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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* 2201-2227 Neptune Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
24DCP108K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
240294ZMK, 240295ZRK, 240296ZCK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Department of City Planning			Neptune Avenue Commercial LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shellooe, Director			Eric Vath		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 475 Park Ave S Suite 2803		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10016
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 212-935-1622	EMAIL evath@goldmanharris.com	

5. *Project Description*

The Applicant, Neptune Avenue Commercial LLC, seeks the approval of a zoning map amendment from an M1-2 to an M1-5/R7-3 (MX); a zoning text amendment pursuant to Appendix F of the Zoning Resolution (ZR) to map a Mandatory Inclusionary Housing (MIH) area; a zoning text amendment pursuant to ZR 123-90 to establish a special mixed use (MX) district; and a waterfront certification pursuant to ZR Section 62-811 for waterfront public access and visual corridors ("Proposed Actions") of a waterfront block (Block 6990, Lots 1, 10, and 20) ("Proposed Project Area") in the Coney Island neighborhood of Brooklyn, Community District 13.

The Proposed Actions would facilitate the construction of a new 18-story, 187-foot tall, approximately 203,360 gross square feet (gsf) mixed-use development with 159,780 gsf of residential use containing 145 dwelling units (37-44 of which would be affordable pursuant to MIH), 22,600 gsf of commercial use, and 60 accessory parking spaces ("Proposed Project") at 2201-2227 Neptune Avenue (Block 6990, Lot 10) ("Projected Development Site 1"). In addition to the Projected Development Site, a Potential Development Site was identified in the environmental review process on lot 20 ("Potential Development Site 1") which may be developed into a 19-story, 198,480 gsf mixed-use development, including 175,580 gsf of residential and 22,900 gsf of ground floor commercial use, pursuant to the Proposed Actions. However, given the active commercial uses present on Lot 20 (Potential Development SIte 1) and the waterfront development constraints, redevelopment is not expected to occur within the 2027 build year and is thus not analyzed as a Projected Development Site. The Proposed Project would comply with the proposed M1-5/R7-3 Special Mixed Use Zoning District and be developed to the maximum allowable FAR.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 13	STREET ADDRESS 2201-2227 Neptune Avenue
TAX BLOCK(S) AND LOT(S) Block 6990; Lots 1, 10, and 20		ZIP CODE 11224

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Generally bounded by West 22nd Street to the east, Neptune Avenue to the south, West 23rd Street to the west , and Coney Island Creek to the north.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-2	ZONING SECTIONAL MAP NUMBER 28d

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

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

☐ CITY MAP AMENDMENT ☒ ZONING CERTIFICATION ☐ CONCESSION
☒ ZONING MAP AMENDMENT ☐ ZONING AUTHORIZATION ☐ UDAAP
☒ ZONING TEXT AMENDMENT ☐ ACQUISITION—REAL PROPERTY ☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY ☐ DISPOSITION—REAL PROPERTY ☐ FRANCHISE
☐ HOUSING PLAN & PROJECT ☐ OTHER, explain:
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION 123-90; Appendix F

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

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)
Total directly affected area (sq. ft.): 77,671 Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.): 77,671 Other, describe (sq. ft.):

8. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)
SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 203,360
NUMBER OF BUILDINGS: 1 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 203,360
HEIGHT OF EACH BUILDING (ft.): 187'-8" NUMBER OF STORIES OF EACH BUILDING: 18

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: 40,741
The total square feet not owned or controlled by the applicant: 36,930

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

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

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	159,780	22,600		
Type (*e.g.,* retail, office, school)	145 units			

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 349 NUMBER OF ADDITIONAL WORKERS: 75

Provide a brief explanation of how these numbers were determined: Number of residents was calculated using 2020 ACS 5-year estimate for average household size is 2.41 for Brooklyn CD 13. Number of workers was based on total gross floor area and Worker Multiplier from DCP, Gowanus Neighborhood Rezoning (CEQR #19DCP157K)

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

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

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

9. *Analysis Year* CEQR Technical Manual Chapter 2

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

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 23 months

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: The 2027 build year assumes ULURP approval in 2025 and a 23-month single phase construction period (demolition, excavation, and foundation; six months; superstructure core and shell: 10 months; and interior finishes and MEP: seven months) starting 2025.

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

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

Part II: TECHNICAL ANALYSIS

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

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

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

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

	YES	NO
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 11,302		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
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): 25,132,506		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
o Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☐
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop, or Citywide Ferry Service landing?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) Appendix C	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☒
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(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		

	YES	NO
preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☐	☒
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	☐	☒
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
o The operation of several pieces of diesel equipment in a single location at peak construction?	☒	☐
o Closure of a community facility or disruption in its services?	☐	☒
o Activities within 400 feet of a historic or cultural resource?	☐	☒
o Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
o Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. The proposed construction period is considered short-term (less than two years) and does not warrant a construction assessment based on CEQR Technical Manual guidance.		

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
Kovid Saxena (Sam Schwartz Engineering, D.P.C.)	11/20/2024

SIGNATURE Kovid Saxena

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
Deputy Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission
NAME	DATE
Evren Ulker-Kacar, AICP, Deputy Director	November 27, 2024

SIGNATURE 

NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The Applicant, Neptune Avenue Commercial LLC, seeks the approval of a zoning map amendment to rezone Block 6990. Lots 1, 10, and 20 (the "Project Area") from an M1-2 to an M1-5/R7-3 (MX); a zoning text amendment pursuant to Appendix F of the Zoning Resolution (ZR) to map a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area; a zoning text amendment pursuant to ZR 123-90 to establish a special mixed use (MX) district coterminous with the Project Area; and a waterfront certification pursuant to ZR Section 62-811 for waterfront public access and visual corridors ("Proposed Actions") of a waterfront block in the Coney Island neighborhood of Brooklyn, Community District 13. The Project Area is bounded by the Coney Island Creek to the north, West 22nd Street to the west, Neptune Avenue to the south, and West 23rd Street to the east. The Proposed Actions would facilitate the construction of a new 18-story, 187-foot tall, approximately 203,360 gross square feet (gsf) mixed-use development with 159,780 gsf of residential use containing 145 dwelling units (37-44 of which would be affordable pursuant to MIH), 22,600 gsf of commercial use, and 60 accessory parking spaces ("Proposed Project") at the applicant owned site located at 2201-2227 Neptune Avenue (Block 6990, Lot 10) ("Projected Development Site 1"). In addition to the Projected Development Site, a Potential Development Site was identified in the environmental review process on lot 20 ("Potential Development Site 1") which, for analysis purposes, assumed to be developed into a 19-story, 198,480 gsf mixed-use development, including 175,580 gsf of residential and 22,900 gsf of ground floor commercial use, pursuant to the Proposed Actions.

The proposed development facilitated by the Proposed Actions would be compatible with existing mixed residential and commercial uses along Neptune Avenue and the surrounding area. While the Proposed Actions would allow for an increase in development and bulk relative to the existing zoning, the proposed M1-5/R7-3 (MX) district would allow for residential use of up to 6.0 FAR, which is compatible with the residential uses on the south side of Neptune Avenue, while maintaining the right to have commercial and light manufacturing used in the Project Area. Additionally, consistency with the NYC Waterfront Revitalization Program (WRP) is included in the EAS. The WRP Policy Consistency Assessment Form demonstrate that the Proposed Development is consistent with the policies of the WRP (WRP# 22-128). Therefore, the Proposed Actions would not result in significant adverse impacts to land use, zoning, or public policy, and no further analysis is warranted.

Open Space

A detailed analysis related to open space is included in the EAS. The Proposed Actions would not directly displace any open space, cause any direct changes to open spaces so that they would no longer serve the same user population, or result in substantial new shadows, noise or air emissions on existing open spaces. Therefore, there are no significant adverse direct impacts on open spaces. The Proposed Actions would introduce approximately 359 residents, which warrants a detailed analysis of indirect open space impacts. Under the With-Action conditions, the total open space ratio would decrease by 1.28% to 5.71 acres per 1,000 residents, which is less than the 5% threshold for that would constitute a significant adverse impact pursuant to the guidance of the *CEQR Technical Manual*, therefore the Proposed Actions would not result in a significant adverse impact on open space, and no further analysis is warranted.

Shadows

A detailed analysis related to Shadows is included in the EAS. The analysis finds that the Proposed Actions would facilitate a development that would cast incremental shadows on three open space resources: the West 23rd Street Community Garden, the Coney Island Boat Basin, Coney Island Creek; and two historic resources: The Mark Twain IS 239 school, and the Coney Island Fire Station Pumping Station, which is located within the West 23rd Street Community Garden. The detailed shadows analysis considers shadows from developments on both the Projected Development Site 1 and Potential Development Site 1.

New incremental shadows would be cast on portions of the West 23rd Street Community Garden in the morning hours of all four analysis days. The resource contains potentially sunlight sensitive features such as vegetation and benches for the people tending to the community garden to rest while gardening. On the May 6 analysis day, the resource would receive 3 hours and 44 minutes of incremental shadows from 6:27am until 10:11am. On the June 21 analysis day, the resource would receive 4 hours and 14 minutes of incremental shadows from 5:57am until 10:11am. On the March 21 analysis day, the resource would receive 2 hours and 55 minutes of incremental shadows from 7:36am until 10:31am. On the December 21 analysis day, the resource would receive 1 hour and 19 minutes of incremental shadows from 8:51am until 10:10am. Although the incremental shadows would be cast on the vegetation during these hours, the garden would continue to receive between six to eight hours of sunlight throughout the rest of the day during the growing season, as per CEQR Technical Manual guidelines, and therefore, incremental shadows would not substantially affect the vegetation in the community garden. New incremental shadows would be cast on a southeastern portion of the Coney Island Boat Basin containing a waterfront walkway. On the December 21 analysis day, the resource would receive 1 hour and 32 minutes of incremental shadows between 1:21pm and 2:53pm, There would be no incremental shadows on the remaining analysis days. While portions of the walkway in the southeastern portion of the Coney Island Boat Basin would be cast in incremental shadows, this area represents less than five percent of the total area of the park where minimal use is expected and therefore would not represent a significant adverse impact. New incremental shadows would be cast on portions of Coney Island Creek on all four analysis days. Incremental shadows would move eastward at the start of the analysis days and would not affect one specific area of the Coney Island Creek for long durations. The areas that receive the longest durations of the incremental shadows would receive more than four hours of direct sunlight between the start and end of all the analysis days. The extent and duration of the incremental shadows would not significantly reduce direct sunlight exposure on this natural resource. The specific areas of the creek that would receive incremental shadows would not alter the public's use of the creek. As a result, the Proposed Actions would not result significant

Project Name: 2201-2227 Neptune Avenue Rezoning
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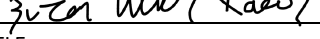
adverse impact, in accordance with *CEQR Technical Manual* methodology. New incremental shadows would be cast on portions of two historic resources: The Coney Island Fire Station Pumping Station and the Mark Twain IS 239 for the Gifted and Talented school. The Coney Island Fire Station Pumping Station is noted for its 'Moderne' architecture, and the Mark Twain IS 239 for the Gifted and Talented school is noted for its neoclassical revival style and for the unique double hollow square plan. Both resources would receive incremental shadows their facades on the March 21, May 6, and June 21 analysis days in the morning hours. However, as defined in the *CEQR Technical Manual*, the design elements of these resources do not fall under the classification of being sunlight-sensitive and therefore incremental shadows would not have a significant adverse impact on these historic resources. Therefore, Proposed Actions would not result in significant adverse shadows impact on identified sunlight-sensitive resources.

Historic and Cultural Resources
A detailed analysis related to historic and cultural resources is included in the EAS. LPC determined that the Project Area is not potentially archeologically significant, and therefore, there would be no significant adverse impacts related to archeological resources. An assessment of architectural resources found that there are two known architectural resources located within the study area. These resources include the State and National Register (S/NR)-listed Coney Island Fire Station Pumping Station and the S/NR-eligible Mark Twain IS 239 for the Gifted and Talented school. These resources are more than 90 feet away from the Project Area, and therefore would not be directly affected by the Proposed Actions. Although the Proposed Actions would allow taller structures within the Project Area, buildings of similar height are located in the surrounding area as described above. The developments on Projected Development Site 1 and Potential Development Site 1 would not obstruct public views of these resources and would not introduce incompatible visual, audible, or atmospheric elements to a historic resource's setting or isolate a resource from its relationship to the streetscape and therefore, there would be no significant adverse impacts on historic and cultural resources.

Hazardous Materials and Air Quality
An (E) designation (E-816) 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 and 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 Andrew Martini at +1 212-720-3315.

TITLE Deputy Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME Evren Ulker-Kacar, AICP	DATE 11/27/2024
SIGNATURE 	
TITLE Chair, City Planning Commission	
NAME Daniel R. Garodnick	DATE 12/2/2024
SIGNATURE	

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Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Brooklyn	Block 6990, Lot 10
Potential Development Site 1	Brooklyn	Block 6990, Lot 20

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-816**) would be established as part of approval of the proposed actions on **Projected Development Site 1** and **Potential Development Site 1** as described below:

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

Hazardous Materials

The (E) designation requirements applicable to **Projected Development Site 1** and **Potential 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.

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Air Quality

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

> ***Projected Development Site 1 (Block 6900, Lot 10):*** *Any new residential and/or commercial development on the above-referenced property must utilize electric-powered HVAC system and hot water equipment with no venting or stacks to avoid any potential significant adverse air quality impact.*
>
> ***Potential Development Site 1 (Block 6900, Lot 20):*** *Any new residential and/or commercial development on the above-referenced property must use natural gas as the type of fuel for heating, ventilation, and air conditioning for the (HVAC) system and hot water equipment, and ensure the HVAC system and hot water equipment stack is located at the highest tier and at least 193.8 feet above grade, and at most 157 feet from the eastern lot line to avoid any potential significant adverse air quality impact.*

Attachment A: Project Description

I. INTRODUCTION

Neptune Avenue Commercial LLC (the "Applicant") is seeking a zoning map amendment (M1-2 to M1-5/R7-3 (MX)) of a waterfront block (Block 6990, Lots 1, 10, and 20) ("Proposed Project Area"); zoning text amendment pursuant to Appendix F and ZR 123-90; and waterfront certification pursuant to ZR Section 62-811, ("Proposed Actions"), to facilitate the construction of a new 18-story, approximately 203,360 gross square feet (gsf) mixed-use development at 2201-2227 Neptune Avenue (Block 6990, Lot 10), ("Projected Development Site 1"), in the Coney Island neighborhood of Brooklyn, Community District 13 (CD 13).

The Proposed Actions would facilitate an approximately 203,360 gsf mixed-use development, including 145 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces ("Proposed Project") on Projected Development Site 1. The Proposed Project is expected to be completed by 2027. The Proposed Actions are discretionary approvals subject to environmental review pursuant to the State Environmental Quality Review Act (SEQRA), in conformance with City Environmental Quality Review (CEQR) guidelines and procedures. The New York City Department of City Planning (DCP) is the lead agency for this environmental review. This attachment establishes the analytical framework for the technical analyses in this Environmental Assessment Statement (EAS).

II. DESCRIPTION OF THE SURROUNDING AREA

The Proposed Project Area is located within Brooklyn CD 13, which encompasses the neighborhoods of Brighton Beach, Coney Island, Gravesend, Homecrest, Sea Gate, and West Brighton. It is generally bounded by Coney Island Creek to the north, West 22nd Street to the east, Neptune Avenue to the south, and West 23rd street to the west (**Figure A-1: Site Location Map**).

There are a variety of residential, commercial, and light industrial uses in the surrounding area (**Figure A-3: Land Use Map)**. To the west of the Proposed Project Area is a community garden and I.S. 239 Mark Twain middle school. To the east of the Proposed Project Area, the north side of Neptune Avenue, there are one-story commercial and automotive buildings. To the north, on the opposite side of Coney Island Creek, there is a large home improvement store and self-storage facility. South of Neptune Avenue detached and semi-detached, one- and two-family homes are the prevailing housing type. There is a 15-story residential building located southwest of the Projected Development Site 1 in the midblock of West 23rd Street. There are also multiple parking lots in the surrounding area.

The Proposed Project Area is in an M1-2 district, which permits 4.8 FAR for community facility use and 2.0 FAR for commercial and manufacturing uses. Residential uses are not permitted. In this district, the height and setback regulations restrict the front wall height to the lesser of 60 feet or 4 stories, above which the building must be setback beyond a sky exposure plane sloping away from the street line at a ratio of 2.7:1 on a narrow street and 5.6:1 on a wide street. Within a 400-foot radius of the Proposed Project Area, there are (i) R5 and R6 districts mapped to the west and south, (ii) C3 and C8-1 districts located east, southeast, and southwest as well as across the Coney Island Creek, and (iii) an M1-2 district to the southeast (**Figure A-4: Existing Zoning Map**).

Public transit includes bus routes on Mermaid Avenue and Surf Avenue, such as the B74 (Sea Gate – Stillwell Ave) and B36 (Sheepshead Bay – Coney Island), respectively; and express bus service to Manhattan on Surf Avenue (X28 and X38). Additionally, the D, F, N, and Q subway trains are also available at the Coney Island/Stillwell Avenue Station, approximately 0.5 miles to the east of the Proposed Project Area.

III. DESCRIPTION OF THE PROPOSED PROJECT AREA AND PROJECT SITE

Proposed Project Area: The Proposed Project Area, also known as the Rezoning Area, consists of Block 6990, Lots 1, 10, and 20, in the Coney Island neighborhood of Brooklyn, CD 13 (**Figure A-2: Tax Lot Map**). It is considered a waterfront block. It is bounded by West 22nd Street to the east, Neptune Avenue to the south, West 23rd Street to the west, and Coney Island Creek to the north. It is currently in a M1-2 zoning district (**Figure A-4: Existing Zoning Map**). M1-2 districts are light manufacturing districts with mainly two to four-story industrial buildings, with a maximum allowable Floor Area Ratio (FAR) of 2.0 (4.8 for community facility use). Parking requirements include one space per 300 sf. The Proposed Project Area is within the coastal and flood zone boundary. There is no Inclusionary Housing Designated Area in the Proposed Project Area.

2760 W 22nd Street (Block 6990, Lot 1) and 2227 Neptune Avenue (Block 6990, Lot 10) are applicant-owned and comprise the Zoning Lot, with a total area of approximately 40,741 sf. The Zoning Lot has 160' of street frontage on West 22nd Street, 238' of street frontage on Neptune Avenue, and 210' of street frontage on West 23rd Street. There is an existing seven-story, 95,014 gsf building, constructed in 2019 and consisting of a women's shelter with 198 DUs. This lot is neither a projected nor a potential development site.

Projected Development Site 1: is the applicant-owned site located at 2201-2227 Neptune Avenue (Block 6990, Lot 10), which comprises approximately 25,628 sf of lot area with 143' of street frontage on Neptune Avenue and 210' of street frontage on West 23rd Street. It is improved with a one-story 25,298 gsf manufacturing building, comprising of active warehouse and commercial uses. It is accessible from West 23rd Street and Neptune Avenue.

Potential Development Site 1: is located at 2737 West 23rd Street (Block 6990, Lot 20) and is under separate ownership (Neptune Equities Group LLC) and has approximately 36,930 sf of lot area with 132' street frontage on West 23rd Street and 62' of street frontage on West 22nd Street. It is improved with a one-story 25,000 gsf manufacturing building consisting of an office supply store, which is a long-standing active use. It is accessible from West 23rd Street.

IV. DESCRIPTION OF THE PROPOSED PROJECT

The Proposed Project (**Figure A-7: Proposed Site Plan**) would include the demolition of an existing one-story 25,298 gsf commercial building and the construction of new 187'-8" tall, 18-story plus cellar, approximately 203,360 gsf mixed-use development, including 159,780 gsf of residential use; 22,600 gsf of commercial use; and 60 parking spaces. There would be approximately 145 DUs, 37-45 of which are proposed to be affordable DUs. Overall floor area ratio (FAR) is proposed to be 3.99 on Projected Development Site 1. The ground floor would include 25,298 gsf of commercial space, along with the residential lobby. Access to the residential lobby would be provided along West 23rd Street. Parking entrance/exit would be provided via a 24' ramp on West 23rd Street as well. The building is proposed to be setback from the street line at different levels starting on the 2nd floor on West 23rd Street, 6th floor on Neptune Avenue and 8th floor on the corner of West 23rd Street and Neptune Avenue before rising to the maximum building height. Residential terraces are proposed on the 2nd, 3rd, 7th, and 9th floors.

V. ACTION(S) NECESSARY TO FACILITATE THE PROJECT

The discretionary actions necessary to facilitate the construction of the Proposed Project include:

- A zoning map change to Zoning Map 28d, rezoning the Project Area from M1-2 to an M1-5/R7-3 (MX) district;
- A text amendment of:
    - Article 12, Chapter 3, of the Zoning Resolution to create a Special Mixed-Use District, which promotes the opportunity for mixed residential and light manufacturing uses in close proximity to each other;
    - Appendix F of the Zoning Resolution to classify the Project Area on Block 1529 as an MIH Designated Area. Within this MIH Designate Area, all developments, enlargements and conversions that provide residential floor area will have to comply with the MIH program requirements of one of the options, described below:
        - Option One: 25 percent of the residential floor area shall be provided as housing affordable to households at an average of 60 percent of the Income Index (AMI), with no unit targeted at a level exceeding 130 percent of AMI. As part of the 25 percent set-aside, 10 percent of residential floor area shall be provided for households at 40 percent AMI; or
        - Option Two: 30 percent of the residential floor area shall be provided as housing affordable to households at an average of 80 percent of the Income Index (AMI), with no unit targeted at a level exceeding 130 percent of AMI.
        - Workforce Option: 30 percent of the residential floor area shall be provided as housing affordable to households at an average of 115 percent AMI, with no unit targeted at a level exceeding 135 percent of AMI.
- A Chairperson certification pursuant to ZR Section 62-811 for waterfront public access and visual corridors.

VI. ANALYSIS YEAR

The Proposed Project would to be operational and available for occupancy in 2027. The 2027 build year assumes ULURP approval in 2025 and a 23-month single phase construction period (demolition, excavation, and foundation; six months; superstructure core and shell: 10 months; and interior finishes and MEP: seven months) starting 2025.

VII. PURPOSE AND NEED OF THE PROPOSED ACTION

The existing M1-2 zoning district would not allow development of any residential use and has a high parking requirement for other non-residential uses. Additionally, due to the Project Site being located on a waterfront block, no development would be allowed without a zoning certification pursuant to Section 68-811 of the Zoning Resolution.

The proposed zoning map amendment to a M1-5/R7-3 Special Mixed Use Zoning District (**Figure A-5: Proposed Zoning Map**) would support the policies and strategies outlined in *Housing Our Neighbors: A Blueprint for Housing and Homelessness* by enabling the Applicant to create new affordable housing and new retail space with reduce parking needs in a transit-rich neighborhood. While the Projected Development Site 1 is not considered to be within the Transit Zone, it is close to multiple bus lines including B74 along Neptune Avenue and within a 10-minute walking distance of D, F, N, and Q subway lines at the Stillwell Avenue station. The lower parking requirement of R7-3 would help alleviate the Community District's affordable housing needs without adding to traffic concerns, which is one of the top three pressing issues as identified by CD 13 in their 2023 *Statements of Community District Needs and Community Board Budget Requests*. Additionally, the proposed mixed-use district incorporating the M1-5 manufacturing district would allow the existing business on Lot 20 to remain legally conforming.

The proposed zoning text amendment would establish a new Mandatory Inclusionary Housing (MIH) Area within the Rezoning Area. The MIH program requires that permanently income-restricted housing be provided within certain new residential developments, enlargements, and conversions from non-residential to residential use within mapped MIH Areas. Within the MIH Area, the Proposed Project must comply with the requirements of MIH Option 1, Option 2, or Workforce Option. Under the proposed zoning text amendment, the Proposed Project would be able to provide approximately 37 new income-restricted DUs in Brooklyn CD 13, where 61.1% of households are rent burdened (households spending 30% or more of their income on rent), according to the American Community Survey 2018-2022 5-year estimates.

The Proposed Project would maximize the allowable residential FAR under the proposed rezoning through the MIH program and provide active commercial retail in keeping with the existing surrounding uses, proving beneficial for the surrounding community.

VIII. KNOWN DEVELOPMENTS WITHIN THE PROJECT VICINTY

Based on active building permits in the area, no known, ongoing, or proposed developments were identified within 400 feet of the Proposed Project Area within the anticipated completion date or prior to the 2027 build year.

IX. NO-ACTION CONDITION

Absent the Proposed Actions (the No-Action scenario), the Proposed Project Area would not be rezoned, and the Projected Development Site 1 would not procure the certification required for any new development. Therefore, the Proposed Project Area would remain the same as under existing conditions, as described in Section III.

X. WITH-ACTION CONDITION

In the With-Action scenario, the proposed M1-5/R7-3 Special Mixed Use Zoning District would allow a maximum of 5.0 FAR for uses such as, community facility, commercial, recreation, general services, and light manufacturing and a maximum residential use of 6.0 FAR, for zoning lots in MIH areas. The total allowable FAR under the Proposed Actions would be 6.0. The applicant owned Projected Development Site 1 (Block 6990, Lot 10) would be developed with the Proposed Project described in Section IV. The Proposed Project assumes the maximum development feasible under the Proposed Actions and would provide only the required parking.

In addition, the Proposed Actions may result in development on the non-applicant owned lot (Block 6990, Lot 20) and will thus be analyzed as a potential development site (“Potential Development Site 1”). Potential Development Site 1 is under separate ownership and given the active commercial uses present on the site and the waterfront development constraints, redevelopment is not expected to occur within the 2027 build year, and is thus not analyzed as a Projected Development Site.

Under the proposed M1-5/R7-3 rezoning, the Potential Development Site 1 may be developed to a maximum of approximately 198,480 gsf mixed-use development, including 175,580 gsf of residential use and 22,900 gsf of ground floor commercial use. Per the guidance in the *CEQR Technical Manual*, Potential Development Site 1 is not considered in the analysis of any density-related impact categories (such as, open space and transportation) but will be analyzed for site-specific impacts (such as, shadows, historic and cultural resources, urban design, and noise).

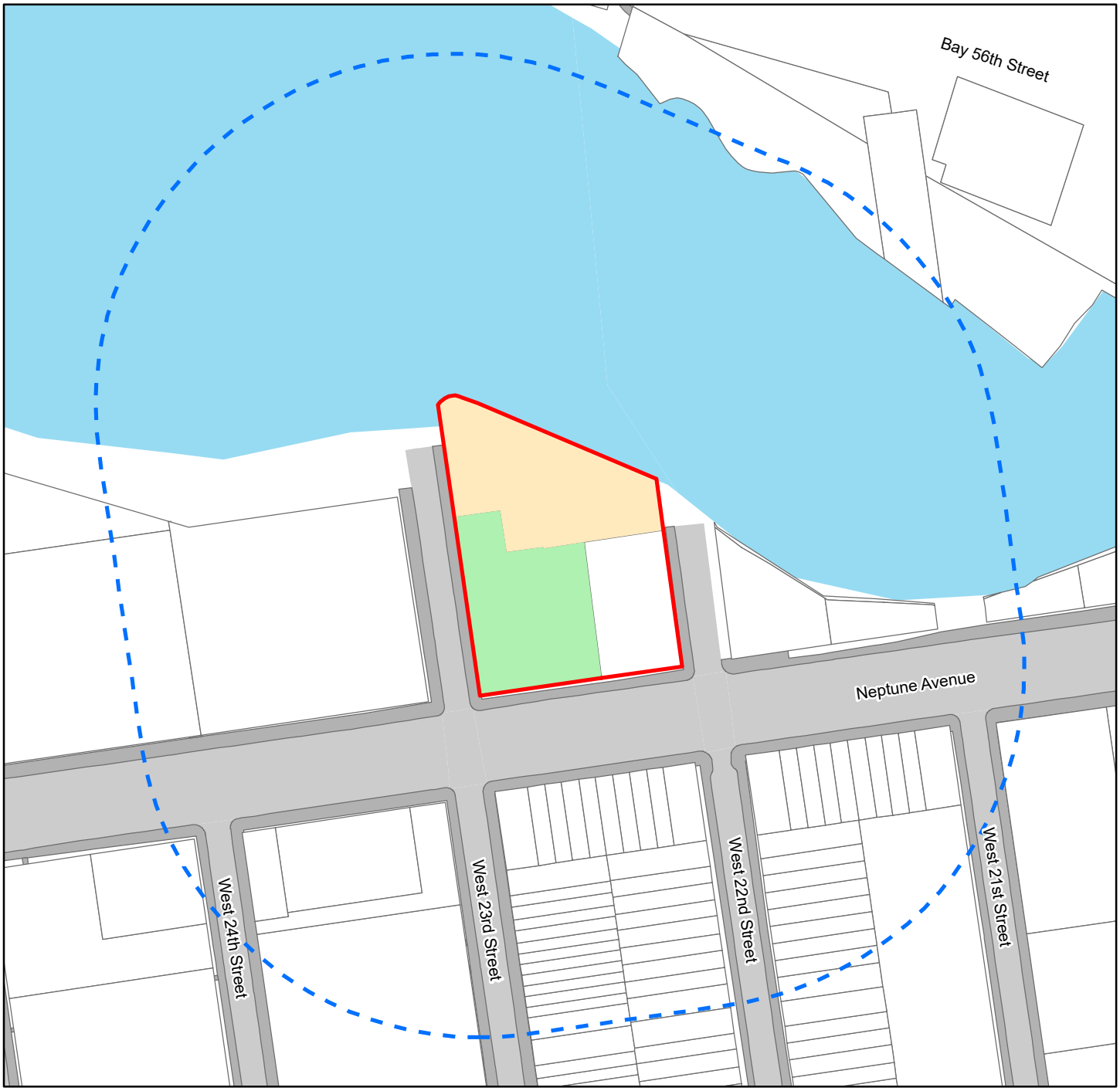
XI. REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDS)

The RWCDS establishes the appropriate framework for analysis to allow the lead agency to make reasonable conclusions regarding the likely environmental effects resulting from a Proposed Project. The RWCDS focuses on the incremental potential development that would be permitted on the Projected Development Site 1 between the No-Action and With-Action conditions.

Accounting for Projected Development Site 1, the RWCDS incremental development would consist of 145 DUs—109 market rate and 37-45 affordable. The net residential square footage increase would be 159,780 gsf. A net loss of 2,698 gsf of commercial floor area would also be realized from the No-Action Condition to the With-Action Condition increment. Further, an increase of 60 residential parking spaces would result in the With-Action Condition compared to the No-Action Condition to accommodate the future residential parking demands **(Table A-1).** In addition, Block 6990, Lot 20 will be assessed as a Potential Development Site and would rise to approximately 190 feet in height.

Table A-1: Increment between No-Action and With-Action Conditions

Use	Existing Condition (gsf)	No-Action Condition (gsf)	With-Action Condition (gsf)	Increment (gsf)
Projected Development Site 1				
Residential *(dwelling units)*	0 *0*	0 *0*	159,780 *145*	**159,780** ***145***
Commercial Use (Retail)	25,298	25,298	22,600	**-2,698**
Parking *(spaces)*	0 0	0 *0*	20,980 *60*	**20,980** ***60***
Total (gsf)	**25,298**	**25,298**	**203,360**	**178,062**
Potential Development Site 1				
Residential *(dwelling units)*	0	0	175,580 N/A	**175,580** N/A
Commercial Use (Retail)	25,000	25,000	22,900	**-2,100**
Parking	0	0	0	**0**
Total (gsf)	**25,000**	**25,000**	**198,480**	**173,480**



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

Projected Development Site 1

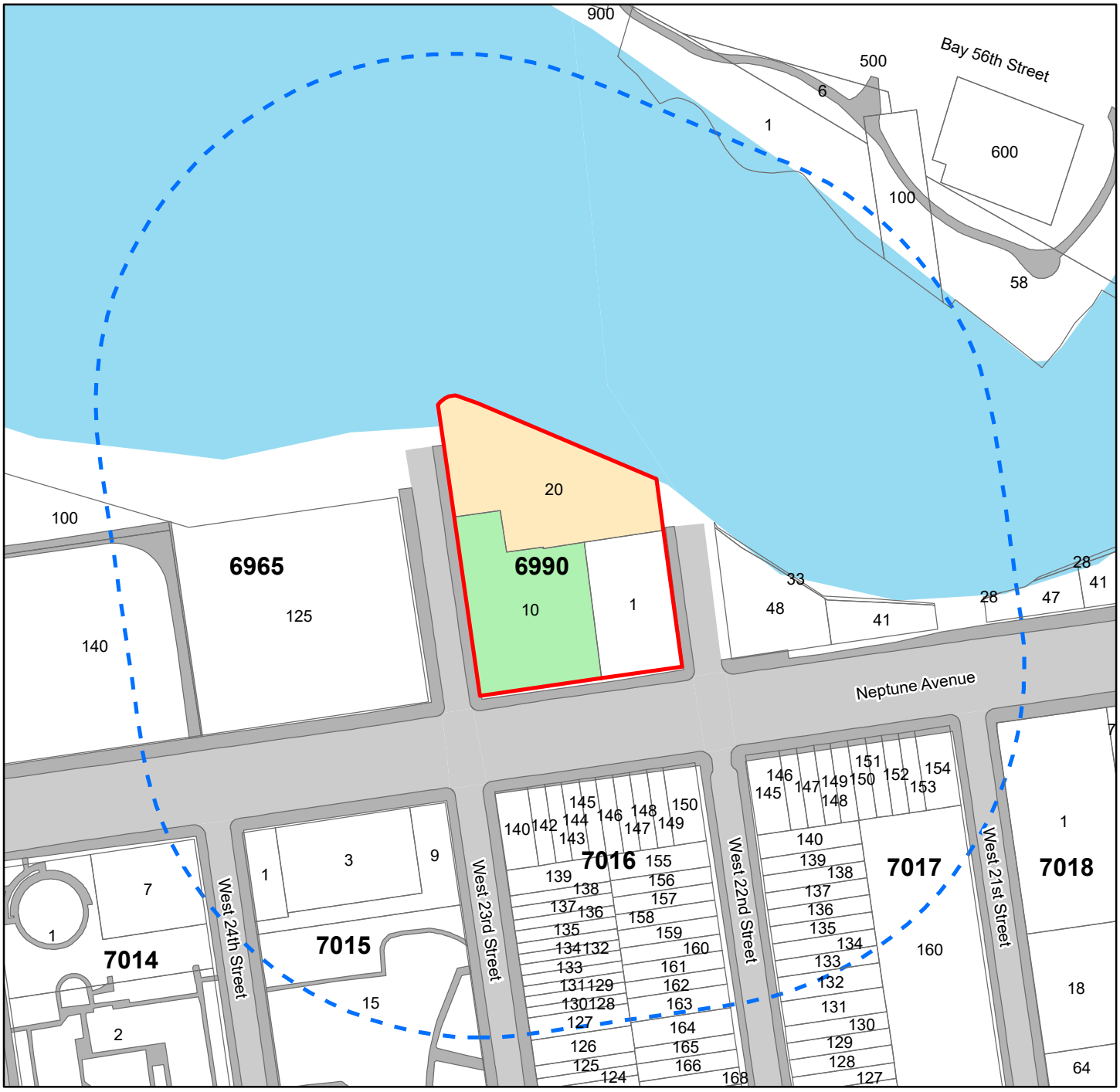
Potential Development Site 1

400-foot Boundary

SITE LOCATION MAP

Figure A-1

2201-2227 Neptune Avenue EAS



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

Projected Development Site 1

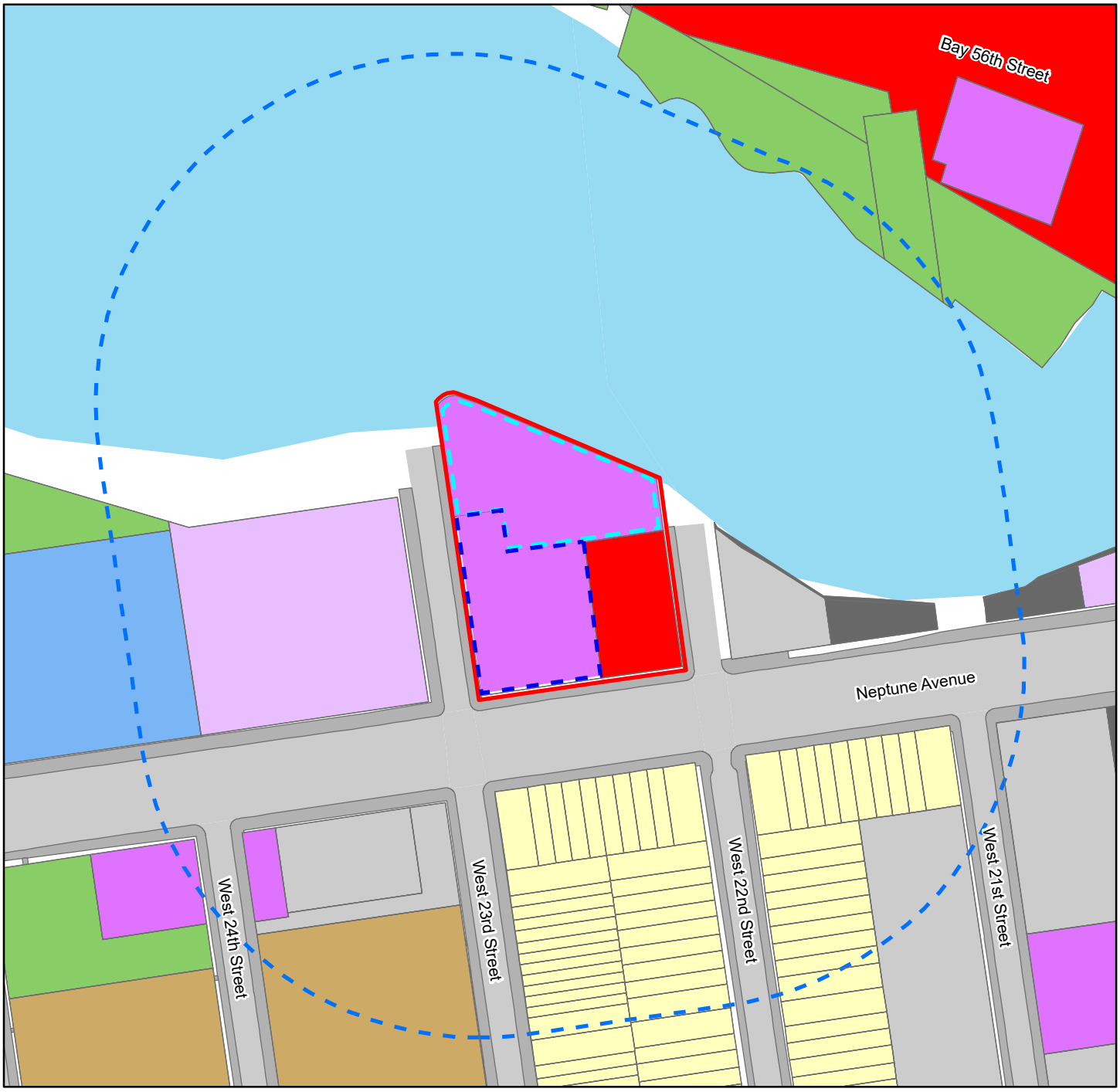
Potential Development Site 1

400-foot Boundary

TAX MAP

Figure A-2

2201-2227 Neptune Avenue EAS



Source: 2023 PLUTO, DCP

Proposed Project Area

400-foot Boundary

Projected Development Site 1

Potential Development Site 1

0 100 200 400 Feet

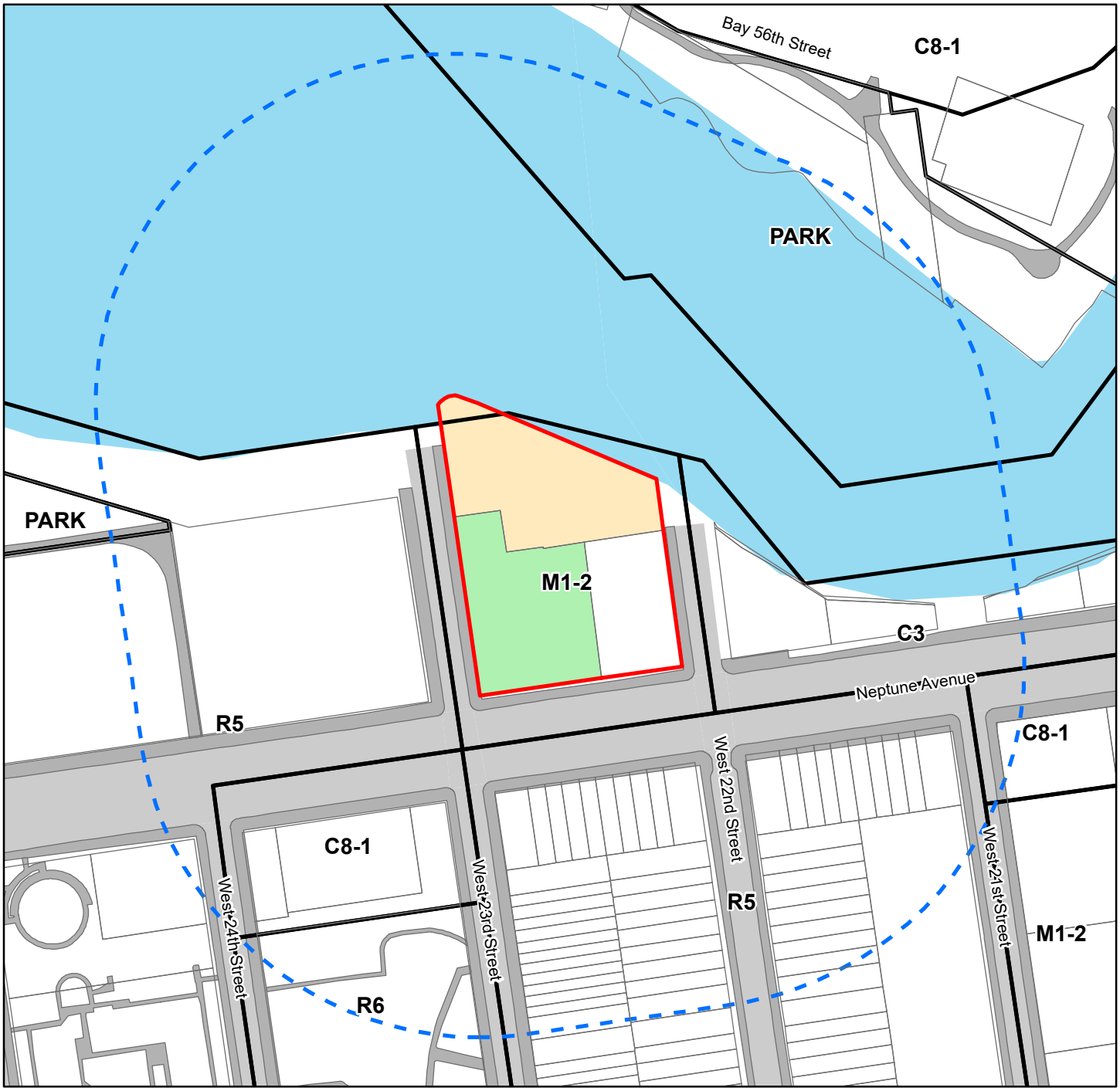
Land use

- One & Two Family Buildings
- Multi-Family Walk-Up Buildings
- Multi-Family Elevator Buildings
- Mixed Residential & Commercial Buildings
- Commericial & Office Buildings
- Industrial & Manufacturing
- Transportation & Utility
- Public Facilities & Institutions
- Open Space & Outdoor Recreation
- Parking Facilities
- Vacant Land

