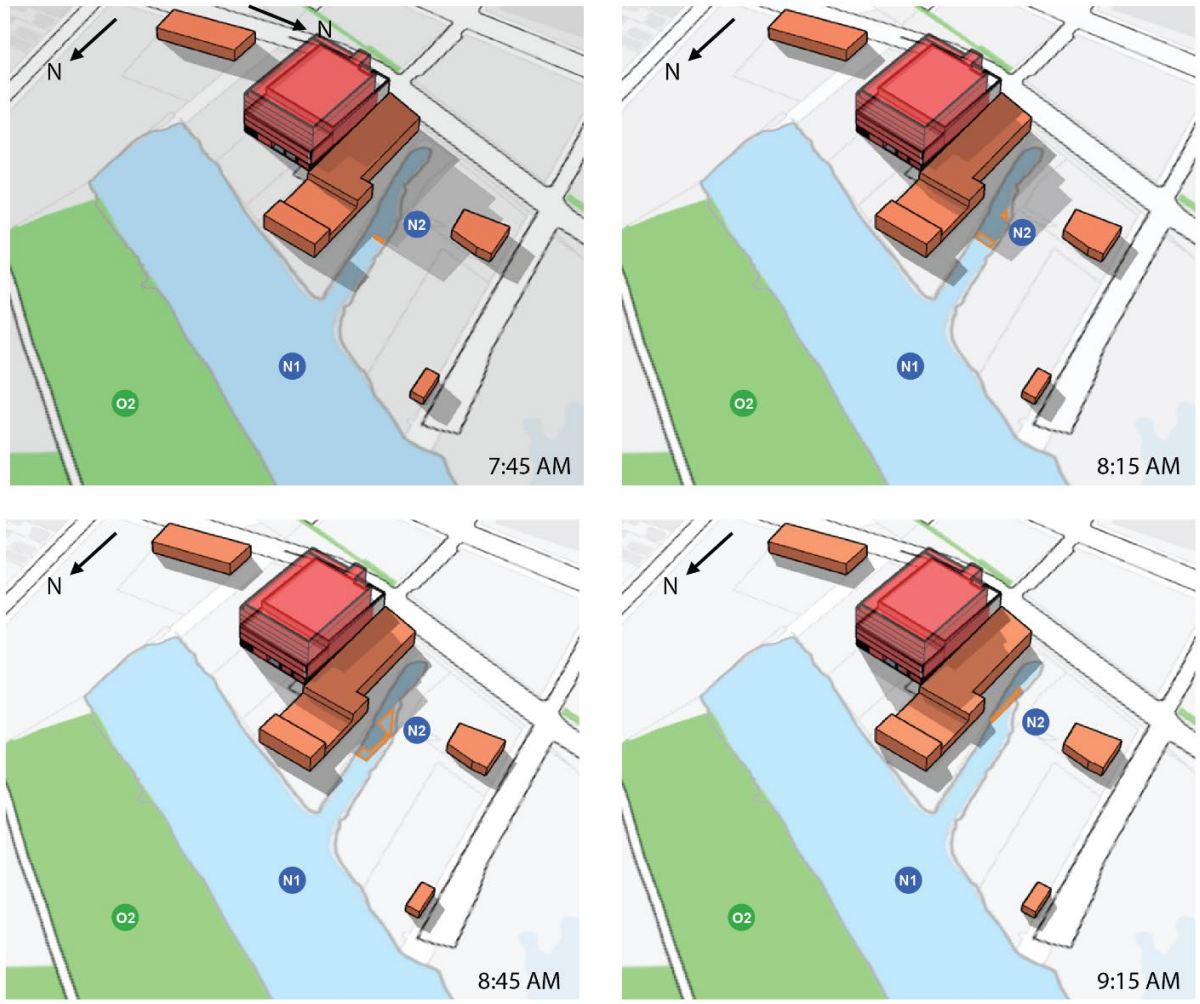


Figure 2.2-4b Detailed Analysis, Barbadoes Basin and Brandreth Creek: March 21 / September 21 Analysis Day (Continued)

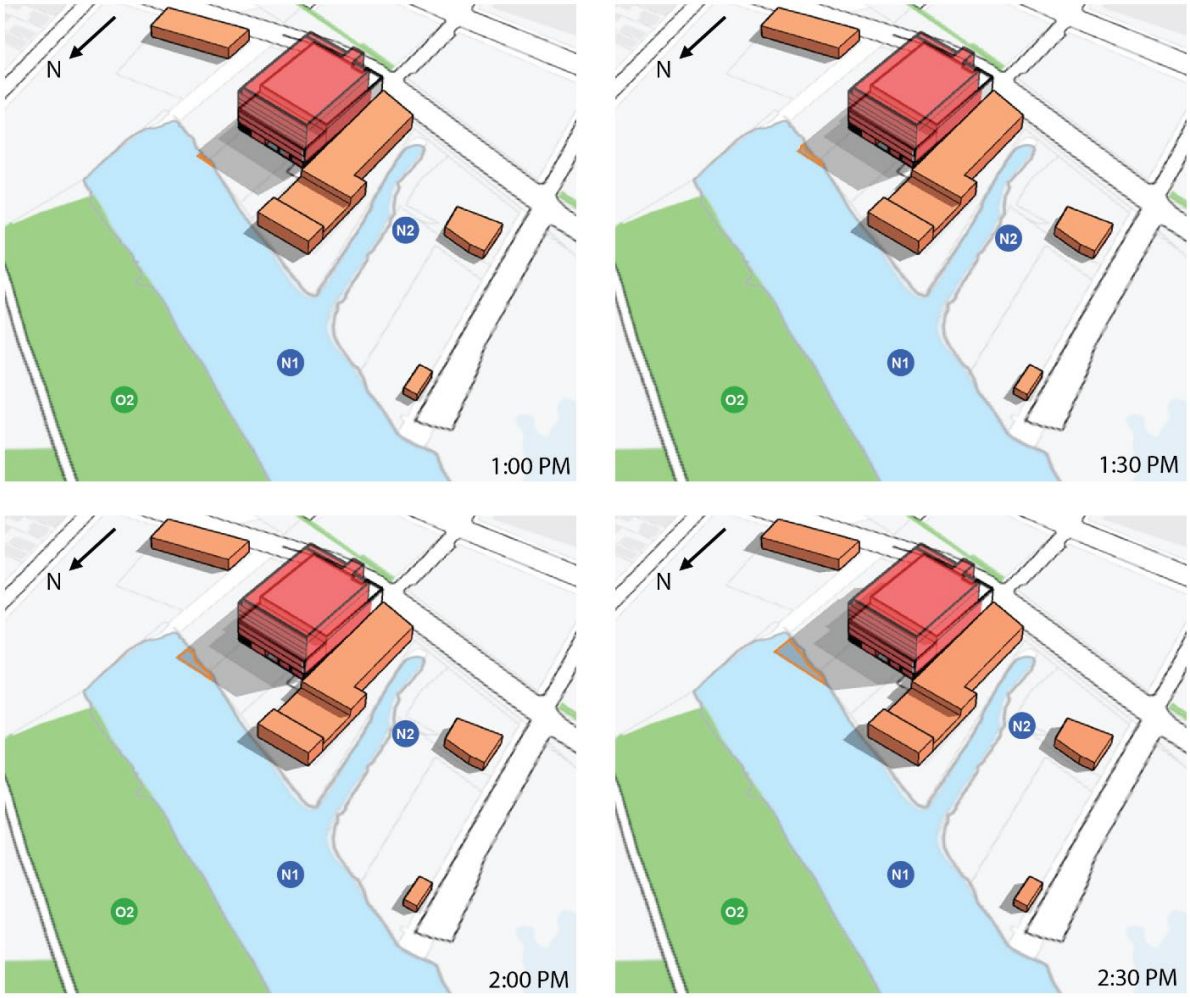


Figure 2.2-4c Detailed Analysis, Barbadoes Basin and Brandreth Creek: March 21 / September 21 Analysis Day (Continued)

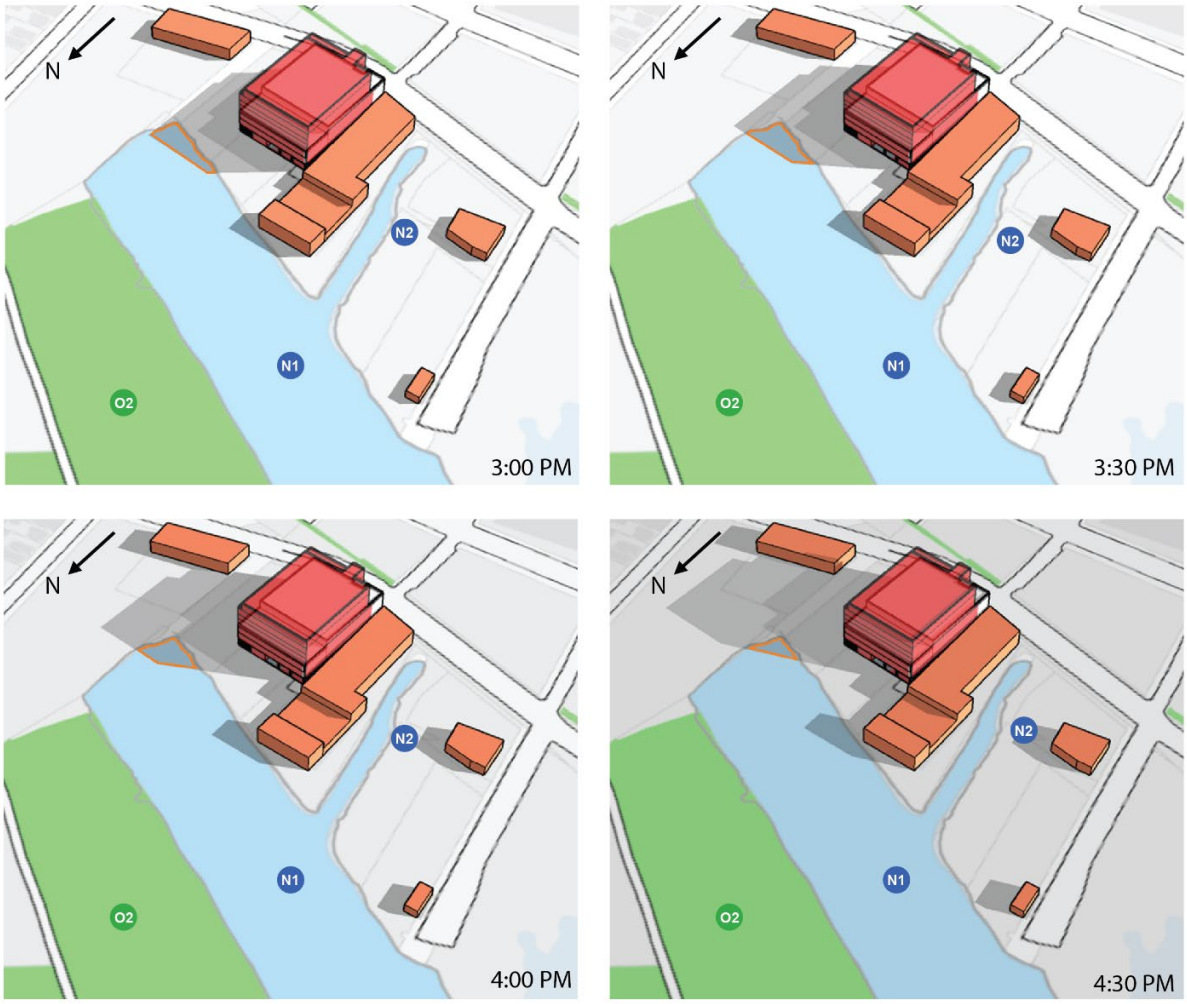


Figure 2.2-5 Detailed Analysis, Barbadoes Basin and Brandreth Creek: May 6 / August 6 Analysis Day

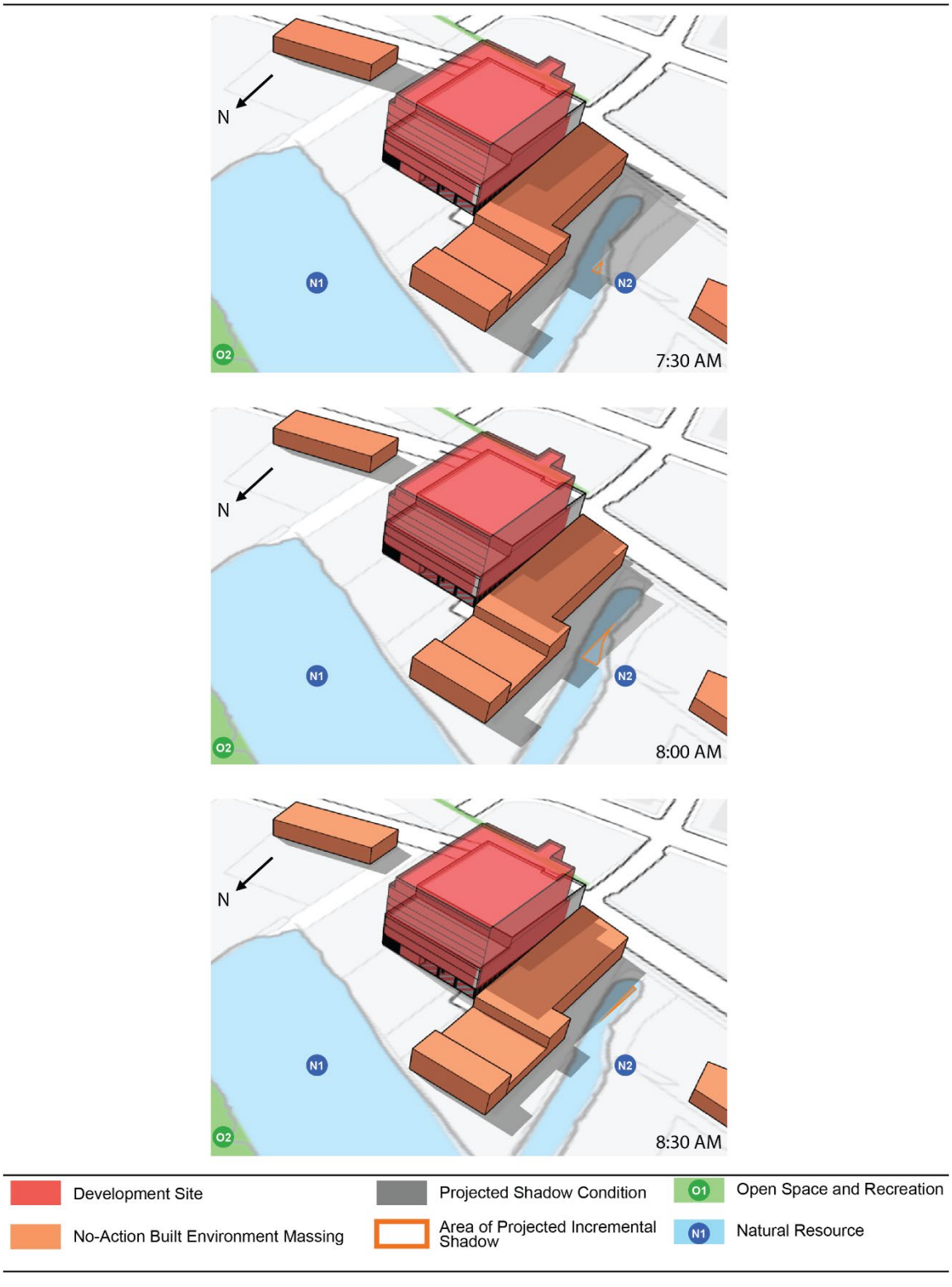
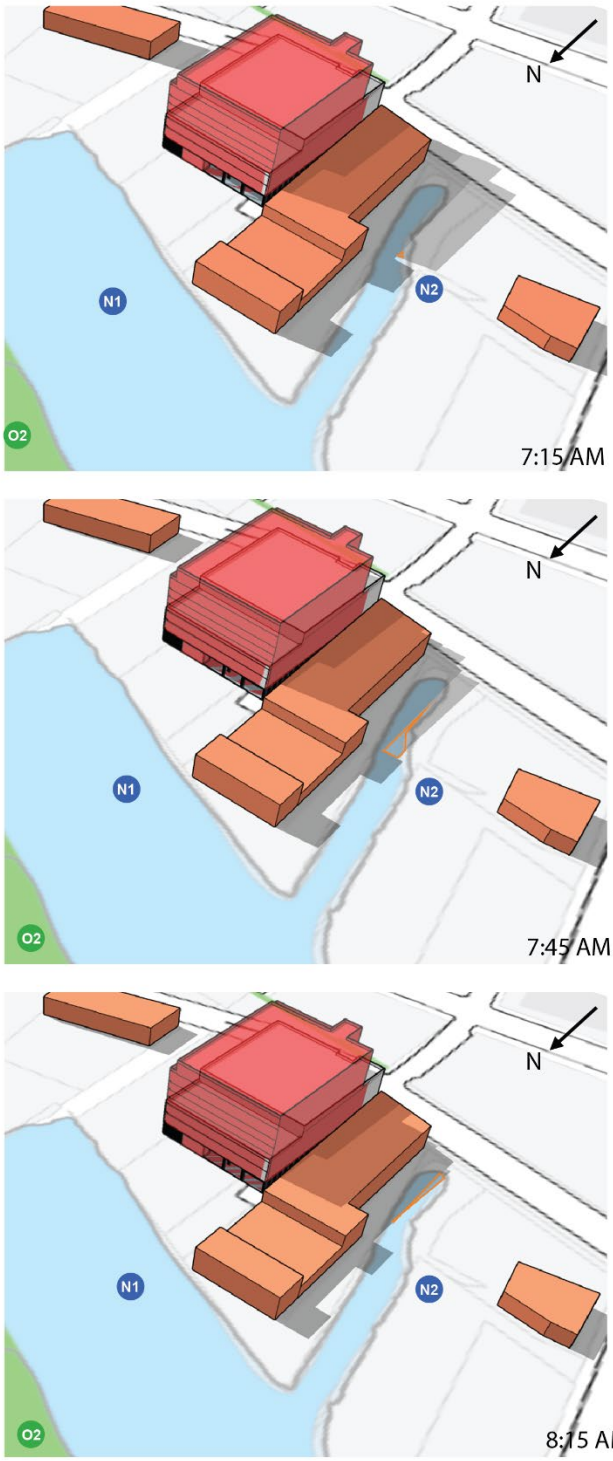
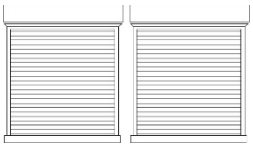


Figure 2.2-6 Detailed Analysis, Barbadoes Basin and Brandreth Creek: June 21 Analysis Day





2.3

Urban Design and Visual Resources

An urban design assessment under CEQR considers whether and how a project may change the experience of a pedestrian in the study area. The assessment focuses on the components of a proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment.

2.3-1 Introduction

This section considers the potential for the proposed project to result in significant adverse urban design and visual resources impacts. As defined in the *2020 City Environmental Quality Review* (CEQR) *Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

Based on the *CEQR Technical Manual*, a preliminary assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. As described in ***Section 1.0, Project Description,*** the applicant is proposing to construct a 239,006-gross square foot (gsf) self-service storage facility, including a new, seven-story, 104-foot tall building containing self-storage uses elevated above parking on the ground floor (Building

B) and maintenance of the existing building on-site (Building A) to contain 34,541 gsf of light industrial. The proposed action would permit a built floor area beyond what would be permitted in the future No-Action condition. Therefore, a preliminary urban design screening assessment was conducted.

Within the 400-foot radius of the project area there are no points of public waterfront access, no public parks, and no historic landmarks. Given the narrow width of Barbadoes Basin and the topography and existing built features in the project area, Beach Channel Drive adjacent to the project area does not provide views of Barbadoes Basin. Therefore, a preliminary assessment of visual resources was not warranted.

Based on the *CEQR Technical Manual*, a preliminary pedestrian wind conditions analysis may be necessary for the "construction of projects involving multiple, tall buildings at or in close proximity to waterfront sites." Guidelines suggest that generally only projects of a substantial size have the potential to alter wind conditions. The proposed project would result in the construction of a single building not considered to be substantial in size, and therefore a pedestrian wind conditions analysis is not warranted.

2.3-2 Methodology

In accordance with the *CEQR Technical Manual* guidelines, the following preliminary urban design assessment considers a 400-foot radius study area where the proposed actions would be most likely to influence the built environment. As stipulated in the *CEQR Technical Manual*, because the purpose of the preliminary assessment is to determine whether any physical changes facilitated by the proposed action would significantly impact elements of urban design, the following information, if known, is included in a preliminary assessment:

- a concise narrative of the existing study area, and conditions under the future No-Action and With-Action conditions;
- an aerial photograph of the study area and ground-level photographs of the project area with immediate context;
- zoning and floor area calculations of the existing and future No-Action and With-Action conditions;
- building massing and building heights; and
- a three-dimensional representation of the future With-Action and No-Action condition streetscape.