LAND USE MAP

Figure A-3

Neptune Avenue EAS



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

Projected Development Site 1

Potential Development Site 1

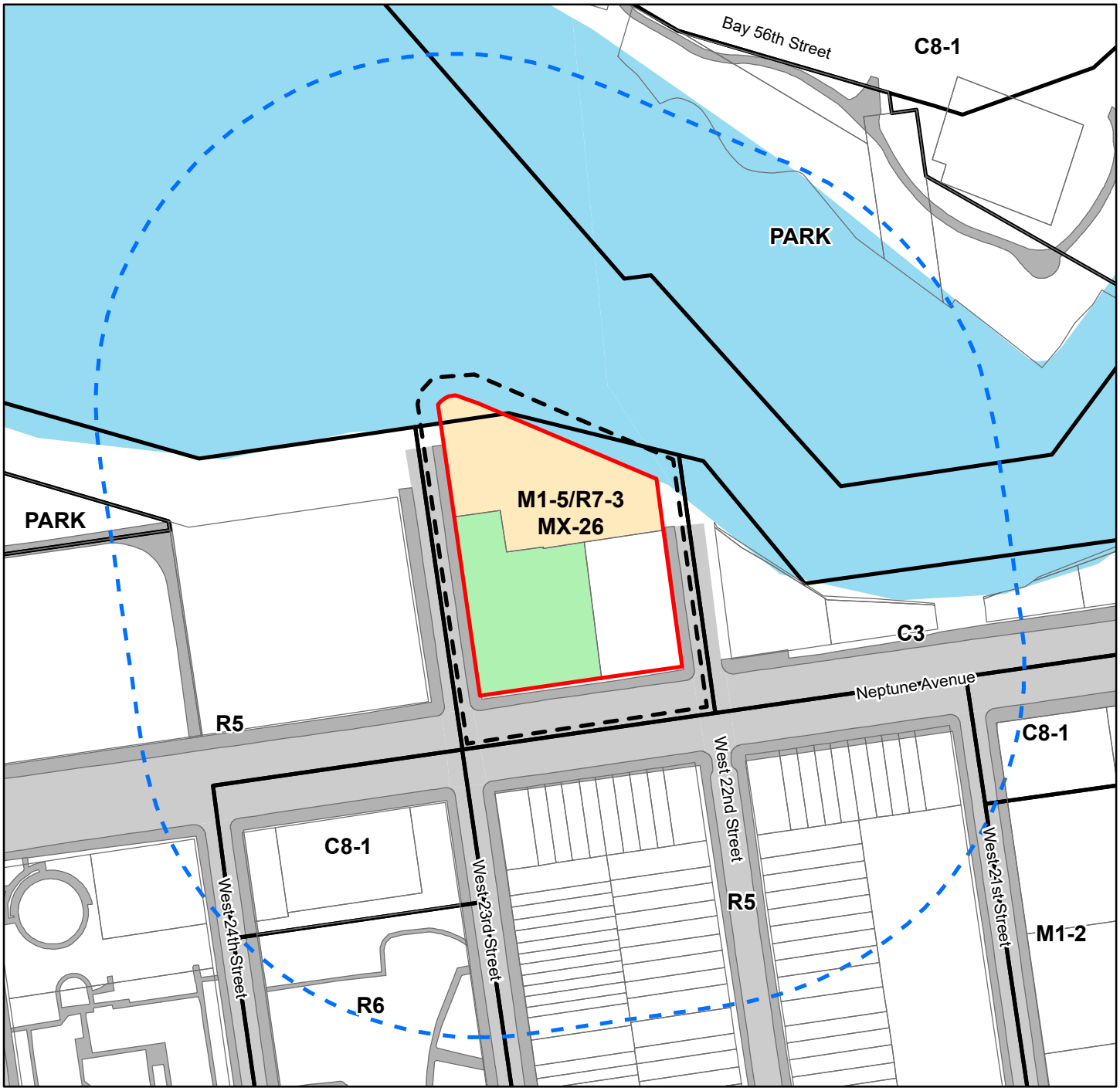
400-foot Boundary

Zoning Districts

ZONING MAP

Figure A-4

2201-2227 Neptune Avenue EAS



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Affected Area ("Rezoning Area")

Projected Development Site 1

Potential Development Site 1

400-foot Boundary

Zoning Districts

Proposed Zoning Distrcts

PROPOSED ZONING MAP

Figure A-5

2201-2227 Neptune Avenue EAS



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

Projected Development Site 1

Potential Development Site 1

400-foot Boundary

Keyed Photograph

AERIAL MAP

Figure A-6

2201-2227 Neptune Avenue EAS

Photograph 1: *View of Project Site, looking east from Neptune Avenue.*



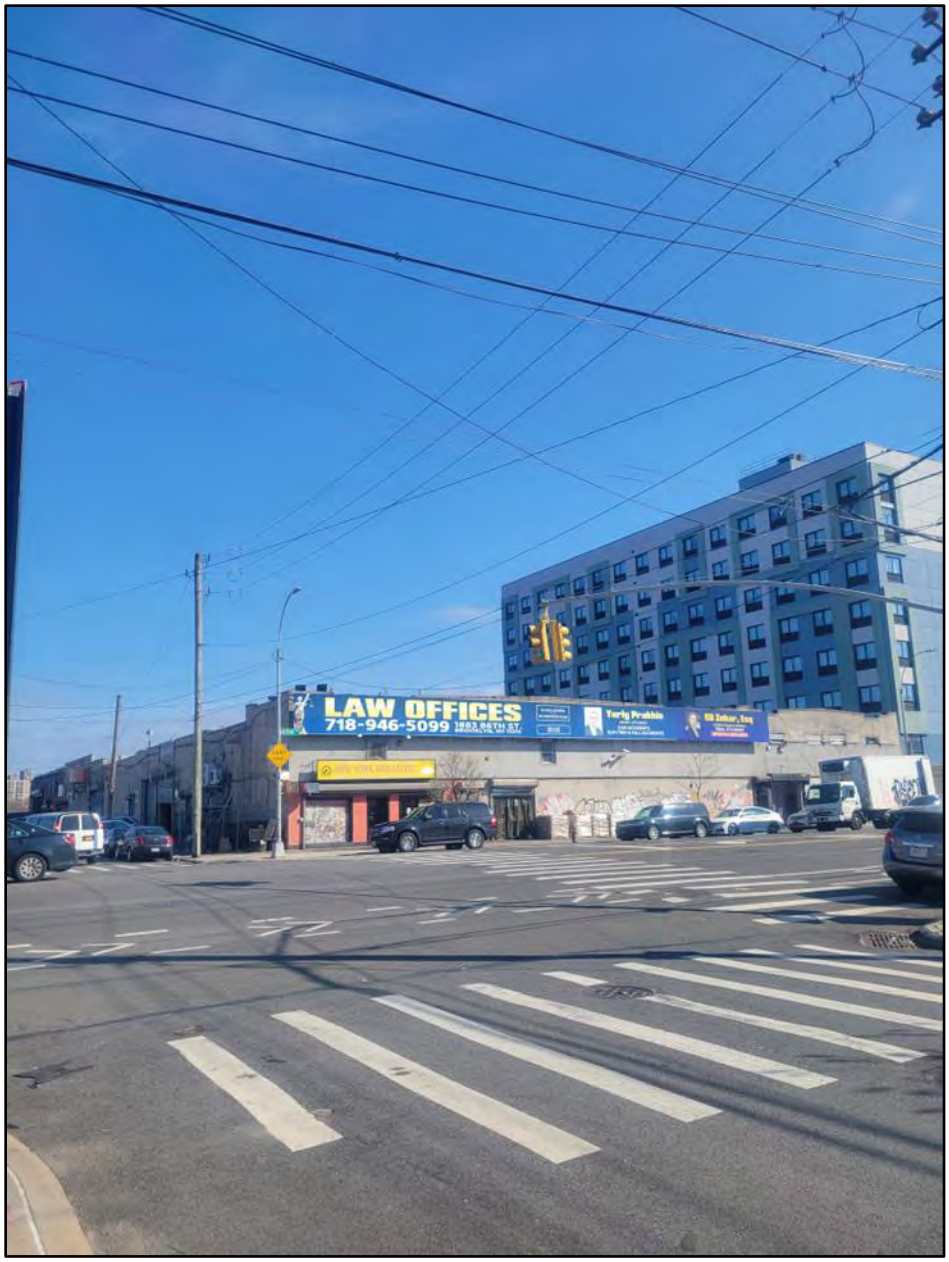
Note: All photographs taken on April 4, 2023

Photograph 2: *View of the Project Site, looking west from Neptune Avenue.*



Note: All photographs taken on April 4, 2023

Photograph 3: *View of the Project Site, looking north from West 23rd Street.*



Note: All photographs taken on April 4, 2023

Photograph 4: *View of the Project Site, looking south from West 23rd Street.*

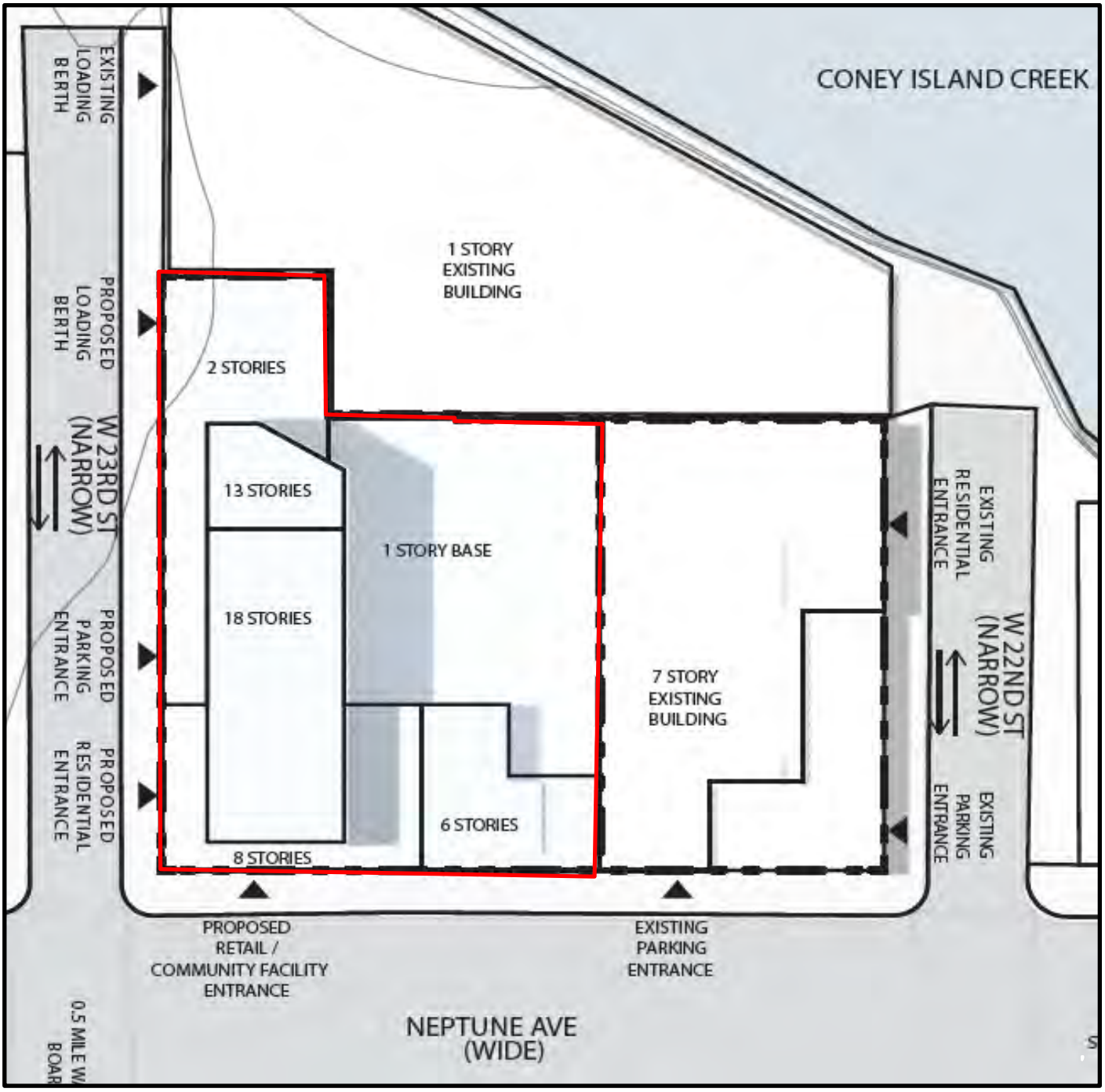


Note: All photographs taken on April 4, 2023

Photograph 5: *View of the Project Site, looking north from West 22nd Street.*



Note: All photographs taken on April 4, 2023



Source: Dattner Architects

Projected Development Site 1

PROPOSED SITE PLAN

Figure A-7

2201-2227 Neptune Avenue EAS

Attachment B: Land Use, Zoning, and Public Policy

I. INTRODUCTION

This attachment assesses the potential for significant adverse impacts of the Proposed Project on land use, zoning, and public policy. As described in Section 210 of Chapter 4 of the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, the land use, zoning, and public policy assessment evaluates the uses and development trends in the area and considers whether a proposed project is compatible with those conditions or may affect them. Similarly, the assessment considers the project's conformance to, and effect on, the area's zoning and other applicable public policies.

The Applicant is seeking a zoning map amendment (M1-2 to M1-5/R7-3 (MX)) of a waterfront block (Block 6990, Lots 1, 10, and 20) ("Proposed Project Area"); zoning text amendment pursuant to Appendix F and Article 12, Chapter 3; and waterfront certification pursuant to ZR Section 62-811, ("Proposed Actions"), to facilitate the construction of the new mixed-use development at 2201-2227 Neptune Avenue (Block 6990, Lot 10), ("Projected Development Site 1"), in the Coney Island neighborhood of Brooklyn, Community District 13 (CD 13).

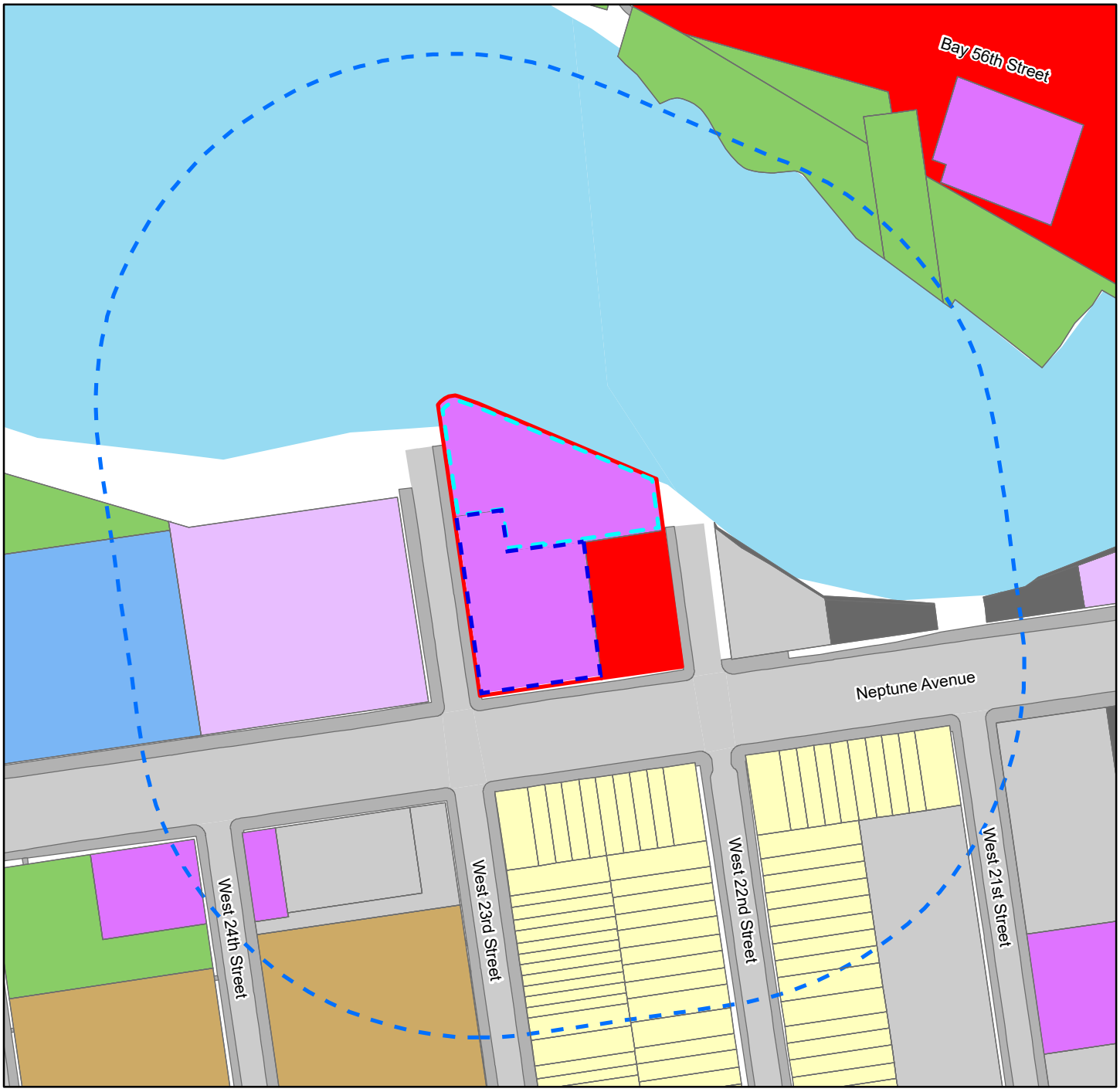
As described in Attachment A, "Project Description," the Proposed Actions would facilitate the development of an approximately 203,360 gsf mixed-use development, including 149 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces. The Proposed Project would be operational in 2027.

CEQR guidelines require that a land use, zoning, and public policy assessment should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. This assessment describes existing, future (2027) No-Action and future (2027) With-Action conditions related to land use, zoning and public policy for Projected Development Site 1 and for an area within 400 feet of it (the "study area"). Changes in land use and zoning that would occur between the No-Action and With-Action conditions are disclosed.

II. METHODOLOGY

Existing land uses were identified through the NYC Zoning and Land Use (ZoLa) database and PLUTO™ 22v1 shapefiles and verified by site visits in March 2022. NYC Zoning Maps and the ZR of the City of New York were consulted to describe existing zoning districts in the land use study area, which provided the basis for the identification of future No-Action and With-Action conditions. Research was conducted to identify relevant public policies recognized by the NYC Department of City Planning (DCP) and other city agencies.

The appropriate study area for land use and zoning is related to the type and size of the proposed project and the location and neighborhood context of the area that could be affected by the proposed project. Since the Proposed Actions are site-specific, in conformance to *CEQR Technical Manual* guidance, the impact of the Proposed Actions on land use, zoning, and public policy are addressed for a land use study area that extends approximately 400 feet from the boundary of the Projected Development Site 1 and encompasses the area most likely to experience indirect impacts due to the Proposed Project.



Source: 2023 PLUTO, DCP

Proposed Project Area

400-foot Boundary

Projected Development Site 1

Potential Development Site 1

0 100 200 400 Feet

Land use

- One & Two Family Buildings
- Multi-Family Walk-Up Buildings
- Multi-Family Elevator Buildings
- Mixed Residential & Commercial Buildings
- Commericial & Office Buildings
- Industrial & Manufacturing
- Transportation & Utility
- Public Facilities & Institutions
- Open Space & Outdoor Recreation
- Parking Facilities
- Vacant Land

LAND USE MAP

Figure B-1

Neptune Avenue EAS

III. EXISTING CONDITIONS

Land Use

Proposed Project Area

The Proposed Project Area, also known as the Rezoning Area, consists of Block 6990, Lots 1, 10, and 20, in the Coney Island neighborhood of Brooklyn, CD 13. It is considered a waterfront block. It is bounded by West 22nd Street to the east, Neptune Avenue to the south, West 23rd Street to the west, and Coney Island Creek to the north. The Proposed Project Area is within the coastal and flood zone boundary.

Projected Development Site 1

The Projected Development Site 1 is located on Lot 10 in Block 6990 is approximately 25,628 sf in lot area with 143' of street frontage on Neptune Avenue and 210' of street frontage on West 23rd Street. It is improved with a one-story 25,298 gsf manufacturing building, comprising of an active warehouse that is accessible from West 23rd Street and Neptune Avenue.

Potential Development Site 1

The Potential Development Site 1 is located on Lot 20 in Block 6990 is approximately 36,929 sf in lot area with 132' of street frontage on West 23rd Street and 62' of street frontage on West 22nd Street. It is improved with a one-story 25,000 gsf manufacturing building consisting of an office supply store, which is a long-standing active use. It is accessible from West 23rd Street.

Study Area

Existing land uses within the 400-foot radius study area include a variety of residential, commercial, and light industrial uses. To the west of the Projected Development Site 1 is a community garden and I.S. 239 Mark Twain middle school. To the east of the Projected Development Site 1, there are one-story commercial and automotive buildings. To the north, on the opposite side of Coney Island Creek, there is a large home improvement store and self-storage facility. South of Neptune Avenue detached and semi-detached, one- and two-family homes are the prevailing housing type. There is a 15-story New York City Housing Authority (NYCHA) building located southwest of the Projected Development Site 1 on Block 7015. There are also multiple parking lots in the surrounding area **(Figure B-1: Land Use Map)**.

Zoning

The Proposed Project Area including the Projected Development Site 1 and the Potential Development Site 1 is in a M1-2 zoning district **(Figure B-2: Existing Zoning Map)**. M1-2 districts are light manufacturing districts with mainly two to four-story industrial buildings, with a maximum allowable Floor Area Ratio (FAR) of 2.0 (4.8 for community facility use). Residential uses are not permitted. In this district, the height and setback regulations restrict the front wall height to the lesser of 60 feet or 4 stories, above which the building must be setback beyond a sky exposure plane sloping away from the street line at a ratio of 2.7:1 on a narrow street and 5.6:1 on a wide street. Parking requirements include one space per 300 sf.

Study Area

Within a 400-foot radius of the Projected Development Site 1, there are (i) R5 and R6 districts mapped to the west and south, (ii) C3 and C8-1 districts located east, southeast, and southwest as well as across the Coney Island Creek, and (iii) an M1-2 district to the southeast **(Figure B-2: Existing Zoning Map)**.

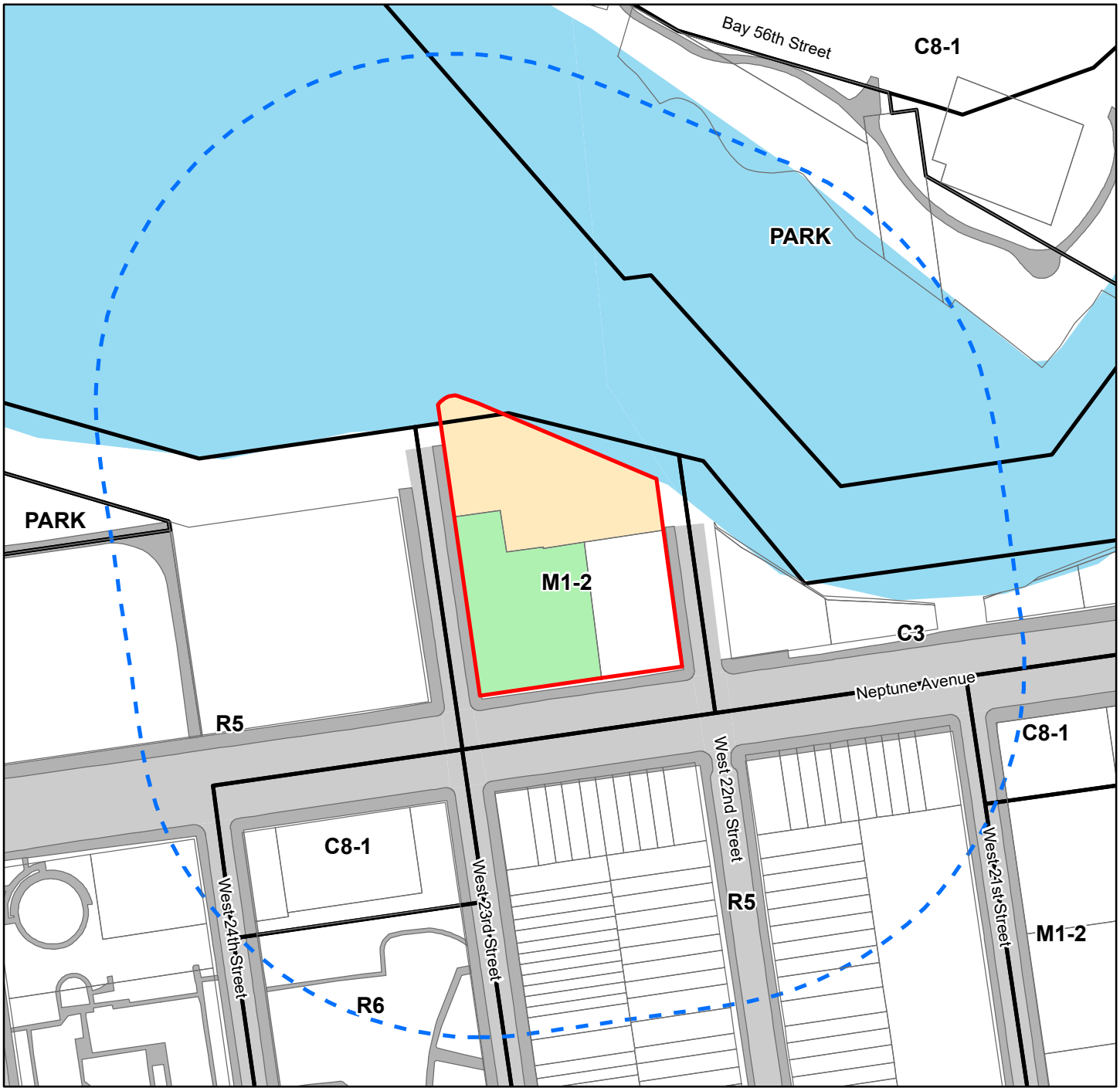
The maximum floor area ratio (FAR) in R5 districts is 1.25 FAR. R5 district typically produces three-and four-story attached houses and small apartment houses. With a height limit of 40 feet, R5 districts provide a transition between lower- and higher-density neighborhoods.

R6 zoning districts typically produce a diverse mix of building types and heights, and are widely mapped in built-up, medium-density areas. The minimum lot area in R6 districts is 1,700 sf with a minimum 18’ width and 30 feet rear yard. Standard height factor regulations produce small multi-family buildings on small zoning lots and tall buildings on larger lots with setbacks from the street with the residential FAR ranging from 0.78 at one-story to 2.43 for a typical height of 13 stories with no height limitations.

C8-1 zoning districts tie commercial and manufacturing districts together, typical uses for C8 districts are automobile showrooms and repair shops, warehouses, gas stations and car washes. They are also mapped along major traffic arteries.

M1-2 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. Nearly all industrial uses are allowed in M1 districts. Offices, hotels and most retail uses are also permitted. Community facilities, such as hospitals, are allowed in M1 districts only by special permit, but houses of worship are allowed as-of-right.

C3 districts permit waterfront recreational activities including boating, fishing, aquatic sports equipment sales and rentals, bicycle shops, ice cream stores and public and private beaches etc. C3 districts also permit residences and community facilities. The FAR permitted in C3 districts is 0.5. Commercial buildings may be no more than two stories or 30 feet high, whichever is less. Residential development in C3 districts is governed by R3-2 district regulations.



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

Projected Development Site 1

Potential Development Site 1

400-foot Boundary

Zoning Districts

ZONING MAP

Figure B-2

2201-2227 Neptune Avenue EAS

Public Policy

The Proposed Project Area including the Projected Development Site 1 and the Potential Development Site 1 resides within the City's Coastal Zone, requiring a Waterfront Revitalization Program (WRP) Consistency Review of public policies for the City's coastal areas. The Projected Development Site 1 and study area are governed by the following major public policy initiatives: Housing Our Neighbors: A Blueprint for Housing and Homelessness and the NYC WRP.

Housing Our Neighbors

In June 2022, the Adams administration released *Housing Our Neighbors*: *A Blueprint for Housing and Homelessness Plan* a comprehensive blueprint to create high quality affordable housing for New Yorkers and preserve and accelerate the creation of 15,000 supportive housing two years ahead of the 2030 schedule, as promised by the City in 2015. The blueprint rests on five key pillars:

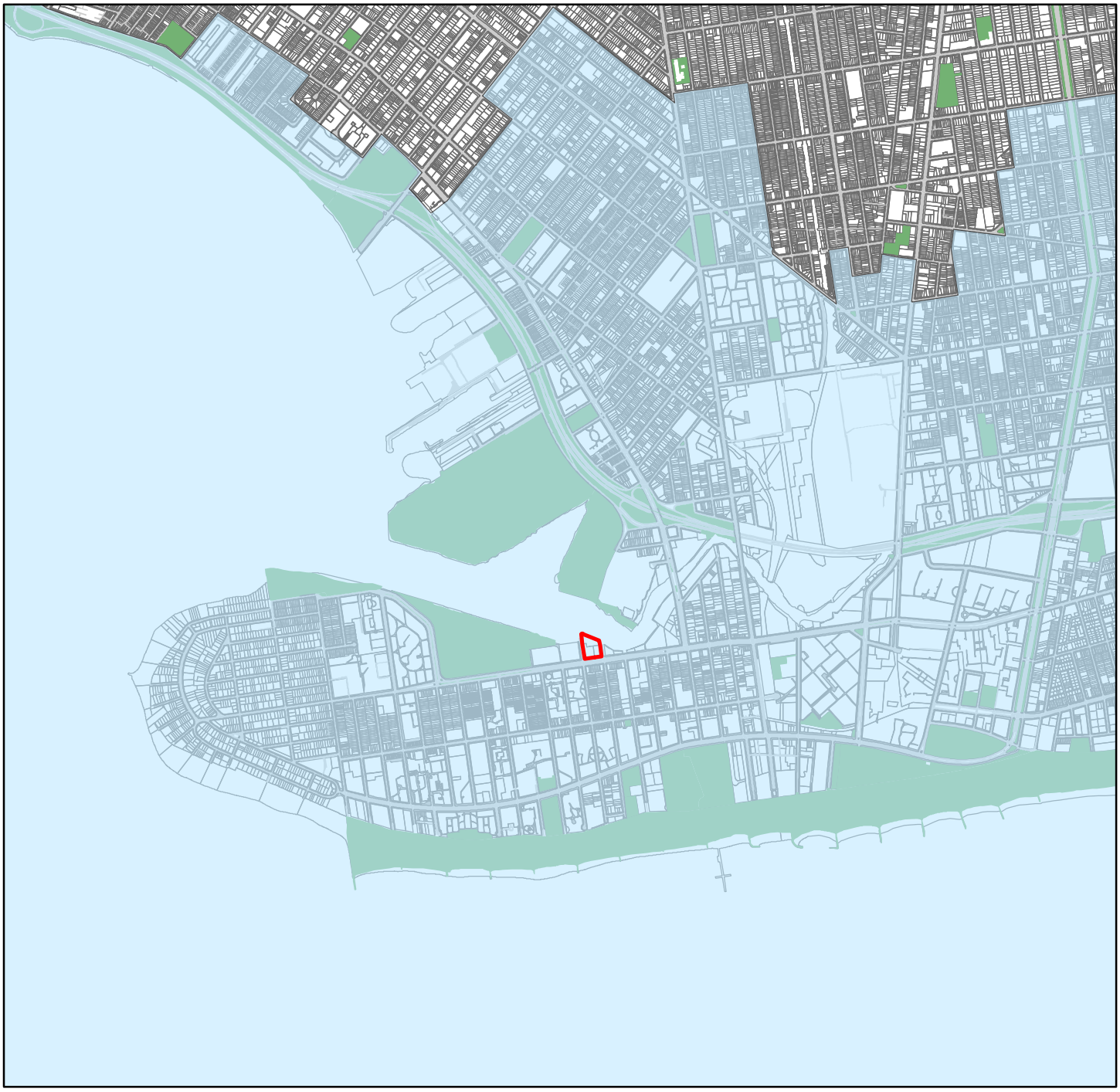
- Transforming NYCHA,
- Addressing Homelessness and Housing Instability,
- Creating and Preserving Affordable Housing,
- Improving the Health and Safety of New Yorkers, and
- Reducing Administrative Burden.

Mayor Adams' $22 billion capital commitment represents the largest investment in housing in New York City's history, allowing the city to accelerate the creation of supportive housing and continue the current pace of affordable housing production, despite rising inflation and interest rates. The Adams administration will make critical investments in the affordable housing stock, while simultaneously pursuing policy reforms, state legislation, tax incentives, and a suite of other tools to help new housing get built faster and increase overall capacity for new supply. The plan, which was created through coordination with 32 agencies and with input from affordable housing developers, homeless shelter providers, and housing and homelessness advocates outlines many initiatives that will accelerate affordable construction, protect tenants, and deliver more value from affordable housing.

Waterfront Revitalization Program

The NYC 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 by the City of New York in 1982, revised in 2002, and revised once more in 2016. A local waterfront revitalization program, such as NYC's, is subject to approval by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act and the Federal Coastal Zone Management Act. All proposed actions subject to CEQR, Uniform Land Use Review Procedure, or other local, state, or federal agency discretionary actions that are situated within NYC's designated Coastal Zone must be reviewed and assessed for their consistency with the WRP. The Project Site is located within the City's designated Coastal Zone (**Figure B-3: Coastal Zone Boundary Map**).

Additionally, the WRP sets forth five types of special area designations included in the City's Coastal Zone, such that if a project is located adjacent to or within a special area designation it is subject to conformance with the priority policies associated. These types include Special Natural Waterfront Areas (SNWAs), Significant Maritime and Industrial Areas (SMIAs), the Arthur Kill Ecologically Sensitive Maritime and Industrial Area (ESMIA), Priority Marine Activity Zones (PMAZ), and Recognized Ecological Complexes (RECs). There is one REC located south of the Project Site which is the Muscat Cove/Bronx Park REC.



Source: 2023 PLUTO, DCP

0 1,200 2,400 4,800 Feet

Proposed Project Area

NYC Coastal Zone Boundary

COASTAL ZONE MAP

Figure B-3

2201-2227 Neptune Avenue EAS

IV. FUTURE WITHOUT PROPOSED ACTIONS (NO-ACTION CONDITION)

Land Use

Without the Proposed Actions in place, the Proposed Project Area would not be rezoned, and the Projected Development Site 1 and the Potential Development Site 1 would not procure the certification required for any new development. Therefore, the Proposed Project Area would remain the same as under existing conditions, as described in Section III.

Study Area

Based on active building permits in the area, no known, ongoing, or proposed developments were identified within 400 feet of the Proposed Project Area within the anticipated completion date or prior to the 2027 build year.

Zoning

In the No-Action condition, no changes to zoning are expected to occur in the Proposed Project Area or in the study area. The Projected Development Site 1 would remain in its current M1-2 zoning designation.

Public Policy

Without the Proposed Actions, no changes to zoning or public policy are expected to occur in the Proposed Project Area or in the study area.