If the preliminary assessment determines that a change to the pedestrian experience is minimal and unlikely to disturb the vitality, walkability or visual character of the study area, then no further assessment is necessary. However, if it shows that changes to the pedestrian environment are significant enough to require greater explanation and further study, then a detailed analysis may be appropriate.

The following preliminary urban design assessment follows these guidelines and provides a characterization of existing conditions, a description of urban design under the future No-

Action and With-Action conditions, and an analysis determining the extent to which physical changes resulting from the proposed action would alter the pedestrian experience.

Study Area

The urban design study area is typically defined as the area within 400 feet of the project area which, for this project, is generally bounded by Beach 75th to the east, the Vernam Barbadoes Preserve and Amstel Boulevard to the north, a line approximately 200 feet west of and parallel to Beach 80th Street to the west, and Aquatic Drive to the south (see ***Figure 2.3-1***). This is the area in which the proposed action would be most likely to have effects in terms of urban design.

2.3-3 Preliminary Assessment

Existing Conditions

Project Area

The project area includes Projected Development Site 1 (detailed below) and part of Lots 24, 28, 29, 33, 34 and 175 of Queens tax block 16100. It is bounded by an imaginary line located 80 feet west of and parallel to the Beach 77th Street widening line, the Pierhead/Bulkhead line of the Barbadoes Basin of Jamaica Bay, an imaginary line located 200 feet to the east of, and parallel to, Beach 80th Street, and the centerline of Rockaway Freeway.

Projected Development Site 1

Projected Development Site 1 is located at 350 Beach 79th Street and is composed of Lots 14, 18, and 20 of Queens tax block 16100. Projected Development Site 1 is bounded by Brandreth Creek to the west, Barbados Basin to the north, Lots 33 and 29 of Block 16100 to the south, and Lot 24 of the same block to the east. It is located on a waterfront lot on the northern end of the project block. Projected Development Site 1 is improved with a one-story building (with a small two-story portion on the north end of the building), referred to as Building A. Building A, located on Lot 14, was originally built in 1956 and contains 34,541 gross square feet (gsf) of light industrial and warehousing uses. Building entrances are located along the eastern side of the building. Lots 18 and 20 within Projected Development Site 1 are vacant and relatively flat. See ***EAS Figure 5, Photos 1*** through ***8*** for project area photographs.

Figure 2.3-1 Study Area Photograph Location Map



Remainder of the Project Area

Lots 33 and 175 are both owned by the City of New York and contain easements with five-foot sidewalks that line the Rockaway Freeway. Lots 28 and 34 are part of Rockaway Freeway. Lot 24 is currently used for construction/maintenance materials storage and accessory parking and is closed to public access. Lot 29, which is owned by the City, is vacant and contains a portion of the Rockaway Freeway and adjoining five-to-ten-foot sidewalks. Study Area

As described above, the study area is generally bounded Beach 75th Street to the east, the Vernam Barbados Preserve and Amstel Boulevard to the north, a line approximately 200 feet west of and parallel to Beach 80th Street to the west, and Aquatic Drive to the south. Study area photographs can be found in ***Photos 1*** through ***12*** below.

Urban Design

The study area is divided by the roadways of Rockaway Freeway and Beach Channel Drive, as well as the elevated MTA subway A line, all running east-west, and Beach 80th which runs north-south, connecting the freeway and the project area to the neighborhoods to the south. Rockaway Freeway and Beach Channel Drive merge just south of the project area into a two-lane road with the eastbound lane running underneath the A line. Sidewalks line both sides of the street (see ***Photo 1***). The rest of the street grid in the study area is poorly connected, with streets ending at the freeway with a one way turn or not providing passage under the subway line (see ***Photo 2***). Some on-street parking is available on the south side of Beach Channel Drive only in the eastern portion of the study area, as well as in the southern portion of the study area along both sides of Beach 80th Street and the residential roads. Sidewalks are present on Beach Channel Drive, but there are no traffic signals or pedestrian crosswalks along the portion of the route in the study area, and many areas of sidewalk are obstructed by overgrown vegetation. There are also no sidewalks along Beach 80th Street in the study area, which is the one road that connects the northern portion of the study area to the southern residential portion (see ***Photo 3***). Sidewalks and cross walks are present along Sunrise Avenue and the residential area to the south. There is no public waterfront access in the study area.

Much of the study area is characterized by low-lying industrial development with one- or two-story warehouse buildings (See ***Photos 4 and 5***). Much of this industrial land is also occupied but developed without buildings and is being used for parking or construction materials storage use. Within the project area, Lot 24 is characterized in this way, as an unpaved lot with accessory parking and storage of construction materials (see ***Photo 6***). This pattern also occurs outside the project area. For example, the area across Barbadoes Basin to the north of Projected Development Site 1 contains construction cranes and the parcels on the east end of the Basin contain a Pensky truck rental and a lot with cement trucks and other material storage (see ***Photo 7***). These lots are relatively flat and developed with unpaved roads.

Photo 1 View of Rockaway Freeway facing east from southwest corner of project area



Photo 2 View of Beach 79th Street facing north from southwest corner of Sunrise Avenue



Photo 3 View of Beach 80th Street facing north from northwest corner of Sunrise Avenue



Photo 4 View of vacant building facing east on Rockaway Freeway/Beach Channel Drive



Photo 5 View of TIA Rubbish Removal and Beach 80th Street facing north on Rockaway Freeway/Beach Channel Drive



Photo 6 View of Lot 24 facing north on Rockaway Freeway/Beach Channel Drive



Other development in the study area includes a small lot along Beach Channel Drive that contains commercial uses in one- and two-story buildings. These buildings exhibit a similar urban design character to the surrounding industrial uses (see ***Photo 8***).

The prevalence of vacant land in the study area also contributes to its character. These parcels are mostly flat and undeveloped with some vegetative cover (see ***Photo 9***). Some have environmental resources such as freshwater ponds, natural communities, and land bordering estuarine and marine deepwater (refer to ***Section 2.4, Natural Resources,*** for a full description). For example, the Vernam Barbadoes Preserve, which is marked as having a vacant land use and is not accessible to the public, contains significant natural communities on its northwestern edge just outside the study area. A small portion of the Preserve is visible across Barbadoes Basin from Beach Channel Drive (see ***Photo 10***).

The exception to this development pattern in the study area is the area to the south of Sunrise Avenue. This area is characterized by two-family, semi-attached homes with garages within a private development (see ***Photo 11***). They are generally set back from the lot line with small planted yards and porches as well as a short driveway leading to a garage in the front of the building, and small adjoining fenced-in yards in the rear. The streets are two-way with on-street parking and sidewalks, street trees, and crosswalks. Some of the homes have their garages in the rear along alleyways that intersect the block between Sunrise Avenue and Aquatic Drive (which is also a private road.) There is also a three-story school with a connected playground next to this residential area (see ***Photo 12***). The school is elevated from the street level on a platform, set back from the lot line on all sides, and is surrounded by fencing. It has an arcade on the lower floor on the eastern and western sides of the building that is integrated with a lawn and plaza. The south side connects to a large playground with courts and play equipment.

No-Action Condition

As described in ***Section 1.0, Project Description,*** absent the proposed action (the future No-Action condition), Projected Development Site 1 would be redeveloped with a new building (Building B), and the existing building (Building A) would be maintained in its current condition. This would be done as-of right within the current zoning regulations.

The applicant would maintain Building A as a 34,541-gsf light industrial facility, maintaining the current building envelope. Building B would be constructed to three stories (54 feet), elevated from the ground level, and would contain 84,962 gsf of as-of-right self-storage uses. Projected Development Site 1 would be developed to a maximum potential of 1.0 FAR. Fifteen parking spaces and four loading berths would be located on the ground floor beneath the elevated structure and at the rear of Building B.

There are no anticipated developments within the study area expected to be completed by the analysis year.

Photo 7 View of Pensky Truck Rental facing northwest from Rockaway Freeway



Photo 8 View of commercial area facing east on Rockaway Freeway/ Beach Channel Drive



Photo 9 View of vacant land facing west from Beach 80th Street



Photo 10 View of Vernam Barbadoes Preserve facing north from Beach Channel Drive



Photo 11 View of residential area facing south from Sunrise Avenue



Photo 12 View of PS 183 Dr. Richard R. Green facing west from Beach 79th Street



With-Action Condition

Projected Development Site 1

As described in ***Section 1.0, Project Description***, in the future With-Action condition, Projected Development Site 1 would be rezoned from M1-1 to M1-2, to facilitate the development of a new self-storage facility on Projected Development Site 1. Building A would remain in its existing condition as a 34,541-gsf light industrial facility, to reach 32 feet at its tallest portion. A new building - Building B - would be constructed as a seven-story 204,465-gsf self-storage facility. This building would reach 104 feet at its tallest portion. The proposed project would have a total zoning floor area of 214,106 zoning square feet (zsf), or 2.0 FAR. The first floor of Building B would be elevated to accommodate open parking on the ground level (15 spaces) and two loading berths. Three additional loading berths would be located to the rear of Building B. The parking and loading berths would be accessed from a driveway from Rockaway Freeway/Beach Channel Drive.

Refer to ***Figures 2.3-2*** and ***2.3-3*** for a visualization of the future No-Action and With-Action conditions.

Urban Design

The proposed action would allow for greater bulk and density on the project site than allowed in the current zoning. The With-Action condition would have development that is taller than any building in the study area, with the tallest being PS 183 (three stories), and would be taller than neighboring buildings in the area, including the vacant two-story building on Beach Channel Drive to the east of Projected Development Site 1 (Block 16080, Lot 37), and the one-story warehouse on Beach 80th Street (Lot 85 of the project block). As compared to the No-Action condition, the With-Action condition would contain greater bulk with a proposed four additional stories.

However, the Applicant believes the With-Action condition would be consistent with the urban design character of the study area overall, which is largely industrial. The proposed development would be consistent with the use and appearance of the buildings within the project block, which are industrial. Due to the elevated roadway, most views from south of the freeway of this industrial area would be obstructed. The With-Action Condition would also bring more activity to an area that is underutilized with a large amount of vacant land and activate Projected Development Site 1 fully with an industrial use that is intended for this area. The Applicant believes the character of the development site building would be similar in the future No-Action and With-Action condition, with the same amount of parking spaces and one additional loading berth in the proposed project. In both conditions, parking would be provided on the ground level of elevated building.

Therefore, the proposed action would not result in any adverse impacts to the urban design character of the study area.

Figure 2.3-2 Building Massings: View from Beach Channel Drive facing East

No-Action



With-Action

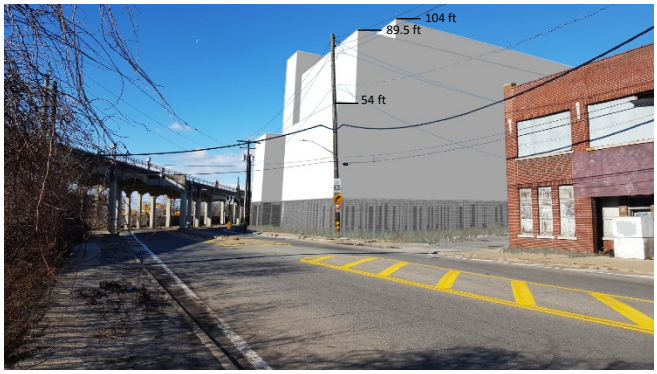


Figure 2.3-3 Building Massings: View from Beach Channel Drive facing west

No-Action



With-Action



2.3-4 Conclusion

Overall, the Applicant believes the With-Action condition would be compatible with the industrial character of the surrounding area. The With-Action condition would bring increased activity to a manufacturing district which suffers from the presence of vacant and underutilized land. Therefore, the proposed actions would not result in a significant adverse impact on urban design, and no further analysis is necessary.

2.4

Natural Resources

This section assesses the potential for a proposed action to result in significant adverse impacts on natural resources, which are defined as the City's biodiversity (plants, wildlife, and other organisms); any aquatic or terrestrial areas capable of providing suitable habitat to sustain the life processes of plants, wildlife, and other organisms; and any areas capable of functioning in support of the ecological systems that maintain the City's environmental stability.

2.4-1 Introduction

According to the *2020 CEQR Technical Manual*, a natural resources assessment may be necessary if a project-related disturbance of natural resources at or near a project area would occur. Both direct and indirect effects to natural resources are to be considered when evaluating the need for an assessment. Direct effects are defined in the *CEQR Technical Manual* as: "*…activities that directly alter the condition of a resource*." Potentially relevant direct effects of the proposed project include the following:

- Removal of vegetation
- Changing one habitat type to create another
- Development of roadways, parking lots, buildings, and other paved surfaces on previously vegetated or unpaved surfaces

› Installation of drainage systems, including sewers, culverts, retaining basins, recharge wells, etc.

As defined in the *CEQR Technical Manual*, indirect effects occur when "*…the changes on a site alter conditions to adjacent or nearby resources or on the site itself after construction has ended*." Potentially relevant indirect effects of the proposed project include the following:

› A change, such as loss and/or change in the health of vegetation, dewatering, soil compaction, site clearance, excavation, introduction of impervious surfaces, or any other change in drainage patterns that would alter the way in which surface or ground water flows from the project area to a nearby natural resource or vice versa.

› A change that would influence the degree or period of tidal inundation of a natural resource

› A change that would decrease the quality of surface or ground water that currently supports a natural resource

Since the proposed project has the potential to result in both direct and indirect effects, a preliminary natural resources assessment was performed to determine if there could be significant adverse impacts to on-site or off-site natural resources.

Regulatory Setting

The following sections identify the federal, state and local legislation and regulatory programs pertaining to natural resources (i.e., surface waters, wetlands, coastal areas, rare/protected species and habitats) that would apply to the proposed project.

Federal

Clean Water Act (33 U.S. Code [USC] §§ 1251-1387)

The federal Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into navigable waters and other regulated waters, including wetlands (collectively referred to as "waters of the United States"). Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities). Permitting pursuant to Section 404 of the CWA is administered by the United States Army Corps of Engineers (USACE). Jurisdictional determinations for waters of the United States are made by the USACE pursuant to the final Navigable Waters Protection Rule (NWPR), which defines "waters of the United States" and establishes federal regulatory authority over regulated waters under the

CWA.[1] Pursuant to Section 401 of the CWA, applicants for certain discharges to navigable waters in New York State must also obtain a Water Quality Certification from the NYSDEC.

Rivers and Harbors Act of 1899, Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the Secretary of the Army, acting through the USACE, for the construction of any structure in or over any navigable water of the United States, the excavation from or deposition of material in these waters, or any obstruction or alteration in navigable waters of the United States. The purpose of this Act is to protect navigation and navigable channels. Any structures placed in or over navigable waters, such as pilings, piers, bulkheads, or bridge abutments up to the mean high water line, are regulated pursuant to this Act. As navigable waters, Barbadoes Basin and Brandreth Creek are regulated under Section 10.

Endangered Species Act of 1973 (16 USC §§ 1531-1544)

The Endangered Species Act of 1973 (ESA) recognizes that endangered species of wildlife and plants are of aesthetic, ecological, educational, historical, recreational, and scientific value to the nation and its people. The ESA provides for the protection of endangered and threatened species and the critical habitats on which endangered and threatened species depend for survival. The ESA also prohibits the importation, exportation, taking, possession, and other activities involving illegally taken species covered under the ESA, and interstate or foreign commercial activities. ESA review under Section 7 of the ESA are conducted by the United States Fish and Wildlife Service (USFWS) and/or the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS). Under Section 7, federal agencies must consult with the USFWS and/or NOAA when any action the agency carries out, funds, or authorizes (such as through a permit) may affect a listed endangered or threatened species.

Magnuson-Stevens Fishery Conservation and Management Act (16 USC §§ 1801 TO 1883)

Section 305(b)(2)-(4) of the Magnuson-Stevens Fishery Conservation and Management Act outlines the process for the NOAA NMFS and the Regional Fishery Management Councils (in this case, the Mid-Atlantic Fishery Management Council) to comment on actions proposed by federal agencies (i.e., by issuing permits, authorization or funding for projects) that may adversely impact areas designated as Essential Fish Habitat (EFH). EFH is defined as: *those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity* (16 USC §1802(10)).

Adverse impacts to EFH, as defined in 50 CFR 600.910(A), include any impact that reduces the quality and/or quantity of EFH. Adverse impacts may include:

- Direct impacts, such as physical disruption or the release of contaminants;
- Indirect impacts, such as the loss of prey or reduction in the fecundity (number of offspring produced) of a managed species; and

[1] Navigable Waters Protection Rule: Definition of "Waters of the United States. Federal Register Vol. 85 pp. 22250-22342

› Site-specific or habitat-wide impacts that may include individual, cumulative, or synergetic consequences of a federal action.

New York State

Tidal Wetlands Act, Article 25, ECL, Implementing Regulations 6 NYCRR § 661.

Tidal wetlands regulations apply anywhere tidal inundation occurs on a daily, monthly, or intermittent basis. In NYS, tidal wetlands include much the Hudson River, as well as the marine shores, bays, inlets, canals, and estuaries of Long Island, New York City and Westchester County. The NYSDEC administers the tidal wetlands regulatory program and the mapping of the State's tidal wetlands. A permit is required for most land uses and activities within regulated tidal wetlands or wetland adjacent areas, which extend up to 150 feet inland from the tidal wetland boundary within New York City and up to 300 feet inland from the tidal wetland boundary elsewhere in New York State. NYSDEC-regulated tidal wetlands and wetland adjacent areas include Barbadoes Basin, Brandreth Creek and certain landward portions of the project area.

Protection of Waters Program, Article 15, Title 5 ECL, Implementing Regulations 6 NYCRR § 608

The NYSDEC administers the Protection of Waters Program to preserve and prevent undesirable impacts to rivers, streams, lakes and other water bodies. Through this program, the NYSDEC has established and enforces regulations that are compatible with the preservation, protection and enhancement of the present and potential values of the water resources, protect the public health and welfare, and are consistent with the reasonable economic and social development of New York State. Barbadoes Basin and Brandreth Creek are subject to regulation under the Protection of Waters Program.

Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern (ECL, Sections 11-0535[1]-[2], 11-0536[2], [4], Implementing Regulations 6 NYCRR § 182) and Protected Native Plants (Implementing Regulations 6 NYCRRR Part 193.3)

New York State endangered, threatened and special concern wildlife species are listed in 6 NYCRR Part 182, which prohibits the taking, import, transport, possession or of these species. Pursuant to 6 NYCRR Part 182.8, consultations and potential permitting with NYSDEC are required for any action that might result in incidental take of endangered or threatened wildlife species. With respect to vegetation, New York State protected native plants are listed and afforded protection under 6 NYCRR Part 193.3. Pursuant to 6 NYCRR Part 193.3(e), it is a violation to pick, pluck, sever, remove, damage by the application of herbicides or defoliants, or carry away, any protected plant without the consent of the owner.

Waterfront Revitalization of Coastal Areas and Inland Waterways, New York State Executive Article 42 (910 to 923)

The federal Coastal Zone Management Act was passed in 1972 to encourage coastal states to develop and implement Coastal Management Programs (CMPs). The act was established

as a United States national policy to preserve, protect, develop, and where possible, restore or enhance, the resources of the Nation's coastal zone for current and succeeding generations. In New York State, the CMP is administered by the New York State Department of State (NYSDOS), under the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. NYSDOS has established 44 coastal policies that promote the beneficial use of coastal resources, prevent their impairment or otherwise address activities that may affect resources within the New York State Coastal Zone. Consistency review with New York State Coastal Policies is required for projects that are subject to federal funding, permits and/or authorizations.

New York City

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. The goal of the WRP 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 the New York State Waterfront Revitalization of Coastal Areas and Inland Waterways Act. The City Planning Commission, in its capacity as the City Coastal Commission, and the New York City Department of City Planning are responsible for administering the WRP. As the project area is located within the New York State Coastal Zone, the proposed project is subject to consistency review with New York City WRP policies.

2.4-2 Methodology

In accordance with *CEQR Technical Manual* guidelines, existing ecological conditions at the project area and vicinity were assessed during field surveys conducted on November 29, 2018 and May 17, 2019. The field surveys included habitat characterization, plant and wildlife species inventories, and a rare/protected species assessment. To supplement the field surveys, relevant government agency resources pertaining to the project area and vicinity were reviewed, including maps, reports and records maintained by the USFWS, USACE, NOAA, NYSDEC, NYSDOS and the New York Natural Heritage Program[2] (NYNHP).

2.4-3 Preliminary Assessment

Existing Conditions

Ecological Communities and Vegetation

As documented during the field survey, the project area is comprised of disturbed, developed and predominantly unvegetated habitats that have been created or substantially altered by humans (referred to as "cultural" communities). The observed cultural

[2] The NY Natural Heritage Program is a partnership between the New York State Department of Environmental Conservation and the State University of New York College of Environmental Science and Forestry.

communities are associated with historic and current site usage, including the existing one-story warehouse building at the western portion of the project area and surrounding areas dedicated to vehicle, material and equipment storage. Vegetation is limited primarily to disturbed perimeter areas of the project area, and, based on field observations, the site flora is dominated by a number of non-native/invasive plant species. The shoreline along Barbadoes Basin to the north and Brandreth Creek to the west of the project area includes the dilapidated remnants of concrete and timber bulkheads, rip rap, demolition debris and assorted refuse. Portions of the shoreline where the bulkheads have been compromised are eroded and the shoreline in general is sparsely vegetated and characterized by degraded conditions. Intertidal waters associated with Barbadoes Basin and Brandreth Creek occur at and adjacent to the shoreline.

Qualitative refinement of the site conditions identified above occurred through review of the NYNHP publication *Ecological Communities of New York State*[3] (ECNYS). This guidance provides detailed descriptions and includes global and state rarity rankings for many communities found within New York State. Utilizing ECNYS, the following four ecological communities were identified at the project area during the field survey:

- Urban Vacant Lot
- Urban Structure Exterior
- Paved Road/Path
- Estuarine Riprap/Artificial Shore

The four ECNYS communities listed above are communities that are commonly associated with disturbed/developed sites located within urban settings. As such, the communities have not been assigned rarity rankings by the NYNHP. Instead, they are designated as "unranked cultural" communities, due to their artificial origin, largely unvegetated conditions and wide distribution throughout New York State.

The Urban Structure Exterior and Paved Road/Path communities describe the existing warehouse building and paved ground surfaces at the project area, respectively. Specifically, the Urban Structure Exterior community is defined in ECNYS as:

> "*The exterior surfaces of metal, wood, or concrete structures (such as commercial buildings, apartment buildings, houses, bridges) or any structural surface composed of inorganic materials (glass, plastics, etc.) in an urban or densely populated suburban area.*"

The Paved Road/Path community is described in ECNYS as follows:

> "*A road or pathway that is paved with asphalt, concrete, brick, stone etc.*"

As observed during the field surveys, the Urban Structure Exterior and Paved Road/Path communities do not support vegetated conditions, which are restricted to portions of the Urban Vacant Lot and Estuarine Riprap/Artificial Shore communities, as described below.

The Urban Vacant Lot community is defined in ECNYS as:

[3] Edinger, G.J., et al. (editors). 2014. *Ecological Communities of New York State*. Second Edition. New York Natural Heritage Program, NYSDEC.

> "A*n open site in a developed, urban area that has been cleared either for construction or following the demolition of a building. Vegetation may be sparse, with large areas of exposed soil, and often with rubble or other debris.*"

Based on site observations, vegetation is sparse or non-existent across much of the project area and is restricted mainly to those portions of the Urban Vacant Lot community that are not subject to regular human activity and disturbance. These areas are dominated by a limited fauna of trees, shrubs, vines and "weedy" herbaceous plants, including a number of non-native/invasive species such as tree-of-heaven (*Ailanthus altissima*), black locust (*Robinia pseudoacacia*), Norway maple (*Acer plantanoides*), multiflora rose (*Rosa multiflora*), Tatarian honeysuckle (*Lonicera tatarica*), wineberry (*Rubus phoenicolasius*), Asiatic bittersweet (*Celastrus orbiculatus*), Japanese honeysuckle (*Lonicera japonica*), English ivy (*Helix hedera*), mugwort (*Artemesia vulgaris*), Japanese knotweed (*Polygonum cuspidatum*) and garlic mustard (*Alliaria petiolata*).

Observed native vegetation includes black cherry (*Prunus serotina*), bigtooth aspen (*Populus grandidentata*), box elder (*Acer* negundo), staghorn sumac (*Rhus typhina*), groundsel bush (*Baccharis halimifolia*), greenbrier (*Smilax rotundifolia*), poison ivy (*Toxicodendron radicans*), grapes (*Vitis sp.*), switchgrass (*Panicum sp.*), seaside goldenrod (*Solidago sempervirens*), common milkweed (*Asclepias syriaca*), hemp dogbane (*Apocynum cannabinum*), redroot pigweed (*Amaranthus retroflexus*), Queen Anne's lace (*Daucus carota*), carpetweed (*Mollugo verticillata*), curly dock (*Rumex crispus*), bald brome (*Bromus racemosum*) and other common species typically associated with vacant lots and disturbed conditions. A complete vegetative inventory is included in ***Appendix D***.

The project area shoreline along Barbadoes Basin and Brandreth Creek is representative of the Estuarine Riprap/Artificial Shore ecological community, which is described in ECNYS as follows:

> "*The wetland community of a constructed estuarine shore in which the substrate is composed of broken rocks, wooden bulkheads, or concrete placed so as to reduce erosion. Vegetative cover and species diversity are low compared to natural estuarine shores.*"

Similar to the above description, with the exception of several isolated patches of smooth cordgrass (*Spartina alterniflora*) along Brandreth Creek, vegetative cover is sparse to non-existent along the project area shoreline, as the presence of shoreline armoring, debris and eroded conditions along the vast majority of the waterfront impede the existence of vegetated tidal wetlands.

In contrast to the project area, substantial vegetated upland communities, vegetated tidal wetlands and other natural shoreline communities occur at the Vernam Barbadoes Preserve, which is located to the north of the project area, on the opposite shore of Barbadoes Basin. However, these communities do not occur at or adjacent to the project area. Additional and extensive undeveloped upland, wetland, intertidal and subtidal habitats occur further afield within the National Park Service's Jamaica Bay Wildlife Refuge/Gateway National Recreation Area, located approximately 0.35-mile to the northwest of the project area. Beginning approximately 0.15-mile to the northwest of the project area, portions of Jamaica Bay have also been designated as a Significant Coastal Fish and Wildlife Habitat by the NYSDEC and NYSDOS. However, the project area is not located within or adjacent to the Jamaica Bay

Wildlife Refuge/Gateway National Recreation Area or the Jamaica Bay Significant Coastal Fish and Wildlife Habitat.

In summary, the project area is composed of disturbed cultural communities that are unranked by the NYNHP, due to their artificial origin, largely unvegetated conditions and wide distribution throughout New York State. Impervious or otherwise unvegetated surfaces occur across the majority of the project area. Where vegetation does occur, the site flora is characterized by low species diversity and is dominated by a number of non-native/invasive tree, shrub, vine and herbaceous plant species adapted to urban environments and disturbed conditions. Due to the presence of artificial shoreline structures, erosion and generally degraded conditions, the project area waterfront does not support significant areas of natural shoreline or vegetated wetland habitats.

Wildlife

Based on the disturbed/developed conditions and the predominantly unvegetated, cultural communities described previously, the project area does not function as a significant habitat area for wildlife. As a consequence, the observed and expected fauna of the project area is characterized by a limited number of common wildlife species that are adapted to cultural habitats and urban surroundings with high levels of human activity.

Avian species are the most common form of wildlife observed and expected within the project area. A total of 21 bird species were observed (i.e., seen or heard) at or over the project area during the field surveys (avian species inventory included in ***Appendix D***). The majority of these are birds that are commonly found within urban terrestrial settings, including rock dove (*Columba livia*), house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), song sparrow (*Melospiza melodia*) and common grackle (*Quiscalus quiscula*). It is likely that rock pigeon, house sparrow, European starling and mourning dove utilize the exterior surfaces of the site building for nesting. In addition, several bird species commonly associated with marine waters were observed within or above Barbadoes Basin and Brandreth Creek in the vicinity of the project area, including herring gull (*Larus argentatus*), American black duck (*Anas rubripes*), double-crested cormorant (*Phalacrocorax auritus*), Canada goose (*Branta canadensis*), laughing gull (*Leucophaeus atricilla*) and osprey (*Pandion haliaetus*).

In order to provide a detailed estimate of other avian species potentially utilizing the project area, the *New York State Breeding Bird Atlas*[4] (NYSBBA) was consulted. According to this resource, a total of 21 bird species were identified between 2000 and 2005 within the NYSBBA survey block that the project area occurs in (Block 5949D). Of these species, 18 are confirmed as breeding and 3 are listed as probable breeders within the survey block (a copy of the atlas report for Block 5949D is included in ***Appendix D***). The majority of birds listed in the atlas report are species common to developed urban landscapes and include many of the species observed at the project area during the field survey. Several of the birds listed in the atlas report are gulls, terns and other species that breed within vegetated tidal wetlands,

[4] McGowan, K.J. and K. Corwin, eds. 2008. *The Atlas of Breeding Birds in New York State*. Cornell University Press. Data also available online at http://www.dec.ny.gov/animals/51030.html Accessed June 19, 2019.

beaches and/or other natural shoreline communities. Although these habitats exist at the nearby Vernam Barbadoes Preserve and occur extensively within the surrounding Jamaica Bay Wildlife Refuge/Gateway National Recreation Area, they do not occur within or adjacent to the project area. Accordingly, the project area does not represent a significant breeding habitat for marine shorebirds. Rather, the cultural communities that compose the project area are best suited for a limited avian fauna adapted to urban environments with limited or no vegetation, including the common species observed during the field survey.

With the exception of several feral cats, no mammals were observed at the project area during the field survey. Given the existing site conditions described previously, the project area is not expected to support a large or diverse mammalian fauna. The expected mammals include several species adapted to developed urban surroundings, such as raccoon (Procyon lotor), Virginia opossum (*Didelphis virginiana*), eastern gray squirrel *(Sciurus carolinensis*) Norway rat (*Rattus norvegicus*) and house mouse (*Mus musculus*).

According to the New York State Amphibian and Reptile Atlas Project[5] (NYSAPAP), 16 amphibian and reptile species have been documented for the USGS Far Rockaway, New York Topographic Map Quadrangle that the project area occurs within (see species list in ***Appendix D***). Potential offsite habitat for some of these species occurs at the Vernam Barbadoes Preserve. However, due to the developed and largely unvegetated site conditions and surrounding urban development, the project area does not represent a significant habitat for amphibians and reptiles, and the NYSSRAP-listed species are not expected to occur onsite.

As detailed in Section 2.4-1, NOAA defines Essential Fish Habitat (EFH) as: "*those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.*" According to the NOAA EFH Mapper,[6] Barbadoes Basin and Brandreth Creek are listed as EFH for 18 fish species (see ***Appendix D***). The 18 species and their respective life stages are summarized in ***Table 2.4-1***.

Table 2.4-1 Essential Fish Habitat Species

Scientific Name	Common Name	Life Stages
Pseudopleuronectes americanus	Winter Flounder	Eggs, Larvae, Juvenile, Adult
Leucoraja erinacea	Little Skate	Juvenile, Adult
Clupea harengus	Atlantic Herring	Larvae, Juvenile, Adult
Gadus morhua	Atlantic Cod	Adult
Urophycis chuss	Red Hake	Eggs, Larvae, Juvenile, Adult
Limanda ferruginea	Yellowtail Flounder	Adult
Lophius spp.	Monkfish	Eggs, Larvae, Adult
Scophthalmus aquosus	Windowpane Flounder	Eggs, Larvae, Juvenile, Adult
Leucoraja ocellata	Winter Skate	Juvenile, Adult
Raja eglanteria	Clearnose Skate	Juvenile, Adult

[5] New York State Department of Environmental Conservation New York State Amphibian and Reptile Atlas Project. Available online at: http://www.dec.ny.gov/animals/7140.html. Accessed June 19, 2019.

[6] National Oceanic and Atmospheric Administration. Available online at: https://www.habitat.noaa.gov/protection/efh/efhmapper/. Accessed October 30, 2020.

Carcharodon carcharias	White Shark	Neonate
Stenotomus chrysops	Scup	Eggs, Larvae, Juvenile, Adult
Loligo pealeii	Longfin Inshore Squid	Eggs
Scomber scombrus	Atlantic Mackerel	Juvenile, Adult
Pomatomus saltatrix	Bluefish	Juvenile, Adult
Peprilus triacanthos	Atlantic Butterfish	Larvae, Juvenile, Adult
Paralichthys dentatus	Summer Flounder	Larvae, Juvenile, Adult
Centropristis striata	Black Sea Bass	Juvenile

As shown on ***Table 2.4-1***, Barbadoes Basin and Brandreth Creek occur within the known range of the 18 listed fish species, and the waters and substrates within these features represent suitable habitat for one for more of the life stages of the listed species. As compared to the adjoining Barbadoes Basin, the shallow depths within the Brandreth Creek may increase the habitat value of the creek for spawning and early life stages of the 18 species. Brandreth Creek also provides habitat for small prey fish species such as Atlantic silversides (*Menidia menidia*), mummichog (*Fundulus heteroclitus*), and banded killifish (*Fundulus diaphanus*) that bluefish (*Pomatomus saltatrix*) and other EFH species depend on as food sources during juvenile and adult life stages. However, it is important to note that the existing environmental conditions within Brandreth Creek may represent limiting factors for some of the 18 EFH species. In particular, the lack of eel grass or other submerged aquatic vegetation within the creek,[7] and debris/sedimentation impacts to the creek bottom substrate from the adjoining eroded shorelines (as observed during the field surveys) have likely lowered the overall habitat value of the creek for some of the listed EFH species life stages.

Rare/Protected Species

No New York State or federal rare/protected plant or wildlife species were observed at the project area during the field surveys, and, as described below, no site-specific records of rare/protected species currently exist for the project area.

As noted previously, New York State endangered, threatened and special concern wildlife species are listed and afforded protection pursuant to 6 NYCRR Part 182 and New York State endangered, threatened, rare and exploitably vulnerable plants are listed and afforded protection under 6 NYCRR Part 193.3.

According to correspondence from the NYNHP, no records for rare or New York State-listed animals, plants or significant natural communities exist for the project area (see ***Appendix D***). As detailed on ***Table 2.4-2***, NYNHP records exist for four New York State endangered plants and one significant natural community at the aforementioned Vernon Barbadoes Preserve, located 0.1-mile from the project area on the opposite shore of Barbadoes Basin. Additionally, the New York State endangered and federally threatened shorebird piping plover (*Charadrius melodus*) has been documented as breeding within 0.3-mile of the project area. Based on the disturbed/developed conditions and cultural communities described

[7] Sea Grant New York – Revisiting Jamaica Bay's Restoration Issues. Available online at: https://seagrant.sunysb.edu/articles/t/revisiting-jamaica-bay-s-restoration-issues-news. Accessed November 2, 2020.

previously, the project area does not include suitable habitat area for any of the species or the significant natural community listed in the NYNHP records.

Table 2.4-2 NYNHP Records

Scientific Name	Common Name	Listing	Record Location	Field Survey Results	Project Area Observations
Charadrius melodus	Piping Plover	NYS (E) Federal (T)	Within 0.3 mile of the project area	Not observed	No potential breeding or foraging habitat (intertidal and upper beaches) occurs onsite.
Suaeda linearis	Narrow-leaf Sea-blite	NYS (E)	Vernon Barbadoes Peninsula	Not observed	No potential habitat (high salt marsh, salt marsh edge) occurs onsite.
Suaeda rolandii	Roland's Sea-blite	NYS (E)	Vernon Barbadoes Peninsula	Not observed	No potential habitat (high salt marsh, salt marsh edge) occurs onsite.
Oenothera laciniata	Cut-leaved Evening Primrose	NYS (E)	Vernon Barbadoes Peninsula	Not observed	No potential habitat (sandy soils within maritime grasslands and successional old fields) occurs onsite.
Quercus phellos	Willow Oak	NYS (E)	Vernon Barbadoes Peninsula	Not observed	No potential habitat (forests, grasslands, swamps, sandy uplands) occurs onsite.
N/A	Low Salt Marsh	None	Vernon Barbadoes Peninsula	Not observed	Supporting conditions do not occur onsite

At the federal level, threatened and endangered species are afforded protection under the federal ESA. Consultations and potential permitting with the USFWS are required for any action that might result in take of federally-listed species. The unofficial USFWS Information for Planning and Conservation (IPaC) Resource List generated for the project area includes four federally-listed species that are documented as occurring within portions of Queens

County (see ***Appendix D***). As detailed on ***Table 2.4-3***, the IPaC Resource List does not contain site-specific records for the four species, which include three shorebirds and one flowering plant that grows in upper beach habitats. As described previously, based on the presence of shoreline armoring, debris and eroded conditions along the waterfront, the project area does not support beach habitats or other natural shoreline communities. As such, the project area does not represent a significant habitat area for the four federally-listed species on the IPaC Resource List.

Table 2.4-3 USFWS Federally-Listed Species

Scientific Name	Common Name	Listing	Field Survey Results	Project Area Observations
Amaranthus pumilus	Seabeach Amaranth	Federal (T) NYS (T)	Not observed	No potential habitat (upper beach) occurs onsite.
Calidris canutus rufa	Red Knot	Federal (T)	Not observed	Limited potential foraging habitat occurs onsite.
Charadrius melodus	Piping Plover	Federal (T) NYS (T)	Not observed	No potential breeding or foraging habitat (intertidal and upper beaches) occurs onsite.
Sterna dougallii dougalii	Roseate Tern	Federal (E) NYS (E)	Not observed	No potential breeding habitat (barrier beach islands, salt marsh islands) occurs onsite.

With respect to marine species, threatened and endangered marine wildlife are afforded protection under Section 7 of the federal ESA. According to the NOAA ESA Section 7 Mapper,[8] the waters of Barbadoes Basin adjacent to the project area are located within the range of one federally-listed fish species and four federally-listed sea turtle species (NOAA ESA report included in ***Appendix D***). The five species are summarized on ***Table 2.4-4***.

Table 2.4-4 NOAA Federally-Listed Species

Scientific Name	Common Name	Listing	Life Stage	Behavior
Acipenser oxyrinchus	Atlantic Sturgeon	Federal (E) NYS (P)	Adult	Migrating and Foraging
Acipenser oxyrinchus	Atlantic Sturgeon	Federal (E) NYS (P)	Subadult	Migrating and Foraging
Chelonia mydas	Green Sea Turtle	Federal (E/T) NYS (T)	Adults and Juveniles	Migrating and Foraging

[8] National Oceanic and Atmospheric Adminsitration – ESA Section 7 Mapper. Avialable at: https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=1bc332edc5204e03b250ac11f9914a27. Accessed November 4, 2020.

Lepidochelys kempii	Kemp's Ridley Sea Turtle	Federal (E) NYS (E)	Adults and Juveniles	Migrating and Foraging .
Dermochelys coriacea	Leatherback Sea Turtle	Federal (E) NYS (E)	Adults and Juveniles	Migrating and Foraging
Caretta caretta	Loggerhead Sea Turtle	Federal (T) NYS (T)	Adults and Juveniles	Migrating and Foraging

E=Endangered T=Threatened P=Protected

According to NOAA, Atlantic sturgeon are bottom feeding fish whose diet includes crustaceans, mollusks, worms, and bottom-dwelling fish. Atlantic sturgeon spawn within the Hudson River and other rivers and adults and subadults migrate and forage within coastal estuaries.[9] As such, Barbadoes Basin and Brandreth Creek represent potential migrating and foraging habitat for adult and juvenile Atlantic sturgeon.

With respect to the four sea turtle species listed on ***Table 2.4-4***, the NYSDEC provides the following information on range and feeding behavior:[10]

- Juvenile and occasionally adult green sea turtles have been sighted in Peconic Bay and other eastern Long Island waters. The diet of green sea turtles consists of algae and sea grass.
- Juvenile loggerhead sea turtles are most frequently seen in nearshore bays and Long Island Sound, while adults and other age groups occur most frequently within pelagic waters 40+ miles off of the Long Island coast. Loggerhead sea turtle diet consists of shellfish, including horseshoe crabs spider crabs, clams and mussels.
- Juvenile and adult leatherback sea turtles occur within the Long Island Sound, along the south coast of Long Island, and within the New York Bight. The diet of leatherback sea turtles consists primarily of jellyfish.
- There have been occasional sightings of Kemp's ridley sea turtle within Jamaica Bay. The turtles' diet includes shellfish, finfish sea urchins and jellyfish.

Based on the above range and feeding behavior, Barbadoes Basin and Brandreth Creek provide potential habitat for the four sea turtles, though no site-specific records for these species within the two waterbodies were included in the NOAA or NYNHP records.