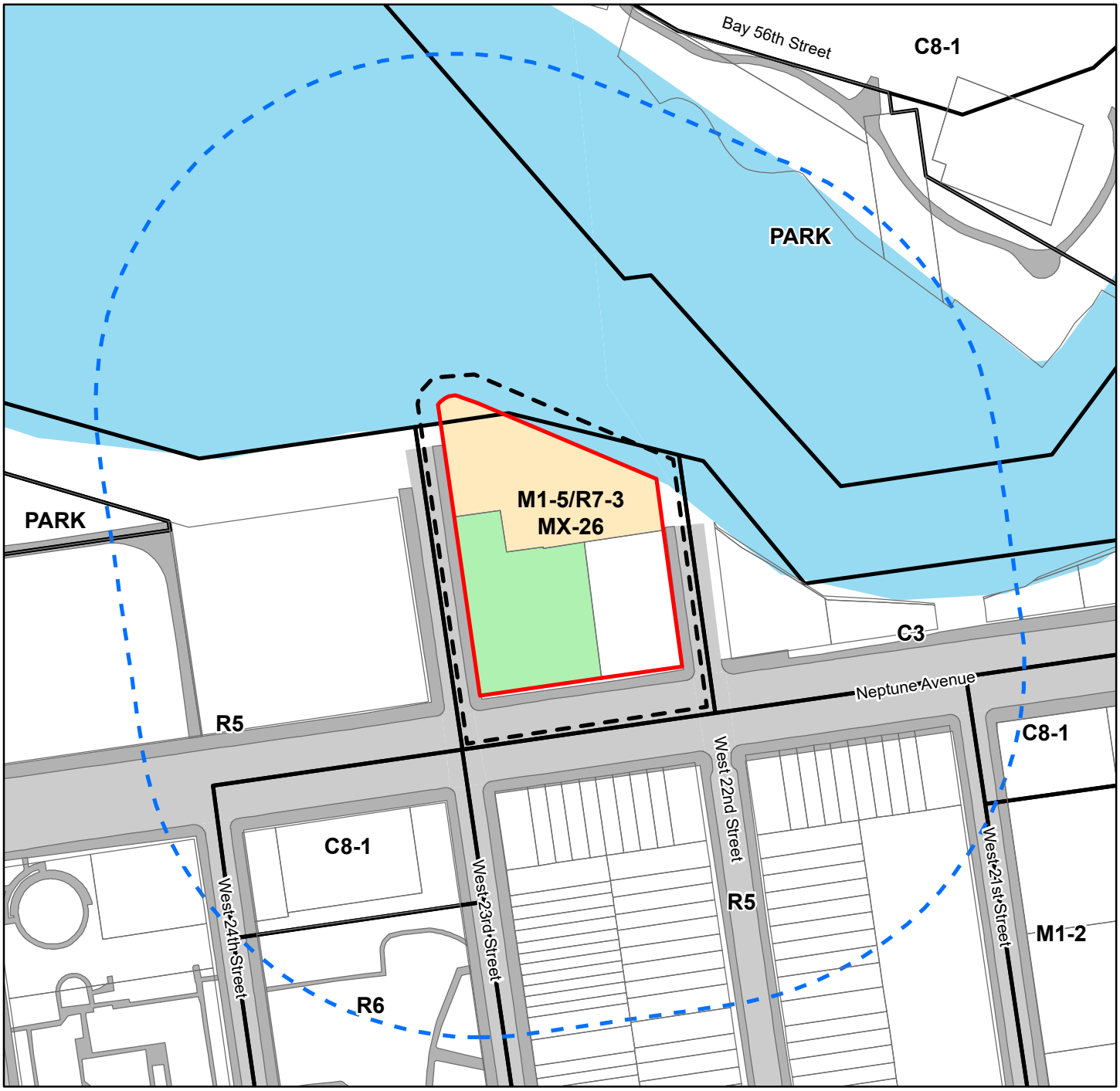
V. FUTURE WITH PROPOSED ACTIONS (WITH-ACTION CONDITION)

Land Use

As described in Attachment A, “Project Description,” in the In the future with the Proposed Actions, the Proposed Project Area, including the Projected Development Site 1 and Potential Development Site 1, would be rezoned from M1-2 to M1-5/R7-3 (MX) (**Figure B-4 Proposed Zoning Map**).

The Proposed Project would result in an approximately 203,360 gsf mixed-use development, including 149 dwelling units (Dus), 37-45 of which is proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces on Projected Development Site 1 (**Table B-1: Increment Between No-Action and With-Action Conditions**).

Potential Development Site 1 is owned and occupied since 1998 by a family-owned business, Discover Group Inc., which is a wholesale distributor of brand name office equipment, computer technology, ink and toner supplies, consumer electronics and accessories, cleaning and breakroom products, tools, janitorial, sanitary supplies, and general household and houseware items, marine and camping, and outdoor sporting goods. The property owner has no known plans to sell or redevelop the site of their business establishment. Potential Development Site 1 is a waterfront zoning lot that would need to satisfy Waterfront Public Access Area (WPAA) requirements to accommodate a predominantly residential or commercial development in the future. Based on the unusual lot geometry, the WPAA would likely require discretionary authorization(s) to modify requirements subject to a separate environmental and land use approval process. In addition,



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Affected Area ("Rezoning Area")

Projected Development Site 1

Potential Development Site 1

400-foot Boundary

Zoning Districts

Proposed Zoning Distrcts

PROPOSED ZONING MAP

Figure B-4

2201-2227 Neptune Avenue EAS

development pursuant to the Proposed Actions on Lot 20 would typically warrant a turnaround for vehicular access on 23rd Street. Geometric and contextual constraints, including the historic Coney Island Fire Station/Pumping Station (90NR01344) site, which includes the Coney Island Community Garden, would preclude provision of such vehicular access. The United States Army Corps of Engineers also has jurisdiction and a Corps Permit will be required for development on Potential Development Site 1. The permit application will require a separate environmental review pursuant to the State Environmental Quality Review Act and the National Environmental Policy Act. With the environmental permitting requirements, any new development on Lot 20, subsequent to approval of the Proposed Actions, would be unlikely prior to the build year for the Proposed Project.

Table B-1: Increment between No-Action and With-Action Conditions

Use	Existing Condition (gsf)	No-Action Condition (gsf)	With-Action Condition (gsf)	Increment (gsf)
Residential	0	0	159,780	**159,780**
(dwelling units)	*0*	*0*	*149*	***149***
Commercial Use (Retail)	25,298	25,298	22,600	**-2,698**
Parking *(spaces)*	0	*0*	*60*	***60***
Total (gsf)	**25,298**	**25,298**	**182,380**	**157,082**

Study Area

Land uses and zoning designations in the study area would remain unchanged from the No-Action condition. The Proposed Actions would add residential and commercial retail to the Study Area. The Proposed Actions are not expected to alter any land uses in the study area. Land use patterns and trends would be similar to what is already present within the Study Area.

Zoning

As described in Attachment A, "Project Description," in the future with the Proposed Actions, the proposed M1-5/R7-3 Special Mixed Use Zoning District would allow a maximum of 5.0 FAR for uses such as, community facility, commercial, recreation, general services, and light manufacturing and a maximum residential use of 6.0 FAR, for zoning lots in MIH areas. The total allowable FAR under the Proposed Actions would be 6.0. Projected Development Site 1 (Block 6990, Lot 10) would be developed with the Proposed Project. In addition, the Proposed Actions may result in some potential development on Potential Development Site 1 (Block 6990, Lot 20). However, this would be unlikely prior to the build year for the Proposed Project.

The existing M1-2 zoning district would not allow development of any residential use and has a high parking requirement for other non-residential uses. Additionally, since the Projected Development Site 1 is located on a waterfront block, no development would be allowed without a zoning certification pursuant to Section 68-811 of the Zoning Resolution.

The proposed M1-5/R7-3 zoning district is appropriate as the Projected Development Site 1 is well served by public transportation such that it is well equipped to handle the proposed increase in density. While the Projected Development Site 1 is not considered to be within the Transit Zone, it is close to multiple bus lines including B74 along Neptune Avenue and within a 10-minute walking distance of D, F, N, and Q

subway lines at the Stillwell Avenue station. The lower parking requirement of R7-3 would help alleviate the Community District's affordable housing needs without adding to traffic concerns, which is one of the top three pressing issues as identified by CD 13 in their 2023 *Statements of Community District Needs and Community Board Budget Requests*. Additionally, the proposed mixed-use district incorporating the M1-5 manufacturing district would allow the existing business on Lot 20 to remain legally conforming. The Proposed Project would maximize the allowable residential FAR under the proposed rezoning through the MIH program and provide active commercial retail in keeping with the existing surrounding uses.

Public Policy

Housing Our Neighbors

The Proposed Project would further the initiative of the third pillar of the Housing Our Neighbors Plan: Creating and Preserving Affordable Housing. The main goals of this key pillar are: accelerate and increase capacity for new housing supply citywide, increase access to transit and amenities for low-income New Yorkers, meet the housing needs of seniors and people with disabilities, expand tools to preserve existing low-cost and affordable housing, promote housing stability for renters and provide inclusive development opportunities for equitable growth. The Proposed Actions would facilitate a mixed-use development that includes residential uses with 37-45 affordable housing units.

One NYC 2050

The Proposed Project would be consistent with two key goals in *One NYC 2050*:

Thriving Neighborhoods

One NYC 2050 offers big solutions to big challenges, including plans to create and preserve 300,000 units of affordable housing, and generate 100,000 good paying jobs. This requires supporting continued mixed-income housing creation in transit-accessible areas and supporting transit-oriented growth across the region. The City will pursue these ambitious goals through plans that are formulated at the neighborhood scale, with an emphasis on affordability and livability. The Proposed Project would further the goals of this initiative that aims to "Support creative of vibrant neighborhoods by alleviating barriers to mixed-use development and utilizing available financing tools." The Proposed Actions would facilitate a mixed-use development that would provide both residential and commercial uses to a site located near a variety of transit options and access to nearby parks and open spaces to all New Yorkers.

A Livable Climate

One NYC 2050 offers solutions to strengthen communities, buildings, infrastructure, and waterfront to be more resilient. To ensure New York City is prepared, OneNYC 2050 has an innovative, multilayered plan that enables a just and equitable transition to citywide climate resiliency. This strategy will mitigate the physical risks of climate change, empower New Yorkers to take climate-smart adaptation measures, and streamline and transform our policies and governance structures to support climate resiliency. The Proposed Project is consistent with this initiative by providing a consistency assessment in accordance with the City's Waterfront Revitalization Program. The consistency assessment is provided below.

VI. WRP CONSISTENCY ASSESSMENT

The Coastal Zone Boundary

The Projected Development Site 1 is located within the City's Coastal Zone (**Figure B-3: NYC Coastal Zone**). Consequently, the Proposed Project is subject to the policies of New York City's Waterfront Revitalization Program (WRP). The WRP establishes the City's policies and objectives for maximizing

benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form for the Proposed Project identifies whether the Proposed Project would "promote" or "hinder" relevant policies and provides a written assessment to determine consistency with each applicable WRP policy. This section provides additional information for policies that the Proposed Project would promote. The WRP prepared in support of the Proposed Actions (WRP# 22-128) was reviewed by the DCP (in its capacity as the City Coastal Commission), which determined that the Proposed Actions would not substantially hinder the achievement of a WRP policy.

Policy 1.1: Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.

The Proposed Actions consist of zoning map and text amendments to facilitate construction of the Proposed Project. The Applicant is seeking a zoning map amendment to rezone the Projected Development Site 1 from its existing M1-2 to M1-5/R7-3 (MX) on (Block 6990, Lot 10). The rezoning of the Projected Development Site 1 would facilitate the development of an approximately 203,360 gsf mixed-use residential and commercial building. Land uses surrounding the area are primarily a variety of residential, commercial, and light industrial uses. The change of use from manufacturing to residential and commercial facilitated by the Proposed Action would be consistent with the surrounding land uses and would encourage residential and commercial redevelopment in an appropriate Coastal Zone area. Additionally, the change of use, facilitated by the Proposed Actions, from manufacturing to residential would result in a decreased risk of potentially hazardous stormwater runoff. Building densities in the study area vary from over 6 FAR directly adjacent to Projected Development Site 1 on 2750 W 22nd Street (Block 6990, Lot 1) to single family 1 FAR homes south of Projected Development Site 1 across Neptune Avenue. Although the Proposed Project would facilitate higher densities than what can be found in the study area, such building densities can be found in the broader Coney Island neighborhood. The Projected Development Site 1 does not have any unique or significant natural features that would limit its redevelopment. Therefore, the Proposed Project would be consistent with Policy 1.1.

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

The Proposed Project would be built at a density compatible with the capacity of the surrounding roadways, mass transit, and essential community services. The Projected Development Site 1 is well served by multiple modes of public transit, including bus and subway service. The closest bus stop is at Neptune Avenue/West 24th Street serving the B74 (Sea Gate – Stillwell Ave) bus route, approximately 400 feet east of the Projected Development Site 1. Nearby bus routes include the B36 (Sheepshead Bay – Coney Island) on Surf Avenue, approximately 1,600 feet south of the Projected Development Site 1; the B82 bus route (Coney Island-Spring Creek), approximately 1,400 feet east of the Project Development Site I; and the express bus service to Manhattan on Surf Avenue (X28 and X38). Additionally, the D, F, N, and Q subway trains are also available at the Coney Island/Stillwell Avenue Station, approximately 0.5 miles to the east of the Proposed Project Area. Overall, public facilities and infrastructure are adequate to handle the demands of the Proposed Project. Therefore, the Proposed Project would be consistent with Policy 1.3.

Policy 1.5: Integrate the consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development.

The Proposed Project would facilitate 149 DUs and integrate resiliency measures that account for potential risks due to the effects of climate change including coastal and tidal flooding. The commercial use/community facility use on the first floor of the Proposed Project would be built at grade which is approximately 6 inches below the Base Flood Elevation (BFE) of 10 feet relative to the North American Vertical Datum of 1988 (NAVD88). The cellar level and the residential and commercial/community facility use lobby areas would be dry floodproofed with removable barriers at building openings. The mechanical

and electrical systems will be elevated to be above the Design Flood Elevation (DFE) asper ASCE 24 (American Society of Civil Engineers, Flood Resistant Design and Construction). Residences will be located above the BFE at an elevation of 26 feet NAVD88, occupying the second through 18th floors. Though the proposed building would incorporate the resiliency measures noted above, development on Potential Development Site 1 may be vulnerable to the effects of coastal and tidal flooding or severe storm events in the absence of similar resiliency measures. Development in the Rezoning Area would also be affected in the event of flooding in the surrounding area. In such a scenario, access to the Project Site would be temporarily impeded until flood waters recede.

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

Projected Development Site 1 is located in a separate sewer area and thus, stormwater is redirected to outfalls to the closest waterway, which is this case is the Coney Island Creek. Wastewater is conveyed to the Coney Island WRRF through interceptor force mains, the closest of which is 252 feet from the Project Site. In addressing wastewater generated by the Proposed Project and stormwater runoff, the Proposed Project would comply with all NYC Department of Environmental Protection (DEP) permitting requirements and regulations which includes obtaining connection permits to the city's sanitary sewer system and establishing a Sewer Connection and Drainage Plan (SCP) for wastewater. In addition, the Proposed Project would utilize erosion and sediment control practices, such as silt fences and sediment traps, during construction to mitigate for any hazardous stormwater runoff. Once constructed, the Proposed Project would include a stormwater detention tank located at the building's base to control the amount of outflowing stormwater. Additional measures to mitigate for stormwater using green infrastructure may include green roofs and "rain garden" tree pits per NYC Department of Transportation (NYCDOT) and NYC Department of Parks ("NYC Parks") and Recreation standards.

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

Guidance provided by DCP includes a detailed methodology to determine the consistency of a project with Policy 6.2. This guidance identifies three basic steps to determine the consistency of a project with this policy: (1) identify vulnerabilities and consequences; (2) identify adaptive strategies; and (3) assess policy consistency. A summary of this process as applied to the Proposed Project is provided in the following discussion.

1. Identify vulnerabilities and consequences.

1(a). Complete the Flood Elevation Worksheet to identify current and future flood elevations in relation to the elevations of the site and project features.

For this assessment, building features are defined in one of four categories: (1) *vulnerable*: project features that have the potential to incur significant damage if flooded; (2) *critical*: project features that if damaged would have severe impacts on the project and its ability to function as designed; (3) *potentially hazardous*: project features that if damaged or made unsecure by flooding could potentially adversely affect the health and safety of the public and the environment; and (4) *other*: project features that are entirely open and unenclosed spaces, except the open storage of potentially hazardous materials, which may be damaged by flooding, but are not likely to present significant consequences and are more easily repaired.

The Flood Elevation Worksheet was prepared for the Proposed Project and is provided in **Appendix A**. This tool identifies current and future flood elevations in relation to the elevations of the Projected Development Site 1 and project features, presents a range of future flood elevations as affected by sea

level rise, from high (90th percentile) to low (10th percentile), where the "high estimate" represents a high-end projected increase in flood elevation.

According to the NYC Panel on Climate Change (NPCC), sea level rise projections in the middle range (25th to 75th percentile) in NYC are likely to have an increase of four to eight inches by the 2020s, 11 to 21 inches by the 2050s, 18 to 39 inches by the 2080s, and 22 to 50 inches by 2100. Under the "high estimate" scenario (90th percentile), sea level rise projections reach 10 inches by the 2020s, 30 inches by the 2050s, 58 inches by the 2080s, and 75 inches by 2100. Sea level rise projections are relative to a 2000-2004 base period (the most recent projections from the NPCC were issued in 2015). According to 2015 Preliminary Flood Insurance Rate Maps, the Projected Development Site 1 is located within the 1% annual chance flood hazard area, Zone AE (an area of high flood risk subject to inundation by the 1% annual chance flood event), with a BFE of +10 feet NAVD88. Based on the NPCC "high estimate" scenario, the 1% annual chance flood BFE for the Projected Development Site 1 could increase up to 10.83 feet in the 2020s, 12.5 feet in the 2050s, 14.83 feet in the 2080s, and up to 16.25 feet by 2100 (NAVD88). The Proposed Project is anticipated to have a lifespan of about 60 years, or until 2086, when the Proposed Project is expected to meet the end of its useful life and adaptive reuse in the form of major rehabilitation or reconstruction would be required. The Proposed Project is evaluated for projected flood levels through 2100 (the farthest data projection currently available).

1(b). Identify any project feature that may be located below the elevation of the 1-Percent Floodplain over the lifespan of the project under any sea level rise scenario.

The BFE at the Projected Development Site 1 is 10 feet NAVD88 which ranges from 2 to 4 feet above grade. The DFE is at 12 feet NAVD88 which ranges from 4 to 6 feet above grade. Vulnerable features of the Proposed Project that would be located below the current 1% annual chance flood elevation includes the residential lobby and commercial/community space at 6 feet NAVD88 and the parking garage located at the cellar level of the Proposed Project at 0 feet NAVD88. These features would be vulnerable to sea level rise under current conditions and for all future sea level rise scenarios until 2100. The projected inundation of critical features of the Proposed Project would surpass the anticipated lifespan of the Proposed Project, or 2084. The lowest floor of residences of the Proposed Project would be located above the current 1% annual chance flood elevation at 26 feet NAVD88, as well as above the 1% annual chance flood evaluation for all future sea level rise scenarios until the 2100s (ranging from 11.25 feet NAVD88 to 16.25 feet NAVD88), the farthest time horizon for which these projections are available.

Potential consequences of parking located within the current and future 1% annual chance flood elevation include flood damage to property, cars, and building structure/loss of inventory, or potentially increased flood insurance costs.

Potential consequences of the residential lobby and commercial space/community facility use being located within the current and future 1% annual chance flood elevation include damage to property and loss of inventory.

Mechanical and electrical systems are located above the top floor of the residences at 187 feet NAVD88 and thus would not be vulnerable or critical to flooding events at any time horizon.

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

Based on the range of sea level rise predictions described above, the Mean Higher High Water (MHHW) at the National Oceanic and Atmospheric Administration (NOAA) Station nearest to the Projected Development Site 1 (Kingsborough #8517756) could range up to 8.71 feet NAVD88 by the 2100s under the "high estimate" (90th percentile) scenario. Current tidal and flood height of the Kingsborough NOAA Station is 2.46 feet NAVD88, as adjusted for changes in sea level since the 1983-2001 tidal epoch. The only feature that is below the elevation of MHHW under current and future sea level rise scenarios is the

parking garage located in the cellar level of the Proposed Project. This could result in frequent flooding due to elevated groundwater tables if design measures are not considered. All other project features would remain above the elevation of the MHHW until the 2080s, which is the farthest time horizon for which these projections are available. Street levels directly fronting Projected Development Site 1 (at 6 feet NAVD88) would be below the MHHW in the high estimate in the 2080s (7.29 feet NAVD88) and high-mid and high estimate in 2100 (6.62 feet NAVD88 and 8.71 feet NAVD88 respectively). Tidal flooding events may affect roadway conditions resulting in hindered access of residents to the building entrance or response time for emergency and public safety services.

1(d). Describe how any additional coastal hazards are likely to affect the project, both currently in the future, such as waves, high winds, or debris.

Since the Projected Development Site 1 is located within Zone AE, it is currently and would continue to be at risk for inundation from 1% annual chance flood events. However, wave action hazards (i.e., Zone VE or Coastal A Zone) have not been designated for the Projected Development Site 1. Therefore, storm impacts due to waves, high winds, or debris would not be expected to affect the project features. No hazardous features would be located below the elevation of MHHW over the lifespan of the Proposed Project under any sea level rise scenario.

2. Identify adaptive strategies.

2(a). For any features identified in Step 1(b), identify adaptive strategies:

The Proposed Project is not designed with any residential units located below the current or future (until 2100) 1% annual chance flood elevation. Low elevation features of the Proposed Project such as the residential lobby and commercial space/community facility use on the first floor and the parking garage at the cellar level would be located below the current and future 1% annual chance flood elevation and sea level rise scenarios. The commercial space/community facility use with frontage below the 1% annual chance flood elevation would be dry floodproofed. The building structure would be designed to resist water loads and infiltration by using water resistant materials in combination with water-tight gates at entry points. In addition, the commercial space/community facility use and residential lobby will be protected by removable flood barriers, which would consist of permanent brackets installed on the facades and gates that are installed in advance of an anticipated storm event.

In addition to the flood barriers, emergency flood egress stairs would be located in all dry floodproof areas, which would rise to a level above the 1% annual chance flood elevation. These stairs would provide access to a landing that would drop back down the sidewalk elevation. The stairs would act as permanent fixtures within the Proposed Project building.

The enclosed cellar level parking garage, which is also projected to be below the 1% annual chance flood elevation and MHHW levels for current and future scenarios, would be dry floodproofed as an adaptive strategy to resist inundation. The space below the DFE would be constructed with flood damage resistant materials in combination with water-tight gates at entry points. Doors, windows, and other openings below the DFE would be sealed through permanent flood gates, made from sheet metal with reinforcement and rubber joints, or deployable shields that will be installed in advance of a flood event.

2(b). Describe any additional measures being taken to protect the project from additional coastal hazards such as waves, high winds, or debris.

The Proposed Project would comply with all local codes, including the 2022 NYC Building Code (or updated current version), and specifically with Appendix G (Flood-resistant Construction). As previously described, additional measures have been incorporated into the planning and design of the Proposed Project to ensure long-term resiliency to climate change and sea level rise in the City’s Coastal Zone.

Wave action hazards (i.e., Zone VE or Coastal A Zone) have not been designated for the Projected Development Site 1. Therefore, storm impacts due to waves, high winds, or debris would not be expected to affect the project features. The only feature that is below the elevation of MHHW under current and future sea level rise scenarios is the parking garage located in the cellar level of the Proposed Project. The enclosed cellar level parking garage would be dry floodproofed as an adaptive strategy to resist inundation.

2(c). Describe how the project would affect the flood protection of adjacent sites, if relevant. How would the project lead to increased flooding on adjacent sites? How would the project protect upland sites from coastal hazards? Does the project complement or conflict with planned, adjacent flood protection projects?

Since the floodplain within NYC is controlled by astronomic tide and meteorological forces (e.g., nor'easters and hurricanes) and not by fluvial flooding, the proposed modifications to the Projected Development Site 1 would not have the potential to adversely affect the floodplain or result in increased coastal flooding at adjacent sites or within the study area. During and following construction, activities at the Projected Development Site 1 would be completed in accordance with applicable stormwater regulations. Therefore, the construction and operation of the Proposed Project would not exacerbate future projected flooding conditions on adjacent sites. Through the implementation of adaptive actions that will mitigate and enhance the resiliency of the Projected Development Site 1 from flood events, the Proposed Project would complement adjacent flood protection projects.

3. Assess policy consistency

Based on this information, the Proposed Project would promote Policy 6.2 (Integrate consideration of the latest New York City projections of climate change and sea level rise). As described above, vulnerable Proposed Project building features within the 1% annual chance flood would be protected from flood water damage with the implementation of adaptive strategies such as dry floodproofing and incorporation of flood damage resistant materials and vents. Vulnerable project features below the projected elevation of the future "high estimate" of MHHW combined with projected sea level rise would be made resilient through dry floodproofing measures and incorporation of flood damage resistant materials and permanent flood gates. Any potential development facilitated by the Proposed Actions on the non-Applicant owned Potential Development Site (Block 6990, Lot 20) would also have to consider flood risk and incorporate protective and adaptive measures to mitigate any such risk.

Policy 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.

Construction best management practices that may be utilized on Projected Development Site 1 include erosion and sediment control such as silt fences and sediment basins or traps, establishing temporary drainage systems to manage or redirect stormwater flow, proper stockpile coverage and management, and avoiding construction activities during periods of heavy rainfall. Compliance with all applicable DEP or NYC Department of Building (DOB) permits would be observed before, during, and after construction. Once constructed, the Proposed Project would include a stormwater detention tank located at the building's base to control the amount of outflowing stormwater. Additional measures to mitigate for stormwater using green infrastructure may include green roofs and "rain garden" tree pits per NYCDOT and NYC Parks standards.

Policy 8.2: Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

Public access to and from Potential Development Site 1 to the adjacent Coney Island Creek would be required should that lot be developed.

Policy 8.3: Provide visual access to the waterfront where physically practical.

In the existing condition, visual access to Coney Island Creek is available at the end of W 23rd Street, albeit somewhat obstructed by the auto uses currently occupying Potential Development Site 1. In the future with the Proposed Actions, visual access to the waterfront at the end of W 23rd Street would remain unchanged.

VII. CONCLUSION

The Proposed Actions would not directly displace any land uses, adversely affect surrounding land uses, or generate land uses that would be incompatible with land uses, zoning, or public policy in the study area. While changes in land use and zoning would occur, the land use changes on the Projected Development Site 1 would be consistent with current and existing development trends of mixed-use residential and commercial/retail developments in the surrounding area. The Proposed Actions would change zoning designations within the study area in a manner that is intended to promote affordable housing development, encourage economic development within an existing commercial corridor, and improve existing community resources.

The Proposed Project would be consistent with relevant public policies and incorporate adaptive and resiliency strategies consistent with the policies set forth in NYC's WRP. Consequently, further analysis is not warranted since the Proposed Project would not result in a significant adverse impact on land use, zoning, or public policy as defined in the *CEQR Technical Manual*.

Attachment C: Open Space

I. INTRODUCTION

This attachment assesses the potential impact of the Proposed Project on open space resources. Open space is defined in the *2021 City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly- or privately-owned land that is available for leisure, play, or sport, or serves to protect or enhance the natural environment. The *CEQR Technical Manual* guidelines indicate that an open space analysis should be conducted if a Proposed Action would result in a direct effect, such as the physical loss or alteration of public open space, or an indirect effect, when a substantial new population could place added demand on an area's open spaces.

As described in Attachment A, "Project Description," the Proposed Actions would facilitate a new 18-story, approximately 203,360 gsf mixed-use development, including 149 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces ("Proposed Project") at 2201-2227 Neptune Avenue (Block 6990, Lot 10) ("Projected Development Site 1"). The Proposed Project is expected to be completed by 2027.

The *CEQR Technical Manual* states that an open space assessment should be conducted for projects that would generate more than 200 additional residents or more than 500 nonresidents, such as workers. Since the Proposed Project would generate more than 200 residents, an open space assessment is warranted.

II. METHODOLOGY

Direct Effects

As described in the *CEQR Technical Manual,* a proposed project would directly affect open space conditions if it encroaches on, or causes a loss of, open space. This includes change in the use of an open space so that it no longer serves the same user population, limitation on public access to an open space, or increased noise or air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of a public open space. Since the Proposed Actions would not directly displace any public open space, nor change the usefulness of or access to any public open space an assessment of direct effects on open space resources is not warranted.

Indirect Effects

Following the methodology in the *CEQR Technical Manual,* indirect open space effects may occur when a Proposed Project would add enough population, either residential or non-residential (such as workers) or a similar number of other non-residential users (such as new university or college related population), to noticeably diminish the capacity of open space in the area to serve the future population. Typically, an assessment of indirect effects is conducted when a proposed project would introduce more than 200 residents or more than 500 nonresidents.

The With-Action condition would generate 149 DUs and 22,600 gsf of commercial use, and 60 parking spaces which would generate approximately 359 residents[1] and 75 workers.[2] Since the 359 residents

[1] (Increment of 149 DUs) x (2.41 multiplier for average household size of Bronx CD 13 (2020 ACS 5-year estimate) = 359 residents (conservatively rounded up).
[2] (Increment of 22,600 gsf commercial uses) x (.003 worker multiplier) = 68 workers, (Increment of 149 DUs) x (0.04 worker multiplier) = 6 workers and (Increment of 60 parking spaces) x (0.02 worker multiplier) = 1 worker. Multipliers per "Gowanus Neighborhood Plan EAS" (CEQR No. 19DCP157K).

generated by the Proposed Actions would exceed the associated residential analysis threshold of 200 residents, an impact assessment of residential open space is warranted. The With-Action condition would generate less than 500 non-residents and therefore would not require an impact assessment of non-residential open space.

Study Area

In conformance to the *CEQR Technical Manual* guidelines, the first step in assessing potential open space impacts is to establish the appropriate study area(s) for the new population that would be added by the Proposed Project. According to the *CEQR Technical Manual*, the open space study areas are based on the distance a person is assumed to walk to reach a neighborhood open space. These distances usually differ by user group. Workers typically use passive open spaces within a short walking distance of their workplaces whereas residents are more likely to travel farther to reach parks and recreational facilities and use both passive and active open spaces. Residents are assumed to walk up to a 0.5-mile distance to reach neighborhood open spaces.

The residential study area for the open space assessment was based on a 0.5-mile distance from the Projected Development Site 1, which includes all the census tracts with at least 50% of their area within 0.5-mile radius. As shown in **Figure C-1: Existing Open Space Resources Map** the 0.5-mile residential study area is defined by Brooklyn census tracts 314.02, 326, 328, 330, 342 and 348. For projects where the open space ratio is marginally above the percentage change guideline, as shown in **Table C-1: Preliminary Assessment – Guidance for Percentage Change in Open Space Ratio**, the presence of a nearby regional park or other substantial open space resources is an alleviating factor for an increase in open space demand expected as a result of the project. As such, the preliminary assessment may consider the availability of these larger-scale parks within the generalized Proposed Project area, including the relative distance from the Projected Development Site 1, the total acreage of open space offered and the passive and active resources available.



Source: 2022 PLUTO, DCP

0 0.25 0.5 Miles

Proposed Project Area

0.5-mile Radius

Residential Study Area

Open Space Resources (Keyed to Table C-4)

Census Tracts

Existing Open Space

EXISTING OPEN SPACE RESOURCES MAP

Figure C-1

2201-2227 Neptune Avenue EAS

Level of Assessment

According to the *CEQR Technical Manual*, a preliminary open space assessment describes the conditions within the study area and degree to which the open space would be affected by the Proposed Project. If this assessment indicates the need for further analysis, a detailed analysis would be performed. In this initial assessment, the Open Space Ratio (OSR) is calculated by comparing the amount of open space acreage per 1,000 residents for existing user population and the total open space acreage within the study area. The OSR in the future No-Action condition includes any increase in population expected by other projects to be completed by the Proposed Project's build year and changes in the acreage of open space in the study area. The OSR for future the With-Action condition is then calculated with the population generated by the Proposed Project, and any changes in the acreage of open space. If the OSR in the With-Action condition is to remain the same or increase compared to the No-Action condition, a detailed analysis is not warranted. If, however, there is a decrease in OSR due to the Proposed Project, Table 7-1 of the *CEQR Technical Manual* identifies threshold for percentage change in OSR for residential population that may generally be tolerated before considering the need for a more detailed analysis (**Table C-1**). When determining the need for a detailed analysis, regional parks or other substantial open space resources located within or just outside of the 0.5-mile study area may be included.

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

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

Source: Table 7-1, 2021 CEQR Technical Manual

As part of the *OneNYC 2050 Building a Strong and Fair City* plan, New York City has put forth a goal for 85% of its residents to live within walking distance of a park by 2030, which includes the NYC Parks' "Walk to a Park" program. As part of the preliminary assessment, if a Project Site is not located within a Walk to a Park Service Area, per the map linked in Section 331 of the *CEQR Technical Manual*, a detailed analysis would be warranted.

A detailed open space analysis typically sorts study area population by age group and details the amount and quality of various types of open space to assess the availability of the types of open space for particular age groups. In conducting this assessment, the analysis focuses on where shortfalls in open space exist now (or in the future) and to identify whether the shortfalls are a result of the Proposed Project. The open spaces within the study area should then be identified and described through data collection and site visits to determine types of facilities, utilization levels, accessibility, and conditions. Regional parks or other substantial open space resources located within or just outside of the 0.5-mile study area may be included. Using the data gathered, the detailed assessment would provide an evaluation of the existing open space conditions relative to the open space needs of the study area users both quantitative and qualitatively using the guidance provided in the *CEQR Technical Manual.* This assessment is then continued in a similar manner for the future No-Action and With-Action conditions.

Impact Significance

The determination of significant adverse impacts is based on both qualitative and quantitative factors, as compared to the No-Action condition. According to the *CEQR Technical Manual,* proposed projects that would directly displace/alter existing open space within the study area or reduce the OSR by more than the general guidelines for the open space percentage change presented in Table 7-5 of the *CEQR Technical*

Manual, may result in a significant adverse impact. When assessing the effects of a change in the OSR, the balance of passive and active open space appropriate to support the affected population should be considered and assessed relative to the City's open space planning goals as mentioned above. The thresholds of Table 7-5 are not absolute and projects that may result in significant quantitative impacts on open space are typically further assessed qualitatively to determine the overall significance of the impact. Projects that may result in a significant physical effect on existing open space by increasing shadow, noise, air pollutant emissions, or odors compared to the future No-Action condition, may be a considered significant adverse impact requiring mitigation. Furthermore, projects located in an identified walk gap of the City, as defined by NYC Parks' "Walk to a Park" program should be further assessed for qualitative impacts.

Table C-2: Detailed Assessment – Percentage Change Guidance to determine possible Open Space Impact

Total Open Space Ratio Range	Active Open Space Ration Range	Passive Open Space Ratio Range	Percentage Change in Open Space Ratio Signifying a Possible Adverse Open Space Impact
2.01 to 2.50* Or greater	1.61 to 2.0* Or greater	0.41 to 0.50* Or greater	5%
1.51 to 2.00	1.21 to 1.60	0.31 to 0.40	4%
1.01 to 1.50	0.81 to 1.20	0.21 to 0.30	3%
0.51 to 1.00	0.41 to 0.80	0.11 to 0.20	2%
0.50 or less	0.01 to 0.40	0.01 to 0.10	1%
*2.5 OSR is the planning goal in NYC, with optimal distribution goal of 2.0 Active OSR and 0.5 Passive OSR			

Source: Table 7-5, 2021 CEQR Technical Manual

Assessment Methodology

Characteristics of the open space user group (residents) are determined using the US Census data for census tracts comprising the residential open space study area. The acreage, conditions, and utilization of existing active and passive open spaces within the residential open space study area are inventoried and mapped based on City data and map files, and field visits. Large public open spaces, such as state parks, which are located within the study area and beyond, are inventoried based on only the portions that fall within the study area. Based on the inventory of facilities and study area populations, active and passive OSRs are calculated for the existing residential populations. OSRs are expressed as the amount of open space acreage (total, active, and passive) per 1,000 users.

Expected changes in future levels of open space supply and demand in the 2027 analysis year are assessed based on other planned development projects within the open space study areas as well as known capital improvements to open space or recreational facilities. OSRs are calculated for the No-Action condition and compared with existing OSRs to determine changes in future levels of adequacy. Characteristics of residents and workers are estimated for the residential and non-residential study areas in the No-Action condition.

The assessment considers the effects of increased resident populations associated with a proposed project on open space supply and demand in the study areas. The assessment also considers any new accessory open space facilities included in a proposed project. Characteristics of residents are estimated for the residential study area in the With-Action condition. A qualitative analysis is performed to assess whether the study areas are sufficiently served by open space, which also considers open space resources outside of the defined study areas that would be available to the residential populations.

III. OPEN SPACE ASSESSMENT

Existing Conditions

Study Area Population

The 2020 Decennial Census Data was compiled for the census tracts within the study area to identify the residential population served by existing open space resources (**Table C-3: Study Area Population, Existing Condition**).

Table C-3: Study Area Population, Existing Condition

Census Tract	Population
314.02	0
326	7,075
328	3,090
330	4,423
342	7,060
348	2,828
Study Area Total	**24,476**

Source: U.S. Census Bureau, 2020

Inventory of Publicly Accessible Open Space

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Public open space is defined as facilities that are open to the public at designated hours on a regular basis and should be assessed for impacts in conformance to the *CEQR Technical Manual*. The *CEQR Technical Manual* indicates that private open space not accessible to the public on a regular basis should only be considered qualitatively.

Publicly accessible open space resources within the study area were identified by name and size based on information available from the NYC Department of Parks & Recreation ("NYC Parks"). The geographic locations of these open spaces are shown on **Figure C-1: Existing Open Space Resources Map** and are keyed to **Table C-4: Inventory of Existing Open Space**.

Santos White Garden

This community garden is located on Mermaid Avenue between West 21st Street and West 22nd Street. The approximately 0.14-acre garden is part of GreenThumb, the largest community gardening program in the nation, and offers urban farming and gardening space between April 1 and October 31. It is operated by NYC Parks.

Calvert Vaux Park

The approximately 85.53-acre regional park is made up of three different portions but is largely bounded by Gravesend Bay, Bay 44th Street, Bay 49th Street, and Shore Parkway. The main park includes a rain garden, two synthetic turf fields, basketball courts, bocce courts, six baseball diamonds, a soccer field, and a newly restored waterfront. There is also a model aircraft field and the Calvert Vaux Park Greenway. According to the *CEQR Technical Manual*, greenways are 100% active. The playground is located between Cropsey Avenue and Shore Parkway and offers play equipment, swings, and benches. Portion of the park is behind the Cube Smart Self Storage located off of Bay 54th Street and is not accessible. It is operated by NYC Parks.

Coney Island Boat Basin/Six Diamonds

The approximately 36.81-acre park is located southeast of Calvert Vaux Park on West 22nd Street between Bay 56th Street and Shore Parkway. It includes baseball fields, waterfront space, and open areas. It is operated by NYC Parks.

Kaiser Park

This is a 26.26-acre park bounded by Neptune Avenue, Bayview Avenue, West 24th Street and West 32nd Street. It includes benches, a pier that allows fishing, barbecue areas, baseball and soccer fields, and running tracks. It is operated by NYC Parks.

Coney Island Creek Park

This is an 8.89-acre waterfront park is located on Bay View Avenue between Sea Gate Avenue and West 33rd Street that includes a beach area, boardwalk, and walking paths. It is operated by NYC Parks.

Surfside Multi-Cultural Garden Coalition

This 0.69-acre community garden is located on Surf Avenue between West 29th Street and West 28th Street and is also part of GreenThumb. The garden is used for gardening and urban farming and also provides benches. It is open Mondays through Wednesdays between 9:30 AM and 1:00 PM, on Sundays and Thursdays between 2:00 PM to 6:00 PM, and on Friday's and Saturdays between 2:30 PM and 6:00 PM during April 1 and October 31. It is operated by NYC Parks.

Surf Playground

The 0.93-acre playground is located on Surf Avenue between West 25th Street and West 27th Street. The playground offers benches, play and fitness equipment, and basketball courts. It is a jointly operated playground by the Department of Education (DOE) and NYC Parks.

West 23rd Street Community Garden (aka Coney Island Community Garden)

The 1.31-acre community garden is located on Neptune Avenue between West 24th Street and West 23rd Street and is also part of GreenThumb. The garden is used for gardening and urban farming and also provides benches. It is open from 6:00 AM to 9:00 PM everyday between April 1 and October 31. It is operated by NYC Parks.