Wetlands and Surface Waters

The project area includes the waterfront along Barbadoes Basin and Brandreth Creek, as well as minimal portions of the underwater lands located immediately adjacent to the shoreline. As noted previously, the waterfront is developed and does not include a beach or other natural shoreline community. Instead, the waterfront is an artificial shoreline community composed of the dilapidated remnants of concrete and timber bulkheads, rip rap, demolition debris and eroded conditions that are representative of the ECNYS Estuarine Riprap/Artificial

[9] National Oceanic and Atmospheric Adminsitration – Atlantic Sturgeon Species Directory. Avialable online at: https://www.fisheries.noaa.gov/species/atlantic-sturgeon. Accessed November 4, 2020

[10] New York State Department of Environmental Conservation - Sea Turtles of New York. Available at: https://www.dec.ny.gov/animals/112355.html. Accessed November 4, 2020.

Shore ecological community. Several small, isolated patches of smooth cordgrass (*Spartina alterniflora*) occur along Brandreth Creek. However significant vegetated intertidal or high marsh wetland communities do not occur at or adjacent to the shoreline. Under existing conditions, stormwater is not managed within the project area and there are no stormwater quality control measures in effect. As such, stormwater runoff from the project area is currently a source of non-point source pollution to Barbadoes Basin and Brandreth Creek.

According to the USFWS National Wetlands Inventory (NWI) maps[11], Barbadoes Basin is mapped as an E1UBLx wetland feature, which is defined as an Estuarine, Subtidal, Unconsolidated Bottom, Subtidal wetland that was excavated by humans (see **Figure 2.4-1**). The channelized portions of Barbadoes Basin are also mapped as R5UBH, which is defined as a Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded wetland.

Based upon review of the NYSDEC Tidal Wetland Map No. 600-492[12] (see **Figure 2.4-1**), the tidal wetland of Barbadoes Basin and Brandreth Creek are classified under the Littoral Zone (LZ) tidal wetland category. The LZ wetlands that occur along the majority of the project area waterfront are defined by the NYSDEC as:

> *"The tidal wetland zone that includes all lands under tidal waters which are not included in any other category. There shall be no LZ under waters deeper than six feet at mean low water."*

As noted previously, Barbadoes Basin and Brandreth Creek are regulated under the Tidal Wetlands Act and its implementing regulations (6 NYCRR *§* 661). Pursuant to 6 NYCRR *§* 661, within the boundaries of New York City, the NYSDEC regulates and requires permits for various land uses and activities, including clearing, grading and ground disturbance within jurisdictional tidal wetlands and the surrounding 150-foot upland adjacent area, with certain exceptions that may limit the adjacent area to less than 150 feet. These exceptions include the presence of exiting, functional structures constructed on or before August 20, 1977 and the presence of the 10-foot above mean seal level elevation contour. Based on review of NYSDEC Tidal Wetlands Permit Application No, 2-6308-00534/00007, the NYSDEC has assumed jurisdiction over portions of the upland project area under 6 NYCRR *§* 661.

[11] United States Fish and Wildlife Service National Wetland Inventory Maps. Available online at: http://www.fws.gov/wetlands/Data/Mapper.html Accessed June 19, 2019.

[12] New York State Department of Environmental Conservation. Available online at: http://twi.ligis.org/. Accessed June 19, 2019.

Figure 2.4-1 Wetland Areas



Barbadoes Basin and Brandreth Creek are subject to federal regulation under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act of 1899. Pursuant to these Acts, the USACE regulates and requires permits for various activities that occur below the mean high water line (and in certain cases the spring high water line) of Barbadoes Basin and Brandreth Creek. Regulated activities include, but are not limited to, dredging, filling, construction of structures, and bank stabilization, including the removal and construction of bulkheads, sea walls, revetments and other shoreline stabilization structures.

Future No-Action Condition

Absent the proposed action, the existing building at Projected Development Site 1 (Building A) would be maintained for light manufacturing uses, and a new building (Building B) would be constructed for additional self-service storage use under the No-Action condition.

Similar to existing conditions, the project area as a whole would continue to function ecologically as a predominantly unvegetated, developed site comprised of disturbed cultural communities. The terrestrial wildlife fauna would continue to be composed of a limited number of common bird and mammals that are adapted to cultural habitats within urban surroundings. As with existing conditions, the project area would not function as significant habitat for rare or protected species. As detailed in ***Section 2.2, Shadows***, shading of Brandreth Creek and Barbadoes Basin would increase as compared to existing conditions, due to the construction of No-Action condition.

Future With-Action Condition

Under the future With-Action condition, Building A would remain in its existing condition and Building B would be constructed as a seven-story self-storage building.

Based on these proposed changes, and similar to the existing conditions described in Section 2.4-3, the project area would continue to function ecologically as a developed site comprised of cultural communities following implementation of the future With-Action condition. However, the quantity and quality of vegetated habitat at the project area would increase, due to installation of an 8,582-sf native planting area along the Barbadoes Basin waterfront to the north of Building B. The planting area would be comprised of the native shrubs northern bayberry (*Myrica pensylvanica*), southern arrowwood (*Viburnum dentatum*), shining sumac (*Rhus copallinum*), beach plum (*Prunus maritima*) and elderberry (*Sambucus canadensis*), as well as the native grass switchgrass (*Panicum virgatum*). Based on the Detailed Assessment in ***Section 2.2, Shadows***, the native planting area would not experience significant periods of shading during the majority of the growing season. Therefore, as the six species proposed for the native planting area are all known to be tolerant of partial shade to full sun conditions,[13,14,15] it is not anticipated that incremental shading under the future With-Action condition will negatively impact the native planting area. Moreover, installation

[13] University of Connecticut Plant Database. Available online at: http://hort.uconn.edu/list.php. Accessed November 19, 2020.

[14] Cornell University Woody Plants Database. Available online at: http://woodyplants.cals.cornell.edu/home. Accessed November 19, 2020.

[15] North Carolina State Extension Plant Toolbox. Available online at: https://plants.ces.ncsu.edu/plants/panicum-virgatum/. Accessed November 19, 2020.

of the native planting area under the future With-Action condition would result in a significant decrease in impervious surfaces and significant increase in native vegetated habitat within the waterfront area, as compared to the future No-Action condition. The native planting area would also function as a vegetated buffer between the developed portions of the project area and the adjacent tidal wetlands.

With respect to wildlife, given the expected continuation of developed conditions and cultural communities under the future With-Action condition, the expected fauna within the project area will be similar to that which currently occurs and will be composed primarily of common bird and mammal species that are adapted to cultural habitats and urban surroundings with high levels of human activity. As such, the anticipated increase in human presence and activity within the project area is not expected to significantly affect wildlife within the project area or adjacent properties, as the existing fauna is composed of species that are acclimated to these conditions. It is further anticipated that the proposed increase in in the quantity and quality of vegetated upland habitat along the waterfront due to the proposed native planting area will offer opportunities for increased wildlife species density and diversity. The proposed seven-story building may increase the potential for fatalities of local and migratory birds due to collisions with transparent or reflective building surfaces. However, these conditions can be minimized through various structural and non-structural means.

As described in the Existing Conditions discussion, Brandreth Creek is listed by NOAA as EFH for 18 fish species. The creek additionally provides habitat for small prey fish species that some of the EFH species life stages depend on as food sources. Under the future With-Action condition, no direct disturbance to Brandreth Creek would occur, and the creek would be protected from any potential project-related erosion, siltation and turbidity impacts through the use of silt fence, straw bale dikes and other control measures to be installed along the project area limits. Furthermore, under existing conditions, stormwater is not managed within the project area and there are no stormwater quality control measures in effect. As such, stormwater runoff from the project area is currently a source of non-point source pollution to Barbadoes Basin and Brandreth Creek. However, following implementation of the future With-Action condition, stormwater from the project area would be captured without conveyance to either water body. Based on the above considerations, no potential adverse impacts to EFH are anticipated as a result of the future With-Action condition.

With respect to the potential for increased shading of the water column and benthic environment of Brandreth Creek under the Future With-Action condition, it is important to note that seasonally variable shading of the creek currently occurs under existing conditions, due to the existing site building located immediately adjacent to the eastern shore of the creek (Building A). As detailed in ***Section 2.2, Shadows***, incremental shading of Brandreth Creek would occur under the future With-Action condition. ***Figure 2.2-3a*** through ***Figure 2.2-6*** of the Detailed Shadows Analysis compare shading of Brandreth Creek under both the future No-Action condition and the future With-Action condition. The figure data is summarized quantitatively on ***Table 2.2-3***, which shows the future No-Action and future With-Action condition shading time periods on representative analysis days for Brandreth Creek and the areal extent of shading (as a function of the total area of the creek) under

both conditions. As shown quantitatively on ***Table 2.2-3*** and depicted graphically on the Detailed Assessment figures in ***Section 2.2, Shadows***, the future With-Action condition would not result in any increase in the duration of daily shading of Brandreth Creek, as compared to the future No-Action Condition. Similar to the future No-Action condition, under the future With-Action condition, portions of the creek would experience brief periods of morning shading (a maximum of 1 hour and 56 minutes) on the representative analysis days. During these periods of shading, other portions of the creek would continue to receive direct sunlight. Following these periods, and similar to the future No-Action Condition, the entire creek would experience shade-free conditions for the remaining daylight hours on the representative analysis days. Moreover, during the brief morning time periods on the representative analysis days when incremental shading of the creek would occur under the future With-Action condition, the percent increases in the area of shading as compared to the future No-Action condition would be minimal (ranging from <1 to 16 percent), with all but one increase being less than 10 percent.

In summary, no change in the duration of morning shading of Brandreth Creek would occur under the future With-Action condition. Moreover, incremental shading to Brandreth Creek under the future With-Action condition would be minimal. Accordingly, no significant shading impacts to aquatic fauna and EFH within Brandreth Creek are anticipated as a result of the future With-Action condition.

Regarding rare/protected species, based on the predominance of disturbed/developed conditions and cultural communities, as well as the lack of beach habitats or other natural shoreline communities, the project area does not represent a significant habitat area for the NYNHP or federally-listed species plant and wildlife species described in Section 2.4-3. Furthermore, due to its distance from the project area and location on the opposite shore of Barbadoes Basin, as well as the proposed improvements in vegetated habitat quantity and quality within the project area, potential adverse direct or indirect effects to rare/protected species known to occur within the Vernon Barbadoes Preserve are not anticipated.

With respect to the rare/protected marine species listed by NOAA as potentially occurring within Barbadoes Basin and Brandreth Creek, as summarized in the Existing Conditions discussion, the two waterbodies represent potential migrating and foraging habitat for adult and juvenile Atlantic sturgeon. Barbadoes Basin and Brandreth Creek also represent potential habitat for four federally- and New York State-listed sea turtle species, although no site-specific records for these species within the two waterbodies were included in the NOAA or NYNHP records. Under the future With-Action condition, no direct disturbance to Barbadoes Basin or Brandreth Creek would occur, and the creek would be protected from any potential project-related erosion, siltation and turbidity impacts through the use of silt fence, straw bale dikes and other control measures to be installed along the project area limits.

Moreover, following implementation of the future With-Action condition, stormwater from the project area would be captured without conveyance to the either water body. Based on the above considerations, no potential adverse impacts to NOAA rare/protected marine species are anticipated due to implementation of the future With-Action condition.

Regarding wetlands and surface waters, no project-related improvements or disturbance to Barbadoes Basin or Brandreth Creek are proposed, and the proposed native planting area

would function as a vegetated buffer between the developed portions of the project area and the adjacent tidal wetlands. Additionally, as summarized in Section 2.4-1, the NYSDEC has assumed tidal wetland jurisdiction over portions of the upland project area, and a permit application has been submitted to the NYSDEC (Tidal Wetlands Permit Application No, 2-6308-00534/00007). It is anticipated that the pending NYSDEC permit will include requirements for silt fence, straw bale dikes and/or other similar erosion, siltation and turbidity controls designed to protect Barbadoes Basin and Brandreth Creek from potential adverse impacts. Furthermore, in contrast with existing conditions and the future No-Action condition, stormwater from the project area would be captured without conveyance to either water body under the future With-Action condition. Moreover, no change in the duration of morning shading of Brandreth Creek would occur under the future With-Action condition as compared to the future No-Action Condition, and incremental shading to the creek under the future With-Action condition would be minimal. Based on the foregoing, no significant adverse impacts to wetlands and surface waters are anticipated.

Finally, regarding federal wetland jurisdiction, as the future With-Action condition does not include bulkhead replacement or other shoreline improvements that would result in filling or other disturbances to waters of the United States, a USACE permit would not be required for the future With-Action condition as currently proposed. It is also important to note that, unrelated to the future With-Action condition, Barbadoes Basin, Brandreth Creek, and the project area are located within the boundaries of the proposed USACE Mid-Rockaway High Frequency Flood Risk Reduction Measures (HFFRRM) project, which is a coastal resiliency project that is currently in the design phase. As detailed in ***Section 2.1, Land Use, Zoning and Public Policy***, according to the Hurricane Sandy General Reevaluation Report and Environmental Impact Statement (HSGRR/EIS), the preliminary design for the Mid-Rockaway HFFRRM in the vicinity of the project area includes construction of a 1,400-linear-foot low floodwall running from east to west along the north side of Beach Channel Drive.[16] Portions of the floodwall would occur along the southern boundary of the project area, and a road ramp would be constructed in order to maintain the existing access to the project area from Beach Channel Drive. Existing stormwater outlets in the vicinity of the project area would be modified or replaced to increase capacity and to prevent high tides or storm surge from flooding through the drainage system. Additional stormwater outlets may also be installed. Drainage along the landward side of the floodwall would be provided by a small ditch or drainage collection pipe that would connect to existing or additional stormwater outlets.

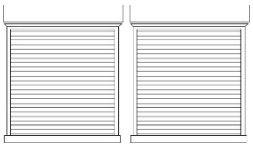
2.4-4 Conclusion

The future With-Action condition would be compatible with the existing ecological conditions that occur within the project area, adjacent properties and much of the general surrounding area. The future With-Action condition would also result in increases in the area of vegetated waterfront communities, native plant diversity and improved habitat opportunities for wildlife, while reducing impervious surfaces and non-native/invasive plant species along the waterfront area. These benefits would not be achieved under the future

[16] Available at: https://www.nan.usace.army.mil/Portals/37/docs/civilworks/projects/ny/coast/Rockaway/Rockaway%20Final%20Report/Rock%20Jam%20Bay%20Final%20Report%20HSGRR%205-9-19.pdf?ver=2019-05-29-124532-717, Accessed May 28, 2021.

No-Action condition. Based on the results of the Detailed Assessment in the shadows analysis, no significant adverse shading impacts are anticipated for EFH species or NOAA rare/protected marine species. As no improvements or project-related disturbance to Barbadoes Basin or Brandreth Creek are proposed, adverse impacts to wetlands and surface waters are not anticipated. The future With-Action condition would also be subject to NYSDEC permitting conditions designed to protect Barbadoes Basin and Brandreth Creek from potential adverse impacts. The future With-Action condition would further create a vegetated shoreline buffer between developed portions of the project area and Barbadoes Basin, and stormwater from the project area would be captured without conveyance to either water body.

Based on the foregoing, the future With-Action condition would not result in significant adverse impacts to natural resources, and no further analysis is necessary.



2.5

Hazardous Materials

This section assesses whether the proposed project may increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. A hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi-volatile organic compounds, methane, polychlorinated biphenyls (PCBs), and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive or toxic).

2.5-2 Introduction

According to the *2020 CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when: a) hazardous materials exist on a site and b) an action would increase pathways to their exposure; or c) an action would introduce new activities or processes using hazardous materials.

As indicated in the *CEQR Technical Manual*, the hazardous materials (E) Designation is an institutional control that may be placed on a site to establish a hazardous materials review and approval framework. It provides a mechanism to ensure that testing for and remediation of hazardous materials, if necessary, are completed prior to future development of an affected site, thereby eliminating the potential for a hazardous materials impact. (E) designated parcels are administered under the authority of the New York City Mayor's Office of Environmental Remediation (OER).

This section presents the findings of the hazardous materials assessment and identifies potential issues of concern with respect to workers, the community, and/or the environment during construction and after implementation of the proposed project.

2.5-3 Methodology

The potential for hazardous materials was evaluated based on the following documents:

- Phase I Environmental Site Assessment (ESA) dated April 6, 2016, prepared by EnviroTrac Ltd. (EnviroTrac)
- Limited Phase II ESA, dated July 28, 2016 prepared by EnviroTrac
- Phase II ESA, dated June 23, 2017 prepared by WCD Group, LLC (WCD)
- Phase II Investigation, Supplemental Field Investigation Letter, dated October 11, 2017 prepared by WCD
- Phase II Investigation, Supplemental Field Investigation letter, dated November 9, 2017, prepared by WCD

Projected Development Site 1 is a single zoning lot composed of Lots 14, 18, and 20, and is currently improved with a one-story building (with a small two-story portion at the north end of the building), referred to as "Building A." As described in detail in ***Section 1.0, Project Description,*** the proposed action would facilitate the development of a new light industrial/warehousing and self-storage facility in two buildings on Projected Development Site 1. Building A would remain in its existing condition as a 34,541 gross square foot (gsf) light manufacturing facility. A new building - Building B - would be constructed as a seven-story 204,465-gsf self-storage facility. Together, Buildings A and B represent With-Action condition.

2.5-4 Preliminary Assessment

Existing Conditions

As indicated in ***Section 1.0, Project Description*** and detailed above, Projected Development Site 1 is composed of Lots 14, 18, and 20. Building A is on Lot 14 and contains 34,541 square feet (sf) of light industrial and warehousing uses (0.32 Floor Area Ratio (FAR)). Western portions of Projected Development Site 1 are within Brandreth Creek, while areas to the east of Building A are devoid of existing buildings and are relatively flat. The zoning lot has 107,553 sf of upland area.

Phase I Environmental Site Assessment

EnviroTrac's Phase I ESA was prepared for Projected Development Site 1 in accordance with ASTM Practice E1527-13, inclusive of the All Appropriate Inquiry requirement amended in the Federal Register on December 30, 2013. The United States Environmental Protection Agency (EPA) All Appropriate Inquiry requirement establishes specific regulatory requirements for conducting appropriate inquiries into the previous ownership, uses, and environmental conditions of a property for the purposes of qualifying for certain landowner liability protections under Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The goal of the Phase I ESA process is to identify Recognized Environmental Conditions (RECs), which means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

Per the current ASTM Standard, the Phase I ESA reviewed a variety of information sources, including current and historic Sanborn Fire Insurance Maps and aerial photographs; state and federal environmental regulatory databases identifying listed sites; and local environmental records. The Phase I ESA also included reconnaissance of Projected Development Site 1 and surrounding neighborhood and interviews with the building manager.

As stated in the current ASTM Practice E1527-13, there may be environmental issues or conditions at the development site, which may be requested by the user to be addressed as part of the Phase I ESA, which are not covered within the scope of ASTM Practice E1527-13. These issues are referred to as "non-scope considerations" and include evaluations relating to asbestos, lead-based paint, mold, etc. These added considerations were also evaluated as part of the Phase I ESA.

Based on the Phase I ESA prepared by EnviroTrac, Projected Development Site 1's historic occupants/uses from prior to 1894 to present include an ice factory, a coal yard, a bike corporation and various manufacturing businesses. A gasoline tank was depicted on the western portions of Projected Development Site 1 on the 1933 Sanborn Fire Insurance map when the development site was utilized as a coal yard. The current building on the western portions of Projected Development Site 1 was constructed between 1954 and 1962. Beach 79th Street traverses the central portions of Projected Development Site 1 in a north-to-south direction. The eastern portion of Projected Development Site 1 currently contains no buildings and is utilized for construction materials storage, but was previously utilized for industrial purposes in 1950 and was occupied by the Chain Bike Corporation.

The current building at Projected Development Site 1 is constructed of concrete block walls, a concrete slab and a timber roof. The on-site building consists of seven (7) tenant spaces occupied by Excel Conveyor (machine shop), a distributor of janitorial supplies, U.C. Workroon, Inc. (carpet storage), John P. Piccone, Inc. (construction business) and one (1) vacant unit formerly occupied by Sorge Construction that was used for storage purposes. John P. Piccone, Inc. occupies three (3) of the tenant spaces and also utilizes the eastern

portion of Projected Development Site 1 for the storage of construction supplies, office trailers, storage trailers and roll-off containers.