Table C-4: Inventory of Existing Open Space

Map No.	Park Name	Location	Owner/Agency	Amenities	Acreage	Active		Passive		Condition	Utilization
						Acres	%	Acres	%		
1	Santos White Garden	Mermaid Ave. between W. 21 St. and W. 22 St.	NYC Parks	Community Garden	**0.14**	0.00	0%	0.14	100%	Good	Low
2	Calvert Vaux Park	Gravesend Bay, Bay 44 St. to Bay 49 St., Shore Pkwy.	NYC Parks	Benches, playgrounds, rain garden, various recreations fields and sport courts, greenway, waterfront space, and open areas	**85.53**	59.87	70%	25.66	30%	Excellent	Low
3	Coney Island Boat Basin/Six Diamonds	W. 22 St. bet. Bay 56 St. and Shore Pkwy.	NYC Parks	Various recreation fields, waterfront space, and open areas	**36.81**	36.81	100%	0.00	0%	Excellent	Low
4	Kaiser Park	Neptune Ave., Bayview Ave.,W. 24 St. to W. 32 St.	NYC Parks	Benches, pier, barbecue areas, various sport courts, running tracks, waterfront spaces, and open areas	**26.26**	18.38	70%	7.88	30%	Excellent	Moderate
5	Coney Island Creek Park	Bay View Ave. between Sea Gate Ave. and W. 33 St.	NYC Parks	Beach and boardwalk	**8.89**	1.78	20%	7.11	80%	Fair	Low
6	Surfside Multi-Cultural Garden Coalition	Surf Ave. bet. W. 29 St. and W. 28 St.	NYC Parks	Benches and community garden	**0.69**	0.00	0%	0.69	100%	Very Good	Low
7	Surf Playground	Surf Ave. between W. 25 St. and W. 27 St.	NYC Parks/DOE	Benches, play and fitness equipment and basketball courts	**0.93**	0.93	100%	0.00	0%	Excellent	Low
8	Coney Island Community Garden	Neptune Ave. bet. W. 24 St. and W. W 23 St.	NYC Parks/DCAS	Benches and community garden	**1.31**	0.00	0%	1.31	100%	Very Good	Moderate
Total, 0.5-Mile Residential Study Area Totals					**160.56**	**117.77**	73%	**42.79**	27%		

Source: Parks Properties, March 2023, NYC Open Data; ArcGIS; Google Maps; PLUTO 2020

Assessment of the Adequacy of Open Space Resources

The *CEQR Technical Manual* indicates that the adequacy of an open space resource in an area is assessed by evaluating the ratio of open space acreage to user population. The study area contains a total of 160.56 acres of usable publicly-accessible open space, serving approximately 24,476 residents, yielding a total OSR of 6.56 acres of improved open space per 1,000 residents (**Table C-5: Adequacy of Open Space Resources, Existing Condition**). The active OSR is 4.81 acres of active open space per 1,000 residents, and the passive OSR is 1.75 acres of passive open space per 1,000 residents.

Table C-5: Adequacy of Open Space Resources, Existing Conditions

Population	Existing Acreage			Existing OSR		
	Total	Active	Passive	Total	Active	Passive
24,476	160.56	117.77	42.79	6.56	4.81	1.75

No-Action Condition

Study Area Population

Without the Proposed Actions, the Proposed Project or any as-of-right residential development would not be developed on the Projected Development Site 1. The Projected Development Site 1would remain the same as under existing conditions. However, six planned or proposed future development projects were identified within the residential study area that would result in a total of 1,362 residential DUs (**Table C-6: No-Action Development Projects**). The 1,362 residential DUs would result in an increase in population of approximately 3,282 residents.

Table C-6: No-Action Development Projects

Project Name	Block	Lot	Residential (DUs)
2905 W. 17 St.	7062	1	77
2940 W. 15 St.	7063	12	324
2938 W. 16 St.	7062	28	376
2926 W. 19 St.	7060	7501	446
2925 W. 16 St.	7063	12	139
Total			1,362
Population Multipliers*			2.41
Population, Residential Study Area			**3,282**

Notes: *Using a multiplier of 2.41 persons per household (DU) for average household size in Brooklyn CD 13 according to ACS 2020 5-year estimate data

Table C-7: Study Area Population, No-Action Condition (2027)

Existing Population	No-Action Developments Population Increase	Project Site As-of-Right Population Increase	Total No-Action Population
24,476	3,282	0	**27,758**

Assessment of Open Space Adequacy

No increase in open space resources is anticipated in the study area by the 2027 analysis year. Therefore, the study area would continue to contain 160.56 acres of publicly accessible open space, which would serve approximately 27,758 residents in 2027. Therefore, the OSR in the No-Action condition would be 5.78 acres of open space per 1,000 residents. The active OSR in the No-Action condition would be 4.24 acres of active open space per 1,000 residents, and the passive OSR would be 1.54 acres of passive open space per 1,000 residents (**Table C-8: Adequacy of Open Space Resources, No-Action Condition (2027)**).

Table C-8: Adequacy of Open Space Resources, No-Action Condition (2027)

Population	No-Action Acreage			No-Action OSR		
	Total	Active	Passive	Total	Active	Passive
27,758	160.56	117.77	42.79	5.78	4.24	1.54

With-Action Condition

Study Area Population

The Proposed Actions would facilitate the Proposed Project resulting in a approximately 149 DUs, 22,600 gsf of commercial use, and 60 parking spaces. As identified in Section II above, this would generate approximately 359 residents (**Table C-9: Study Area Population, With-Action Condition (2027)**).

Table C-9: Study Area Population, With-Action Condition (2027)

Total No-Action Population	Project Site With-Action Population Increase	Total With-Action Population
27,758	359	**28,117**

Assessment of Open Space Adequacy

Since no additional open space resources are expected as part of the Proposed Project or within the study area by the 2027 analysis year, the study area would continue to have 160.56 acres of publicly accessible open space, serving approximately 28,117 residents in the With-Action condition, yielding a total OSR of 5.71 acres of open space per 1,000 residents. The active OSR in the With-Action condition would be 4.19 acres of active open space per 1,000 residents and the passive OSR would be 1.52 acres of passive open space per 1,000 residents (**Table C-10: Adequacy of Open Space Resources, With-Action Condition (2027)**).

Table C-10: Adequacy of Open Space Resources, With-Action Condition (2027)

Population	With-Action Acreage			With-Action OSR		
	Total	Active	Passive	Total	Active	Passive
28,118	160.56	117.77	42.79	5.71	4.19	1.52

As shown in **Table C-11: Open Space Ratios Summary**, the residential OSR would decrease from an overall OSR of 5.78 in the No-Action condition to an overall OSR of 5.71 in the With-Action condition. The overall residential OSR as well as the active and passive OSR, would decrease by 1.28% between the No-

Action condition and the With-Action condition. This is less than the 5% change in OSR for areas with a total OSR of 2.5 or greater, as identified in *CEQR Technical Manual* (Table 7-5).

Table C-11: Open Space Ratios Summary

	Percentage Change in Open Space Ratio/ OSR Signifying a Possible Adverse Open Space Impact	Open Space Ratio (acres per 1,000 persons)			Percent/OSR Change (Between No-Action condition and With-Action Conditions)
		Existing	No-Action	With-Action	
Residential Total	5%	6.56	5.78	5.71	-1.28%
Residential - Active	5%	4.81	4.24	4.19	-1.28%
Residential - Passive	5%	1.75	1.54	1.52	-1.28%

Additionally, the Projected Development Site 1 is located within a Walk to a Park Service Area (**Figure C-2: Walk to A Park Service Areas Map**), as defined in *OneNYC 2050 Building a Strong and Fair City* plan. Therefore, there is no potential for significant adverse impact on open space due to the Proposed Project.

IV. CONCLUSION

With the availability of the existing open space resources to study area residents, the OSR reduction summarized in **Table C-11,** the Proposed Project would not constitute a significant adverse impact on open space.



Source: 2022 PLUTO, DCP

0 200 400 Feet

Proposed Project Area

Walk to a Park Service Area

Projected Development Site 1

Potential Development Site 1

WALK TO A PARK SERVICE AREAS MAP

Figure C-2

2201-2227 Neptune Avenue EAS

Attachment D: Shadows

I. INTRODUCTION

This attachment assesses the potential for significant adverse impacts due to shadows created by the Proposed Project on sunlight-sensitive resources. Section 200 of Chapter 8 of the *2021 City Environmental Quality Review (CEQR) Technical Manual* states that a shadows assessment is necessary for projects that would either result in new structures (or additions to existing structures) of 50 feet in height or more, or be located adjacent to, or across the street from, a sunlight-sensitive resource. Sunlight-sensitive resources are those that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity and include public open spaces, historic architectural resources, and natural resources.

As described in Attachment A, "Project Description," the Proposed Actions would facilitate a new 18-story, approximately 203,360 gsf mixed-use development, including 149 dwelling units (DUs), 37 of which is proposed to be affordable DUs, 22,600 gsf of commercial use, and 62 parking spaces ("Proposed Project") at 2201-2227 Neptune Avenue (Block 6990, Lot 10) ("Projected Development Site 1"). The Proposed Project is expected to be completed by 2027. Additionally, Block 6990, Lot 20 would also be affected by the Proposed Actions and is considered Potential Development Site 1.

The *CEQR Technical Manual* states that a shadows assessment should be conducted for projects that would:

1. Result in new structures (or additions to existing structures including the addition of rooftop mechanical equipment) of 50 feet or more; or
2. Be located adjacent to, or across the street from, a sunlight-sensitive resource.

Since the Proposed Project would result in a new structure that is more than 50 feet in height, a shadows assessment is warranted.

II. METHODOLOGY

Sunlight-Sensitive Resources of Concern

The shadows assessment begins with a preliminary screening assessment to ascertain whether a project's shadow may reach any sunlight-sensitive resources at any time of the year. Sunlight-sensitive resources of concern, as defined by CEQR, are those resources that depend on sunlight or require direct sunlight to maintain their usability or architectural integrity. The following are sunlight-sensitive resources as defined in the *CEQR Technical Manual*:

- ***Public open space.*** All open space that is accessible on a constant and regular basis for active and passive recreation (e.g., parks, beaches, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating).The uses and vegetation in an open space establish its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather-dependent features like wading pools and sand boxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches that could be affected by a loss of winter sunlight. Uses that rely on sunlight include passive uses, such as sitting or sunning; active uses, such as playfields or paved courts; as well as such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants,

and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement for healthy growth and maintenance.

- ***Features of historic architectural resources that depend on sunlight for their enjoyment by the public***. When evaluating the impact on historic architectural resources, only the sunlight-sensitive features of these resources are considered, as opposed to the entire architectural resource. Sunlight-sensitive features include design elements that are part of a recognized architectural style that depend on the contrast between light and dark (e.g., deep recesses or voids such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained-glass windows; exterior building materials and colors that depend on direct sunlight for visual character (e.g., the polychrome (multicolored) features found on Victorian Gothic Revival or Art Deco façades); and historic landscapes, such as scenic landmarks including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.

- ***Natural resources where the introduction of shadows could alter the resource's condition or microclimate.*** Such resources could include community gardens, surface water bodies, wetland resources, upland resources, or significant, sensitive, or designated resources such as coastal fish and wildlife habitats.

- ***Other Resources:*** Greenstreets (planted areas within unused portions of roadbeds that are part of the Greenstreets program).

Preliminary Screening Assessment

The preliminary screening assessment was completed in conformance with a tiered assessment process prescribed in the *CEQR Technical Manual*. Major steps in this process included:

- ***Base Map.*** Development of a base map that illustrates the proposed site location in relationship to the sunlight-sensitive resources.

- ***Tier 1 Screening Assessment.*** Development of the longest shadow area. The longest shadow study area encompasses the site of the proposed project and a perimeter around the site's boundary with a radius equal to the longest shadow. According to the *CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. The purpose of the Tier 1 Screening Assessment is to determine whether the sunlight-sensitive resources are located within the longest shadow study area.

- ***Tier 2 Screening Assessment.*** If any portion of a sunlight-sensitive resource lies within the longest study area, a Tier 2 Screening Assessment is warranted. Due to the path of the sun across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. The purpose of the Tier 2 Screening Assessment is to determine whether the sunlight-sensitive resources identified in the Tier 1 Screening Assessment are located within portions of the longest shadow study area that can receive shadows from a proposed project.

- ***Tier 3 Screening Assessment.*** According to the *CEQR Technical Manual*, a Tier 3 Screening Assessment should be performed to determine if, in the absence of intervening buildings, shadows resulting from a proposed project can reach a sunlight-sensitive resource, thereby warranting a detailed shadow analysis. The Tier 3 Screening Assessment is used to determine if shadows resulting from a proposed project can reach a sunlight-sensitive resource at any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis dates.

For the New York City area, the months of interest for an open space resource encompass the growing season (March through October) and one month between November and February (usually December) representing a cold-weather month. Representative days for the growing season are generally the March 21st vernal equinox (or September 21st autumnal equinox), the June 21st summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes such as May 6th or August 6th (which are approximately the same). As the sun rises in the east and travels across the southern part of the sky to set in the west, a project's earliest shadows would be cast in a westward direction. Throughout the day, the shadows would shift clockwise (moving northwest, then north, then northeast) until sunset. Therefore, a project's earliest shadow on a sunlight-sensitive resource would occur in a similar pattern, depending on the location of the resource in relation to the site.

Detailed Shadow Analysis

If the preliminary screening analyses described above do not rule out the possibility that project-generated shadows would reach any sunlight-sensitive resource, then a detailed shadows analysis is warranted. The detailed shadows analysis establishes a baseline condition (the "No-Action" condition) that is compared to the future condition resulting from the proposed project (the "With-Action" condition) to illustrate the shadows cast by existing or future buildings and to distinguish the additional (incremental) shadow cast by the project. The detailed analysis for the Proposed Project was conducted using a three-dimensional (3D) digital model of the study area using PLUTO™ 22v1 data to characterize the building footprints and approximate heights. To evaluate the extent of the shadows, the 3D model was geo-located to the Projected Development Site 1 and Potential Development Site 1, so that sunlight and shadow conditions would be accurately approximated in the model. The results of the detailed analysis were documented in graphic form and accompanied by a table summarizing the extent and duration of the incremental shadows.

The detailed shadows analysis provided in this attachment includes a description of the effects of incremental shadows on sunlight-sensitive resources within the maximum shadow radius and determines whether those effects constitute significant adverse impacts under CEQR. As described in the *CEQR Technical Manual,* an incremental shadow is generally not considered significant when its duration is no longer than 10 minutes at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of 10 minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- **Vegetation**: a substantial reduction in sunlight available to a sunlight-sensitive feature of the resource to less than the minimum time necessary for its survival (when there was sufficient sunlight in the future without the project), or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum time necessary for its survival).
- **Historic and cultural resources**: a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.
- **Open space utilization**: a substantial reduction in the usability of open space as a result of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected time periods.
- **For any sunlight-sensitive feature of a resource**: complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

In general, a significant adverse shadows impact occurs when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource and substantially reduces or eliminates direct

sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

III. PRELIMINARY SCREENING ASSESSMENT

Base Map

A base map was developed that identified the Proposed Development Site 1 and Potential Development Site 1, street layout, and study area in relationship to resources of concern **(Figure D-1: Base Map).**

Tier 1 Screening Assessment

In conformance with guidance in Section 312 of Chapter 8 of the *CEQR Technical Manual*, a Tier 1 Screening Assessment was completed that identified the longest shadow that could be cast by the Proposed Project, which is 4.3 times the height of the structure. The buildings on Projected Development Site 1 and Potential Development Site 1 would rise to approximately 205 feet and could cast a shadow to a maximum radius of approximately 881.5 feet from them. As shown in **Figure D-2: Tier 1 Shadow Screening Assessment Map**, five potential sunlight sensitive resources of concern are located within the longest shadow study area boundary:

1. The NYC Department of Parks and Recreation (NYC Parks) West 23rd Street Community Garden (aka Coney Island Community Garden) located at 2327 Neptune Avenue (Block 6965, Lot 125);
2. The Coney Island Boat Basin/Six Diamonds owned by NYC Parks is located across the Coney Island Creek (Block 6991, Lots 1 and 100, and Block 6992, Lot 58);
3. The Mark Twain IS 239 for the gifted and talented at 2401 Neptune Avenue on (Block 6965, Lot 140).This site is eligible to be listed in the State and National Register of Historic Places;
4. The Coney Island Fire Station Pumping Station at 2301 Neptune Avenue (Block 6965, Lot 125). This site is listed in the State and National Register of Historic Places; and
5. The Coney Island Creek adjacent to the Potential Development Site 1 to the north.

Tier 2 Screening Assessment

Since there are five potentially sunlight-sensitive resources of concern within the longest shadow study area, as described in Section 313 of Chapter 8 of the *CEQR Technical Manual*, a Tier 2 Screening Assessment was performed. In New York City, no shadow can be cast within an area between -108 and +108 degrees from true north of a site. **Figure D-3: Tier 2 Shadow Analysis** depicts the area that could not be shaded due to the Proposed Project. As indicated in **Figure D-3**, incremental shadows due to the proposed buildings on Projected Development Site 1 and Potential Development Site 1 could still potentially cast shadows on all the sensitive resources of concern listed above. As a result, a Tier 3 Screening Assessment was performed.

Tier 3 Screening Assessment

The analysis timeframe considers shadows that occur 90 minutes following sunrise and 90 minutes preceding sunset. In conformance to *CEQR Technical Manual* guidelines, daylight savings time is not used to determine the timeframes for analysis; all times are listed in Eastern Standard Time. The Tier 3 Assessment does not consider the effect of intervening buildings on incremental shadows due to the Proposed Project and the building on Potential Development Site 1.

Figures D-4 through **D-7** show the Tier 3 Screening Assessment for the representative days of December 21st, March 21st, May 6th, and June 21st, respectively. For all representative days, shadows from the Proposed Project may be cast on all the sunlight-sensitive open-space resources listed above.

Since the Tier 3 Screening Assessment indicated that the proposed buildings on Projected Development Site 1 and Potential Development Site 1 would cast shadows on the sensitive resources of concern, a detailed shadow analysis is warranted to quantify the extent of these effects on the four analysis days – December 21st, March 21st, May 6th, June 21st.



Source: 2022 PLUTO, NYC DCP

0 100 200 400 600 800 1,000 Feet

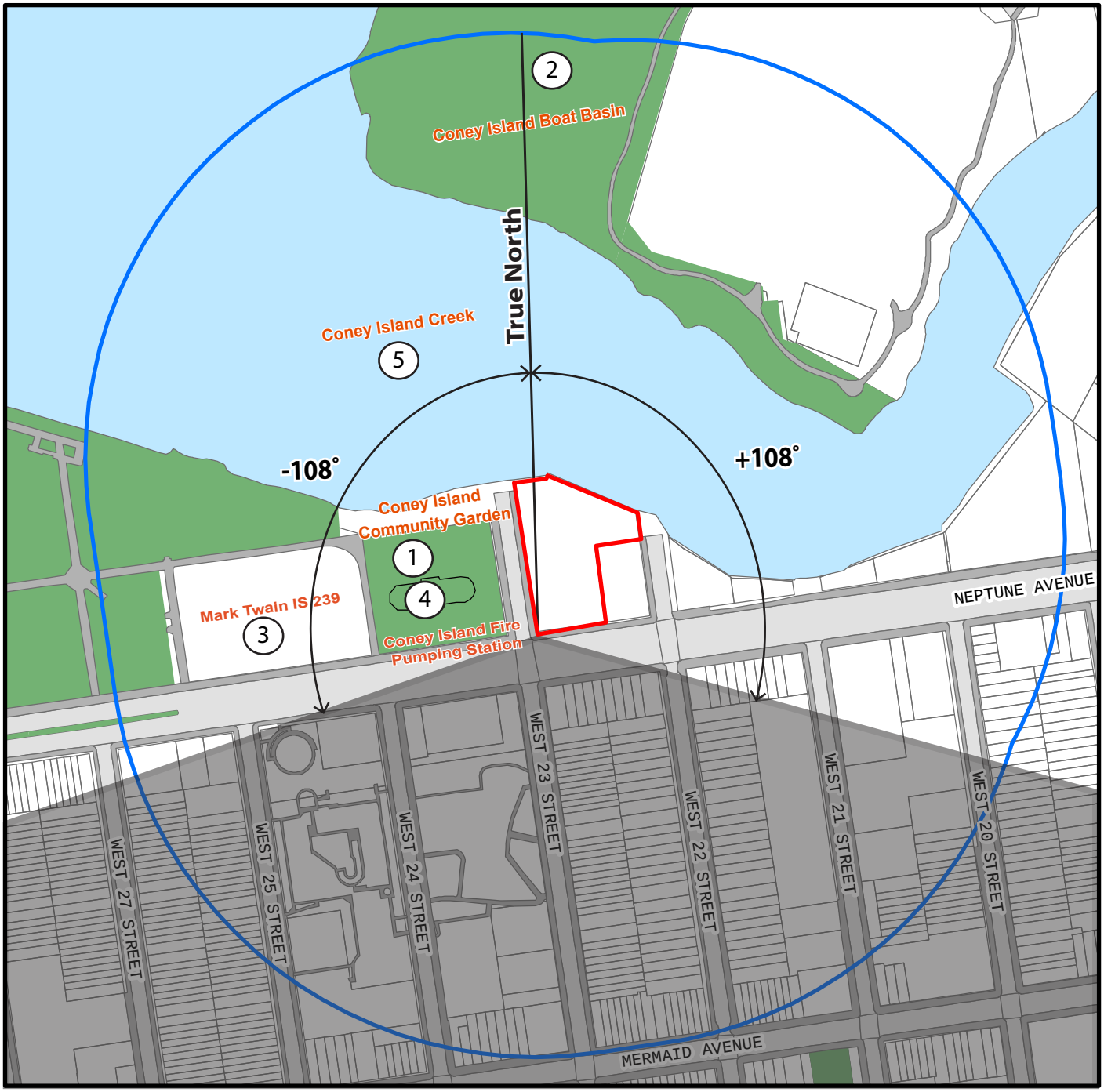
Projected Development Site 1 and Potential Development Site 1

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

SHADOWS BASE MAP

Figure D-1

2201-2227 Neptune Avenue EAS



Source: 2022 PLUTO, NYC DCP

0 100 200 400 600 800 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

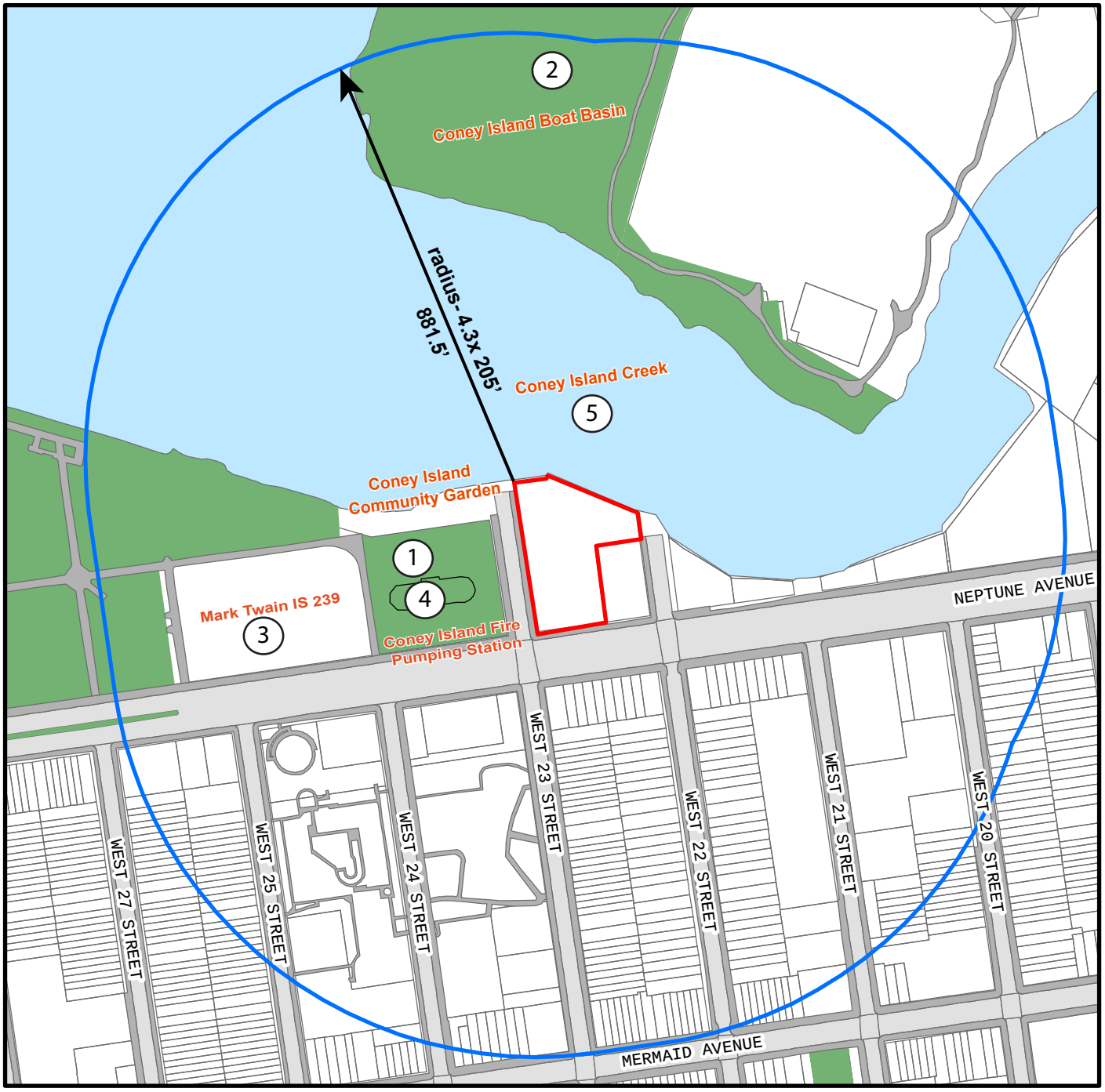
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Area that cannot be shaded by the proposed building

TIER 2 SHADOW SCREENING ASSESSMENT MAP

Figure D-3

2201-2227 Neptune Avenue EAS



Source: 2022 PLUTO, NYC DCP

0 100 200 400 600 800 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

TIER 1 SHADOW SCREENING ASSESSMENT MAP

Figure D-2

2201-2227 Neptune Avenue EAS



Source: 2022 PLUTO, NYC DCP

0 100 200 400 600 800 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

TIER 3 SHADOW SCREENING ASSESSMENT MAP

December 21st Analysis Day

Figure D-4

2201-2227 Neptune Avenue EAS



Source: 2022 PLUTO, NYC DCP

0 100 200 400 600 800 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

TIER 3 SHADOW SCREENING ASSESSMENT MAP

March 21st Analysis Day

Figure D-5

2201-2227 Neptune Avenue EAS



Source: 2022 PLUTO, NYC DCP

0 100 200 400 600 800 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

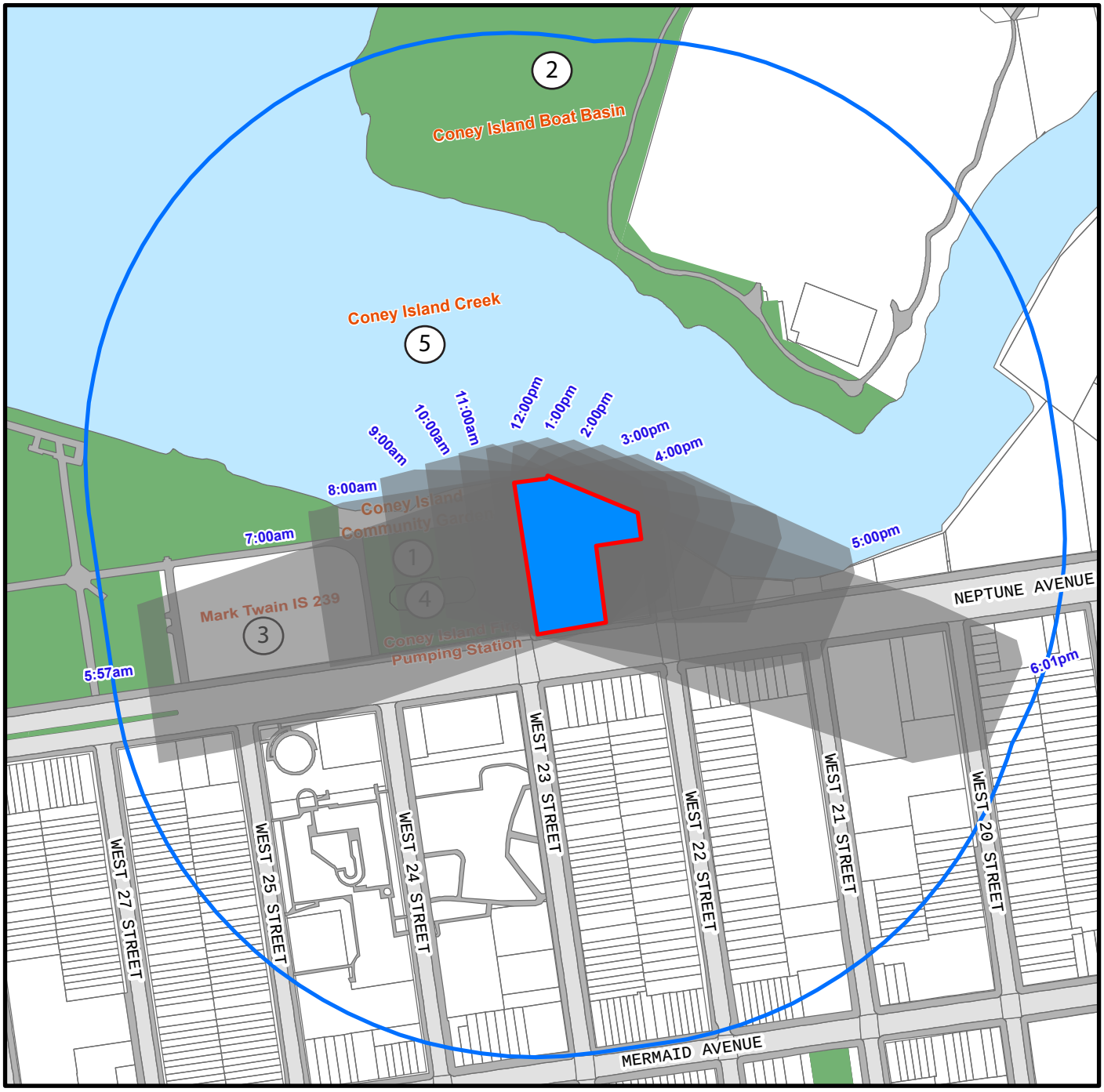
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

TIER 3 SHADOW SCREENING ASSESSMENT MAP

May 6th Analysis Day

Figure D-6

2201-2227 Neptune Avenue EAS



Source: 2022 PLUTO, NYC DCP

0 100 200 400 600 800 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

TIER 3 SHADOW SCREENING ASSESSMENT MAP

June 21st Analysis Day

Figure D-7

2201-2227 Neptune Avenue EAS

IV. DETAILED SHADOW ANALYSIS

The detailed shadow analysis compares the extent of shading that would occur in the No-Action condition with the extent of shading that would occur in the With-Action condition. The purpose of the detailed analysis is to determine the extent and duration of new incremental shadows due to the Proposed Project that would fall on sunlight-sensitive resources due to the Proposed Project.

For the detailed analysis, a 3D model of the Projected Development Site 1 and the Potential Development Site 1 and surrounding area was developed to evaluate the incremental shadows cast by the Proposed Project and any future buildings on Potential Development Site 1. The Potential Development Site 1 is assumed to be the same height as the Proposed Project for analysis purposes, which would be the maximum allowable building height under the Proposed Actions. In conformance to CEQR guidelines, a detailed shadow analysis was performed for the two sunlight-sensitive resources identified above, which is the Coney Island Community Garden and the Coney Island Boat Basin/Six Diamonds. The analysis was performed on four representative days of the year during which the resources of concern would potentially be in shadow in the With-Action condition: December 21st, March 21st, May 6th, and June 21st. CEQR guidelines define the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset. As discussed above, the results of the shadow analysis identify the incremental difference in shadows between the No-Action and With-Action conditions.

Sunlight-Sensitive Resources of Concern

Coney Island Community Garden

Coney Island Community Garden is an approximately 1.3-acre community garden that is part of the New York City Green Thumb, the largest community gardening program in the nation, providing programming and material support to over 550 community gardens in the City. Community Gardens are hubs of gardening, urban farming, community organizing, environmental justice, and are led by a diverse set of volunteers. It is operated and maintained by NYC Parks. According to the NYC Parks website, the community garden is open between April 1 and October 31 between the hours of 6:00 AM and 9:00 PM, seven days a week. It also houses the Coney Island Fire Station, which is listed in the National Register of Buildings but is not considered a sunlight-sensitive historic or architectural resource.

For the December 21st analysis day, the Proposed Project and the building on Potential Development Site 1 would cast incremental shadows over the northeast corner of the community garden starting at approximately 8:51 AM (beginning of analysis day) and would sweep eastward and exit the community garden at approximately 10:10 AM (**Figure D-8** and **D-9**). The total duration of the incremental shadow is approximately 1 hour and 19 minutes.

For the March 21st analysis day, the Proposed Project and the building on Potential Development Site 1 would cast incremental shadows that would cover the northern and southeast portion of the community garden starting at approximately 7:36 AM (beginning of analysis day) and would sweep eastward towards the eastern edge of the community garden and would exit at approximately 10:31 AM (**Figure D-10** through **D-13**). The total duration of the incremental shadow is approximately 2 hours and 55 minutes.

For the May 6th analysis day, the Proposed Project and the building on Potential Development Site 1 would cast incremental shadows that would cover the community garden starting at approximately 6:27 AM (beginning of analysis day) and would sweep eastward towards the eastern edge of the community garden. The incremental shadow would exit the community garden at approximately 10:11 AM (**Figure D-14** through **D-18**). The total duration of the incremental shadow is approximately 3 hours and 44 minutes.

For the June 21st analysis day, the Proposed Project and the building on Potential Development Site 1 would cast incremental shadows that would cover the community garden starting at approximately 5:57 AM (beginning of analysis day) and would sweep eastward towards the eastern edge of the community garden

before exiting at approximately 10:11 AM (**Figure D-19** through **D-23**). The total duration of the incremental shadow is approximately 4 hour and 14 minutes.

Coney Island Boat Basin

The Coney Island Boat Basin/Six Diamonds is home to six baseball fields and two soccer fields, waterfront space, open areas, as well as drinking fountains and lights for night games. Trees stand around the edges and a chain link fence encloses the athletic fields. The 36.8-acre park is home to local school athletics and many baseball and softball leagues, as well as a soccer league. Since the Tier 3 Screening Assessment indicated that the Proposed Project would cast shadows on the walkway in the southeastern portion of the park for December 21st analysis day only, a detailed analysis was not prepared for the remaining analysis days.

For the December 21st analysis day, incremental shadows from the Proposed Project would enter the walkway along the southeastern portion of the park at 1:21 and would cast a maximum incremental shadow at 2:53 PM (the end of the analysis day) (**Figures D-24** and **D-25**).The total incremental shadow duration is approximately 1 hour and 32 minutes on this analysis day.

Mark Twain IS 239 for the Gifted and Talented

The Mark Twain IS 239 for the Gifted and Talented is eligible to be listed in the State and National Register of Historic Places for its architecture. The school was built in 1936-1937. In general, the three story plus basement building is rectangular in plan, with a large central courtyard in the east half of the school and two smaller courtyards in the west. I.S. 239 was one of the earliest schools built on the double hollow square plan. Notable characteristics of this plan include three transverse corridors to provide good air circulation, a first-floor cafeteria, a large auditorium and two gymnasiums.

The school is light buff brick, with limestone trim and a granite-faced base. There is no “main” entrance, as equal architectural treatment is given to the set of three doors leading to the lobby and auditorium on the west façade and the three sets of three adjoining doors on the long south façade. They are all embellished with paneled doors topped by divided transom lights, an ornate grille, a terra cotta frame with an entablature of stylized rosettes and a Greek key motif, flanked by fluted engaged limestone columns topped by a limestone lintel with disks that represent stripped-down capitals. Other notable features of the Neoclassical Revival style school include solid masonry end pavilions, stone belt courses and sills, and decorative brickwork between the second and third story windows and along the parapet roof. Entrances are accessed by wide sets of stone stairs with iron railings, and there is an iron fence along Neptune Avenue. Despite some alterations including replacement windows, I.S. 239 retains a high degree of integrity.

The Proposed Project would cast incremental shadows on March 21st, May 6th, and June 21st. For the March 21st analysis day, incremental shadows from the Proposed Project would enter the school along the northeastern portion of the building at 7:36 AM and would exit the building at 7:48 AM (**Figures D-26** and **D-27**).The total incremental shadow duration is approximately 12 minutes on this analysis day.

For the May 6th analysis day, incremental shadows from the Proposed Project would be cast upon the southeastern portion of the eastern façade and southern facade of the building at approximately 6:27 AM and sweeps eastward across the eastern portion of the building and exits at 6:57 AM (**Figure D-29** and **D-29**). The total incremental shadow duration is approximately 30 minutes on this analysis day.

For the June 21st analysis day, incremental shadows from the Proposed Project would be cast along the southern façade and the southern portion of the roof and along the eastern façade and middle of the roof of building at 5:57 AM and would exit the building at 7:03 AM (**Figure D-30** and **D-31).** The total incremental shadow duration is approximately 1 hour and 6 minutes on this analysis day.

Coney Island Fire Station Pumping Station

The Coney Island Fire Station Pumping Station is listed in the State and National Register of Historic Places for its architecture. This one story oblong shaped structure is fronted with limestone trimmed dark marble. A series of shallow steps lead to the raised entrance sections, framed in marble. A wide low band of metal windows encircles the rest of the building, which is executed in limestone. The "moderne" design of this former pumping station reflects the influence of the exposition halls of the 1930's, at that time a major architectural activity in Depression America. In their own way, moderne styles were America's preliminary version of the International style, and this sleek building was no doubt called "clean and modern" when built. This structure was built to maintain adequate water pressure for firefighting in this section of the city, but recent improvements in supply have led the Fire Department to close it down. The Proposed Project and the building on Potential Development Site 1 would cast incremental shadows on March 21st, May 6th, and June 21st.

For the March 21st analysis day, incremental shadows from the Proposed Project would almost entirely cover the pumping station except for the southwestern corner at 7:36 AM and would exit the building at 8:58 AM (**Figures D-32** and **D-33**).The total incremental shadow duration is approximately one hour and 22 minutes on this analysis day.

For the May 6th analysis day, incremental shadows from the Proposed Project and the building on Potential Development Site 1 would entirely cover the pumping station at approximately 6:27 AM and sweeps eastward across the eastern portion of the building and exits at 9:05 AM (**Figure D-34** through **D-37**). The total incremental shadow duration is approximately two hours and 38 minutes on this analysis day.

For the June 21st analysis day, incremental shadows from the Proposed Project and the building on Potential Development Site 1 would entirely cover the pumping station at approximately 5:57 AM and sweeps eastward across the eastern portion of the building and exits at 8:56 AM (**Figure D-38** through **D-41**). The total incremental shadow duration is approximately two hours and 59 minutes on this analysis day.

Coney Island Creek

Coney Island Creek, located in southwest Brooklyn, is tributary to Gravesend Bay and flows in a southwesterly direction. Coney Island Creek extends eastward 1.8 miles from Gravesend Bay to Shell Road and separates the west end of Coney Island from the neighborhoods of Gravesend and Bath Beach. The west end of the creek is bordered by Coney Island Creek Park and Kaiser Park on the south, and Calvert Vaux Park on the north. The Proposed Project and the building on Potential Development Site 1 would cast incremental shadows on all four representative days.