Based upon the information provided in the Phase I ESA, the following findings and Projected Development Site 1 features were identified:

- The development site is located at a topographic elevation of approximately four (4) feet above mean sea level (amsl).
- Groundwater beneath the projected development site was estimated to be approximately five feet below grade surface (bgs).
- Localized groundwater flow beneath the development site was assumed to flow to the north, toward Barbados Basin.
- The perimeter of the development site is located within the 100-year Federal Emergency Management Administration (FEMA) Flood Zone, and the center of the development site is located within the 500-year FEMA Flood Zone.
- The on-site building is heated via natural gas-fired system(s).
- The on-site building is reportedly connected the New York City municipal sewer and public water supply.
- Containers of cutting oil, paint thinners, polyurethane, carpet adhesive, small portable containers of gasoline and typical household cleaning agents were observed stored within the units and within the storage trailers at the development site. These containers were observed to be in good working conditions with no spills or stains observed.
- Oil staining as observed at the base of a pipe on the upper exterior southern wall, which ran down the length of the wall to the soil. There was no obvious staining observed on the soil beneath the pipe. The oil staining was determined to be a de minimis condition.
- Oil staining was observed on the concrete floor of unit #3 beneath an engine. This was classified as a *de minimis* condition.
- The development site was identified in the regulatory agency database report as an inactive New York State Solid Waste/Landfill (SWF/LF) facility for former operations as a construction and demolition (C&D) debris transfer station.
- No hazardous substance use, storage and/or disposal was observed in the areas visually inspected during EnviroTrac's site reconnaissance.
- No visual evidence of underground storage tanks (USTs) or aboveground storage tanks (ASTs) such as fill or vent pipes were observed during EnviroTrac's site reconnaissance.
- No polychlorinated biphenyl (PCB)-containing equipment was observed during the site reconnaissance.
- No visible evidence of waste pits, ponds, lagoons, sumps, stormwater drywells, wells (irrigation, monitoring or observation), debris, dumping or other conditions were observed during the site reconnaissance.

Based upon the results of the Phase I ESA, the following RECs were identified for Projected Development Site 1:

- The development site was listed on one (1) regulatory agency database listing as an inactive SWF/LF facility. C&D was reportedly stored at the development site and the site

was issued a permit to operate as a transfer station. Although there was no visible releases identified at the development site in association with former SWF/LF operations, the listing represented a REC for the development site, as the database listing has not been properly closed out with the appropriate regulatory agency (the New York State Department of Environmental Conservation [NYSDEC]).

- Based on a review of historical Sanborn Fire Insurance maps and aerial photographs, the development site was utilized for industrial purposes prior to 1894 to present. The historical industrial use of the development site represented a REC.
- A gasoline tank was depicted on the western portion of the development site in the 1933 historic Sanborn Fire Insurance map, at the time when the development site was utilized as a coal yard. There was no additional information found regarding the status of the tank. The potential presence of a gasoline tank represented a REC.
- The adjacent property to the west of the development site was historically utilized as an incinerator by the New York City Department of Environmental Protection (NYCDEP). Coal ash fallout from the incinerator was identified as a condition that had the potential to have impacted subsurface conditions at the development site, and was considered a REC.
- De minimis oil staining was observed at the base of a pip on the upper exterior southern wall. No obvious staining was observed on the soil beneath the pipe. However, the unknown pipe and origins was considered a REC.

The following *de minimis* condition was identified at Projected Development Site 1:

- De minimis oil staining was observed on the concrete floor of the vacant unit #3 beneath an engine. No release to the soil was identified in connection with this condition.

In addition to the above, the following, non-scope conditions were identified for Projected Development Site 1:

- Based on the age of the building (constructed between 1954 and 1962), asbestos-containing materials (ACM) have the potential to be present. Although there was no suspect ACM observed during the site reconnaissance, there is a potential for the roofing system to contain ACM, which was not visually observed or accessed.
- Given the age of the building, there is a potential for lead-based paint to have been applied. All painted surface were visually observed to be in good condition as part of the site reconnaissance.

Based on the results of the Phase I ESA, EnviroTrack issued the following recommendations:

- A Limited Phase II ESA should be performed to determine if the historical occupants, industrial utilization and historical incinerator to the west has impacted subsurface conditions. Subsurface soil borings should be collected in a grid pattern and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals.
- A geophysical survey should be performed on the western portions of the development site to determine if the gasoline tank depicted on the 1933 Sanborn Fire Insurance map remains in-place.

- The purposes of the pipe along the upper exterior southern wall should be investigated. A surficial soil should be collected beneath the pipe along the exterior.
- Prior to renovation or demolition, asbestos and LBP inspections should be performed by licensed professionals.

Limited Phase II Environmental Site Assessment

Based upon the results of the Phase I ESA, EnviroTrac conducted a Limited Phase II ESA at Projected Development Site 1 to investigate and/or address the previously identified RECs. The results of the Limited Phase II ESA field activities were summarized in a Limited Phase II ESA Letter dated July 28, 2016.

To address the RECs, EnviroTrac and its subcontractors advanced nine (9) soil borings at several locations at Projected Development Site 1, and conducted a geophysical investigation in the vicinity of the UST depicted on the 1933 Sanborn Fire Insurance map (Unit #4 currently occupied by a carpet company). Based upon the field work conducted, the following findings, conclusions and recommendations were provided:

- The SWF/LF listing for the development site was closed out by the NYSDEC on July 6, 2019, with closure documentation appended to the Limited Phase II ESA letter.
- Subsurface soil borings were installed in accessible areas to determine if apparent contamination existed beneath the development site from historical industrial occupants and operations. Soil boring observations indicated that no apparent contamination existed beneath the development site. The soil beneath the pipe extruding out the southern exterior wall was also further investigated for visual/olfactory indications of contamination and was screened utilizing a calibrated photoionization detector (PID).
- The geophysical survey identified an anomaly within the approximate location of a potential former UST. An excavation was performed and a UST was determined to not be present. The metallic anomaly was shown to exist beneath the concrete floor of Unit #4 and was investigated via excavation down to approximately five-to-six feet bgs. The metallic anomaly consisted of several pieces of piping that were removed. Four (4) sidewall samples were collected and analyzed for VOCs and SVOCs. No VOCs were detected in the soil sample results. Several SVOCs were detected above NYSDEC Restricted Use Soil Cleanup Objectives. As no source of contamination was identified, the presence of SVOCs was attributed to fill material that was also observed in the excavation areas.

Phase II Environmental Site Assessment

A subsequent Phase II ESA was conducted at Projected Development Site 1 by WCD and summarized in a Phase II ESA report dated June 23, 2017. The Phase II ESA was conducted as a supplemental investigation to the limited Phase II ESA to further characterize soil and groundwater conditions at Projected Development Site 1. The purpose of the Phase II ESA was to summarize the field investigations performed by WCD and its subcontractors, and to recommend, if appropriate, further investigation and/or remedial options regarding identified on-site conditions.

The supplemental Phase II ESA field work was conducted over a two-day period and involved the following activities:

- Advancement of 10 direct push soil borings to a maximum depth of 15 feet bgs, including one boring within the on-site building footprint.
- Two hand auger borings installed to a maximum depth of two-feet bgs in the open areas west of the on-site building.
- Collected two (2) sediment grab samples in the channel directly north of the development site.
- Installation of two (2) temporary groundwater monitoring wells from two of the direct push soil boring locations.
- Laboratory analysis of soil, groundwater and sediments to document the presence or absence of VOCVs, SVOCs, metals, pesticides and/or PCBs.

Based upon the findings of the Phase II ESA, the following conclusions and recommendations were provided in the Phase II ESA:

- The development site is underlain by approximately five-to-nine feet of fill material (coal fragments, cinders, concrete, asphalt and what slag/bottom ash). The fill is present above native material that consists of 12-to-18-inch layer of clay underlain by fine-to-medium grain sand.
- Groundwater was confirmed between 12 and 14 feet bgs.
- Petroleum staining and odors were observed in fill and native material recovered from three soil boring locations.
- Elevated concentrations of selenium, lead, mercury, zinc and barium were detected throughout the development site, particularly in fill materials.
- Elevated concentrations of chlorinated solvents and their degradation products were detected in soils collected on the eastern portions, and in groundwater collected from the south-central portions of the development site.
- Elevated detection limits for VOC analyses of soil collected from other locations on the eastern portions of the site do not preclude the presence of chlorinated solvents in concentrations that exceed Unrestricted Use or Restricted Residential Use standards.
- Elevated concentrations of SVOCs were present in fill material encountered at the southeastern corner and western boundary of the development site.
- Sulfurous odors and elevated hydrogen sulfide readings were observed in native clay soils at 90% of boring locations, including in the groundwater at the southern portions of the development site. Hydrogen sulfide is commonly associated with the breakdown of organic matter in anaerobic environments.

Based on the findings, the Phase II ESA recommended further site characterization may be necessary to further delineate impacted soil and groundwater at the site and to evaluate the need for remedial action. WCD recommended that prospective development activities involving soil disturbance be managed in accordance with applicable NYSDEC regulations, including implementation of a site-specific Health and Safety Plan, proper sampling of soils slated for off-site disposal and proper dust and runoff control.

Phase II Investigation, Supplemental Field Investigation, July 2017

To further characterize Projected Development Site 1, WCD group conducted additional supplemental testing at the development site in July 2017. The results of the additional supplemental testing, combined with the previous Phase II ESA activities summarized as part of the Phase II ESA, dated June 27, 2017 were included in a Phase II Investigation, Supplemental Field Investigation letter, dated October 11, 2017. The additional scope of work conducted during the July 2017 field activities included the installation of ten (10) additional soil borings (for a total of 20 soil borings amongst all supplemental field investigations) to a maximum depth of approximately 15-feet bgs.

Notwithstanding the initial Phase II ESA results, the following additional findings were provided under the additional supplemental testing:

- Elevated concentrations of arsenic, copper and nickel were also detected during the additional supplemental studies.
- PCBs were detected in fill material and black native soils at the southern portions of the development site. These concentrations were below NYSDEC Soil Cleanup Objectives for the protection of groundwater.

No further action was recommended by WCD for the additional supplemental testing and Phase II ESA activities conducted at Projected Development Site 1 based on the following:

- The naturally occurring clay deposits would act as a barrier to the downward vertical migration of contaminants that may be present in the historic fill.
- Groundwater, which is not a source of potable water in the area, does not appear to be significantly impacted.
- An on-site source of the solvents was not identified.
- The development site is intended to be used for commercial purposes.

Phase II Investigation, Supplemental Field Investigation, November 2017

To further characterize Projected Development Site 1, WCD group conducted additional supplemental testing at the development site in November 2017. The following scope of work was performed during the supplemental testing:

- Eight (8) direct push soil borings were advanced to a maximum depth of 20-feet bgs.
- Five (5) discrete soil samples were collected from various depths from five soil boring locations.
- Eight (8) temporary groundwater wells installed in each of the direct push soil boring locations.
- Soil and groundwater samples were collected and analyzed for VOCs.

The analytical results obtained for soil samples collected during the supplemental testing did not identify a source of chlorinated or hydrocarbon release at Projected Development Site 1. Concentrations of substances detected were below restricted use or commercial soil cleanup guidance. No further action was recommended regarding the presence of chlorinated solvents in soil, based on the intended use for commercial purposes.

Eleven chlorinated solvents were encountered in six groundwater samples. An apparent source of groundwater contamination was not identified during the current or previous investigations. The data indicates that natural attenuation is occurring based on the concentration of chlorinated tetrachloroethylene (PCE) and trichloroethene (TCE) compared to their degradation products. The WCD report indicates that monitored natural attenuation (MNA) would be a likely remedial strategy for the site.

WCD recommended further monitoring of groundwater at Projected Development Site 1 to assess the progress of natural attenuation. With respect to soil vapor, it was determined that vapor intrusion was not a significant concern given the intended future use of the property as a self-storage facility.

Future No-Action Condition

Absent the proposed action (the "future No-Action condition"), the applicant would maintain Building A in its existing condition as a 34,541-gsf (31,087-zsf) light manufacturing facility. Building B would be constructed to a height of three stories, or 54 feet. The first floor would be elevated to allow for open parking at the ground level, accommodating 15 parking spaces and four loading berths. Building A would be maintained within its existing building envelope, with a majority of the building preserved at a single story (16 feet in height) and a small portion at the rear of the building preserved at two stories (32 feet in height). Access to Projected Development Site 1 would be maintained from Beach Channel Drive.

Under the future No-Action condition, no further assessment of hazardous materials would be conducted and an (E) Designation for Hazardous Materials would not be placed on Projected Development Site 1.

Notwithstanding the above, regulatory requirements pertaining to the building materials containing asbestos and lead-based paint would be addressed as part of standard renovation and redevelopment practices.

Future With-Action Condition

In the future With-Action condition, Building B would be constructed as a 204,465-gsf self-service facility. Building A would remain in its existing condition as a light manufacturing facility.

Building B would be constructed to a height of seven stories, or 104 feet. The first floor would be elevated to allow for open parking at the ground level, accommodating 15 parking spaces and five loading berths. Building A would be maintained within its existing building envelope, with a majority of the building preserved at a single story (16 feet in height) and a small portion at the rear of the building preserved at two stories (32 feet in height). Access to Projected Development Site 1 would be maintained from Beach Channel Drive.

To preclude the potential for significant adverse impacts related to hazardous materials, (E) designations (E-624) would be incorporated into the rezoning area (Block 16100, Lots: 14, 18 and 20). With the placement of the (E) designations, further hazardous materials assessments would be directed through OER.

The (E) designation text related to hazardous materials is as follows:

Task 1

The applicant submits to OER, for review and approval, a Phase I ESA of the site along with a soil and groundwater testing protocol (a.k.a. Remedial Investigation Work Plan [RIWP] along with a site-specific Health and Safety Plan (HASP), including a description of methods and a project site map with all sampling locations clearly and precisely represented.

If site sampling is required, no sampling should begin until written approval of a protocol is received from OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum-based contamination and non-petroleum-based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2

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 the test results, a proposed Remedial Action Plan (RAP) must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER in accordance with the approved RAWP. The applicant should then provide proper documentation that remedial action has been satisfactorily completed.

An OER-approved CHASP would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.

All demolition or rehabilitation would be conducted in accordance with applicable requirements for disturbance, handling and disposal of suspect lead-paint and asbestos containing materials.

In addition to the above, regulatory requirements pertaining to the building materials containing asbestos and lead-based paint would be addressed as part of standard renovation and redevelopment practices.

Notwithstanding the above, portions of Projected Development Site 1 (i.e., Lots 18 and 20) have been accepted into the New York State Brownfield Cleanup Program (BCP), which will provide regulatory oversight by the New York State Department of Environmental Conservation (NYSDEC). As part of the BCP, additional requirements, including implementation of a Remedial Investigation (RI) and the preparation and implementation of a Remedial Action Work Plan (RAWP) will be conducted. Participation in the NYSDEC BCP will concurrently satisfy regulatory requirements of a hazardous materials (E) Designation (see NYCDEP letter dated July 10, 2020 in ***Appendix B***).

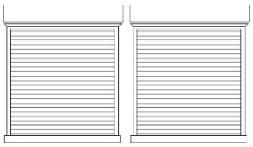
Given these measures, the future With-Action condition would not result in any significant adverse impacts relating to hazardous materials.

2.5-5 Conclusion

Any potential impacts relating to hazardous materials would be identified and investigated prior to subsurface disturbance as required by an (E) designation for hazardous materials on Projected Development Site 1 (E-624). Any potential remedial action that may be required would also be administered as part of the (E) designation protocol under the regulatory oversight of OER. In order to reduce the potential for exposure to future site occupants, during and following construction, regulatory requirements pertaining to ACM, LBP, PCBs and chemical use and storage would be followed where building conversions are proposed.

Notwithstanding the above, portions of Projected Development Site 1, specifically Lots 18 and 20, have been accepted into the NYSDEC BCP, which will provide regulatory oversight by the NYSDEC. As part of the BCP, additional requirements, including implementation of an RI and the preparation and implementation of a RAWP will be conducted. Participation in the NYSDEC BCP will concurrently satisfy regulatory requirements of a hazardous materials (E) Designation.

With the implementation of these measures, no significant adverse impacts related to hazardous materials would result from the proposed action.



2.6

Air Quality

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

2.6-1 Introduction

This section examines the potential for air quality impacts from the proposed project. According to the *2020 CEQR Technical Manual*, air quality impacts can be characterized as either direct or indirect impacts. Direct impacts result from emissions generated by stationary sources, such as stack emissions from on-site fuel burned for boilers and heating, ventilation, and air conditioning (HVAC) systems. Indirect effects are caused by off-site emissions associated with a project, such as emissions from on-road motor vehicles ("mobile sources") traveling to and from a development site.

Consistent with the *CEQR Technical Manual*, air quality analyses for a proposed project focus on three main areas of potential concern:

- Potential impacts from mobile sources introduced by a project.
- Potential impacts from potential air pollutant sources introduced by a project, such as:

  - Emissions from a project's heating, ventilation, and air conditioning (HVAC) system
  - Emissions from a project's enclosed parking garage.

› Potential impacts on the proposed project from either manufacturing/processing facilities or large/major sources that are located near the project site.

The proposed project would not introduce a significant number of incremental vehicular trips, and thus it is anticipated that the *CEQR Technical Manual* CO-based screening threshold of 170 vehicles per hour, and $PM_{2.5}$-based screening threshold of 23 heavy duty trucks (or equivalent) per hour would not be exceeded.

The proposed project does not include a significant number of parking spaces, and thus, an assessment of emissions from a parking facility is not warranted.

Additionally, the proposed project would not introduce sensitive receptors, identified as schools, hospitals, parks, and residences per the *CEQR Technical Manual,* and thus an assessment of the potential for manufacturing/processing facilities or large/major sources that are located near the project site to affect the proposed development is not required.

Therefore, this analysis focuses on the following:

› An assessment of the proposed project's HVAC systems to affect both the uses in the surrounding area ("project on existing") and other project buildings ("project on project").

2.6-2 Pollutants of Concern

Air pollution is of concern because of its demonstrated effects on human health. Of special concern are the respiratory effects of the pollutants and their potential toxic effects, as described below.

Carbon monoxide (CO) is a colorless and odorless gas that is a product of incomplete combustion. Carbon monoxide is absorbed by the lungs and reacts with hemoglobin to reduce the oxygen carrying capacity of the blood. At low concentrations, CO has been shown to aggravate the symptoms of cardiovascular disease. It can cause headaches, nausea, and at sustained high concentration levels, can lead to coma and death.

Particulate matter is made up of small solid particles and liquid droplets. PM_{10} refers to particulate matter with a nominal aerodynamic diameter of 10 micrometers or less, and $PM_{2.5}$ refers to particulate matter with an aerodynamic diameter of 2.5 micrometers or less. Particulates can enter the body through the respiratory system. Particulates over 10 micrometers in size are generally captured in the nose and throat and are readily expelled from the body. Particulates smaller than 10 micrometers, and especially particles smaller than 2.5 micrometers, can reach the air ducts (bronchi) and the air sacs (alveoli) in the lungs. Particulates are associated with increased incidence of respiratory diseases, cardiopulmonary disease, and cancer.

Nitrogen oxides (NO_X), the most significant of which are nitric oxide (NO) and nitrogen dioxide (NO_2), can occur when combustion temperatures are extremely high (such as in

engines) and atmosphere nitrogen gas combines with oxygen gas. NO is relatively harmless to humans but quickly converts to NO_2. Nitrogen dioxide has been found to be a lung irritant and can lead to respiratory illnesses. Nitrogen oxides, along with VOCs, are also precursors to ozone formation.

Sulfur Dioxide (SO_2) emissions are the main components of the "oxides of sulfur," a group of highly reactive gases from fossil fuel combustion at power plants, other industrial facilities, industrial processes, and burning of high sulfur containing fuels by locomotives, large ships, and non-road equipment. High concentrations of SO_2 will lead to formation of other sulfur oxides. By reducing the SO_2 emissions, other forms of sulfur oxides are also expected to decrease. When oxides of sulfur react with other compounds in the atmosphere, small particles that can affect the lungs can be formed. This can lead to respiratory disease and aggravate existing heart disease.

Non-criteria pollutants may be of concern in addition to the criteria pollutants discussed above. Non-criteria pollutants are emitted by a wide range of man-made and naturally occurring sources. These pollutants are sometimes referred to as hazardous air pollutants (HAP) and when emitted from mobile sources, as Mobile Source Air Toxics (MSATs). Emissions of non-criteria pollutants from industrial sources are regulated by the United States Environmental Protection Agency (EPA).

Federal ambient air quality standards do not exist for non-criteria pollutants; however, the New York State Department of Environmental Conservation (NYSDEC) has issued standards for certain non-criteria compounds, including beryllium, gaseous fluorides, and hydrogen sulfide. NYSDEC has also developed guidance document DAR-1 (August 2016), which contains a compilation of annual and short term (1-hour) guideline concentration thresholds for these compounds. The NYSDEC's DAR-1 guidance thresholds represent ambient levels that are considered safe for public exposure. EPA has also developed guidelines for assessing exposure to non-criteria pollutants. These exposure guidelines are used in health risk assessments to determine the potential effects to the public.

2.6-3 Impact Criteria

The predicted concentrations of pollutants of concern associated with a proposed project are compared with either the National Ambient Air Quality Standards (NAAQS) for criteria air pollutants or ambient guideline concentrations for non-criteria pollutants. In general, if a project would cause the standards for any pollutant to be exceeded, it would likely result in a significant adverse air quality impact. In addition, the City's *de minimis* criteria are also used to determine significance of impacts for CO and $PM_{2.5}$.