For the December 21st analysis day, incremental shadows would be cast at the beginning of the analysis day (8:51 AM) and would move eastward and would exit the creek past the end of the analysis day (after 2:53 PM)). Incremental shadows from the Proposed Project would be cast over Coney Island Creek for approximately seven hours and two minutes (**Figures D-42 through D-48**).

For the March 21st analysis day, incremental shadows from the Proposed Project and the building on Potential Development Site 1 would be cast over the creek at the start of the analysis day (7:36 AM) until the end of the analysis day (4:36 PM) (**Figures D-49** through **D-58**).The total incremental shadow duration is approximately eight hours and 53 minutes on this analysis day.

For the May 6th analysis day, incremental shadows from the Proposed Project and the building on Potential Development Site 1 would enter the creek at 6:27 AM and would remain on the creek until the end of the analysis day (5:18 PM) (**Figures D-59** through **D-70**).The total incremental shadow duration is approximately 10 hours and 51 minutes on this analysis day.

For the June 21st analysis day, incremental shadows from the Proposed Project would enter the creek at 7:57 AM and would remain on the creek until the end of the analysis day (6:01 PM) (**Figures D-71** through **D-81**).The total incremental shadow duration is approximately 10 hours and 5 minutes on this analysis day.

Table D-1: Analysis Summary shows the incremental shadow duration for the five sunlight-sensitive resources of concern.

Table D-1: Analysis Summary

Sunlight-Sensitive Resource	Analysis Day Timeframe Window	December 21st 8:51 A.M. - 2:53 P.M.	March 21st 7:36 A.M. - 4:29 P.M.	May 6th 6:27 A.M. - 5:18 P.M.	June 21st 5:57 A.M. - 6:01 P.M.
Coney Island Community Garden	Shadow Enter -Exit Time	8:51 A.M. - 10:10 A.M.	7:36 A.M. - 10:31 A.M.	6:27 A.M. - 10:11 A.M.	5:57 A.M. - 10:11 A.M.
	Incremental Shadow Duration	1 hour and 19 minutes	2 hours and 55 minutes	3 hours and 44 minutes	4 hours and 14 minutes
Coney Island Boat Basin	Shadow Enter -Exit Time	1:21 P.M. - 2:53 P.M.	NA	NA	NA
	Incremental Shadow Duration	1 hour and 32 minutes			
Mark Twain IS 239	Shadow Enter -Exit Time	NA	7:36 A.M. - 7:48 A.M.	6:27 A.M. - 6:57 A.M.	5:57 A.M. - 7:03 A.M.
	Incremental Shadow Duration		12 minutes	30 minutes	1 hour and 6 minutes
Coney Island Fire Station Pumping Station	Shadow Enter -Exit Time	NA	7:36 A.M. - 8:58 A.M.	6:27 A.M. - 9:05 A.M.	5:57 A.M. - 8:56 A.M.
	Incremental Shadow Duration		2 hours and 55 minutes	3 hours and 44 minutes	4 hours and 14 minutes
Coney Island Creek	Shadow Enter -Exit Time	8:51 A.M. - 2:53 P.M.	7:36 A.M. - 4:29 P.M.	6:27 A.M. - 5:18 A.M.	7:57 A.M. - 6:01 P .M.
	Incremental Shadow Duration	7 hours and 2 minutes	8 hours and 53 minutes	10 hours and 51 minutes	10 hours and 5 minutes

Note: Daylight savings time not used



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:51 AM

December 21st Analysis Day

Figure D-8



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

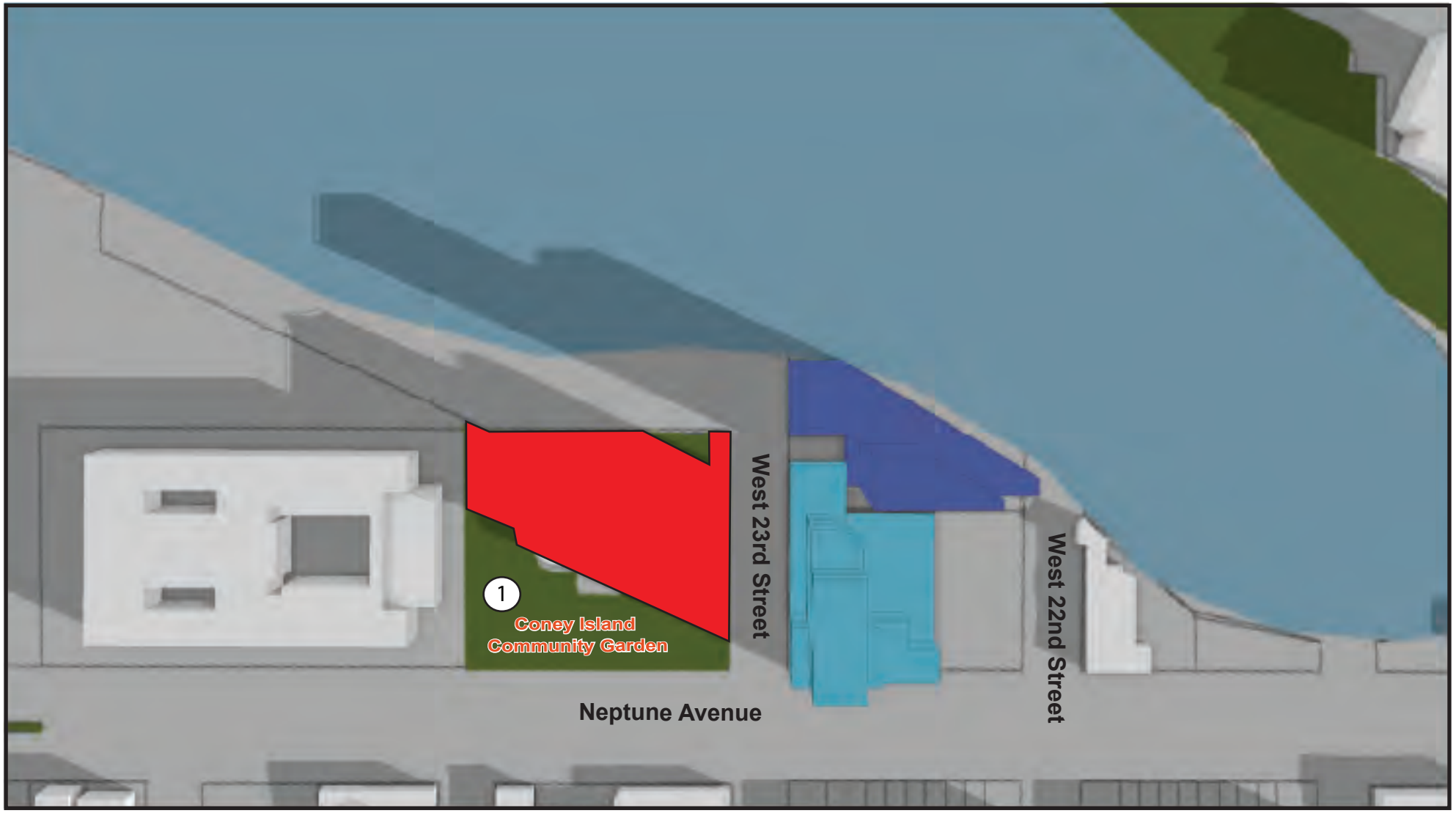
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 10:10 AM

December 21st Analysis Day

Figure D-9



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

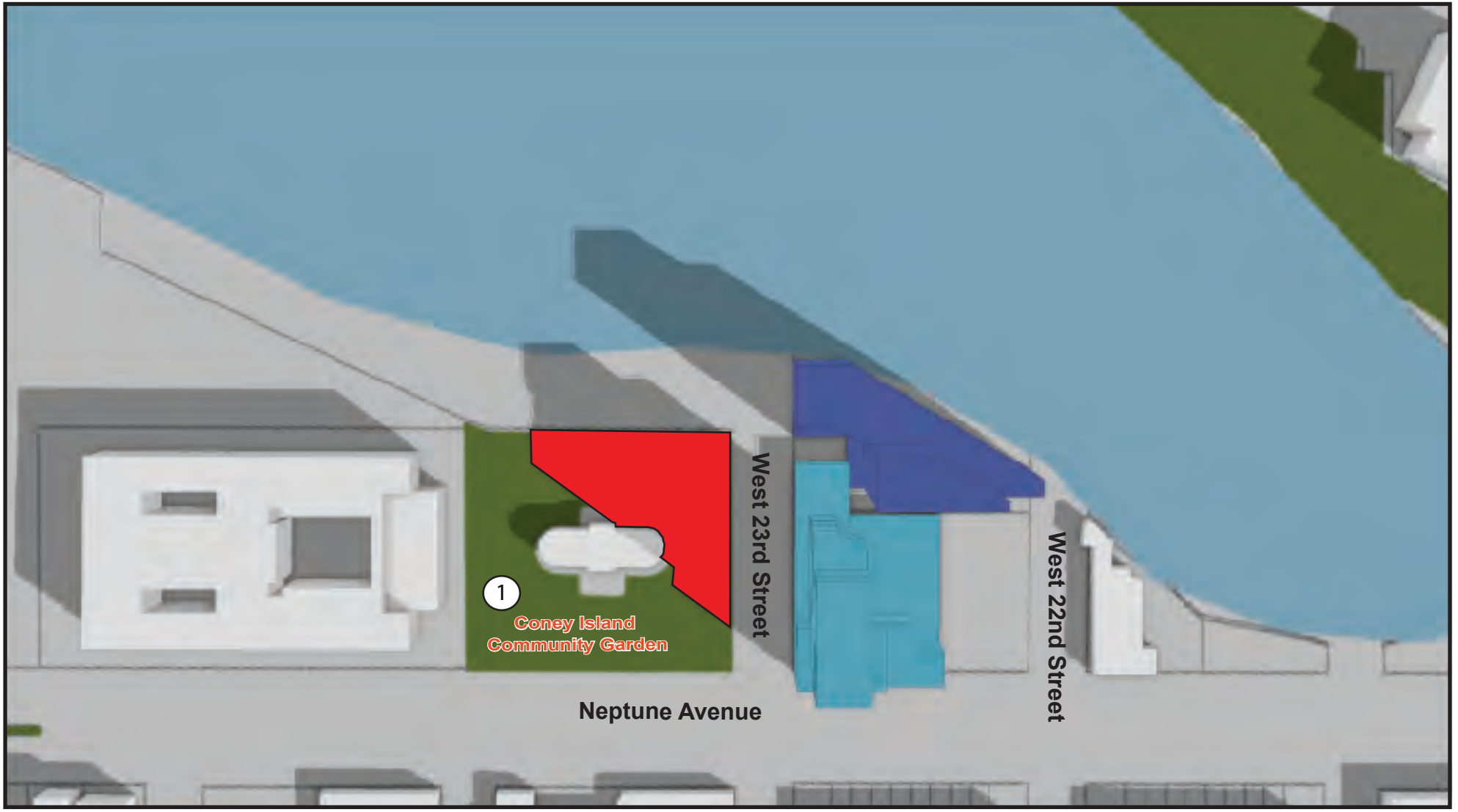
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:36 AM

March 21st Analysis Day

Figure D-10



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

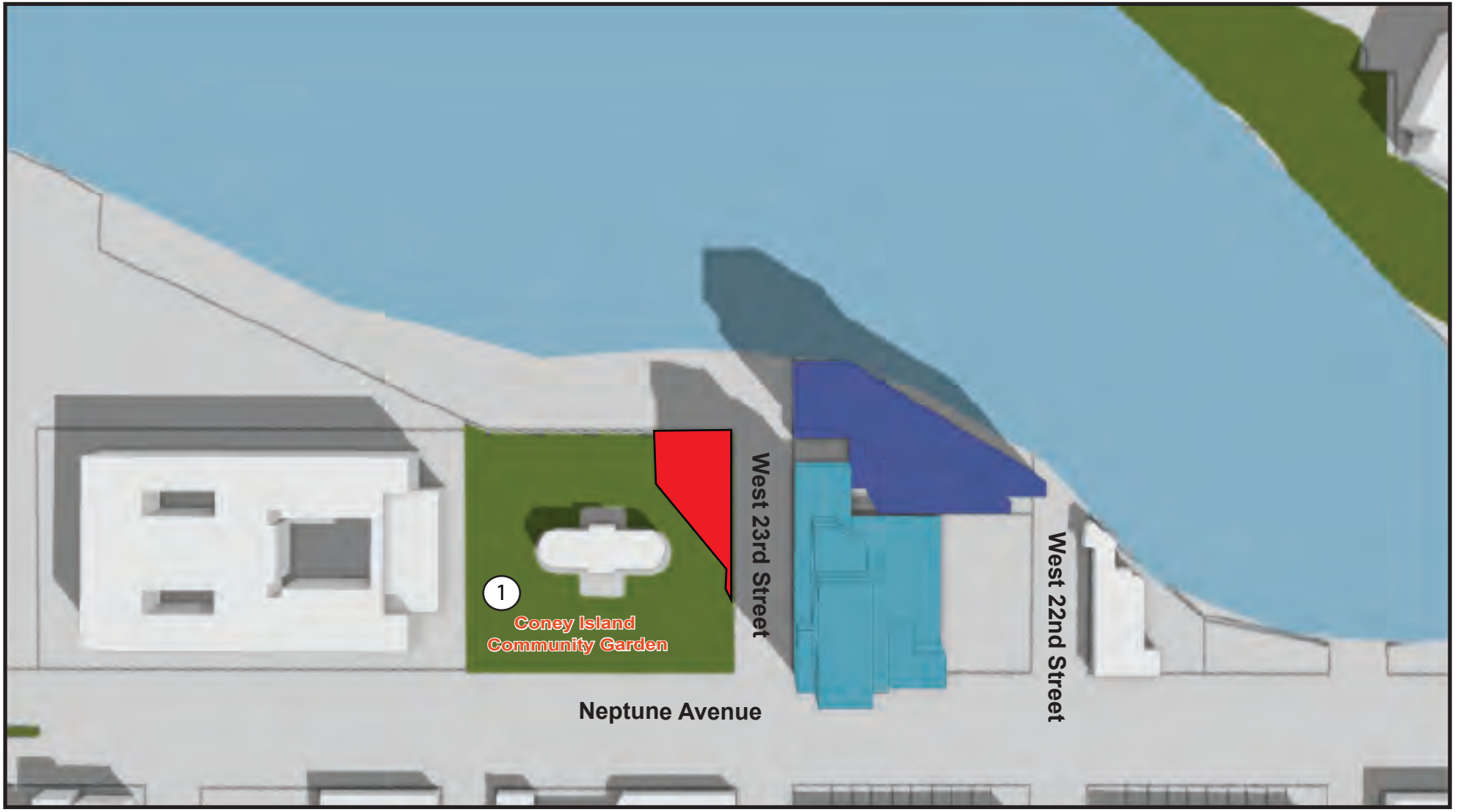
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:36 AM

March 21st Analysis Day

Figure D-11



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

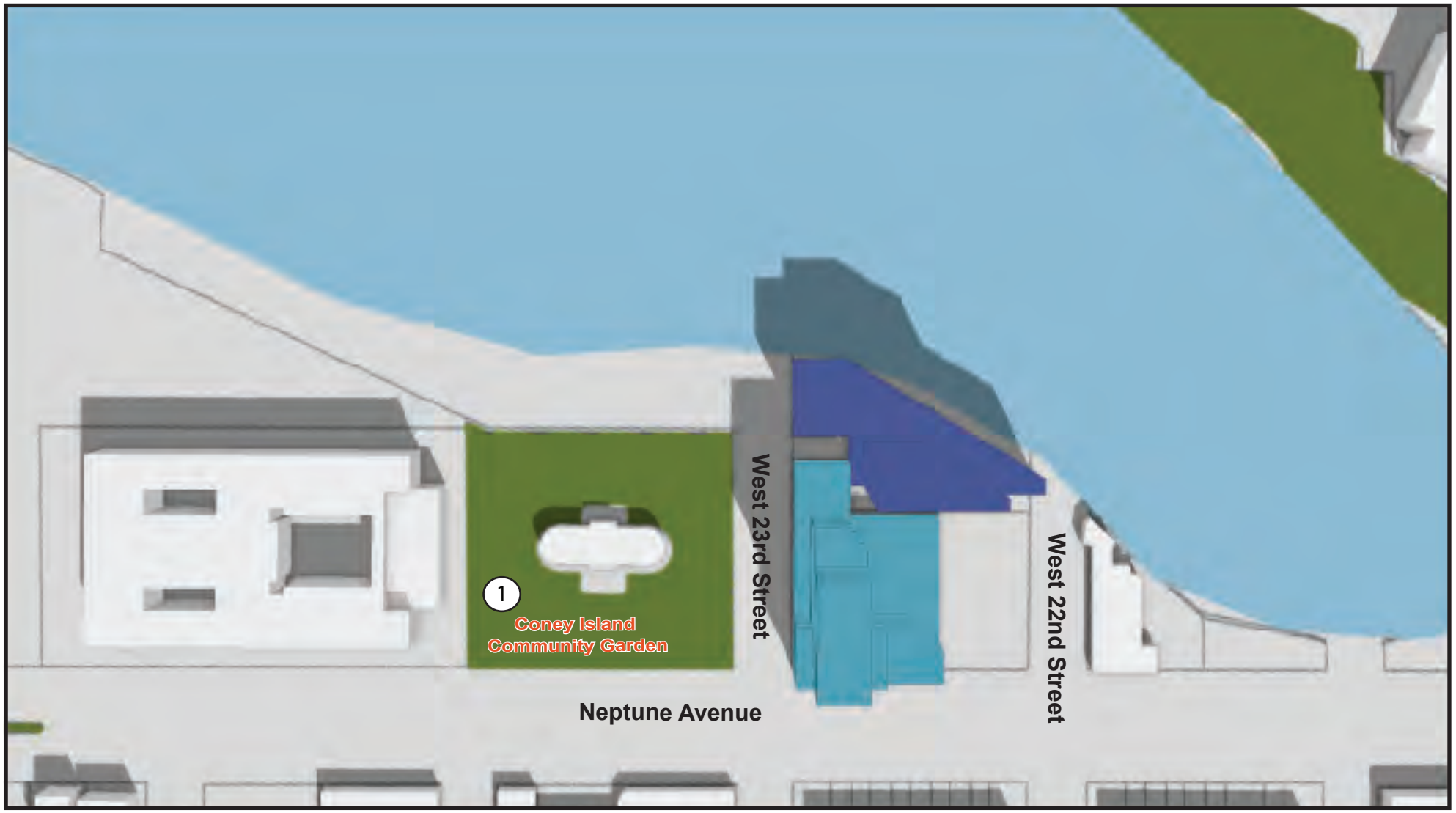
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 9:36 AM

March 21st Analysis Day

Figure D-12



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

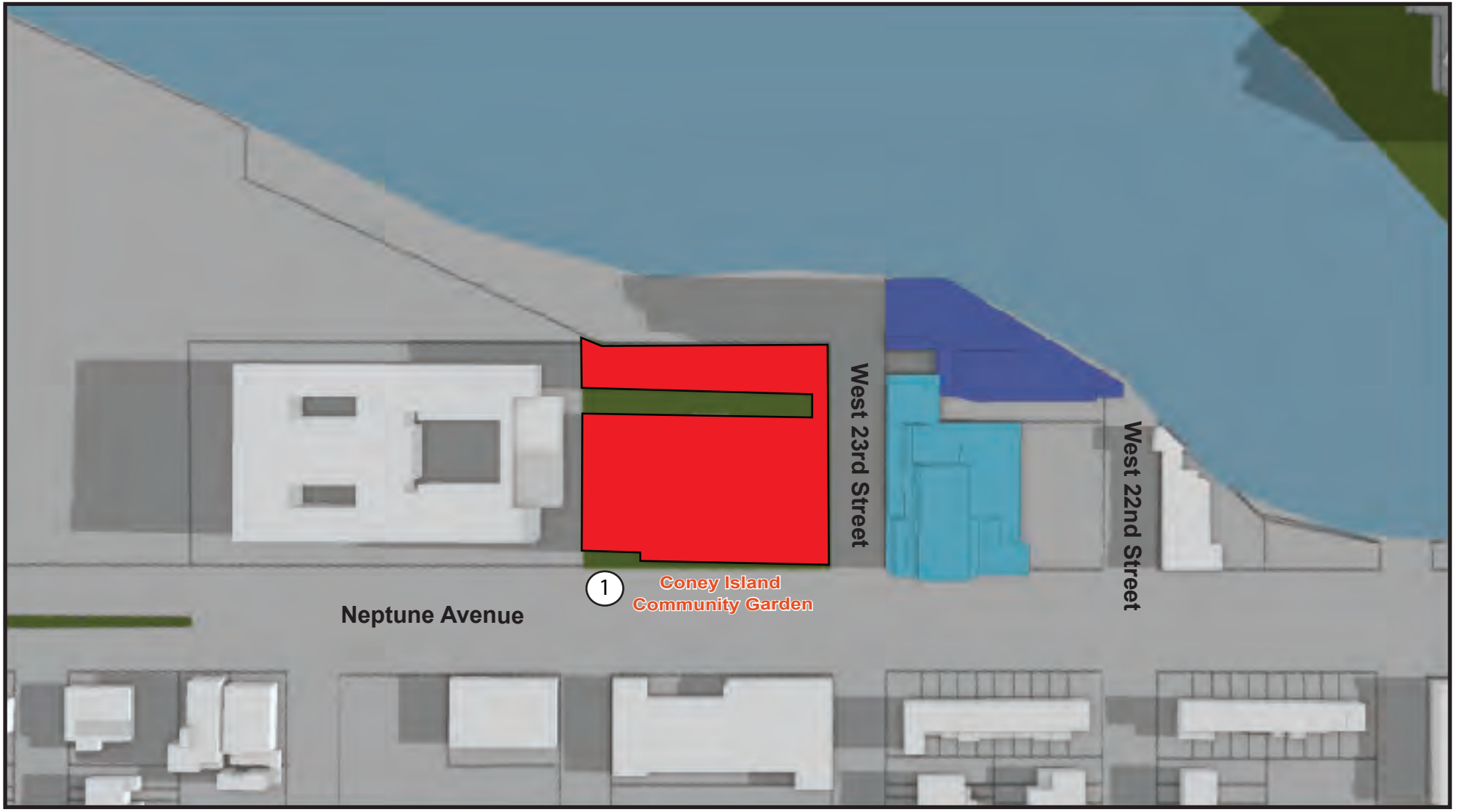
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 10:31 AM

March 21st Analysis Day

Figure D-13



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

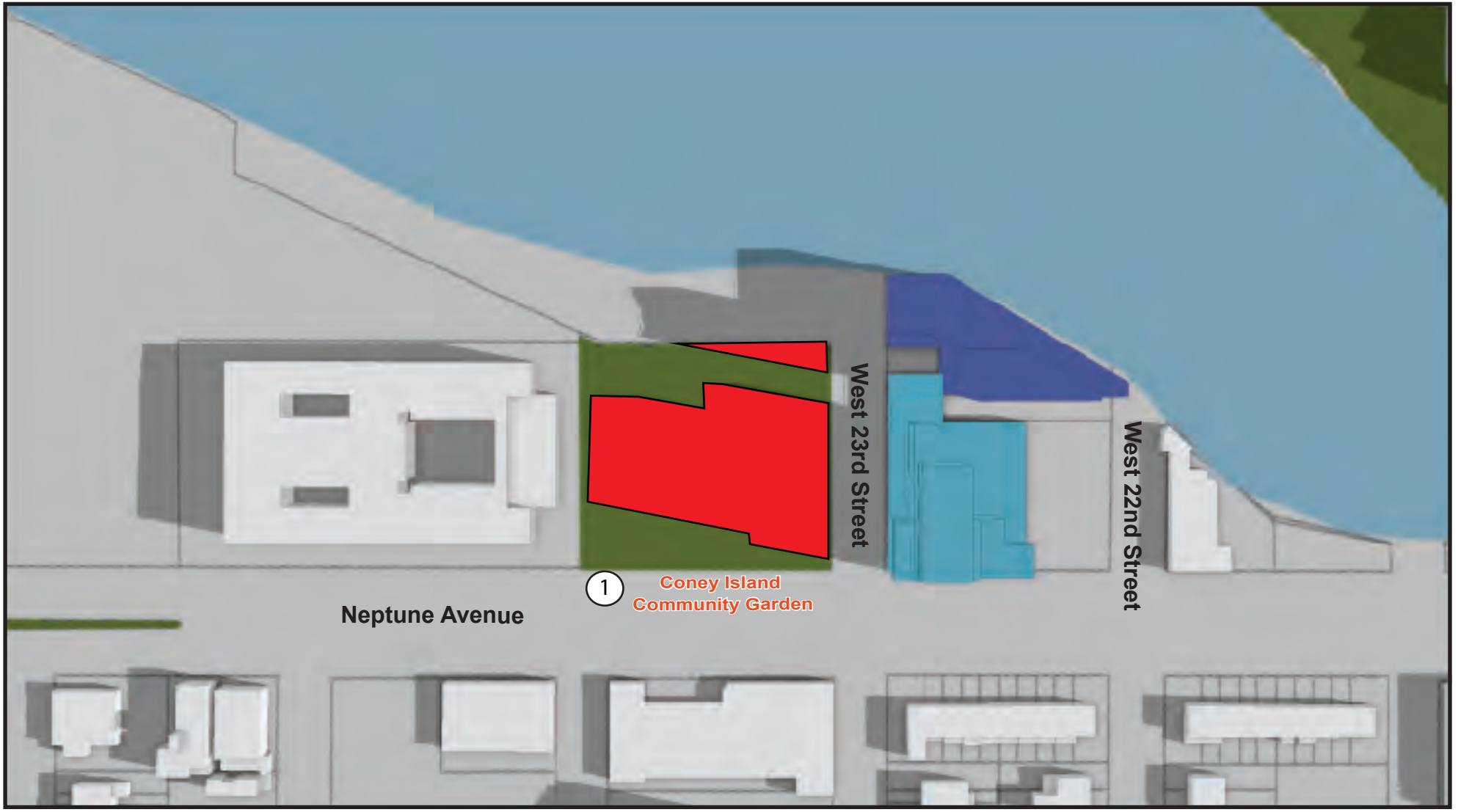
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 6:27 AM

May 6th Analysis Day

Figure D-14



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

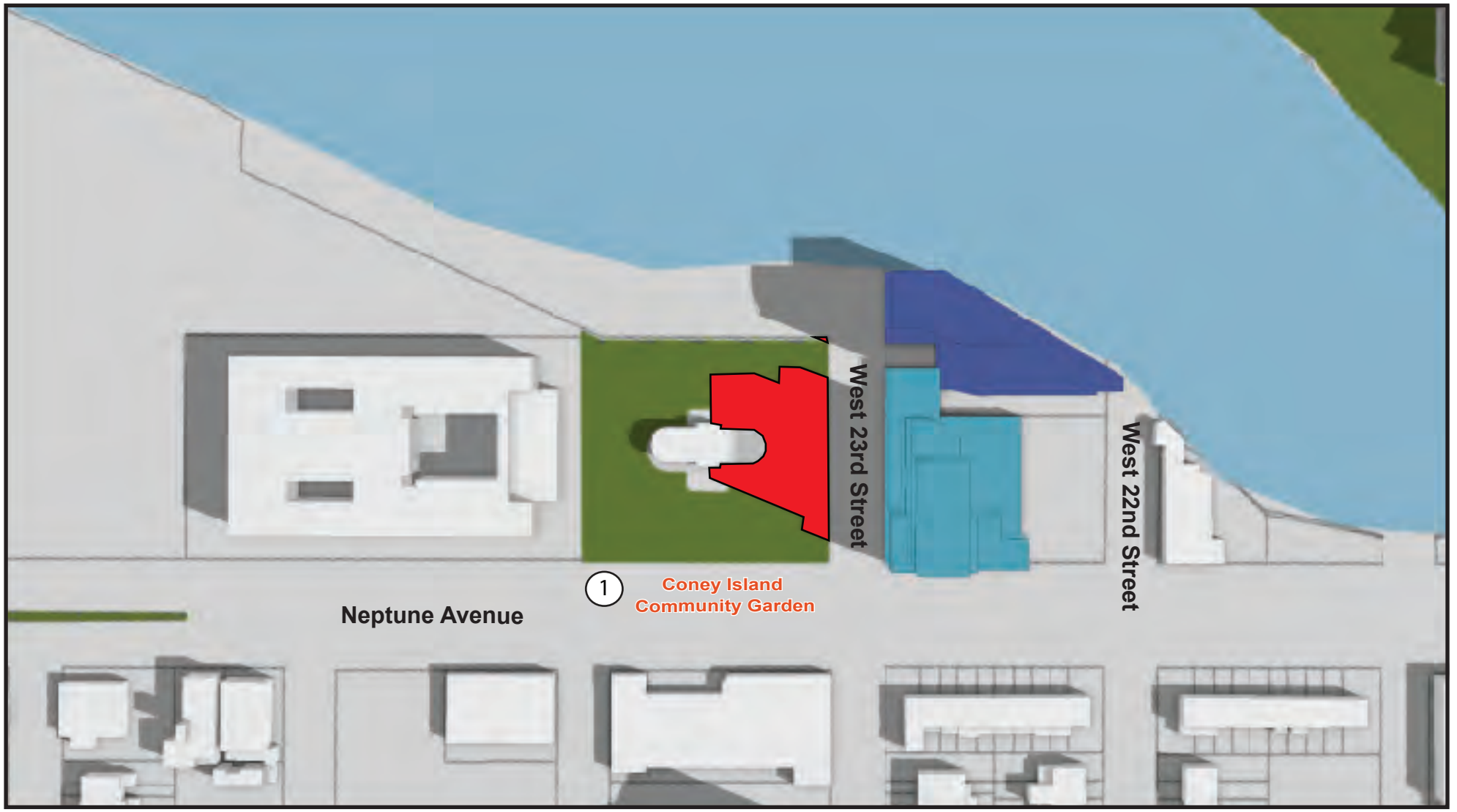
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:27 AM

May 6th Analysis Day

Figure D-15



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

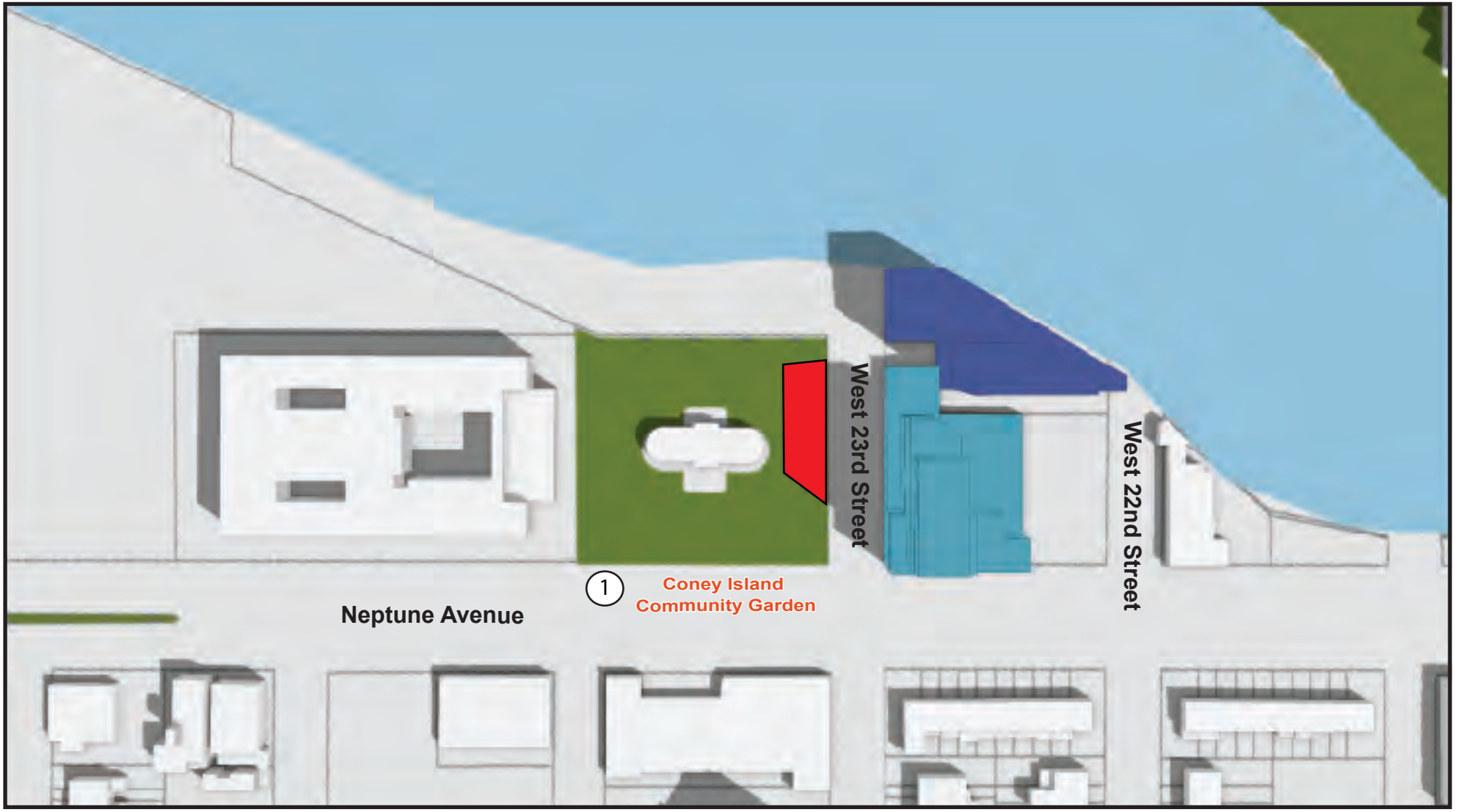
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:27 AM

May 6th Analysis Day

Figure D-16



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

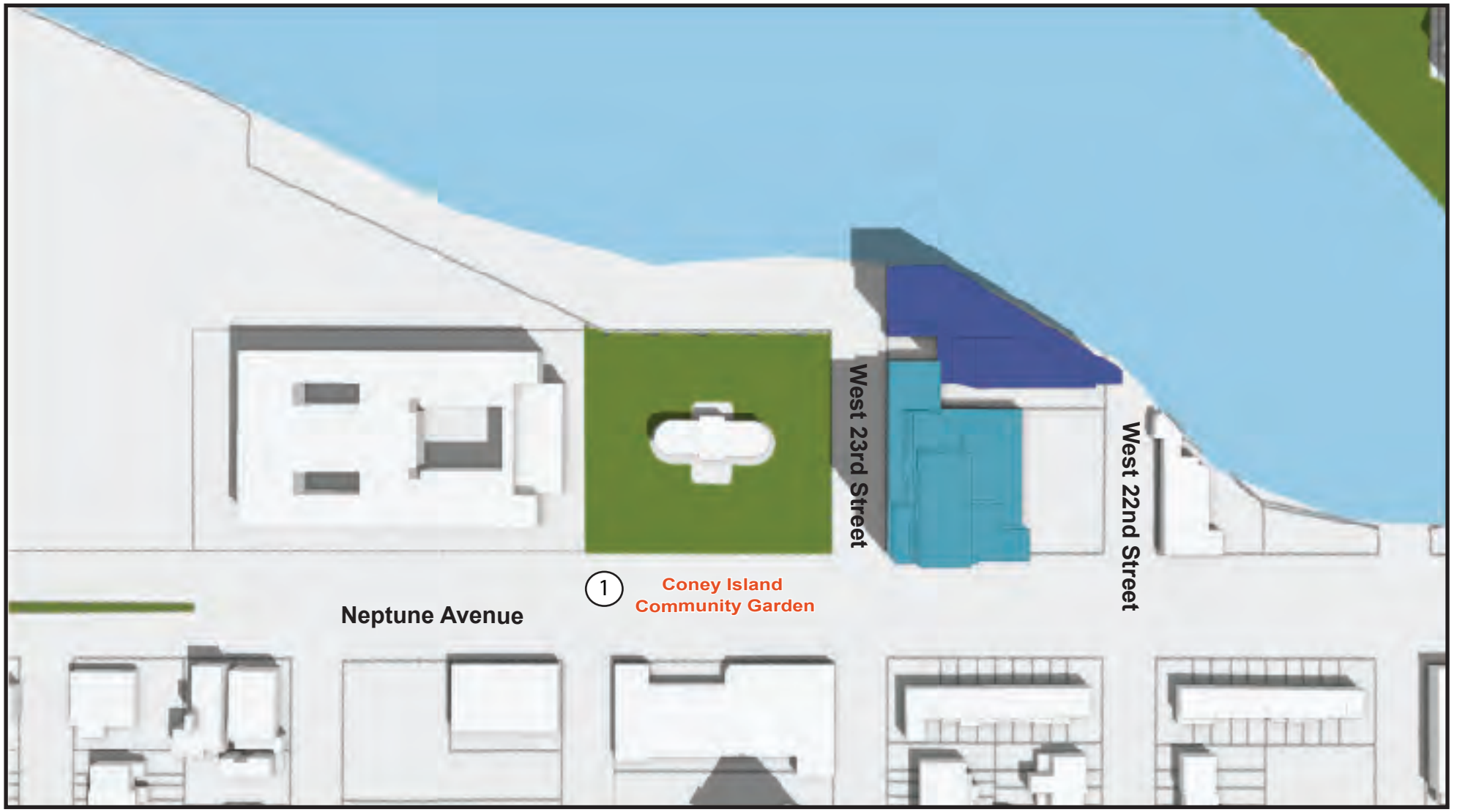
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 9:27 AM

May 6th Analysis Day

Figure D-17



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

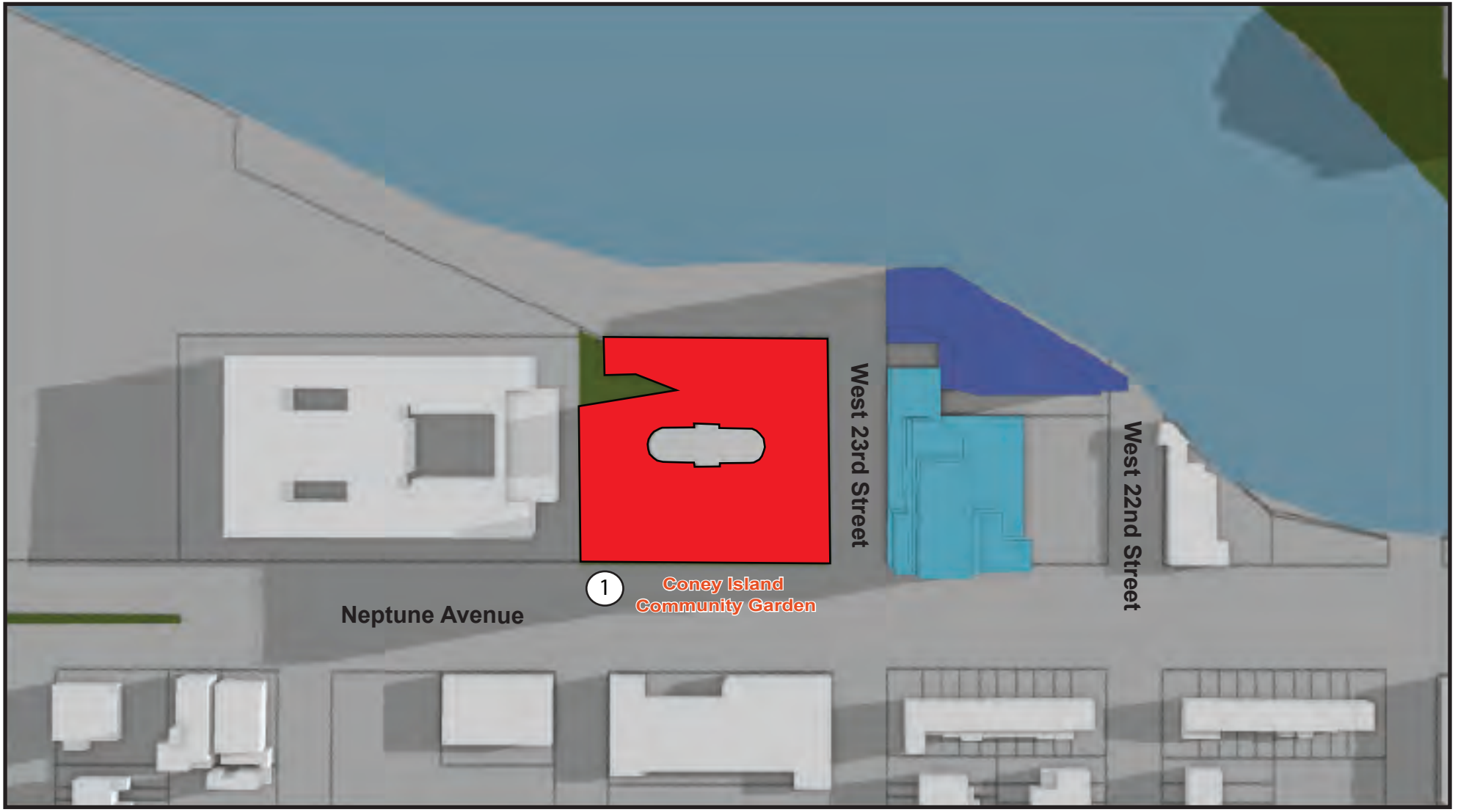
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 10:11 AM