National Ambient Air Quality Standards

The Clean Air Act (CAA) requires the EPA to set standards on the pollutants that are considered harmful to public health and the environment. The NAAQS were implemented as a result of the CAA, amended in 1990 (see ***Table 2.6-1***). The NAAQS applies to six principal ("criteria") pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter 10 (PM_{10}), particulate matter 2.5 ($PM_{2.5}$), sulfur dioxide (SO_2), and ozone.

Table 2.6-1 National and New York State Ambient Air Quality Standards

Pollutant	Averaging Time	Standard
Carbon Monoxide	1-Hour	35 ppm (40,000 µg/m^3)
	8-Hour	9 ppm (10,000 µg/m^3)
Nitrogen Dioxide	Annual	53 ppb (100 µg/m^3)
	1-Hour	100 ppb (188 µg/m^3)
Ozone	8-Hour	0.070 ppm
Particulate Matter (PM_{10})	24-Hour	150 µg/m^3
Particulate Matter ($PM_{2.5}$)	Annual	12.0 µg/m^3
	24-Hour	35.0 µg/m^3
Sulfur Dioxide	3-Hour	0.5 ppm (1,300 µg/m^3)
	1-Hour	75 ppb (196 µg/m^3)

Source: *United States Environmental Protection Agency National Ambient Air Quality Standards. Retrieved from https://www.epa.gov/criteria-air-pollutants/naaqs-table.*

Non-criteria Pollutant Thresholds

Non-criteria, or toxic, air pollutants include a multitude of pollutants of variable toxicity. No federal ambient air quality standards have been promulgated for toxic air pollutants. However, EPA and NYSDEC have issued guidelines that establish acceptable ambient levels for these pollutants based on human exposure.

The NYSDEC DAR-1 guidance document presents guideline concentrations in micrograms per cubic meter (µg/m^3) for the one-hour and annual average time periods for various air toxic compounds.[1]

In order to evaluate impacts of non-carcinogenic toxic air emissions, EPA developed a methodology called the "Hazard Index Approach." The acute hazard index is based on short-term exposure, while the chronic non-carcinogenic hazard index is based on annual exposure limits. If the combined ratio of pollutant concentration divided by its respective short-term or annual exposure threshold for each of the toxic pollutants is found to be less than 1.0, no significant adverse air quality impacts are predicted to occur due to these pollutant releases.

In addition, EPA has developed unit risk factors for carcinogenic pollutants. EPA considers an overall incremental cancer risk from a proposed action of less than one-in-one million to be insignificant. Using these factors, the potential cancer risk associated with each carcinogenic pollutant, as well as the total cancer risk of the releases of all the carcinogenic toxic pollutants combined, can be estimated. If the total incremental cancer risk of all the carcinogenic toxic pollutants combined is less than one-in-one million, no significant adverse air quality impacts are predicted to occur due to these pollutant releases.

[1] NYSDEC DAR-1 - http://www.dec.ny.gov/docs/air_pdf/dar1.pdf.

CO *De Minimis* Criteria

New York City has developed *de minimis* criteria to assess the significance of the increase in CO concentrations that would result from the impact of project-generated mobile sources, as set forth in the *CEQR Technical Manual*. These criteria set the minimum change in CO concentration that defines a significant adverse environmental impact. Significant increases of CO concentrations in New York City are defined as:

- An increase of 0.5 ppm or more in the maximum eight-hour average CO concentration at a location where the predicted No-Action eight-hour concentration is equal to or between 8.0 and 9.0 ppm; or
- An increase of more than half the difference between baseline (i.e., No-Action) concentrations and the eight-hour standard, when No-Action concentrations are below 8.0 ppm.

$PM_{2.5}$ *De Minimis* Criteria

New York City uses de minimis criteria to determine a project's potential to result in a significant adverse $PM_{2.5}$ impact under CEQR. The de minimis criteria are as follows:

- Predicted increase of more than half the difference between the background concentration and the 24-hour standard;
- Annual average $PM_{2.5}$ concentration increments which are predicted to be greater than 0.1 µg/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 at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations); or
- Annual average $PM_{2.5}$ concentration increments which are predicted to be greater than 0.3 µg/m^3 at a discrete receptor location (elevated or ground level).

Background Concentrations

Background concentrations are ambient pollution levels associated with existing stationary, mobile, and other area emission sources. NYSDEC maintains an air quality monitoring network and produces annual air quality reports that include monitoring data for CO, NO_x, PM_{10}, $PM_{2.5}$, and SO_2. To develop background levels, the latest available pollutant concentrations from NYSDEC monitoring sites located closest to Projected Development Site 1 were used. If the pollutant concentration from the nearest monitoring station is not available, the next closest monitoring station is selected, and so forth. ***Table 2.6-2*** summarizes the background concentrations for each of the pollutants.

Table 2.6-2 Background Concentrations

Pollutant	Averaging Time	Monitoring Location	Background Concentration
Carbon Monoxide	1-Hour[1]	Queens College 2	1.72 ppm
	8-Hour[1]	Queens College 2	1.2 ppm
Nitrogen Dioxide	1-Hour[2]	Queens College 2	105.7 µg/m^3
	Annual[3]	Queens College 2	29.9 µg/m^3
Particulate Matter (PM_{10})	24-Hour[4]	Queens College 2	31 µg/m^3
Particulate Matter ($PM_{2.5}$)	24-Hour[5]	Queens College 2	17.7 µg/m^3
Sulfur Dioxide	1-Hour[6]	Queens College 2	14.9 µg/m^3

1 1-hour CO and 8-hour CO background concentrations are based on the highest second max value from the latest five years of available monitoring data from NYSDEC (2014-2018)
2 1-hour NO_2 background concentration is based on three-year average (2016-2018) of the 98th percentile of daily maximum 1-hour concentrations from available monitoring data from NYSDEC.
3 Annual NO_2 background concentration is based on the maximum annual average from the latest five years of available monitoring data from NYSDEC (2014-2018).
4 24-hour PM_{10} is based on the highest second max value from the latest three years of available monitoring data from NYSDEC (2016-2018).
5 The 24-hour $PM_{2.5}$ background concentration is based on maximum 98th percentile concentration averaged over three years of data from NYSDEC (2016-2018).
6 1-hour SO_2 background concentration is based on maximum 99th percentile concentration averaged over the latest three years of available monitoring data from NYSDEC (2016-2018).
Source: NYSDEC Ambient Air Quality Report, 2018, http://www.dec.ny.gov/chemical/8536.html, https://www.dec.ny.gov/docs/air_pdf/2018airqualreport.pdf.

$PM_{2.5}$ impacts are assessed on an incremental basis and compared with the $PM_{2.5}$ *de minimis* criteria, without considering the annual background. Therefore, the annual $PM_{2.5}$ background is not presented in the table.

2.6-4 Methodology

HVAC Analysis

As described in ***Section 1.0, Project Description,*** the With-Action condition would result in two buildings: existing Buildings A and new Building B on Projected Development Site 1. It is assumed that the buildings would have individual boiler stacks for their HVAC systems. Thus, an air quality analysis is warranted to assess the potential for emissions from the HVAC systems to significantly impact existing buildings.

CEQR Graphical Screening (HVAC Screening Analysis)

As described in Section 220 and Section 321 in Chapter 17 of the *CEQR Technical Manual*, for single-building projects that would use fossil fuels (i.e., fuel oil or natural gas) for HVAC systems, a preliminary stationary source screening analysis is typically warranted to evaluate the potential for impacts on existing buildings from HVAC systems emissions for the proposed project. The *CEQR Technical Manual* provides screening nomographs based on fuel type, stack height, minimum distance from the source to the nearest receptor buildings with similar or greater heights, and floor area of development resulting from the proposed project. There are three different curves representing three different stack heights (30 feet,

100 feet and 165 feet) on the figures, and the height closest to but not higher than the proposed stack height should be selected. Based on the development size, if the distance from Projected Development Site 1 to the nearest building of similar or greater height is less than the minimum required distance determined, there is the potential for a significant air quality impact from the project's boilers, and further analysis needs to be conducted using the USEPA's AERMOD model.

As detailed below, the HVAC screening analysis indicated that a refined analysis is not warranted for the proposed project.

2.6-5 Assessment

HVAC Analysis

The With-Action condition would consist of two buildings located on Projected Development Site 1:

- Building A, which is an existing two-story (32 feet above grade) 34,541-gsf light manufacturing building which would be maintained in its existing condition
- Building B, which would be a seven-story (104 feet above grade) proposed self-storage facility totaling approximately 204,465 gsf

The buildings would have roof heights of approximately 32 and 104 feet above grade level, respectively. Consistent with *CEQR Technical Manual* guidelines, it is assumed that the stacks would rise three feet above the roofs for total heights of 35 and 107 feet above grade, respectively.

A screening analysis was performed for Building A assuming a stack height of 35 feet above grade and a total development size of approximately 34,541 square feet. Based upon the proposed height and square footage, the minimum screening distance necessary to avoid potential adverse air quality impacts was determined to be approximately 42 feet assuming no. 2 fuel oil (see ***Figure 2.6-1***). A survey of existing residential land uses and other sensitive receptor sites within a 400-foot radius of Projected Development Site 1 indicated that proposed project building, Building B, is of similar or greater height than Building A. The distance from the two-story façade of Building A facing Beach 79th Street to the closest façade of Building B facing Brandreth Creek is approximately 102 feet. With the minimum source to receptor distance determined to be 102 feet, and a required distance of 42 feet for no. 2 fuel oil, the screening distance requirement is met and there would be no significant adverse stationary source impacts related to the proposed project's HVAC systems.

A screening analysis was also performed for Building B assuming a stack height of 107 feet above grade and a total development size of approximately 204,465 square feet. Based upon the proposed height and square footage, the minimum screening distance necessary to avoid potential adverse air quality impacts was determined to be approximately 105 feet assuming no. 2 fuel oil (see ***Figure 2.6-2***). A survey of existing residential land uses and other sensitive receptor sites within a 400-foot radius of the project site indicated that there are no buildings of similar or greater height than Building B.

Therefore, further analysis is not necessary.

To ensure that there are no significant adverse impacts from the HVAC system of the proposed action, certain restrictions would be required through the mapping of an (E) designation for air quality regarding stack height.

The (E) designation text would be as follows:

Block 16100, Lot 14 (Building A)

Any new light manufacturing development on the above-referenced property must ensure that the heating, ventilating, and air conditioning (HVAC) systems and hot water equipment stack is located at the highest tier or at least 35 feet above to avoid any potential significant adverse air quality impacts.

Block 16100, Lots 18 and 20 (Building B)

Any new self-storage development on the above-referenced property must ensure that the heating, ventilating, and air conditioning (HVAC) systems and hot water equipment stack is located at the highest tier or at least 107 feet above to avoid any potential significant adverse air quality impacts.

Figure 2.6-1 No. 2 Fuel Oil HVAC Screening – Building A

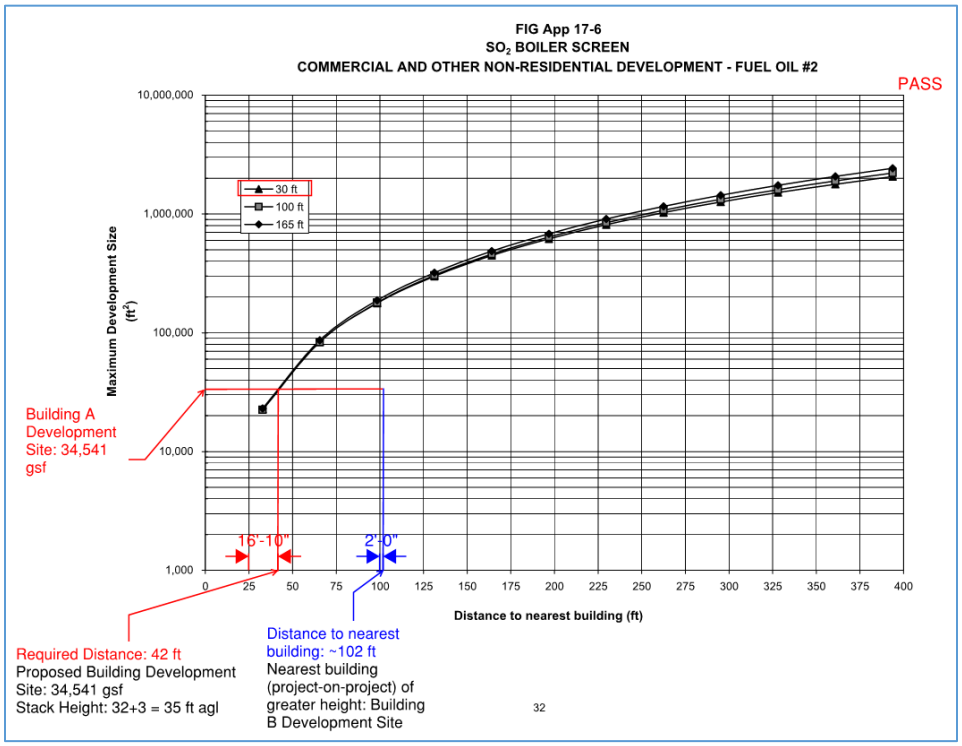
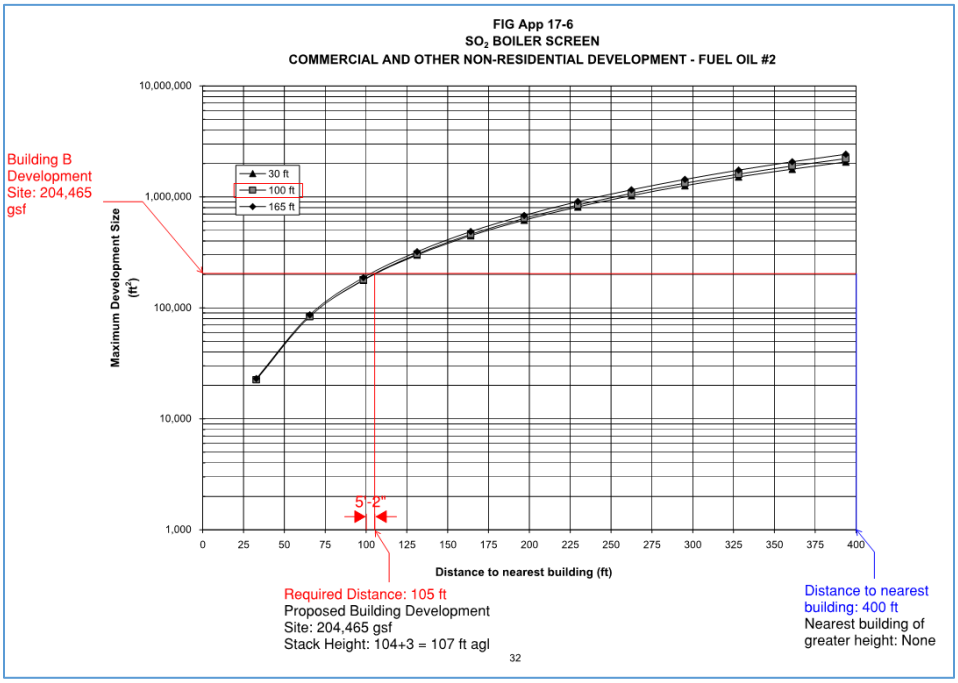


Figure 2.6-2 No. 2 Fuel Oil HVAC Screening – Building B



2.6-6 Conclusion

The proposed project would not introduce a significant number of incremental vehicular trips, and thus the proposed project would not result in a significant adverse impact on mobile source air quality.

The HVAC screening analyses demonstrated that there would be no potential for significant adverse stationary source air quality impacts from the proposed project's HVAC systems, even when assuming No. 2 fuel oil would be used.

The proposed project would not introduce sensitive receptors, and thus an assessment of the potential for manufacturing/processing facilities or large/major sources that are located near the project site to affect the proposed development was not required.

Therefore, there would be no significant adverse air quality impacts as a result of the proposed action, and further analysis is not necessary.

Appendix A – WRP Consistency Assessment

FOR INTERNAL USE ONLY	WRP No. WRP No. 18-091
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: 79 Arverne Development LLC.

Name of Applicant Representative: Uri Kaufman

Address: 220-46 73rd Avenue, Bayside, NY 11364

Telephone: 917-453-3384 Email: urikaufman50@gmail.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The applicant, 79 Arverne Development LLC, seeks a zoning map amendment for the project area to modify the underlying zoning district from M1-1 to M1-2. The proposed action would facilitate a new self-storage facility. Building A would remain in its existing condition, with approximately 34,541-gsf (31,087 zsf) of light manufacturing uses. A new building - Building B - would be constructed as a 146,000 gsf/zsf self-service storage facility. However, for the purposes of a conservative environmental analysis, a larger With-Action scenario was analyzed, including Building B as a 204,465-gsf (184,019-zsf) self-storage facility. The proposed project would be constructed as-of-right in the proposed M1-2 zoning district and would meet the applicable zoning provisions, including parking and loading requirements, of the zoning district.

2. Purpose of activity

To enable a greater scale and density of self-storage development on the project site. The development site is located in a manufacturing district that is not in a Designated Area, as designated by the Self Storage Text Amendment, meaning self storage development is allowed without a special permit. It is also a suitable site for self-storage because there is unmet demand for self-storage in the city and a need for more self-storage in the Rockaways due to the location on an island and in a flood zone that eliminates the possibility of using residential cellar space for storage. Due to this unmet demand that the applicant believes to exist in the area and that the existing bulk restrictions are insufficient for meeting that demand, a zoning map amendment is being proposed from M1-1 to M1-2.

C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): Block 16100, Lots 14, 18, 20; p/o lots 24, 28, 29, 33, 34, 175

Street Address: 350 Beach 79th Street

Name of water body (if located on the waterfront): Barbadoes Basin and Brandreth Creek

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: NYSDEC Permit type and number: Article 25 Tidal Wetlands Permit,
- ☐ 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: Abigail Rudow, VHB

Address: One Penn Plaza, Suite 715, New York, NY 10119

Telephone: 914-467-6616 Email: arudow@vhb.com

Applicant/Agent's Signature: Rudow, Abigail Digitally signed by Rudow, Abigail Date: 2021.06.03 10:43:16 -04'00'

Date: 6/3/21

Appendix A - WRP Consistency Assessment Form

Policy 2: Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.

2.4: 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.

The proposed project consists of a new building built to comply with the New York City Building Code requirements for construction within the 100-year and 500-year floodplains regarding the lowest floor elevation, which would be constructed at an elevation of 20.5 feet, 9.5 feet above the base flood elevation and accounting for the high estimate elevations under the SLR scenarios for 2100 shown under Policy 6.2. Self-storage uses are well suited to exist in an industrial area on the waterfront because their operations do not need to take place at ground level, and they have a low environmental impact in that there are no hazardous materials or uses associated with their operations. Therefore, the proposed project is consistent with this policy.

Policy 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.

Under existing conditions, the project area is characterized by disturbed and developed habitats, with impervious or otherwise unvegetated surfaces occurring across the majority of the development site. Where vegetation does occur, the flora is dominated by a number of non-native/invasive plant species. Due to the presence

of artificial shoreline structures, erosion and generally degraded conditions, the waterfront does not support significant areas of native vegetation.

Implementation of the proposed project would continue commercial use of the project area. However, under the proposed project, the existing predominantly impervious ground surfaces located along the Barbadoes Basin waterfront to the north of Building B would be removed and replaced with pervious surfaces comprising an 8,582 square-foot (SF) native planting area containing native shrubs and grasses. As such, the proposed project would protect and restore the quality and quantity of component habitats within the Special Natural Waterfront Area and would therefore be consistent with this policy.

4.5: Protect and restore tidal and freshwater wetlands.

The proposed project would protect tidal wetlands by installation of the 8,582-SF waterfront native planting area containing native shrubs and grasses, including northern bayberry (*Myrica pensylvanica*), southern arrowwood (*Viburnum dentatum*), shining sumac (*Rhus copallinum*), beach plum (*Prunus maritima*) and elderberry (*Sambucus canadensis*), as well as the native grass switchgrass (*Panicum virgatum*). The native planting area would improve the quality and quantity of waterfront habitat and function as a vegetated buffer between the developed portions of the project area and the adjacent tidal wetlands. The proposed project would further protect tidal wetlands through installation of stormwater management practices that will collect stormwater without conveyance to Barbadoes Basin or Brandreth Creek. Moreover, as part of the pending New York State Department of Environmental Conservation (NYSDEC) Tidal Wetlands Permit (Tidal Wetlands Permit Application No, 2-6308-00534/00007), the project would be subject to various conditions designed to protect tidal wetlands during project implementation, including the use of erosion, silt and turbidity controls and/or other measures. Based on the foregoing, the proposed project would be consistent with this policy.

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.

Implementation of the proposed project would continue use of a developed site. However, to the extent practicable, the proposed project has been designed to improve habitat diversity and quality by incorporating landscaped and natural habitat elements wherever possible. In particular, the proposed 8,582-SF waterfront native planting area containing native shrubs and grasses would significantly improve habitat diversity at the development site. Accordingly, the proposed project would be consistent with this policy.

4.8: Maintain and protect living aquatic resources.

As noted in the narratives for Policies 4.1, 4.5, and 4.6, implementation of the proposed project would result in installation of an 8,582-SF waterfront native planting area containing native shrubs and grasses that would maintain and protect

living aquatic resources by functioning as a vegetated buffer between the developed portions of the project area and the adjacent waters of Barbadoes Basin. The proposed project would further protect living aquatic resources through installation of stormwater management practices that will collect stormwater without conveyance to Barbadoes Basin or Brandreth Creek. Therefore, the proposed project would be consistent with this policy.

Policy 5: Protect and improve water quality in the New York City coastal area.

5.2: Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.

Stormwater runoff to the Barbadoes Basin and Brandreth Creek is the primary source of potential non-point source pollution from the proposed project. However, following implementation of the proposed project stormwater from the project site would be captured without conveyance to the either water body. Therefore, the proposed project would be consistent with this policy.

5.5 Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.

Under existing conditions, stormwater is not managed and there are no stormwater quality control measures in effect. Through the implementation of the proposed project, stormwater would be collected without conveyance to the neighboring water bodies. Also, as described in the narrative for Policy 4.5, planting of native vegetation and reduction of impervious surfaces along the waterfront will help to protect and improve water quality. Therefore, the proposed project would be consistent with this policy.

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.

Policy 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.

The proposed project has been designed to minimize losses caused by flooding and erosion and increase resilience to flooding by constructing Building B above the base flood elevation and to meet the requirements of Appendix G of the NYC Building Code. The proposed project would also seek to maximize flooding and erosion protective capacity through installation of pervious surfaces comprising an 8,582 square-foot (SF) native planting area containing native shrubs and grasses along the waterfront, thereby controlling erosion and increasing ground water recharge to mitigate flooding. These measures would help to minimize potential losses from flooding and erosion. Therefore, the proposed project would be consistent with this policy

Policy 6.2: "Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in the 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 entirety of the project area is located within the National Flood Insurance Program's (NFIP) 100-year floodplain, as mapped in the Preliminary Flood Insurance Rate Map (PFIRM) for New York County, NY dated December 13, 2013 (Map Number 3604970383G). The height of the 100-year floodplain is 11 feet NAVD88. The height of the 500-year floodplain is 15.3 feet. The Limit of Moderate Wave Action (LiMWA) borders the northern end of the development site along the Barbadoes Basin, but is not a threat to the existing or proposed buildings on-site.

Based on sea level rise (SLR) estimates from the New York City Panel of Climate Change's 2015 report, Building the Knowledge Base for Climate Resiliency, predicted flood elevations for various SLR scenarios were determined, as depicted in **Table 1**. All SLR calculations are provided in the flood elevation worksheets attached.

Table 1 100-Year Floodplain Elevations with Sea Level Rise

Decade	Low Estimate – 10th percentile (ft)	Mid-Range – 25th to 75th percentile (ft)		High Estimate – 90th percentile (ft)
2020	11.2	11.3	11.7	11.8
2050	11.7	11.9	12.8	13.5
2080	12.1	12.5	14.3	15.8
2100	12.3	12.8	15.2	17.3

The proposed new building on the development site would be able to withstand sea level rise, coastal flooding, and storm surge. It would be designed to the standards of Appendix G of the New York City Building Code. The lowest floor elevation of the proposed new building, which consists of self-storage and manufacturing space, would be constructed at an elevation of 20.5 feet, which is 9.5 feet higher than the 100-year flood height, and 3.2 feet higher than the high estimate of the 2100 100-year floodplain with sea level rise. This would elevate the building to avoid almost all projected flood hazards, except for the 2100 500-year flood plus sea level rise high estimates. The existing building on the development site would be subject to the 100-year flood and the high projections for sea level rise in 2100. However, the natural protective elements being incorporated into the design of the development site such as the salt water tolerant vegetation and natural and structural shoreline treatments, would help to mitigate impacts to the existing building.

As such, the proposed project would be consistent with this policy.

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	350 Beach 79th Street
Location	350 Beach 79th Street, Queens (Block 16100, Lots 14,18, and 20 and part of lots 24, 29, 33 and 175)
Type(s)	☐ Residential, Commercial, Community Facility ☐ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facility ☑ Industrial Uses ☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Drainage ☐ Coastal Protection
Description	The applicant seeks to rezone the project area (Queens Block 16100, Lots 14, 18, 20, and part of lots 24, 29, 33 and 175) from an M1-1 zoning district to an M1-2 zoning district in order to construct an approximately 204,465-gsf self-storage facility ("Building B") while maintaining an existing approximately 34,000-gsf building on the site ("Building A") for light manufacturing uses. Building B would be seven stories/92' 4" in height above the base flood elevation (11').
Planned Completion Date	2023
Expected Project Lifespan	50 + 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**	*Appendix A Beach Channel- Adjusted*
1% flood height	11.00	**11.00**	**NAVD88**	*FEMA NYC FIS Report*
Design flood elevation	20.50	**20.50**	**NAVD88**	
As relevant:				
0.2% flood height	15.30	15.30	**NAVD88**	*FEMA NYC FIS Report*

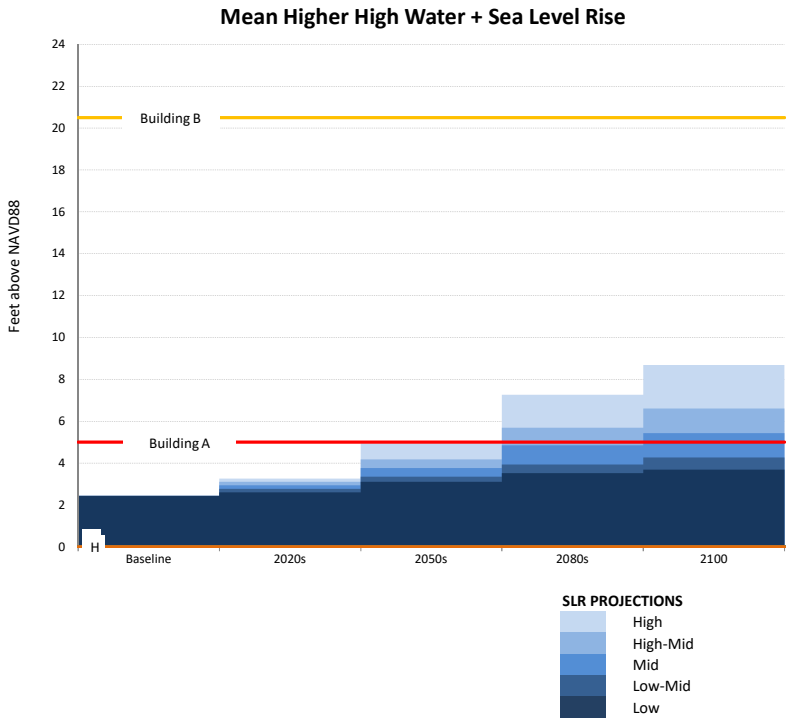
Data will be converted based on the following datums:

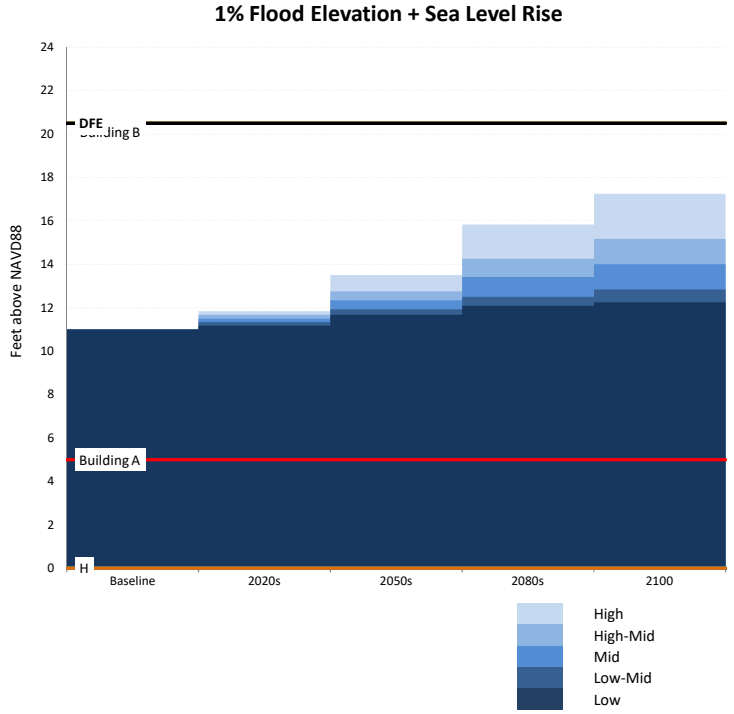
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

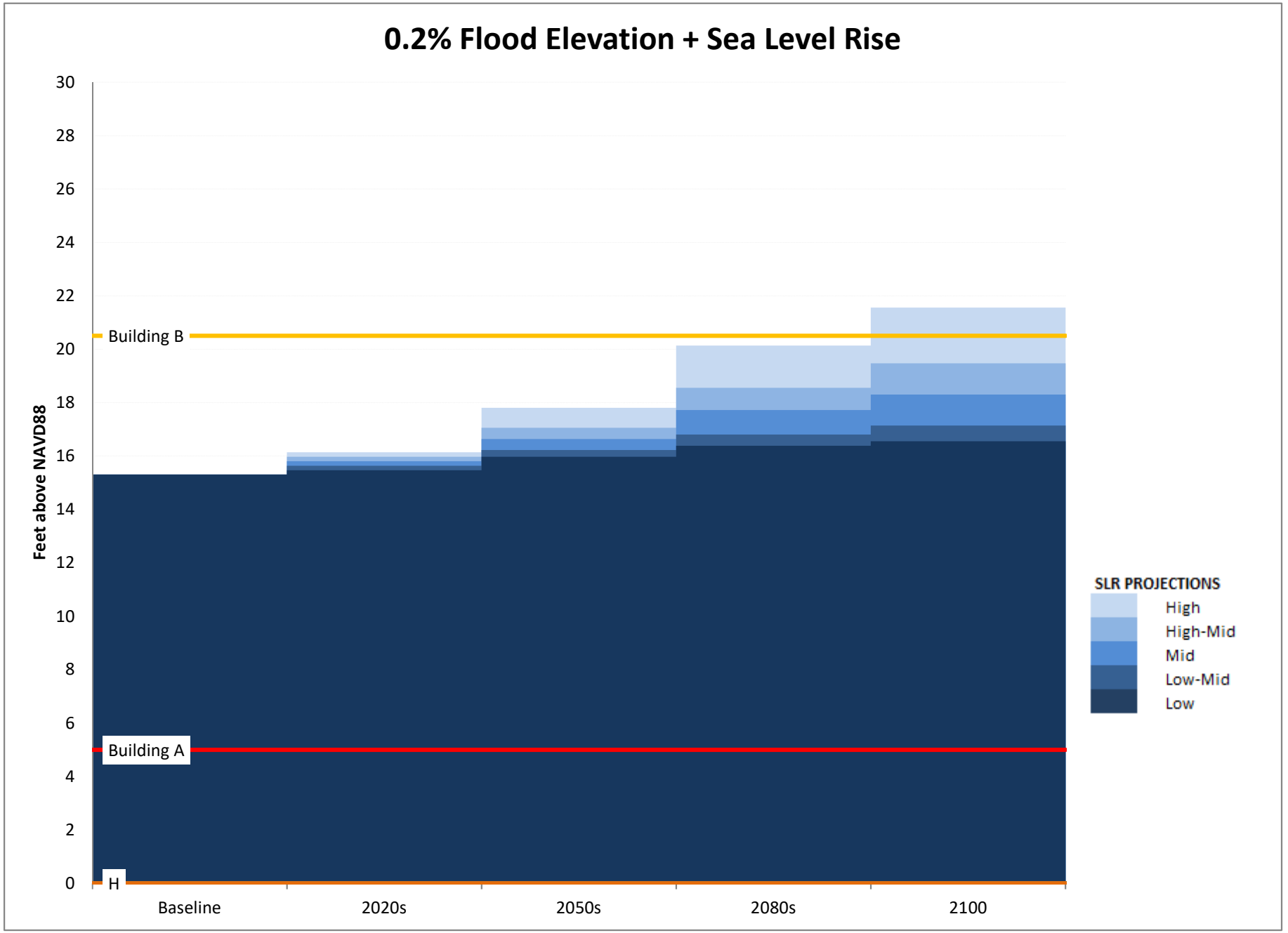
Describe key physical features of the project.

Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Building A	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other		5.0	Feet	NAVD88	*5.0*	*5.0*	*2.6*	*-10.3*
Elevation of existing building "Building A" on site									
Building B	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other		20.5	Feet	NAVD88	*20.5*	*20.5*	*18.1*	*5.2*
Lowest floor elevation for proposed "Building B" self storage facility									
C	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
D	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
E	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
F	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
G	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
H	☐ Vulnerable ☐ Critical ☑ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									

Assess project vulnerability over a range of sea level rise projections.






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
Building B
Building A
H
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

	SLR (ft)				
	Low	Low-Mid	Mid	High-Mid	High
Baseline	0.00	0.00	0.00	0.00	0.00
2020s	0.17	0.33	0.50	0.67	0.83
2050s	0.67	0.92	1.33	1.75	2.50
2080s	1.08	1.50	2.42	3.25	4.83
2100	1.25	1.83	3.00	4.17	6.25

	SLR (in)				
	Low	Low-Mid	Mid	High-Mid	High
2014	0	0	0	0	0
2020s	2	4	6	8	10
2050s	8	11	16	21	30
2080s	13	18	29	39	58
2100	15	22	36	50	75

	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	11.00	11.00	11.00	11.00	11.00
2020s	11.17	11.33	11.50	11.67	11.83
2050s	11.67	11.92	12.33	12.75	13.50
2080s	12.08	12.50	13.42	14.25	15.83
2100	12.25	12.83	14.00	15.17	17.25

	0.2%+SLR (ft above NAVD88)				
	Low	Low-Mid	Mid	High-Mid	High
Baseline	15.30	15.30	15.30	15.30	15.30
2020s	15.47	15.63	15.80	15.97	16.13
2050s	15.97	16.22	16.63	17.05	17.80
2080s	16.38	16.80	17.72	18.55	20.13
2100	16.55	17.13	18.30	19.47	21.55

	0	1
Building A	5	5
Building B	21	20.5
C	0	0
D	0	0
E	0	0
F	0	0
G	0	0
H	0	0
DFE	20.50	20.50

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)**	*Source*
8518687	Queensboro Bridge	2.27	2.60	NOAA Tides and Currents
8530095	Alpine	2.11	2.44	NOAA Tides and Currents
8516614	Glen Cove	3.72	4.05	NOAA Tides and Currents
8516990	Willets Point	3.72	4.05	NOAA Tides and Currents
8518639	Port Morris	3.33	3.66	NOAA Tides and Currents
8518699	Williamsburg Bridge	2.14	2.47	NOAA Tides and Currents
8518750	The Battery	2.28	2.61	NOAA Tides and Currents
8531680	Sandy Hook	2.41	2.74	NOAA Tides and Currents
8518490	New Rochelle	3.71	4.04	NOAA Tides and Currents
8531545	Keyport	2.66	2.99	NOAA Tides and Currents
8516891	Norton Point	2.08	2.41	NOAA VDATUM
8517201	North Channel	2.72	3.05	NOAA Tides and Currents
8517137	Beach Channel	2.10	2.43	NOAA VDATUM
8517756	Kingsborough	2.13	2.46	NOAA VDATUM
8519436	Great Kills	2.22	2.55	NOAA VDATUM
8531142	Port Reading	2.82	3.15	NOAA VDATUM
8519483	Bergen Point	2.56	2.89	NOAA VDATUM
8519050	USCG	2.28	2.61	NOAA Tides and Currents
8518902	Dyckman St	2.01	2.34	NOAA Tides and Currents
8517251	Worlds Fair Marina	3.59	3.92	NOAA VDATUM
8518668	Horns Hook	2.54	2.87	NOAA VDATUM
8518643	Randalls Island	2.60	2.93	NOAA VDATUM
8518526	Throggs Neck	3.68	4.01	NOAA Tides and Currents

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-2001 tidal epoch.



Appendix B – 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 79 SELF STORAGE REZONING
Date received: 2/7/2019

Properties with no Architectural or Archaeological significance:

1) ADDRESS: 350 Beach 79th Street, BBL: 4161000014
2) ADDRESS: Rockaway Freeway, BBL: 4161000018
3) ADDRESS: Rockaway Freeway, BBL: 4161000020
4) ADDRESS: Beach 77 Street, BBL: 4161000024
5) ADDRESS: Beach 77 Street, BBL: 4161000029
6) ADDRESS: Rockaway Freeway, BBL: 4161000175

Gina Santucci

2/21/2019

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 33980_FSO_DNP_02142019.doc

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

July 10, 2020

Laura Kenny
Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, New York 10271

Re: Beach 79th Self Storage Rezoning
Block 16100, Lots 14, 18, 20, p/o 24, p/o 28, p/o 29, p/o 33, p/o 34 and p/o 175
CEQR # 20DCP138Q

Dear Ms. Kenny:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the April 2020 Environmental Assessment Statement (EAS) prepared by VHB Engineering, Surveying, Landscape Architecture and Geology, P.C., the April 2016 Phase I Environmental Site Assessment (Phase I) prepared by EnviroTrac Limited, the July 2016 Limited Phase II Environmental Site Assessment (Phase II) prepared by EnviroTrac Limited, the June 2017 Phase II Environmental Site Assessment (Phase II), prepared by WCD Group LLC., the October 2017 Phase II Investigation Supplemental Field Investigation (Phase II) prepared by WCD Group LLC., and the November 2017 Phase II Investigation Supplemental Field Investigation (Phase II) prepared by WCD Group LLC. on behalf of 79 Arverne Development LLC., (applicant), for the above referenced project located at Brandreth Creek and the end of Beach 79th Street in the Arverne neighborhood of Queens Community District 14. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning (DCP) to rezone Block 16100, Lots 14, 18, 20, p/o 24, p/o 28, p/o 29, p/o 33, p/o 34 and p/o 175 from a M1-1 zoning district to a M1-2 zoning district. The proposed action would facilitate the conversion of an existing one-story building into a 34,541 gross square feet (gsf) self-service storage facility (Building A), as well as the construction of a new seven-story, 204,465 gsf, self-service storage facility (Building B), on Block 16100, Lots 14, 18 and 20 (Development Site). It should be noted that the Development Site is applicant-owned while the remainder of the project area, lots not controlled by the applicant (Block 16100, Lots p/o 24, p/o 28, p/o 29, p/o 33, p/o 34 and p/o 175), is not proposed for development.

The April 2016 Phase I report revealed that historical on-site and surrounding area land uses consists of manufacturing and commercial uses including the Excel Conveyor manufacturing company, a janitorial supplies company, Rockaway Motor Company, The Arverne Ice Factory, Chain Bike Corporation, an ice cream factory, an auto wrecking yard, a lumber yard, a planing mill, an incinerator, a machine shop, a coal yard, an auto repair shop as well as several residential buildings. Regulatory databases such as the New York State Department of Environmental Conservation (NYSDEC) SPILLS, Leaking Underground Storage Tank, Leaking Storage Tanks (LTANKS), Resource Conservation and Recovery Act Generators, and Petroleum

Bulk Storage (PBS) Underground Storage Tanks (USTs) and PBS Aboveground Storage Tanks (ASTs) identified several sites in close proximity to the project site. The SPILLS database reported five SPILLS within a 1/8-mile radius of the project site and the LTANKS database reported 10 LTANKS within a 1/2-mile radius of the project site. The PBS USTs and the PBS ASTs databases reported five USTs and seven ASTs within a 1/4-mile radius of the project site. The Phase I also reported two Auto Stations within a 1/8-mile radius of the project site. Based on the age of the building that currently occupies the project site, asbestos containing materials and lead based paint could be present in the structure.

It should be noted that the Phase II Subsurface Investigations were conducted without DEP approval.

During the June, July, and November 2017 fieldwork 28 soil borings (B1 through B28) and 12 temporary groundwater monitoring wells (B1 Water, B3 Water, B11W, B17W, B21W through B28W) were installed at the project site. Twelve groundwater samples and twenty-five soil samples, collected from various depths between one foot below grade surface (bgs) and 15 feet bgs, were analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds (SVOCs) via EPA Method 8270, pesticides via EPA Method 8081, polychlorinated biphenyls (PCBs) via EPA Method 8082 and Target Analyte List metals via EPA Method 6010.