May 6th Analysis Day

Figure D-18



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

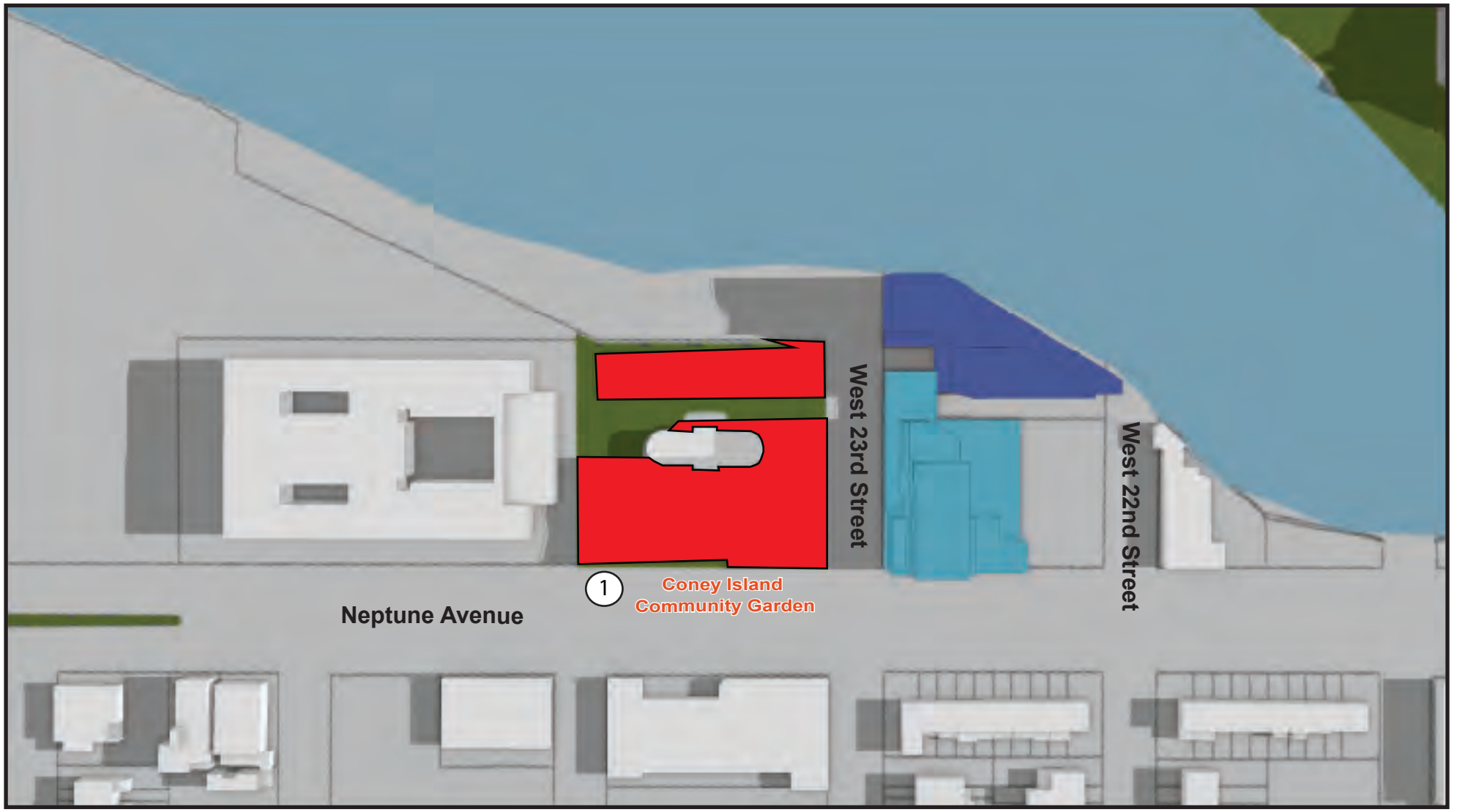
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 5:57 AM

June 21st Analysis Day

Figure D-19



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

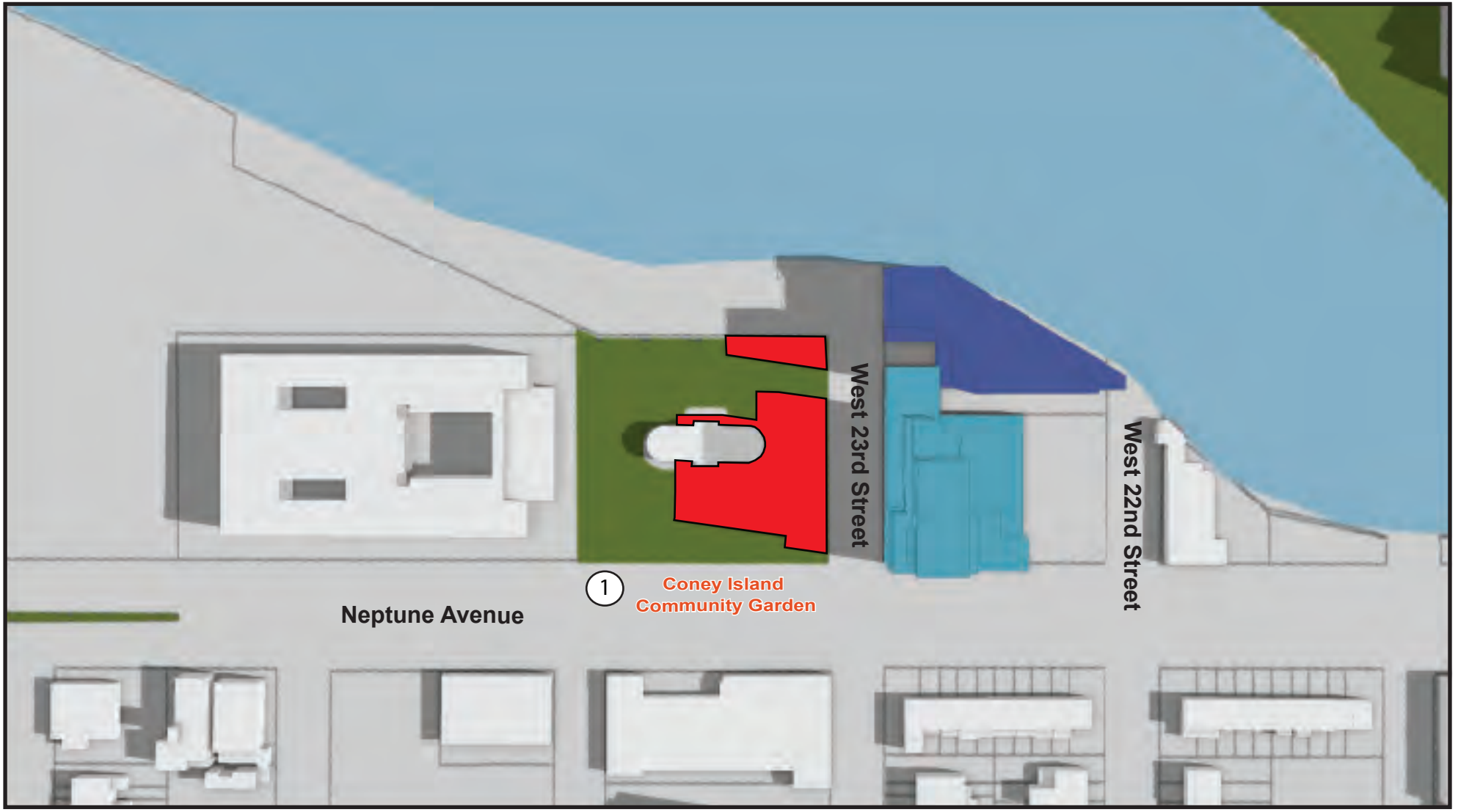
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 6:57 AM

June 21st Analysis Day

Figure D-20



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

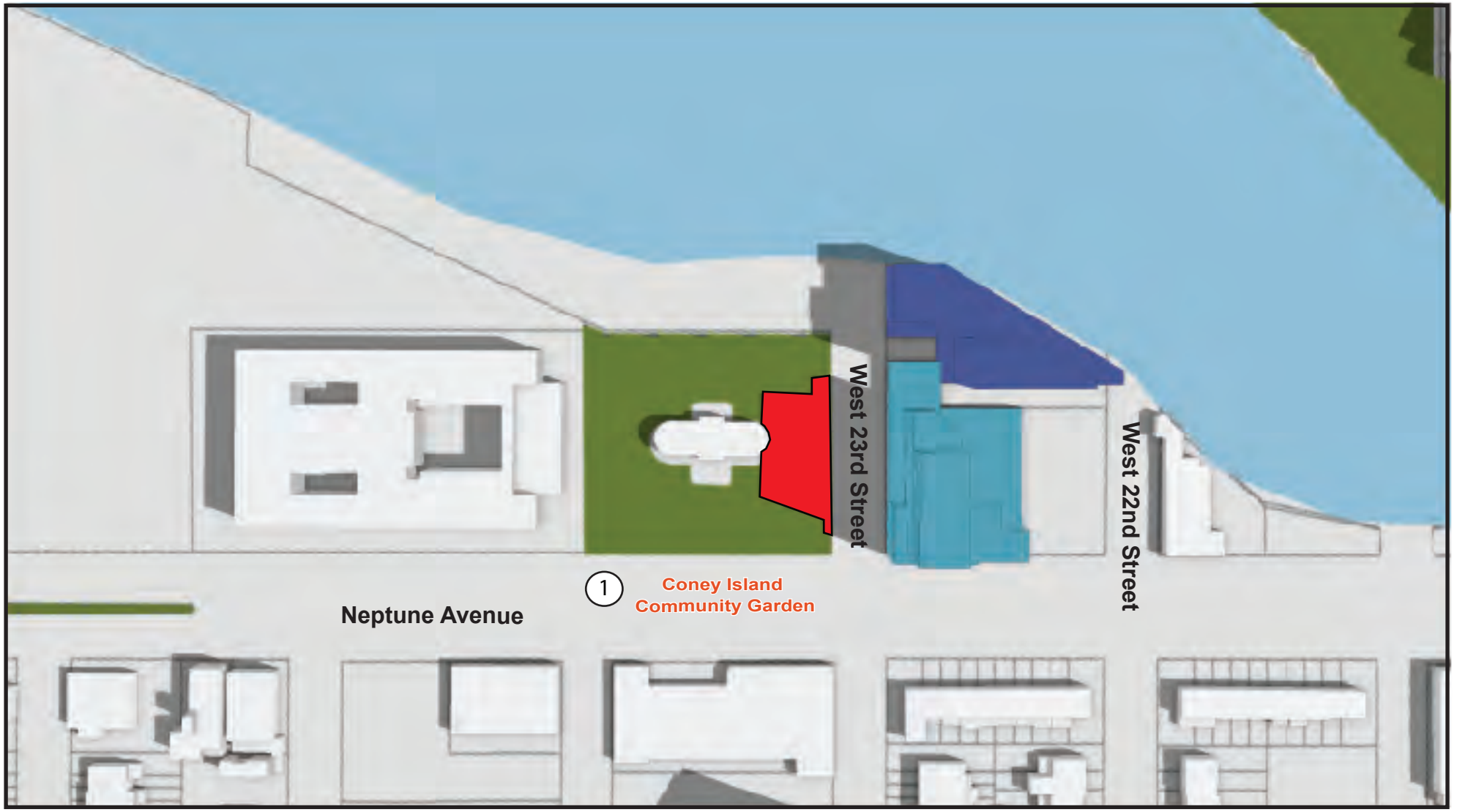
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:57 AM

June 21st Analysis Day

Figure D-21



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

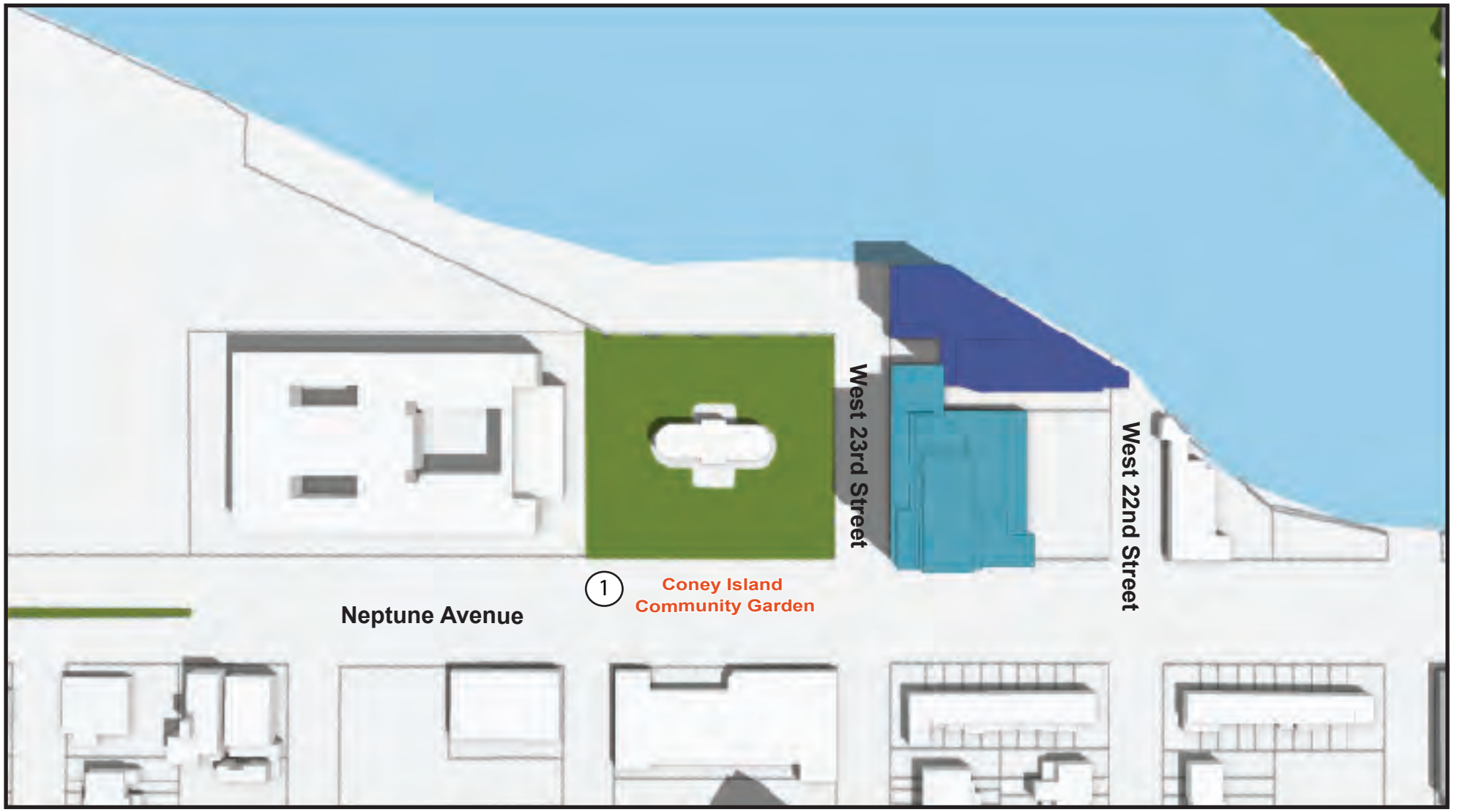
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:57 AM

June 21st Analysis Day

Figure D-22



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 10:11 AM

June 21st Analysis Day

Figure D-23



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

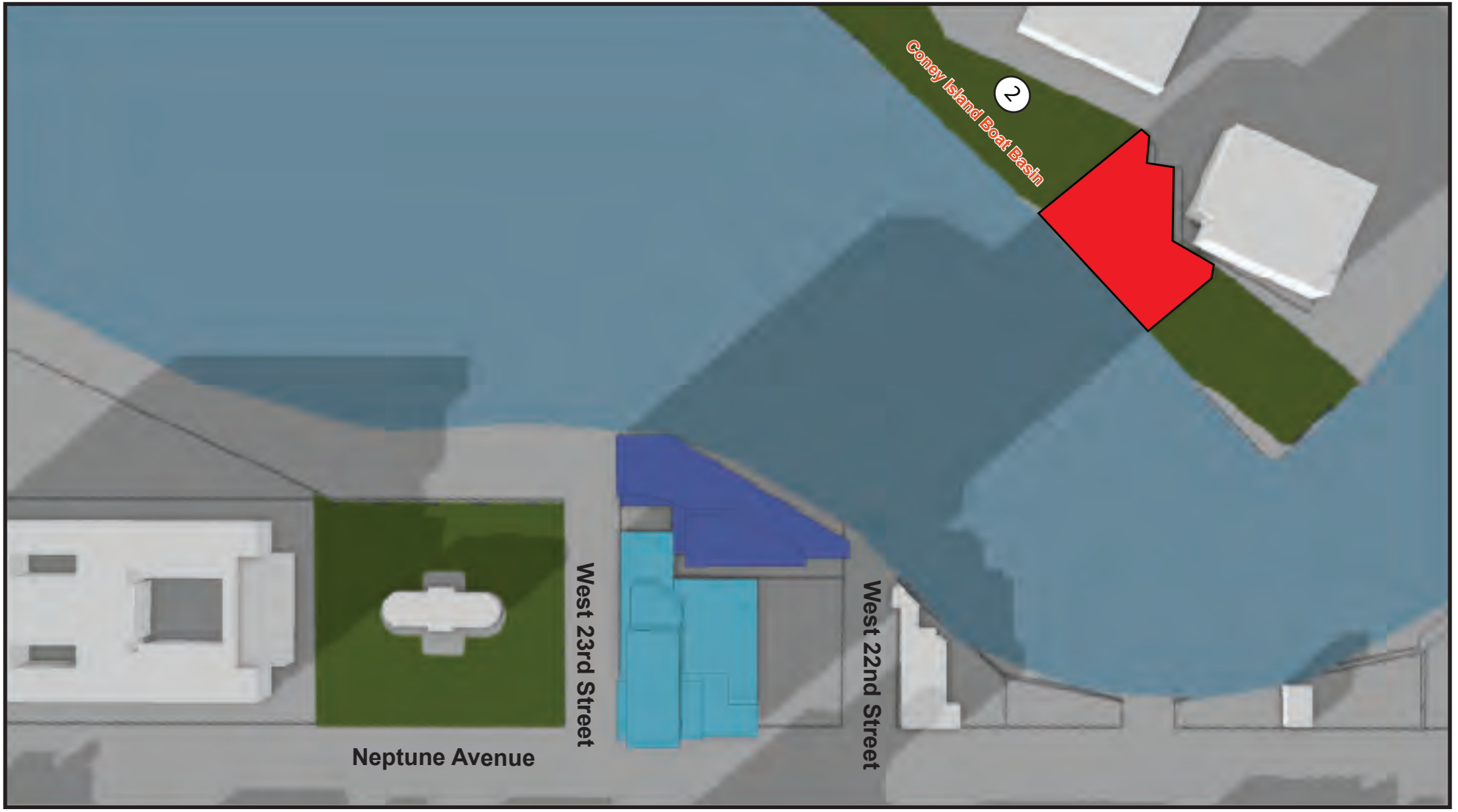
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 1:21 PM

December 21st Analysis Day

Figure D-24



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 2:53 PM

December 21st Analysis Day

Figure D-25



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

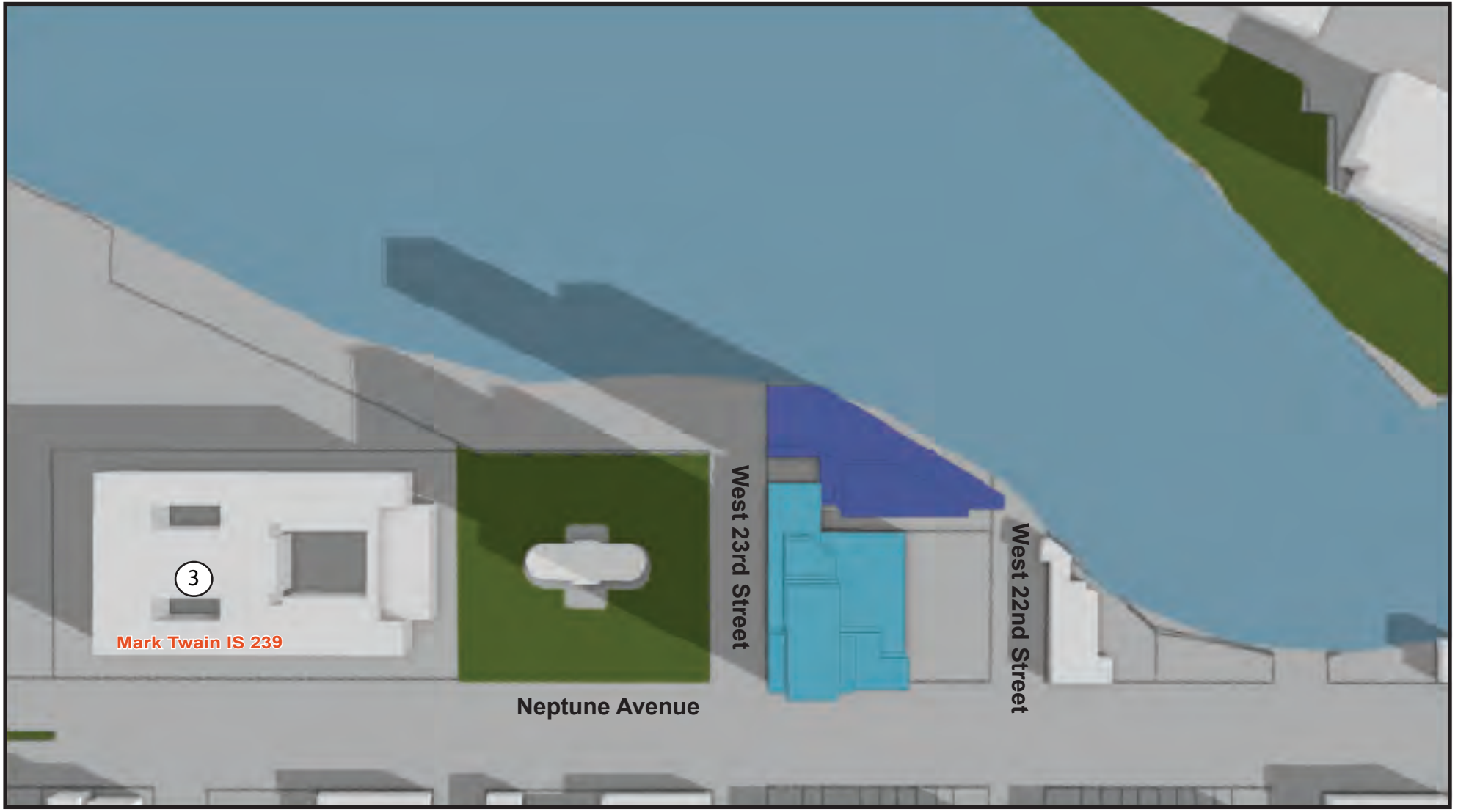
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:36 AM

March 21st Analysis Day

Figure D-26



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

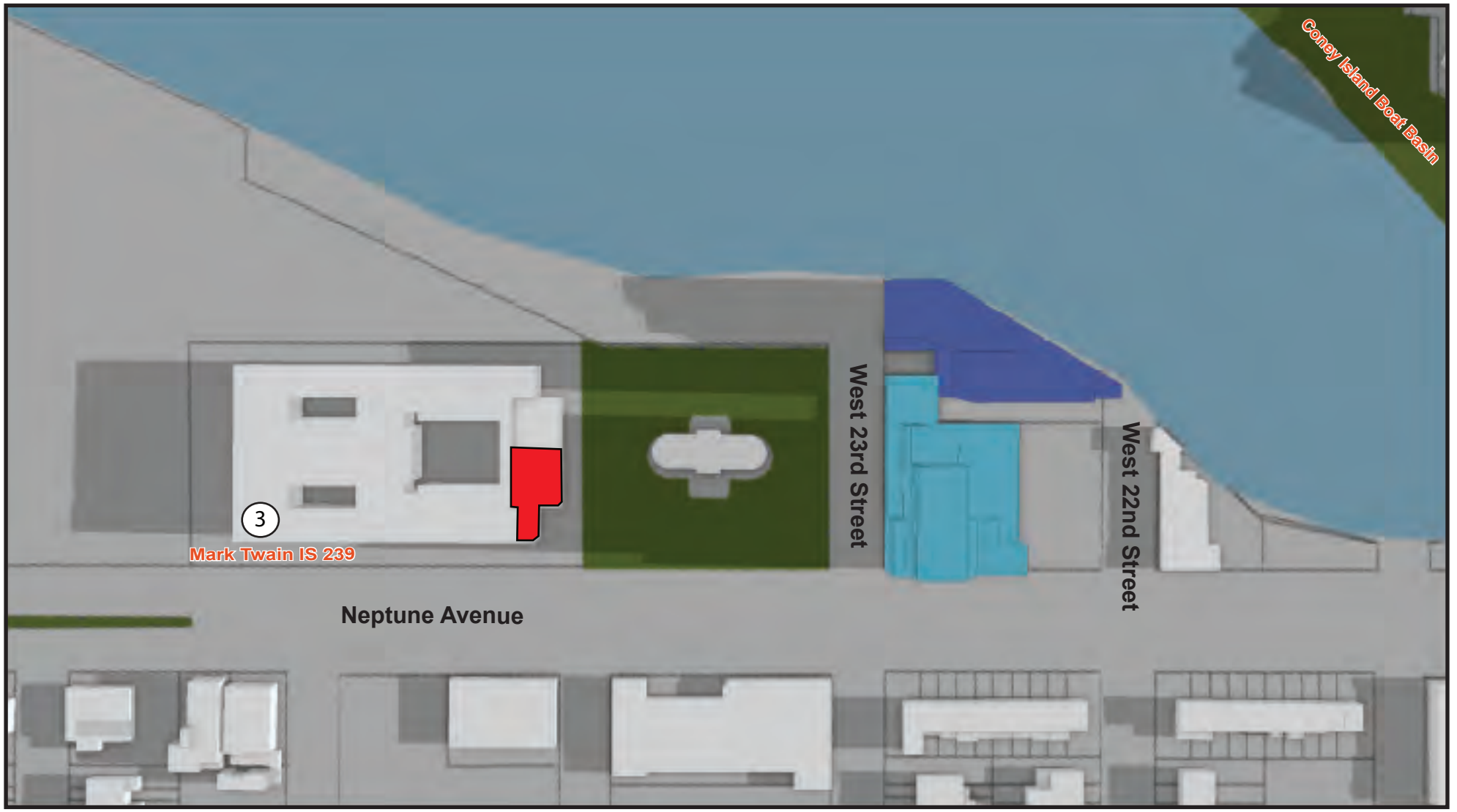
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:48 AM

March 21st Analysis Day

Figure D-27



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

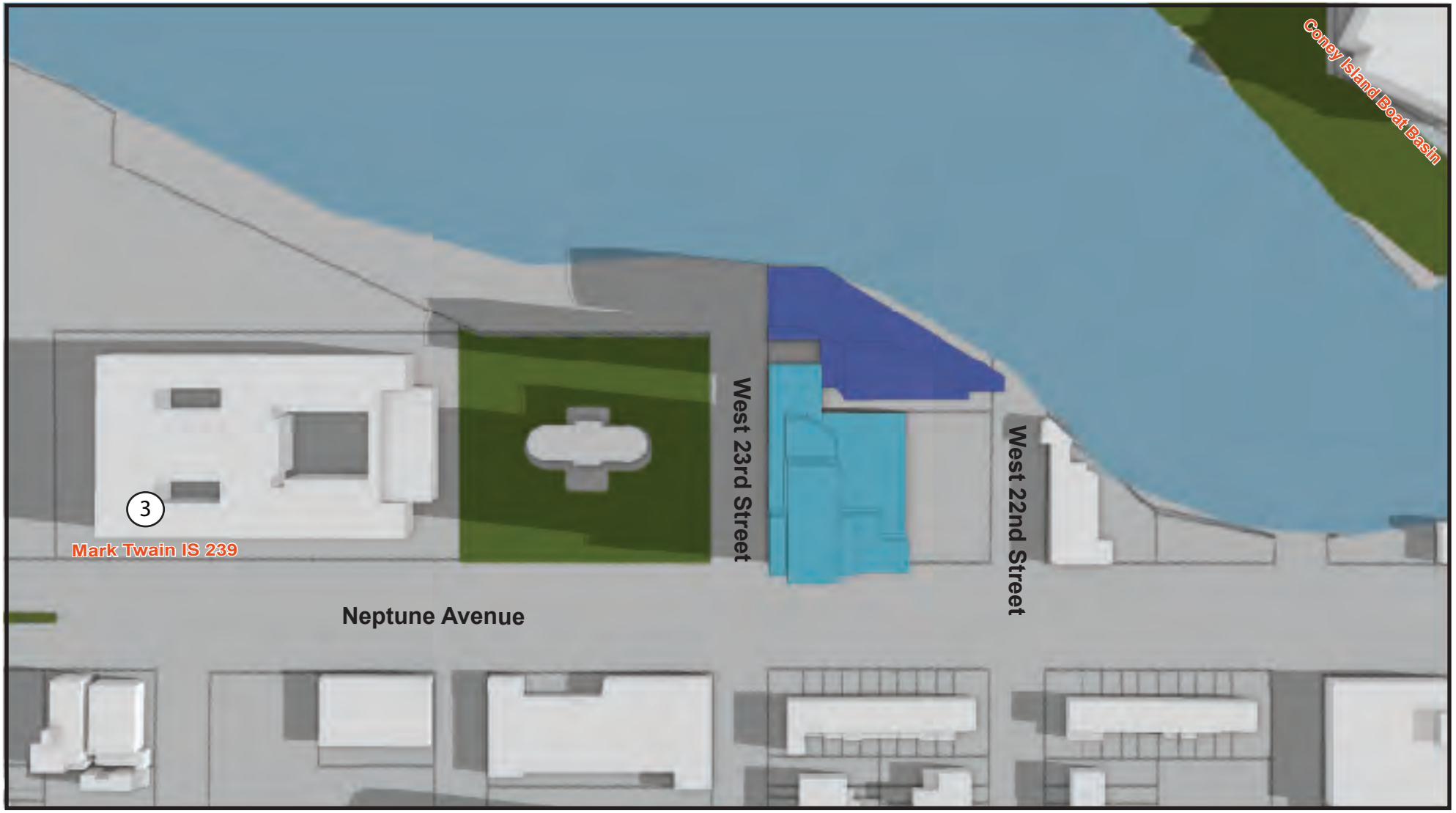
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 6:27 AM

May 6th Analysis Day

Figure D-28



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

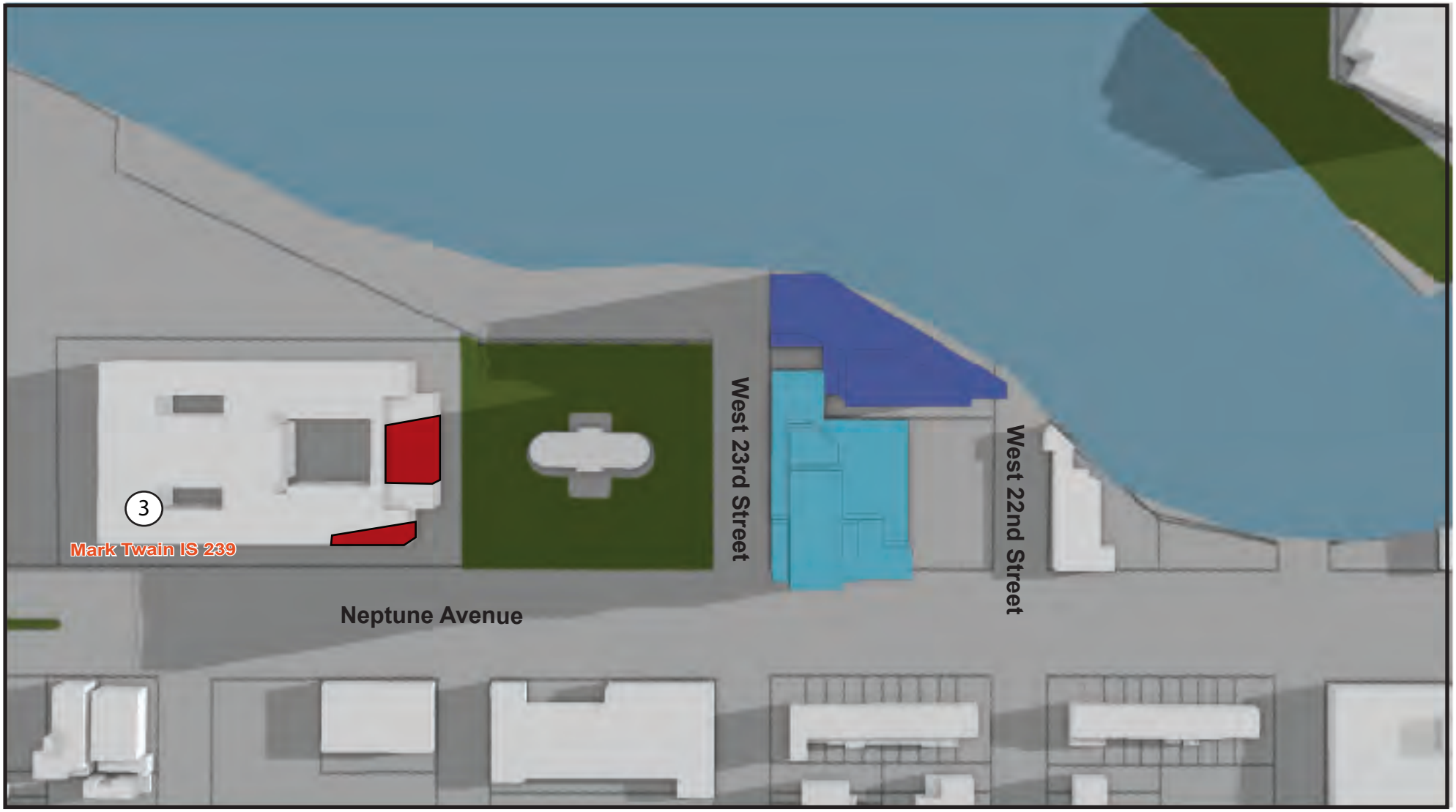
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 6:57 AM

May 6th Analysis Day

Figure D-29



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

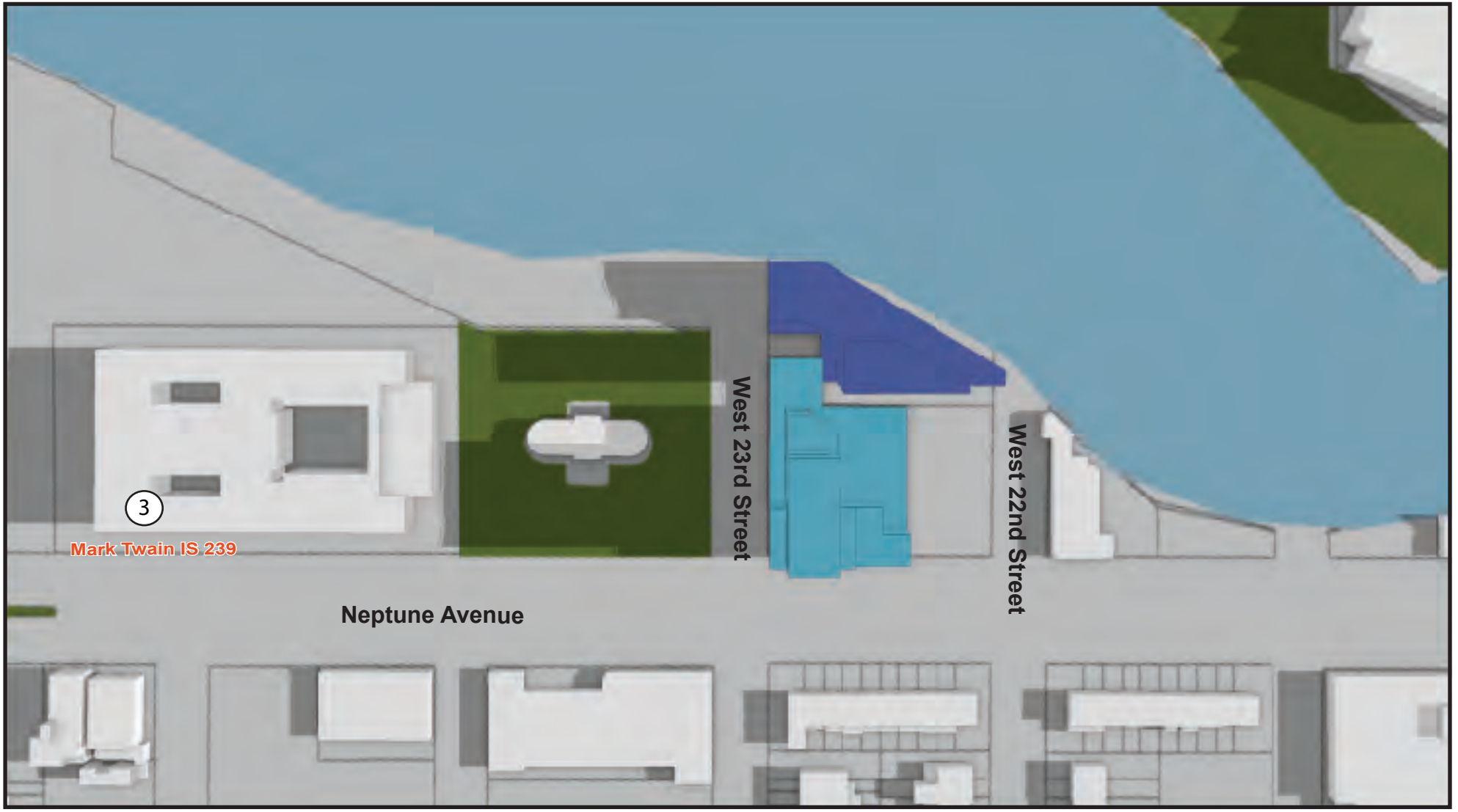
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 5:57 AM