The soil analytical results revealed seven VOCs (2-butanone, acetone, cis-1,2-dichloroethylene, tetrachloroethylene, trans-1,2-dichloroethylene, trichloroethylene and vinyl chloride), seven SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene), nine metals (arsenic, barium, cadmium, copper, lead, mercury, nickel, selenium and zinc), two pesticides (aldrin and dieldrin) and two PCBs (aroclor 1242 and aroclor 1260) were detected above NYSDEC 6 NYCRR Part 375 Unrestricted Use and/or Restricted Residential Use Soil Cleanup Objectives. The groundwater analytical results revealed pesticides and PCBs were either non-detect or below NYSDEC Division of Water Technical Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations for Class GA standards. Six VOCs (cis-1,2-dichloroethylene, naphthalene, p-isopropyltoluene, tetrachloroethylene, trichloroethylene and vinyl chloride), five SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene and chrysene) and five metals (arsenic, iron, manganese, selenium and sodium) were detected above NYSDEC Water Quality Guideline Values.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

Block 16100, Lots 14, 18 and 20 (Development Site)

- Based on the applicant's proposal to construct subject to NYSDEC Brownfield Cleanup Program (BCP) requirements, DEP concurs that the incorporation of all testing and remedial measures under NYSDEC BCP requirements will ensure that there would be no potential for significant adverse hazardous materials impacts as a result of the proposed project. DEP concurs with the EAS recommendation that an (E) 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) designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance in the event the applicant withdraws their participation from the NYSDEC BCP. These measures will ensure the development is protective of human health and the environment through the Mayor's Office of Environmental Remediation oversight as part of the New York City Department of Buildings approval process.

Future correspondence and submittals related to this project should include the following CEQR # **20DCP138Q.** If you have any questions, you may contact Ms. Cassandra Scantlebury at (718) 595-6756.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

cc: R. Weissbard
T. Estesen
C. Scantlebury
M. Wimbish
R. Lucas
O. Abinader - DCP
M. Bertini - OER

Appendix C – Jamaica Bay Watershed 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: 20DCP138Q 1a. Modification ☐
2. Project Name: Beach 79th Self-Storage Rezoning
3. Project Description:

The Applicant seeks a zoning map amendment to the project area to modify the underlying zoning district from M1-1 to M1-2. The proposed project would facilitate a new self-storage facility.

4. Project Sponsor: 79 Averne Development LLC
5. Required approvals: zoning map amendment
6. Project schedule (build year and construction schedule): 2023

B. PROJECT LOCATION:

1. Street address: 350 Beach 79th Street
2. Tax block(s): 16100 Tax Lot(s): 14, 18, 20 and parts of 24, 28, 29, 33, 34, an
3. Identify existing land use and zoning on the project site: light manufacturing (M1-1)
4. Identify proposed land use and zoning on the project site: light manufacturing and self-storage (M
5. Identify land use of adjacent sites (include any open space): vacant, transportation, manufacturing
6. Describe existing density on the project site and the proposed density:

Existing Condition	Proposed Condition
FAR 1.0	FAR 2.0

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): TBD
2. Will soil be removed (if so, what is the volume in cubic yards)? Yes (volume TBD)
3. Subsurface soil classification:
   (per the New York City Soil and Water Conservation Board): UsA
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:

   Groundwater beneath the project area is estimated to be approximately five feet below grade surface (bgs)

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:	30,698 sf	Building A-30,698 sf, Building B- 24,090 sf
Pavement/walkway:	54,661 sf	impervious street and yard- 7,627 sf
Grass/softscape:		pervious vegetation- 8,582 sf
Other (describe):		pervious pavers- 11,868 sf
2. ***Wetland*** (regulated or non-regulated) area and classification:	7,974 sf	7,974 sf
3. ***Water surface area:***	2,484 sf	2,484 sf

4. ***Stormwater management*** (describe):

Existing – how is the site drained?

Drains to Barbadoes Basin.

Proposed – describe, including any infrastructure improvements necessary off-site:

The proposed project will decrease impervious area on the development site. Following implementation of the project, stormwater from the project area would be captured without conveyance to adjacent waterbodies.

Appendix D – Natural Resources Documentation

Plant Species List

The following list provides an inventory of vegetation observed during field surveys of the project area conducted on November 29, 2018 and May 17, 2019. This observed plant species list is not intended to be an all-inclusive inventory of the vegetative species present at the project area.

Trees

Acer negundo	boxelder
Acer plantanoides	Norway maple
Ailanthus altissima	tree-of-heaven
Elaeagnus angustifolia	Russian olive
Gleditsia triacanthos	honey locust
Morus alba	white mulberry
Populus grandidentata	big-tooth aspen
Prunus serotina	black cherry
Rhus copallinum	shining sumac
Rhus typhina	staghorn sumac
Robinia pseudoacacia	black locust
Salix discolor	pussy willow

Shrubs and Woody Vines

Baccharis halimifolia	groundsel bush
Berberis thunbergii	Japanese barberry
Celastrus orbiculatus	Asiatic bittersweet
Helix hedera	English ivy
Lonicera canadensis	American fly honeysuckle
Lonicera japonica	Japanese honeysuckle
Lonicera tatarica	Tatarian honeysuckle
Parthenocissus quinquefolia	Virginia creeper
Rosa multiflora	multiflora rose
Rosa rugosa	rugosa rose
Rubus phoenicolasius	wineberry
Rubus sp.	brambles
Smilax rotundifolia	roundleaf greenbrier
Toxicodendron radicans	poison ivy
Vitis aestivalis	summer grape

Herbaceous Plants

Achillea millefolium	yarrow
Alliaria petiolata	garlic mustard
Amaranthus retroflexus	redroot pigweed
Andropogon virginicus	broomsedge
Apocynum cannabinum	hemp dogbane
Artemisia vulgaris	common mugwort
Asclepias syriaca	common milkweed

Bidens frondosa	devil's beggarticks
Bromus racemosus	bald brome
Chenopodium album	lambsquarters
Chicorium intybus	chicory
Dactylis glomerata	orchard grass
Daucus carota	Queen Anne's lace
Digitaria sanguinalis	large crabgrass
Digitaria sp.	crabgrass
Festuca sp.	fescue
Fucus vesiculosus	rockweed
Galinsoga parviflora	quickweed
Linaria vulgaris	butter-and-eggs (toadflax)
Lolium sp.	ryegrass
Mullugo verticillata	carpetweed
Panicum virgatum	switch grass
Phragmites australis	common reed
Plantago lanceolata	narrowleaf plantain
Plantago major	broadleaf plantain
Polygonum cuspidatum	Japanese knotweed
Polygonum persicaria	lady's thumb
Rumex crispus	curly dock
Setaria faberi	giant foxtail
Setaria viridis	green foxtail
Solidago rugosa	rough-stemmed goldenrod
Solidago sempervirens	seaside goldenrod
Solidago sp.	goldenrod
Sonchus arvensis	perennial sowthistle
Spartina alterniflora	saltmarsh cordgrass (low marsh)
Taraxacum officinale	common dandelion
Trifolium campestre	low hop clover
Trifolium pratense	red clover
Trifolium repens	white clover
Verbascum thapsus	mullein

Birds

The following list provides an inventory of birds observed (seen and/or heard) during field surveys of the project area conducted on November 29, 2018 and May 17, 2019. This observed bird species list is not intended to be an all-inclusive inventory of the bird species present at the project area.

Agelaius phoeniceus	red-winged blackbird
Anas rubripes	American black duck
Branta canadensis	Canada goose
Columba livia	rock dove
Corvus brachyrhynchos	American crow
Cyanocitta cristata	blue jay
Icterus galbula	northern oriole
Larus argentatus	herring gull
Leucophaeus atricilla	laughing gull
Megaceryle alcyon	belted kingfisher
Melospiza melodia	song sparrow
Mimus polyglottos	northern mockingbird
Pandion haliaetus	osprey
Passer domesticus	house sparrow
Phalacrocorax auritus	double-crested cormorant
Setophaga petechia	yellow warbler
Spinus tristis	American goldfinch
Sturnus vulgaris	European starling
Troglodytes aedon	house wren
Turdus migratorius	American robin
Zenaida macroura	mourning dove

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NYS Breeding Bird Atlas

Block 5949D

2000-2005

ATLAS 2000

Navigation Tools

Perform Another Search
Show All Records
Sort by Field Card Order
Sort by Taxonomic Order
View 1985 Data

Block 5949D Summary

Total Species:	21
Possible:	0
Probable:	3
Confirmed:	18

Click on column heading to sort by that category.

List of Species Breeding in Atlas Block 5949D

Common Name	Scientific Name	Behavior Code	Date	NY Legal Status
Red-winged Blackbird	*Agelaius phoeniceus*	ON	7/15/2000	Protected
Northern Cardinal	*Cardinalis cardinalis*	FL	7/15/2000	Protected
Piping Plover	*Charadrius melodus*	NY	5/30/2000	Endangered
Killdeer	*Charadrius vociferus*	NE	3/30/2000	Protected
Rock Pigeon	*Columba livia*	ON	6/15/2000	Unprotected
American Crow	*Corvus brachyrhynchos*	UN	7/15/2000	Game Species
Yellow Warbler	*Dendroica petechia*	FL	6/22/2000	Protected
Gray Catbird	*Dumetella carolinensis*	FL	7/12/2000	Protected
Willow Flycatcher	*Empidonax traillii*	T2	6/22/2000	Protected
Common Yellowthroat	*Geothlypis trichas*	T2	7/1/2000	Protected
American Oystercatcher	*Haematopus palliatus*	NY	5/12/2000	Protected
Barn Swallow	*Hirundo rustica*	NE	7/15/2000	Protected
Song Sparrow	*Melospiza melodia*	FY	8/11/2002	Protected
Northern Mockingbird	*Mimus polyglottos*	ON	5/13/2000	Protected
Brown-headed Cowbird	*Molothrus ater*	FL	8/11/2002	Protected

House Sparrow	*Passer domesticus*	ON	6/15/2000	Unprotected
Ring-necked Pheasant	*Phasianus colchicus*	FL	8/12/2000	Game Species
Common Tern	*Sterna hirundo*	NY	8/3/2000	Threatened
Least Tern	*Sternula antillarum*	NE	6/16/2000	Threatened
European Starling	*Sturnus vulgaris*	ON	7/4/2000	Unprotected
Mourning Dove	*Zenaida macroura*	N2	6/1/2000	Protected

Current Date: 11/27/2018

List of Species Reported for the Far Rockaway, New York Quadrangle Topographic Map during the New York Amphibian and Reptile Atlas Project Survey (1990-1999)

Ambystoma maculatum	spotted salamander
Bufo fowleri	Fowler's toad
Chelydra serpentina	common snapping turtle
Chrysemys picta	painted turtle
Coluber c. constrictor	northern black racer
Hyla versicolor	gray treefrog
Lampropeltis triangulum	eastern milk snake
Malaclemys terrapin	diamondback terrapin
Notophthalmus viridescens	red-spotted newt
Plethodon cinereus	northern redback salamander
Pseudacris crucifer	northern spring peeper
Rana clamitans	green frog
Scaphiopus holbrookii	eastern spadefoot toad
Storeria d. dekayi	northern brown snake
Terrapene carolina	eastern box turtle
Thamnophis sirtalis	eastern garter snake

November 27, 2018

VIA ELECTRONIC MAIL

Ref: 26746.00

Ms. Andrea Chaloux
New York State Department of Environmental Conservation
Information Services
New York Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233-4757

Re: NYNHP Records Request
350 Beach 79th Street
Rockaway Beach, NY 11693

Dear Ms. Chaloux:

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) has been retained by 79 Arverne Development LLC to prepare an Environmental Assessment Statement (EAS) following the guidelines set forth in the City of New York's *2014 CEQR Technical Manual* for a proposed zoning map amendment (rezoning) to facilitate redevelopment of the above-referenced 3.58±-acre waterfront property (the "Development Site").

The Development Site is developed with a one-to-two story industrial/ warehouse building and adjoining paved and unpaved surfaces associated with current site usage. The rezoning would allow for redevelopment of the Development with self-storage and manufacturing/ warehousing uses within the existing building (to be expanded vertically within its current footprint) and within one proposed new building in the eastern portion of the property. Preliminary development plans are attached.

To ensure that the EAS will identify and evaluate all potentially significant issues, we are submitting this request for any New York Natural Heritage Program (NYNHP) records for rare plants, animals, natural communities or significant wildlife habitats at or near the Development Site.

For your reference, a copy of the United States Geological Survey Topographic Map (Sayville, New York Quadrangle) showing the Development Site is enclosed.

Thank you in advance for your assistance. If additional information is required, or if you have any questions, please do not hesitate to contact me at (631) 787-3400 or dkennedy@vhb.com.

Sincerely,

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.



David Kennedy
Project Scientist

DK
enc.

- Excerpt of USGS Topographic Map (Far Rockaway, New York Quadrangle)



EXCERPT OF USGS TOPOGRAPHIC MAP

LOCATION: 350 Beach 79th Street, Far Rockaway, New York 11693
COORDINATES: LAT.: 40˚ 35' 27.80" N Lon.: 73˚ 48' 17.87" W
BASE MAP SOURCE: United States Geological Survey Topographic Map – Far Rockaway, New York Quadrangle (2013)

N

vhb

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

December 17, 2018

David Kennedy
VHB
100 Motor Parkway, Suite 135
Hauppauge, NY 11788

Re: 350 Beach 79th Street, Rockaway Beach
County: Queens Town/City: City Of New York

Dear Mr. Kennedy:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 2 Office, Division of Environmental Permits at dep.r2@dec.ny.gov, (718) 482-4997.

Sincerely,

Heidi Krahling
Environmental Review Specialist
New York Natural Heritage Program

1344

The following state-listed animals have been documented in the vicinity of the project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing.

For information about any permit considerations for your project, please contact the Permits staff at the NYSDEC Region 2 Office at dep.r2@dec.ny.gov, (718) 482-4997.

The following species have been documented within 0.3 mile of the project site .

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Piping Plover *Breeding*	*Charadrius melodus*	Endangered	Threatened	6945

This report only includes records from the NY Natural Heritage database.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

The following rare plants and significant natural communities have been documented in vicinity of the project site.

We recommend that potential onsite and offsite impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following plants are listed as Endangered or Threatened by New York State, and/or are considered rare by the New York Natural Heritage Program, and so are a vulnerable natural resource of conservation concern.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Narrow-leaf Sea-blite	*Suaeda linearis*	Endangered	Critically Imperiled in NYS

Vernam Barbadoes Peninsula, within 0.1 mile north of the project site across the small inlet of Jamaica Bay, 1997-10-16: Upper edge of high salt marsh in a zone with Limonium, Solidago sempervirens, Salicornia europea, Atriplex, Suaeda maritima, Suaeda calceolariformis, and Suaeda rolandii. Below is a zone of Spartina alterniflora. Shrubs above it are Myrica pensylvanica,Panicum virgatum, Parthenocissus, Prunus serotina and Rhus copallinum. 2130

Cut-leaved Evening-primrose	*Oenothera laciniata*	Endangered	Critically Imperiled in NYS

Vernam Barbadoes Peninsula, within 0.1 mile north of the project site across the small inlet of Jamaica Bay, 1988-su: Open disturbed ground on old fill area with nearby maritime grassland. 4246

Willow Oak	*Quercus phellos*	Endangered	Critically Imperiled in NYS

Vernam Barbadoes Peninsula, within 0.25 mile north of the project site across the small inlet of Jamaica Bay, 1995-10-19: Maritime grassland. 4776

Roland's Sea-blite	*Suaeda rolandii*	Endangered	Critically Imperiled in NYS and Globally Rare

Vernam Barbadoes Peninsula, within 0.1 mile north of the project site across the small inlet of Jamaica Bay, 1997-10-16: Upper edge of high salt marsh in a zone with Limonium, Solidago sempervirens, Salicornia europea, Atriplex, Suaeda maritima, Suaeda calceolariformis, and Suaeda linearis. Below is a zone of Spartina alterniflora. The shrubs above it are Myrica pensylvanica, Panicum virgatum, Parthenocissus, Prunus serotina, and Rhus copallinum. 4731

The following significant natural community is considered significant from a statewide perspective by the NY Natural Heritage Program. It is either an occurrence of a community type that is rare in the state, or a high quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers this community occurrence to have high ecological and conservation value.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Low Salt Marsh			Uncommon Community Type

Jamaica Bay, 0.25 mile northwest of the project site along the edge of the Vernam Barbadoes Peninsula: This is a very large occurrence consisting of multiple patches with few exotic plant species, located in a protected bay within a National Park Service Wildlife Refuge and Recreation area. The occurrence is unhealthy; it is degrading quickly and is converting to mudflat. The surrounding landscape is heavily developed and contributes numerous detrimental inputs to the bay. 10248

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to www.dec.ny.gov/animals/97703.html for Ecological Communities of New York State.

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

Last login June 26, 2019 03:26 PM MDT

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Queens County, New York



Local office

Long Island Ecological Services Field Office

(631) 286-0485
(631) 286-4003

340 Smith Road
Shirley, NY 11967-2258

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Piping Plover Charadrius melodus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot Calidris canutus rufa No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1864	Threatened
Roseate Tern Sterna dougallii dougallii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2083	Endangered

Flowering Plants

NAME	STATUS
Seabeach Amaranth Amaranthus pumilus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8549	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

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Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

MIGRATORY BIRD INFORMATION IS NOT AVAILABLE AT THIS TIME

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird

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on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project

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activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

ESTUARINE AND MARINE DEEPWATER

E1UBLx

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

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The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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EFH Data Notice: Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional Fishery Management Councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

Greater Atlantic Regional Office
Atlantic Highly Migratory Species Management Division

Query Results

Degrees, Minutes, Seconds: Latitude = 40º35'33" N, Longitude = 74º11'37" W
Decimal Degrees: Latitude = 40.59, Longitude = -73.81

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

*** W A R N I N G ***

Please note under "Life Stage(s) Found at Location" the category "ALL" indicates that all life stages of that species share the same map and are designated at the queried location.

EFH

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Winter Flounder	Eggs Juvenile Larvae/Adult	New England	Amendment 14 to the Northeast Multispecies FMP
			Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
			Atlantic Herring	Juvenile Adult Larvae	New England	Amendment 3 to the Atlantic Herring FMP
			Atlantic Cod	Adult	New England	Amendment 14 to the Northeast Multispecies FMP
			Red Hake	Adult Eggs/Larvae/Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Yellowtail Flounder	Adult	New England	Amendment 14 to the Northeast Multispecies FMP
			Monkfish	Adult Eggs/Larvae	New England	Amendment 4 to the Monkfish FMP
			Windowpane Flounder	Adult Larvae Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
			Winter Skate	Adult Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
			Clearnose Skate	Adult Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
			White Shark	Neonate	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
			Scup	Larvae Eggs Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
			Longfin Inshore Squid	Eggs	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
			Atlantic Mackerel	Juvenile Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish
			Atlantic Butterfish	Larvae Adult Juvenile	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
			Summer Flounder	Larvae Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
			Black Sea Bass	Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data. **For links to all EFH text descriptions see the complete data inventory: open data inventory -->
Mid-Atlantic Council HAPCs, No spatial data for summer flounder SAV HAPC.

Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Area : 3.14 acres

Nov 3 2020 12:20:15 Eastern Standard Time



Summary

Name	Count	Area(acres)	Length(mi)
Atlantic Sturgeon	2	0.06	N/A
Shortnose Sturgeon	0	0	N/A
Atlantic Salmon	0	0	N/A
Sea Turtles	4	0.11	N/A
Atlantic Large Whales	0	0	N/A
In or Near Critical Habitat	0	0	N/A

Atlantic Sturgeon

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	ANS_C50_ADU_MAF	Atlantic sturgeon	Adult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	0.03
2	ANS_C50_SUB_MAF	Atlantic sturgeon	Subadult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	0.03

Sea Turtles

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	GRN_STS_AJV_MAF	Green sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	0.03
2	KMP_STS_AJV_MAF	Kemp's ridley sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	0.03
3	LTR_STS_AJV_MAF	Leatherback sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	0.03
4	LOG_STS_AJV_MAF	Loggerhead sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	0.03

DISCLAIMER: Use of this App does NOT replace the Endangered Species Act (ESA) Section 7 consultation process; it is a first step in determining if a proposed Federal action overlaps with listed species or critical habitat presence. Because the data provided through this App are updated regularly, reporting results must include the date they were generated. The report outputs (map/tables) depend on the options picked by the user, including the shape and size of the action area drawn, the layers marked as visible or selectable, and the buffer distance specified when using the "Draw your Action Area" function. Area calculations represent the size of overlap between the user-drawn Area of Interest (with buffer) and the specified S7 Consultation Area. Summary table areas represent the sum of these overlapping areas for each species group.