June 21st Analysis Day

Figure D-30



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:03 AM

June 21st Analysis Day

Figure D-31



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

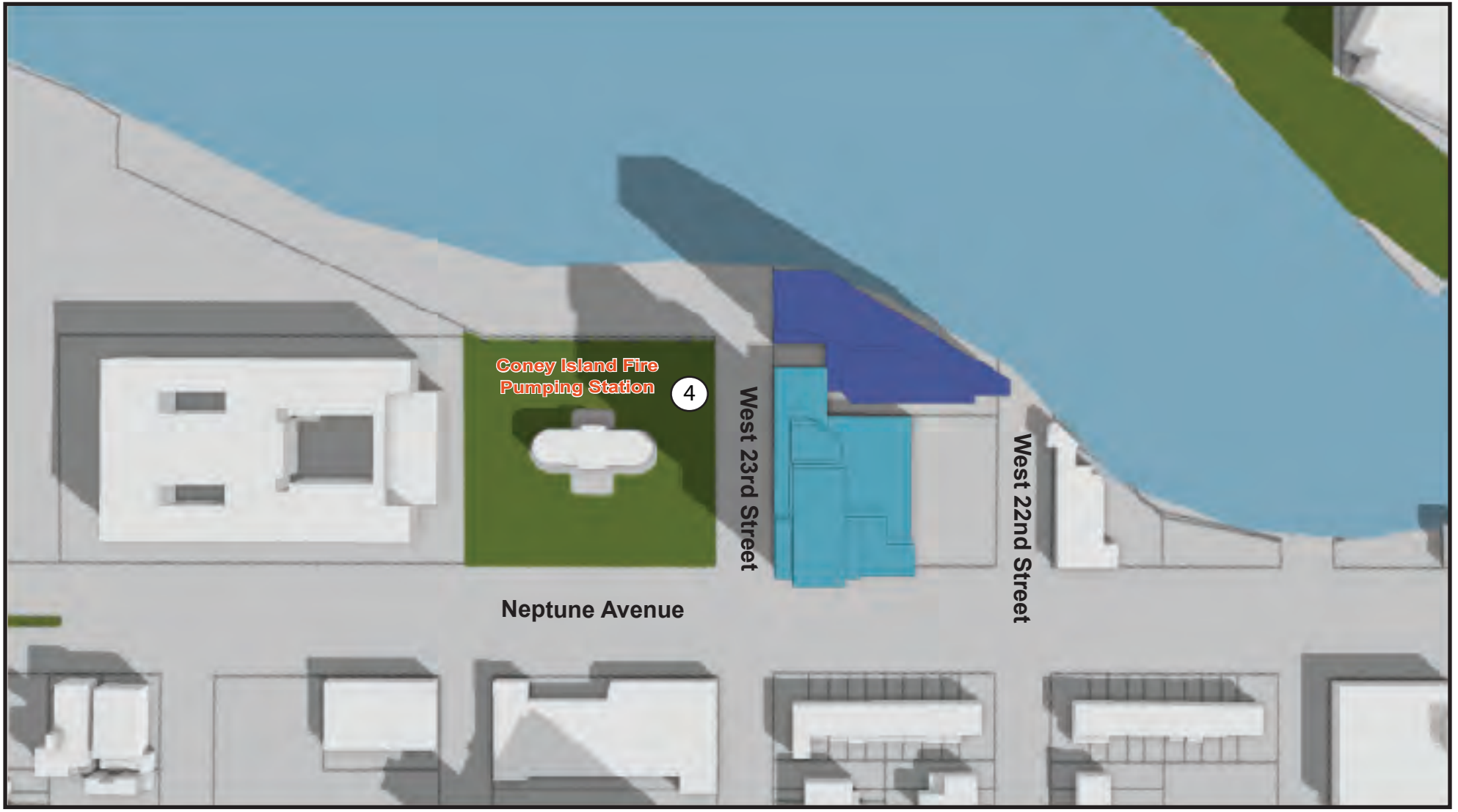
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:36 AM

March 21st Analysis Day

Figure D-32



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

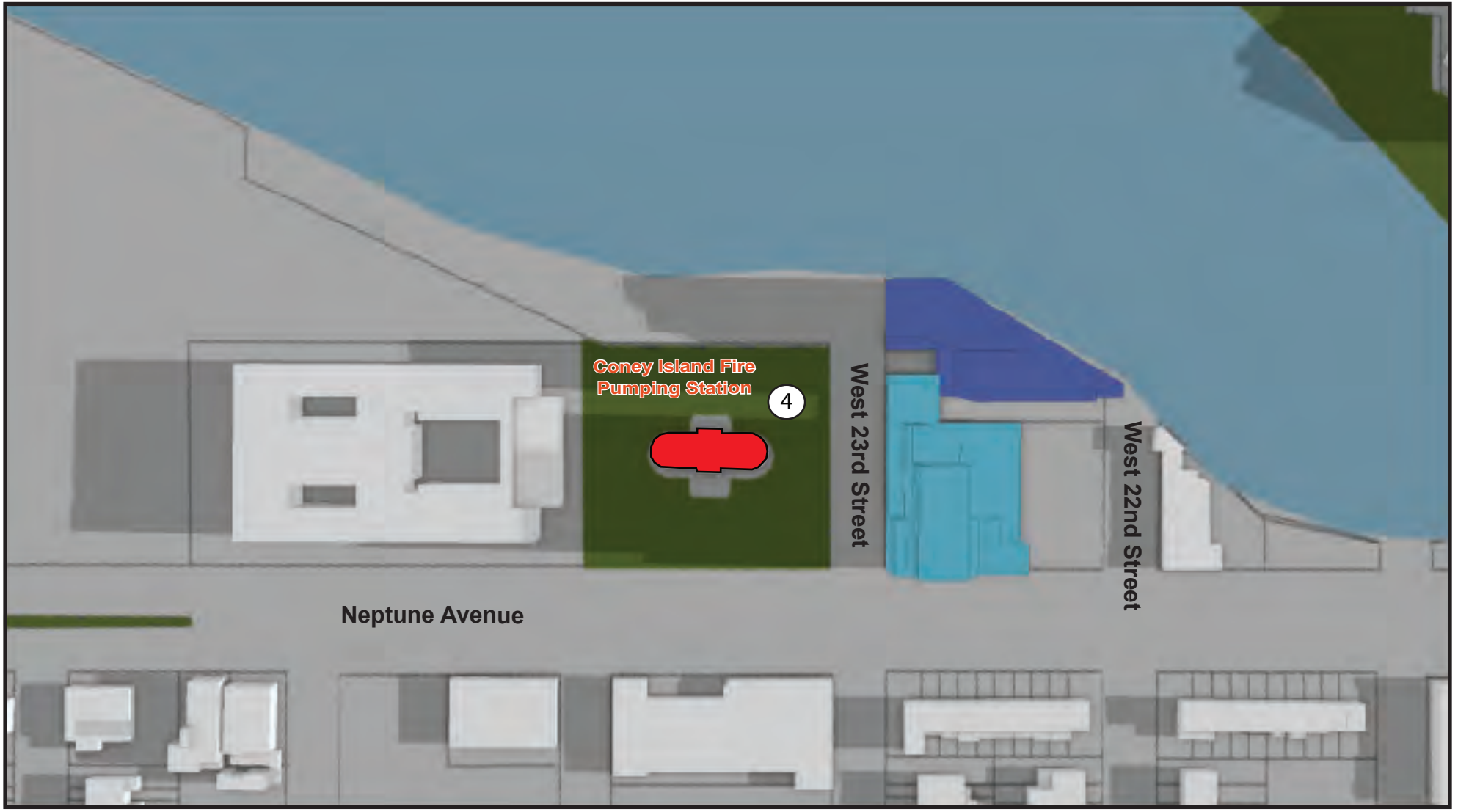
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:58 AM

March 21st Analysis Day

Figure D-33



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

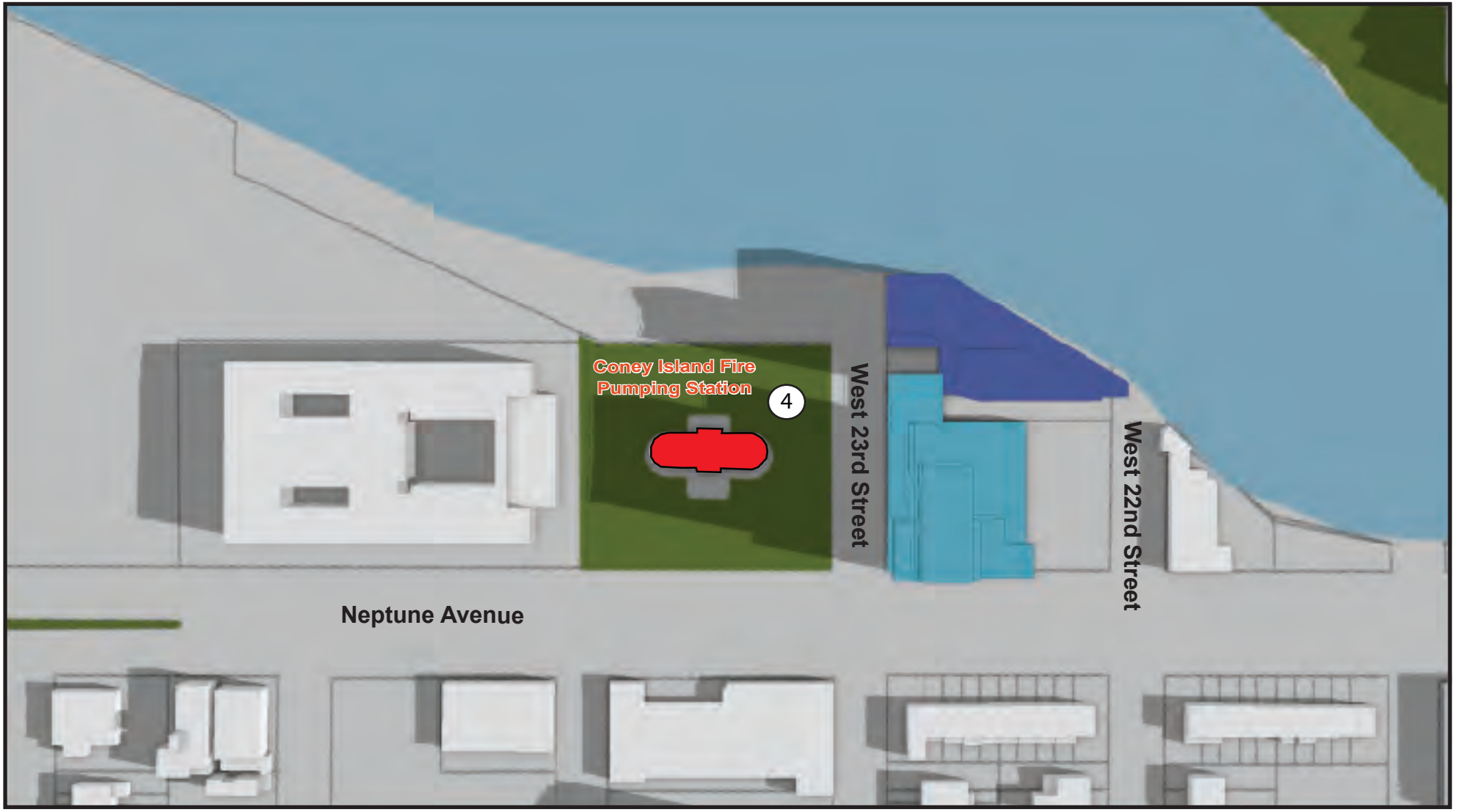
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 6:27 AM

May 6th Analysis Day

Figure D-34



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

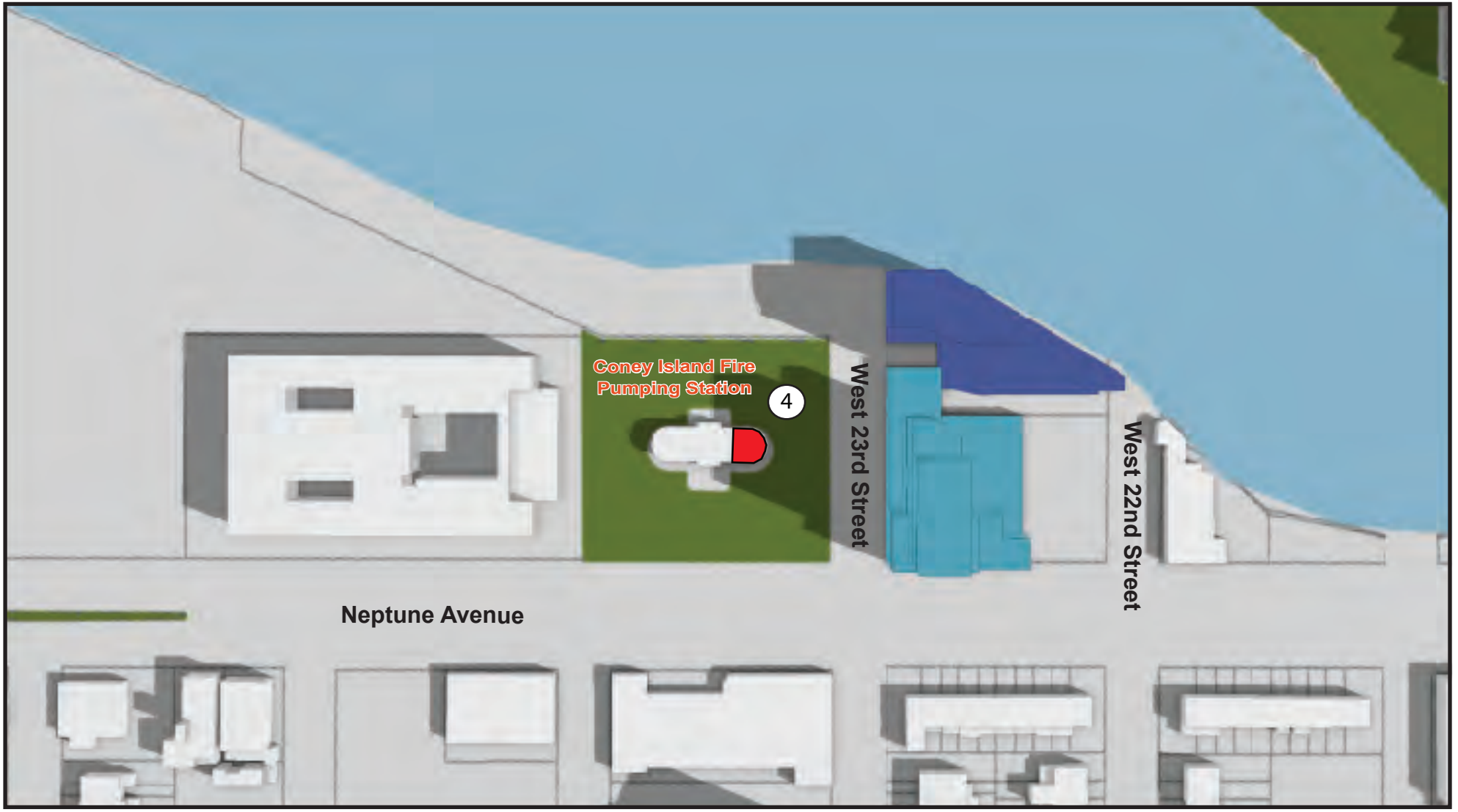
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:27 AM

May 6th Analysis Day

Figure D-35



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:27 AM

May 6th Analysis Day

Figure D-36



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

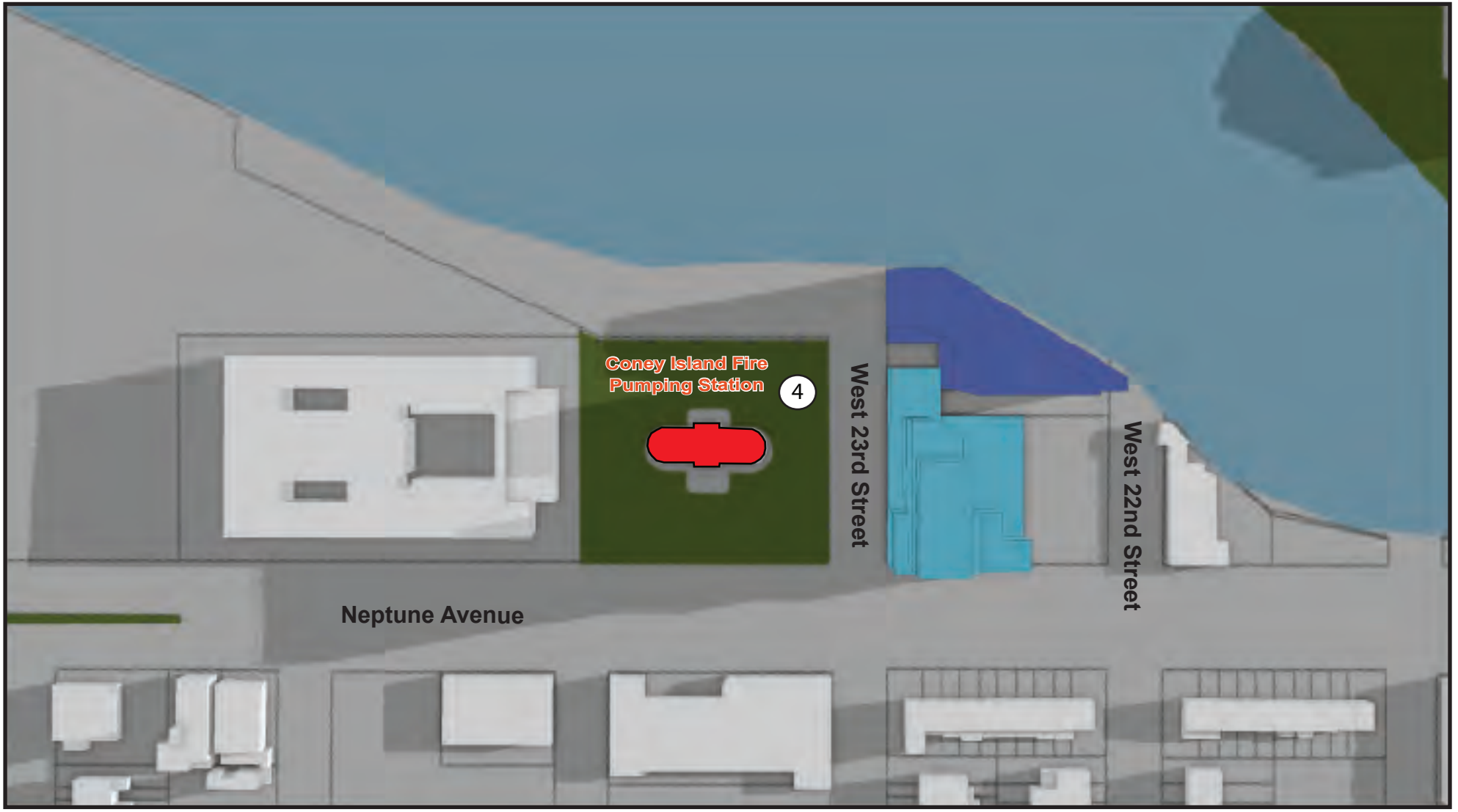
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 9:05 AM

May 6th Analysis Day

Figure D-37



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 5:57 AM

June 21st Analysis Day

Figure D-38



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

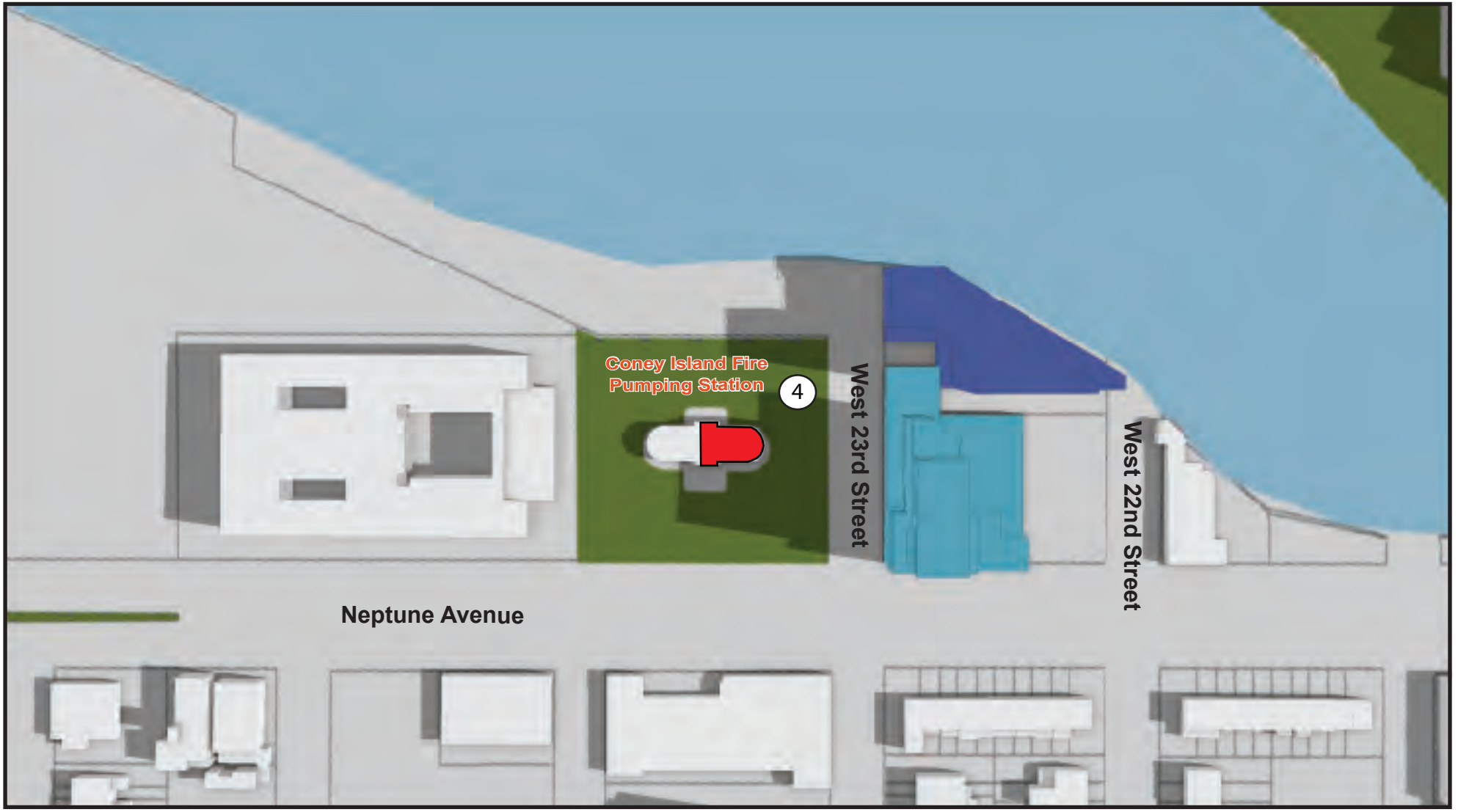
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 6:57 AM

June 21st Analysis Day

Figure D-39



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

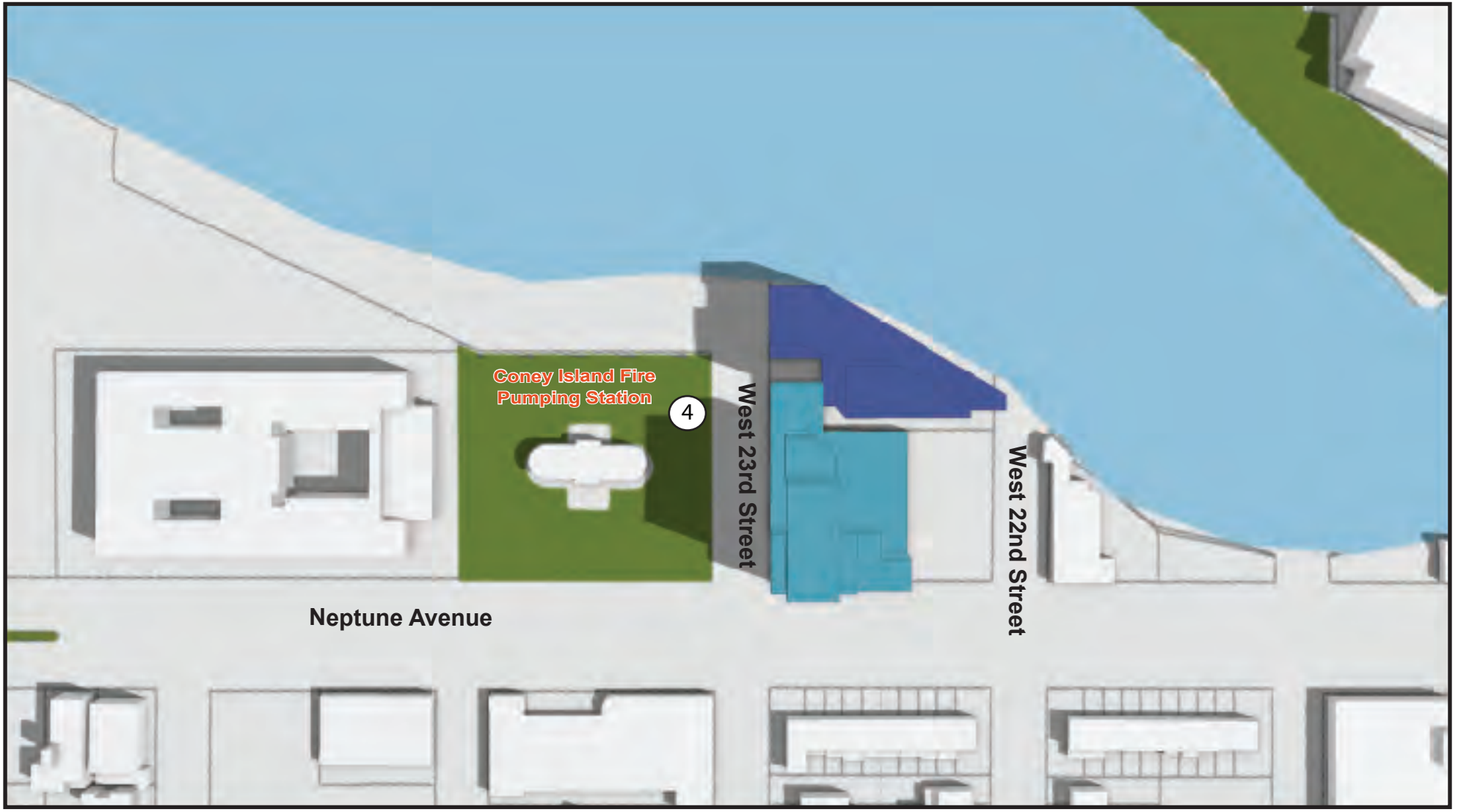
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:57 AM

June 21st Analysis Day

Figure D-40



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

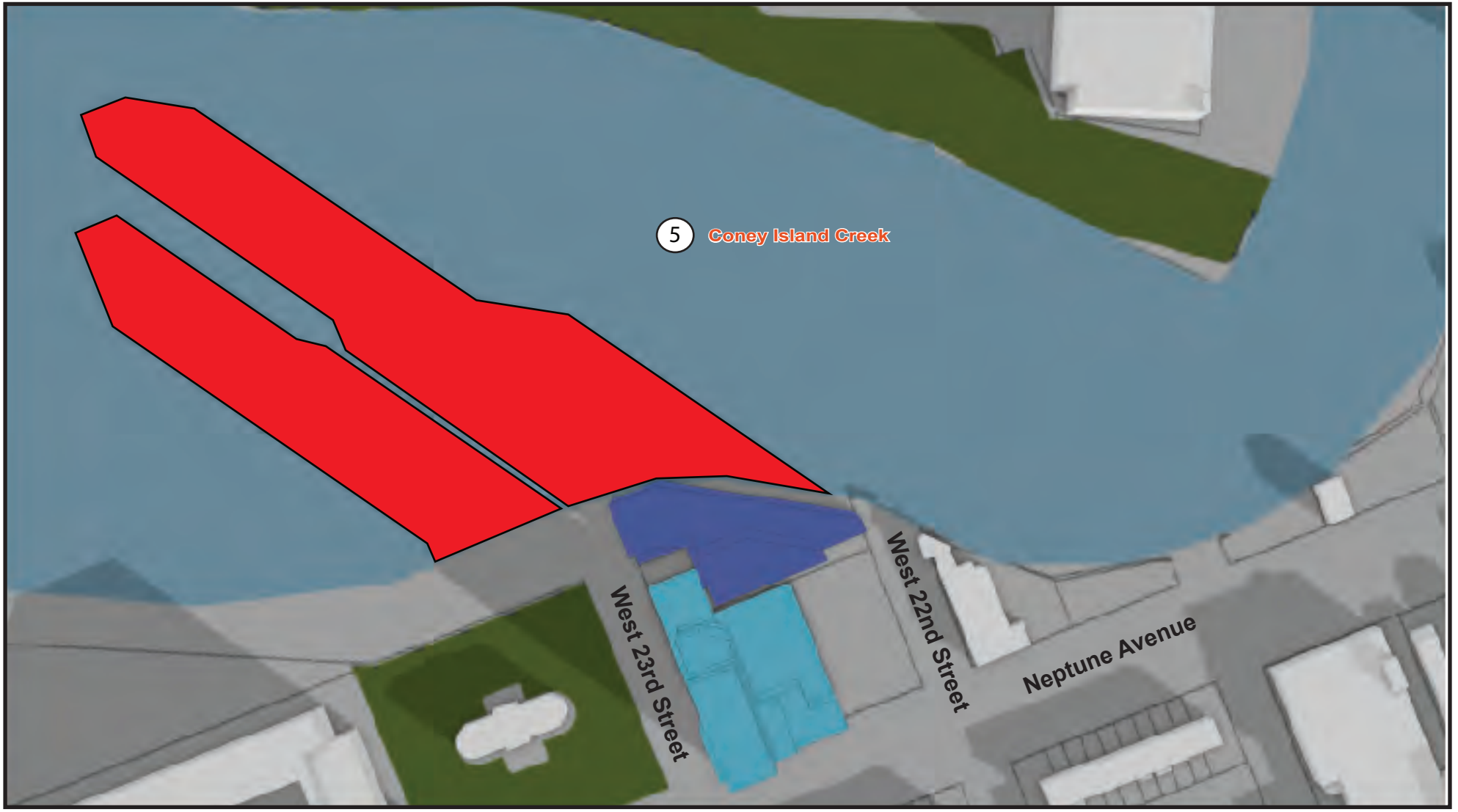
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 9:03 AM

June 21st Analysis Day

Figure D-41



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

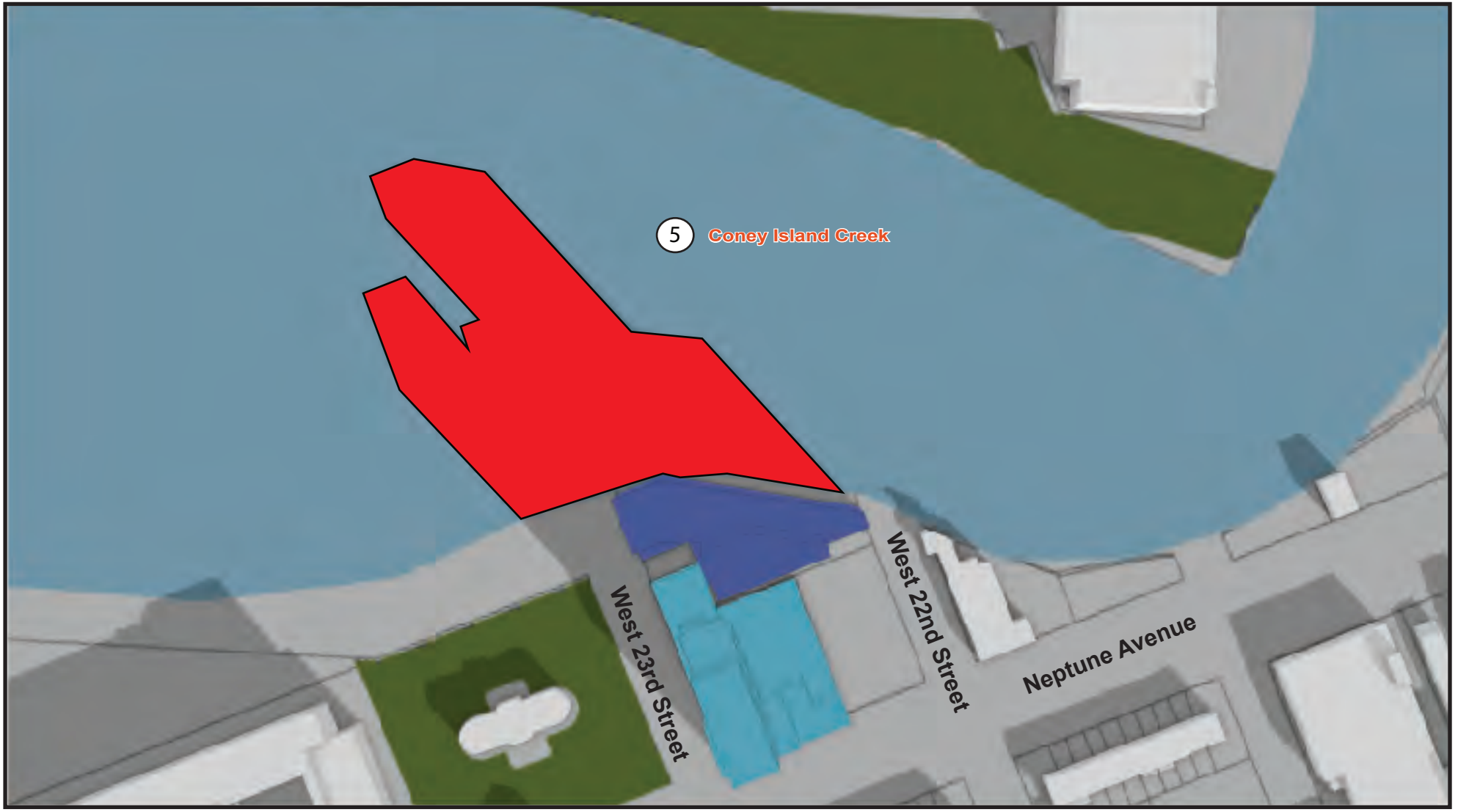
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:51 AM

December 21st Analysis Day

Figure D-42



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

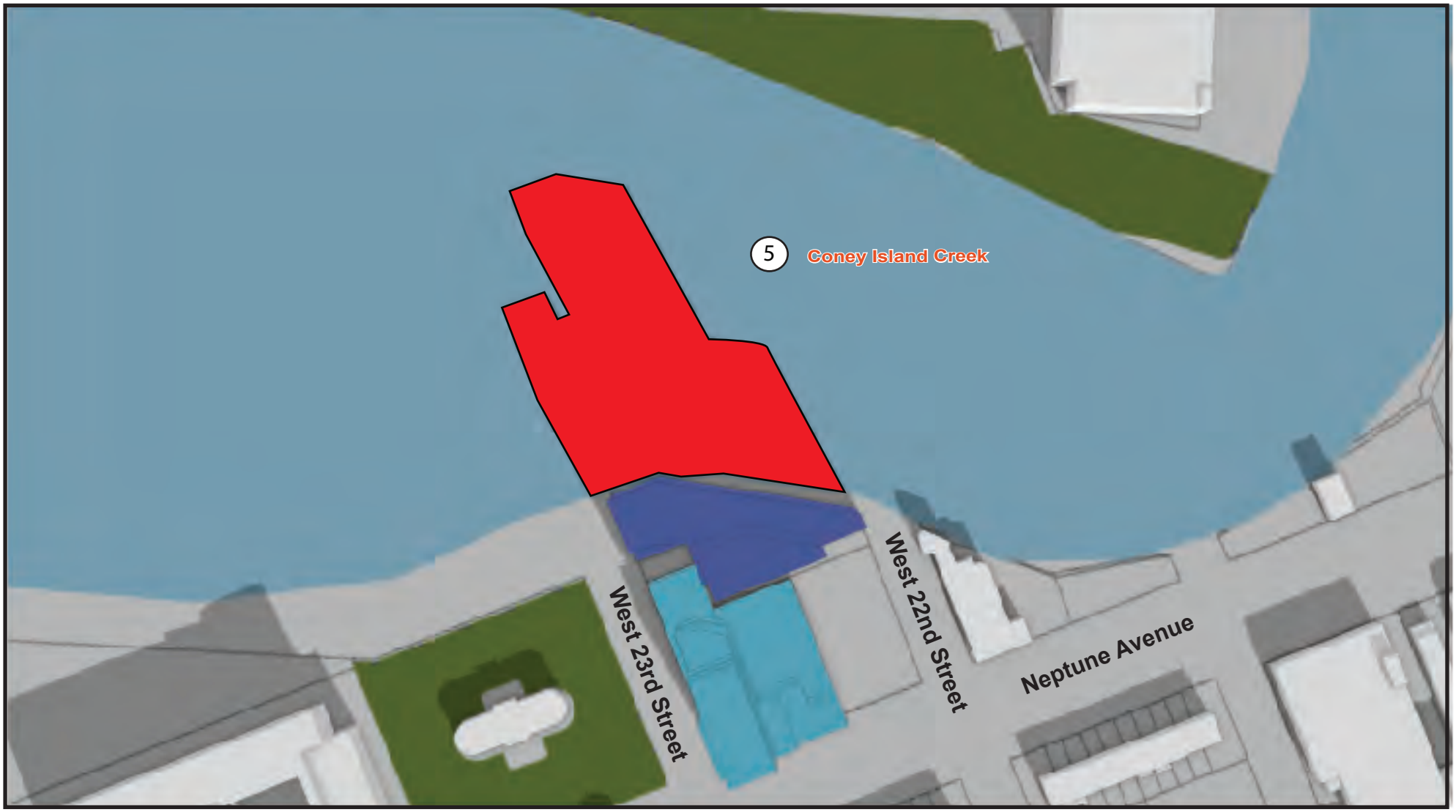
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 9:51 AM

December 21st Analysis Day

Figure D-43



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

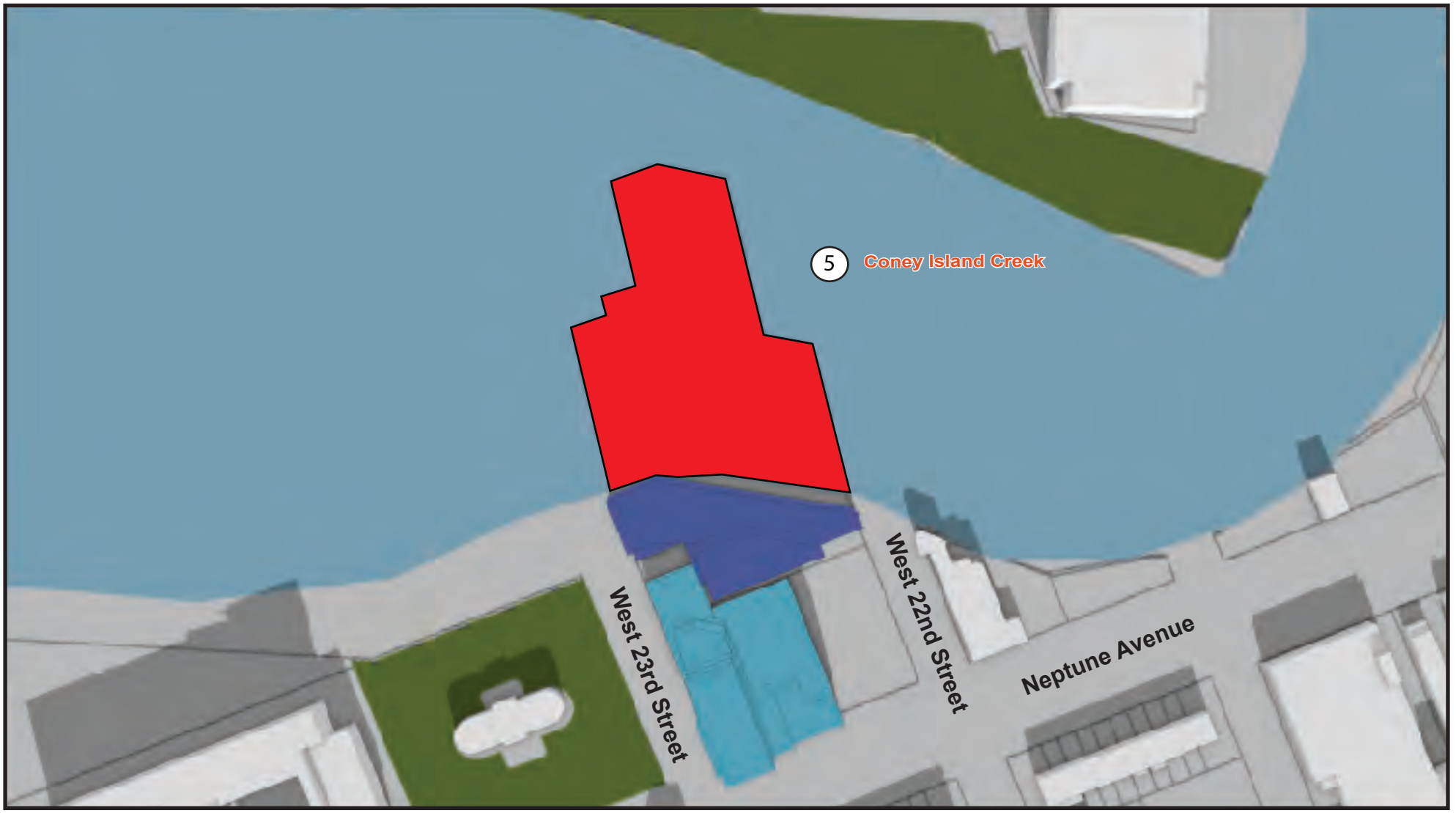
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 10:51 AM

December 21st Analysis Day

Figure D-44



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

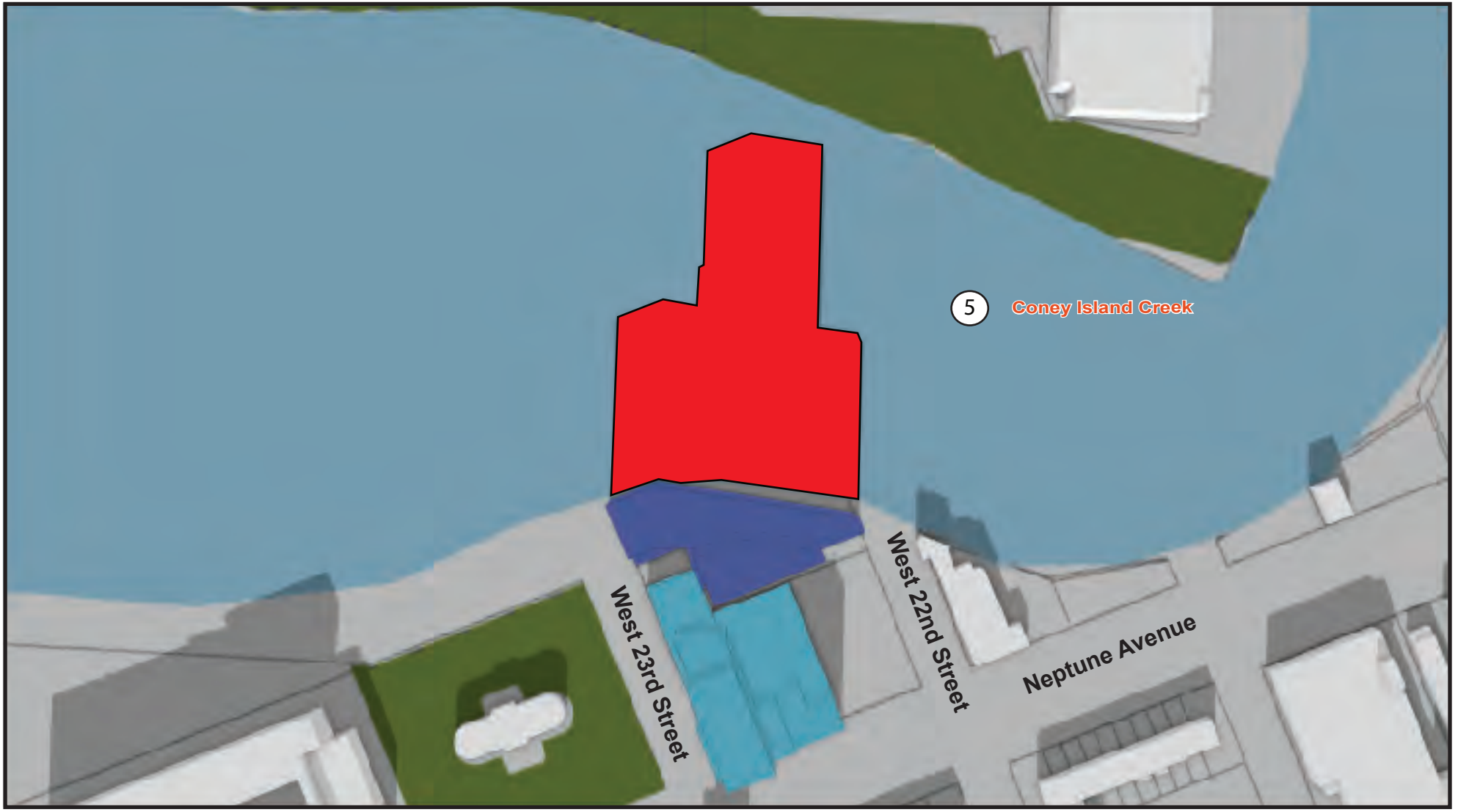
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 11:51 AM

December 21st Analysis Day

Figure D-45



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

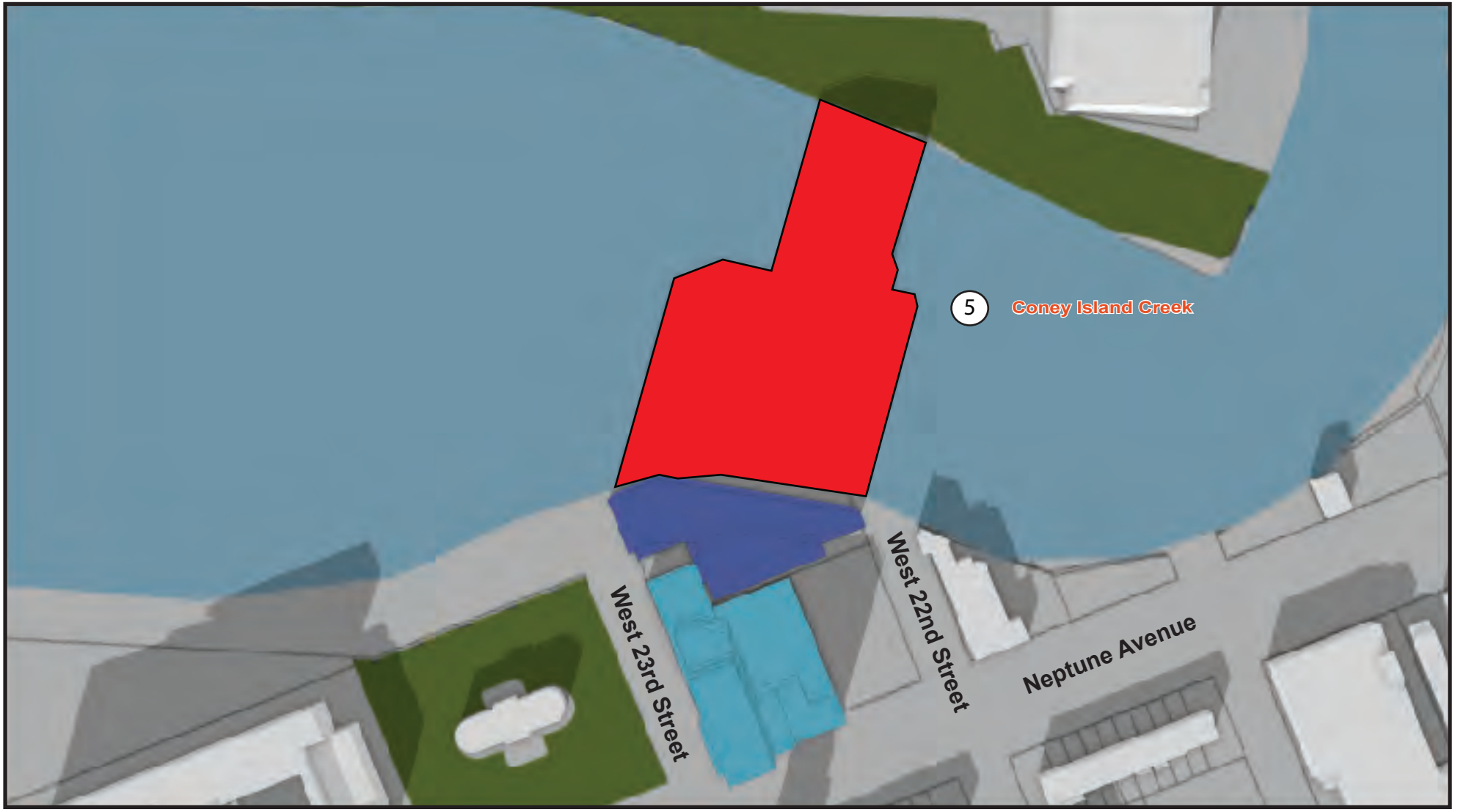
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 12:51 PM

December 21st Analysis Day

Figure D-46



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

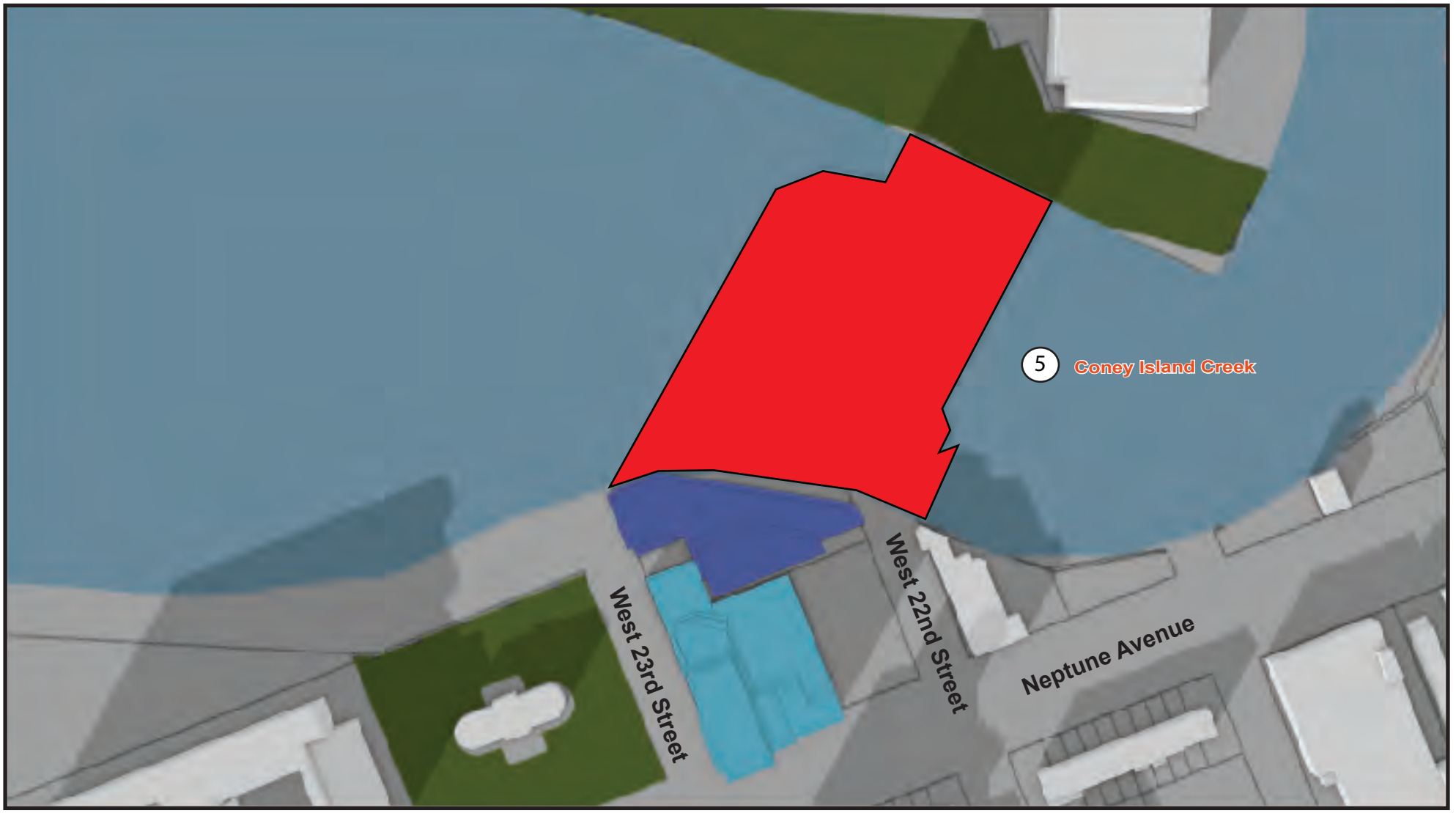
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 1:51 PM

December 21st Analysis Day

Figure D-47



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

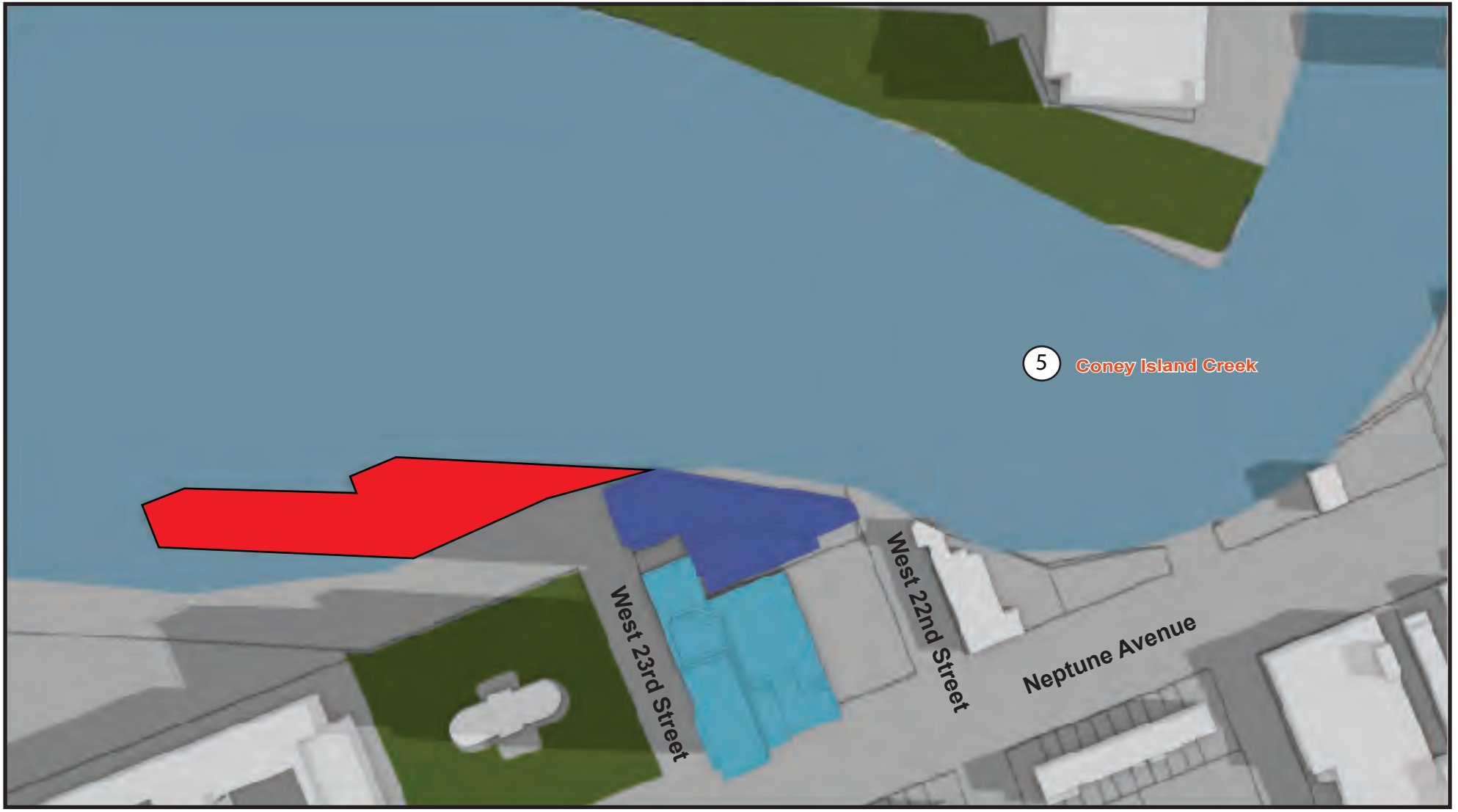
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 2:53 PM

December 21st Analysis Day

Figure D-48



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

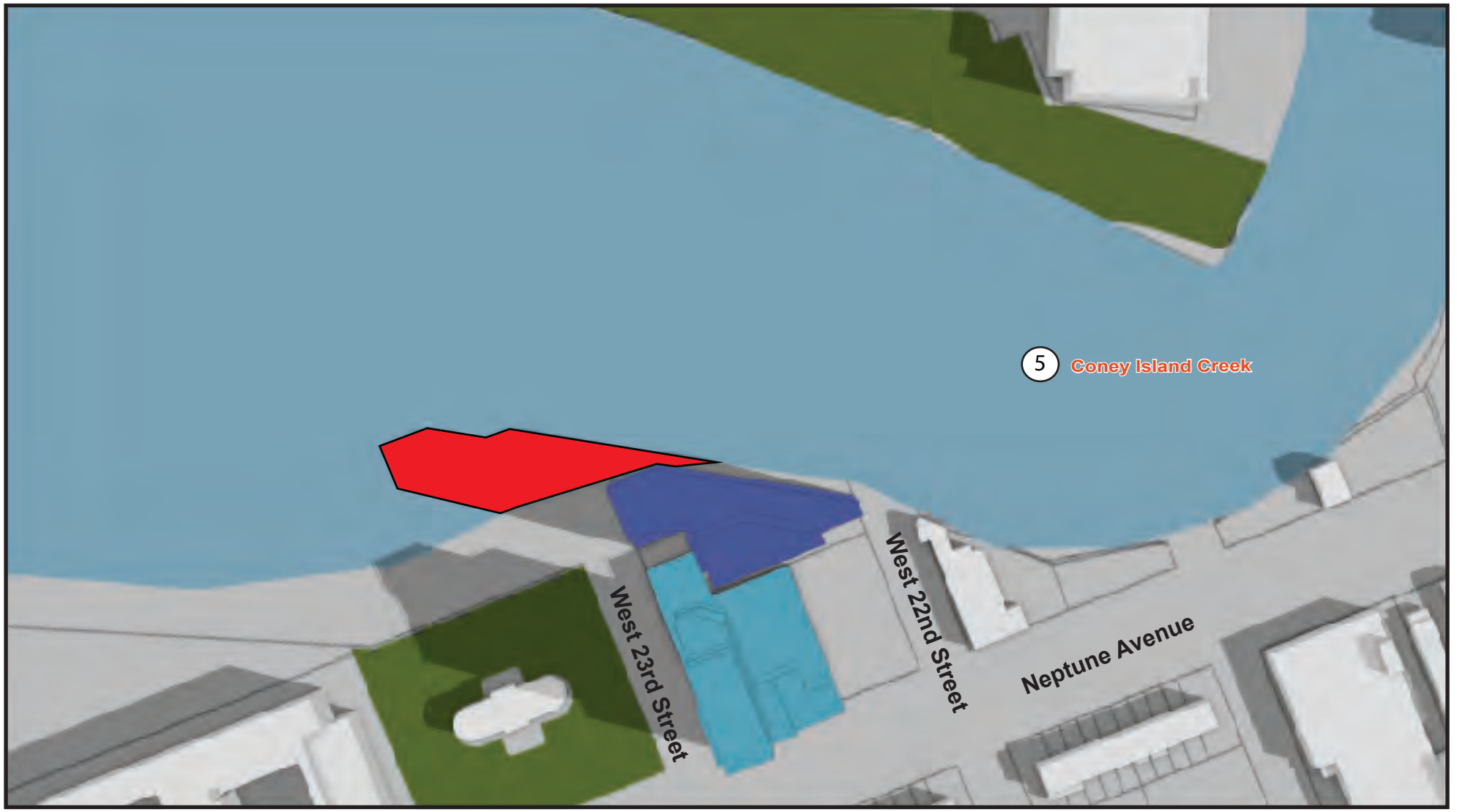
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:36 AM

March 21st Analysis Day

Figure D-49



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

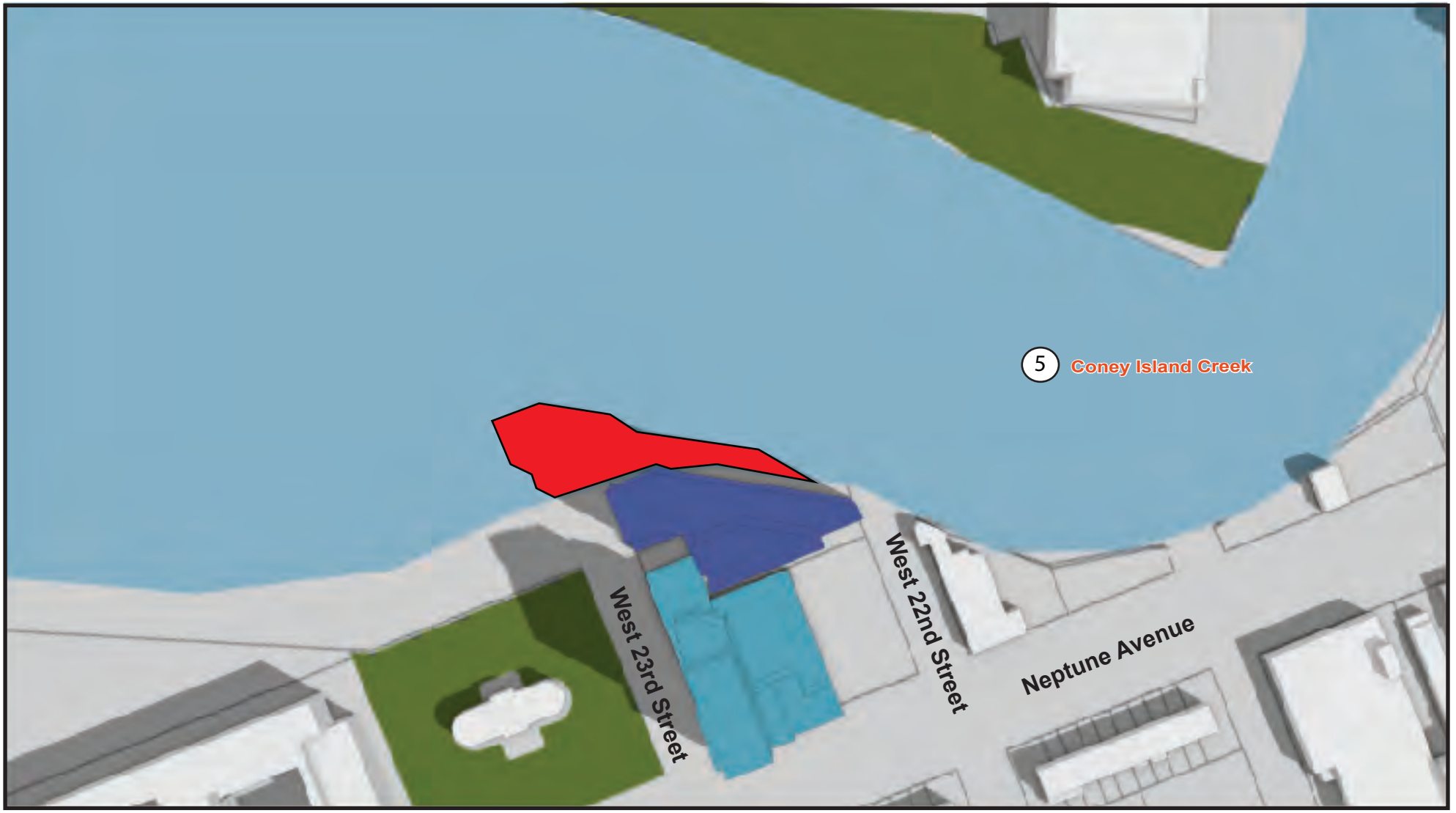
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:36 AM

March 21st Analysis Day

Figure D-50



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

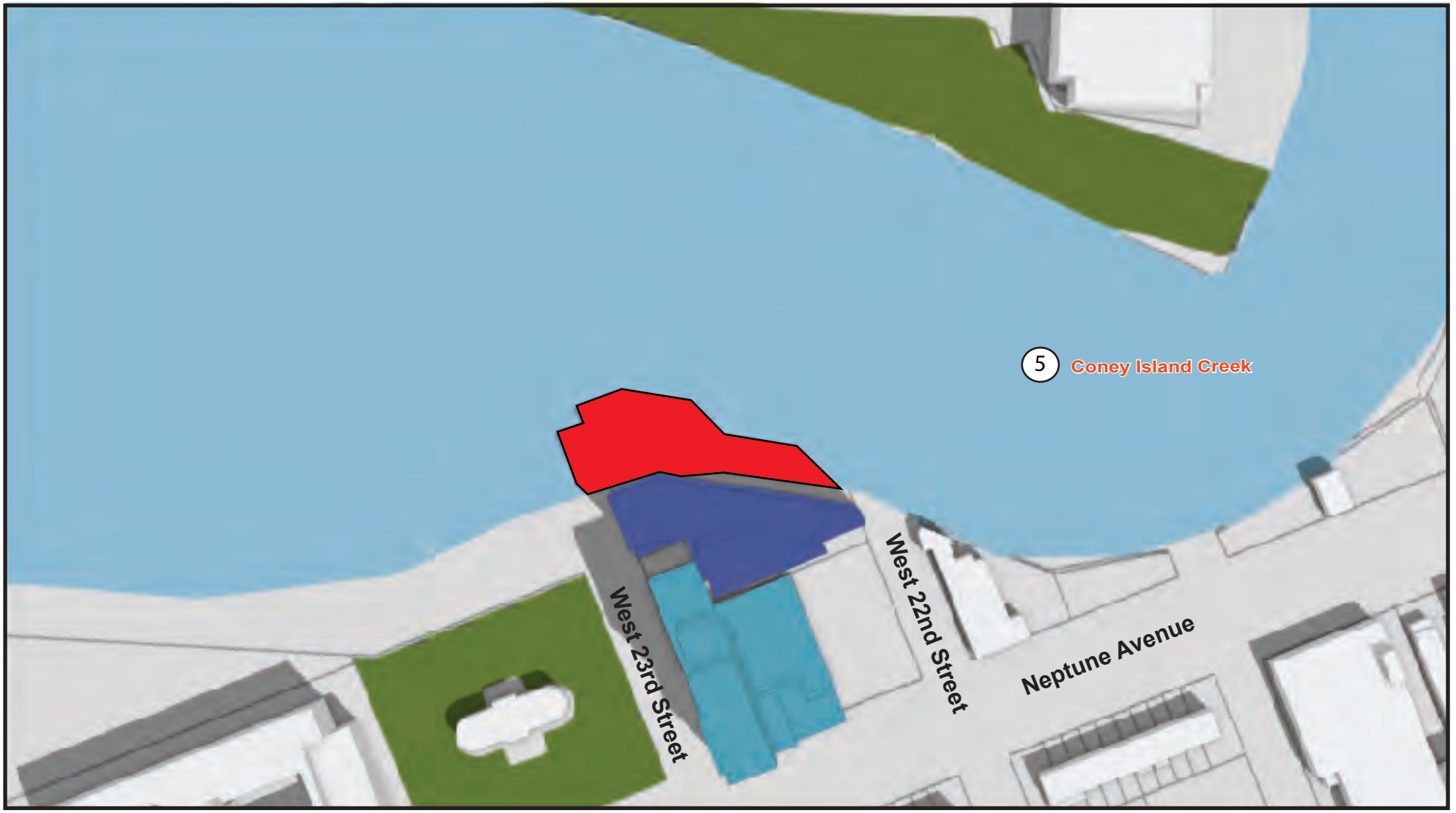
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 9:36 AM

March 21st Analysis Day

Figure D-51



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

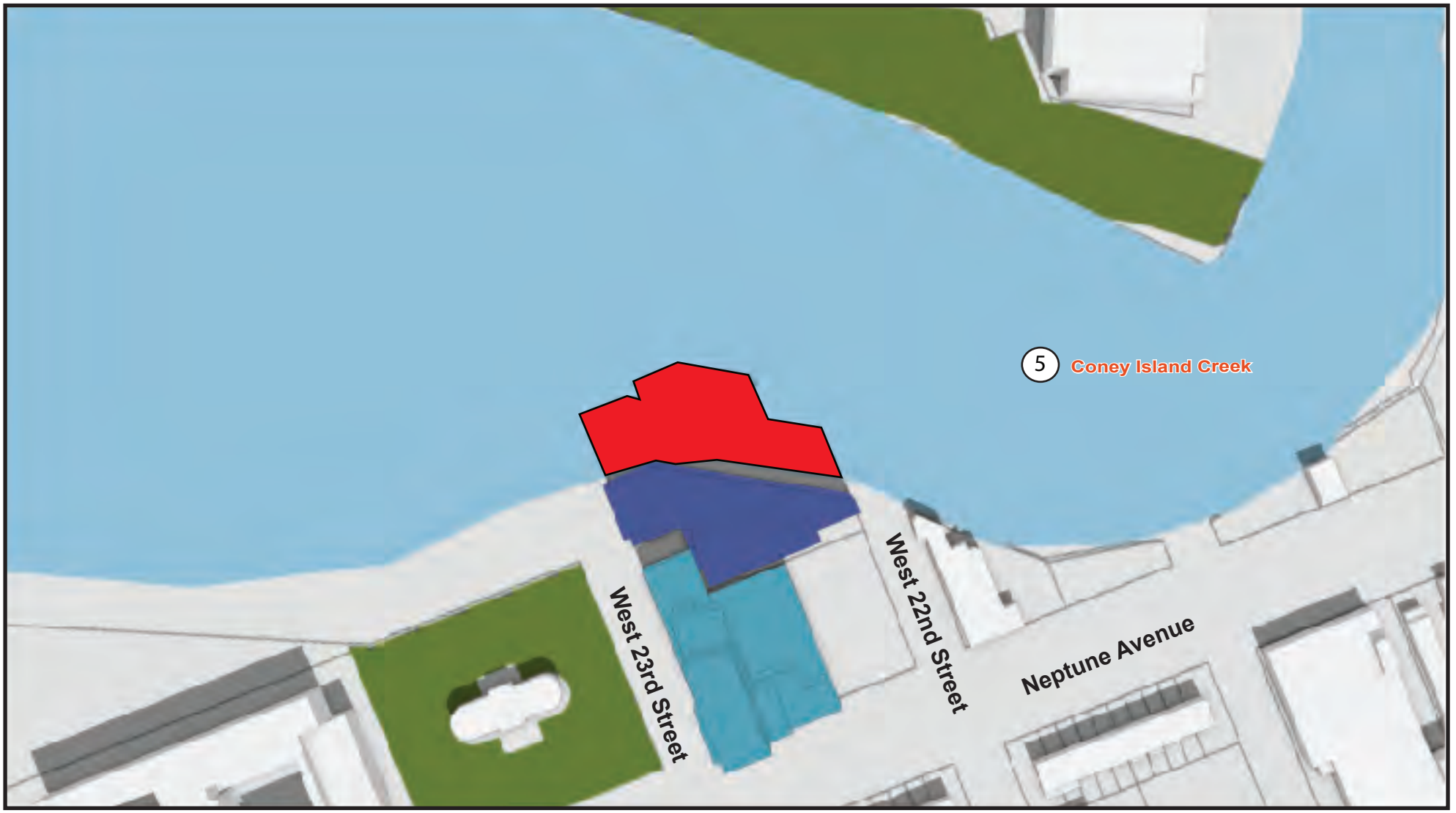
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 10:36 AM

March 21st Analysis Day

Figure D-52



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

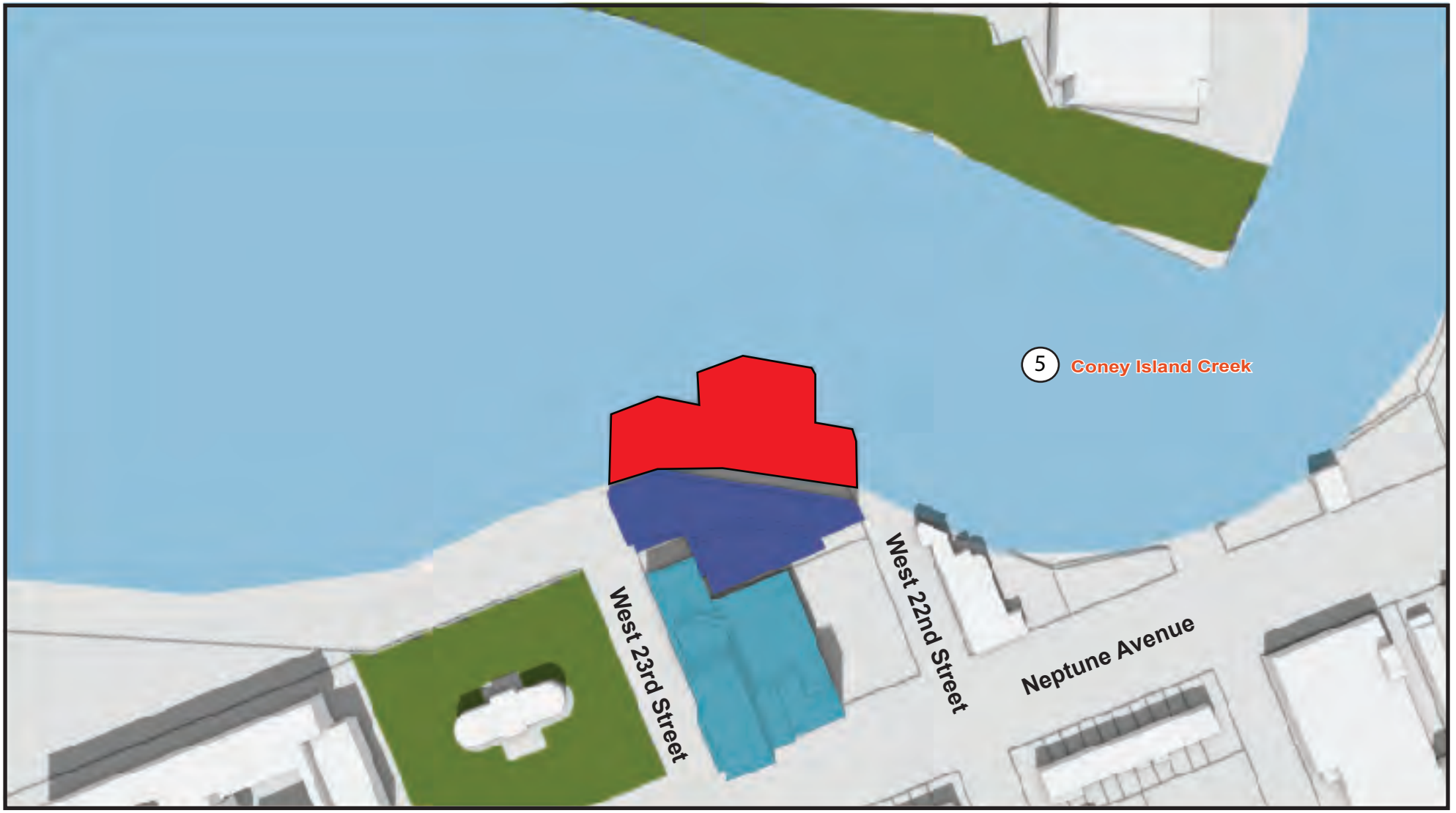
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 11:36 AM

March 21st Analysis Day

Figure D-53



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

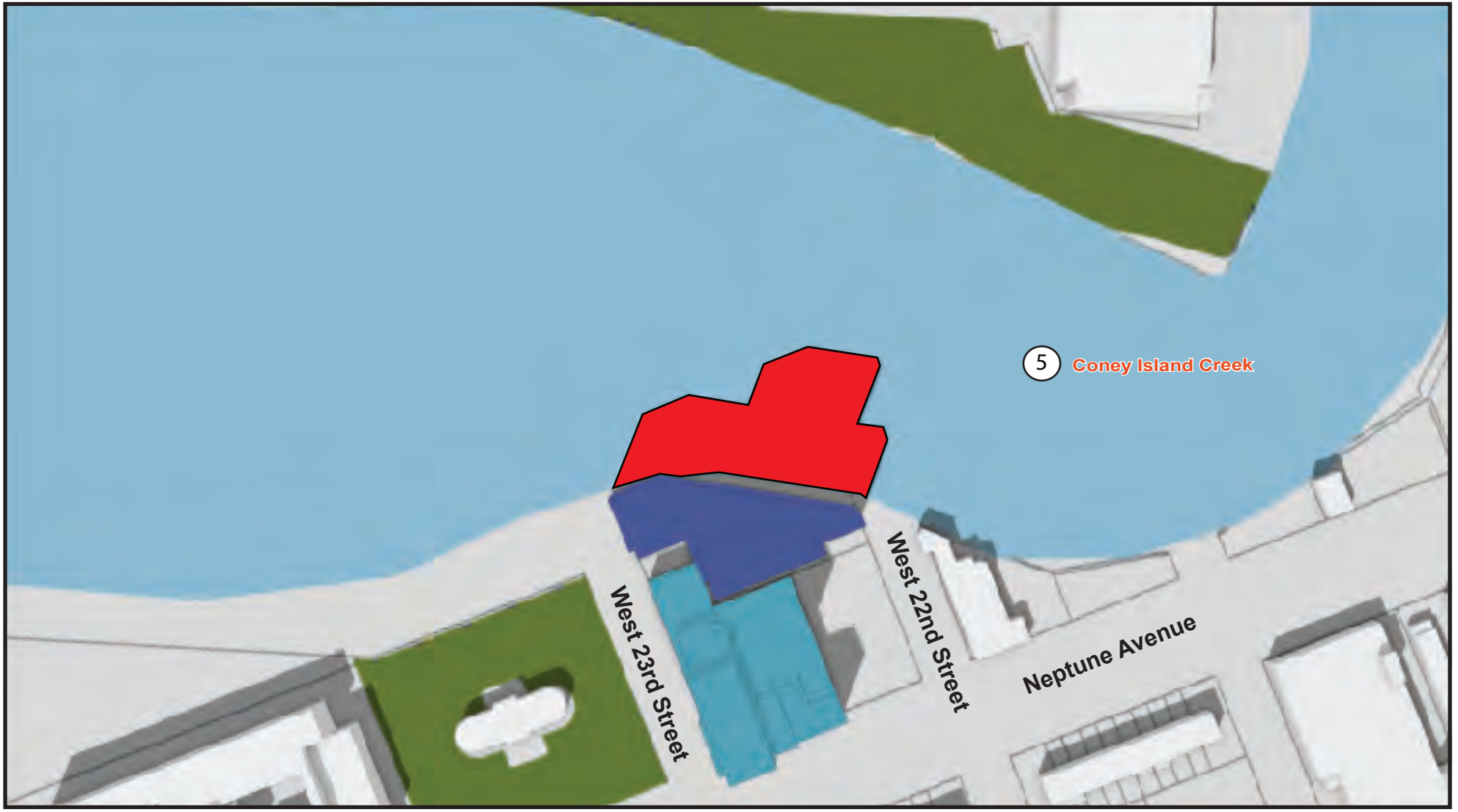
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 12:36 PM

March 21st Analysis Day

Figure D-54



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

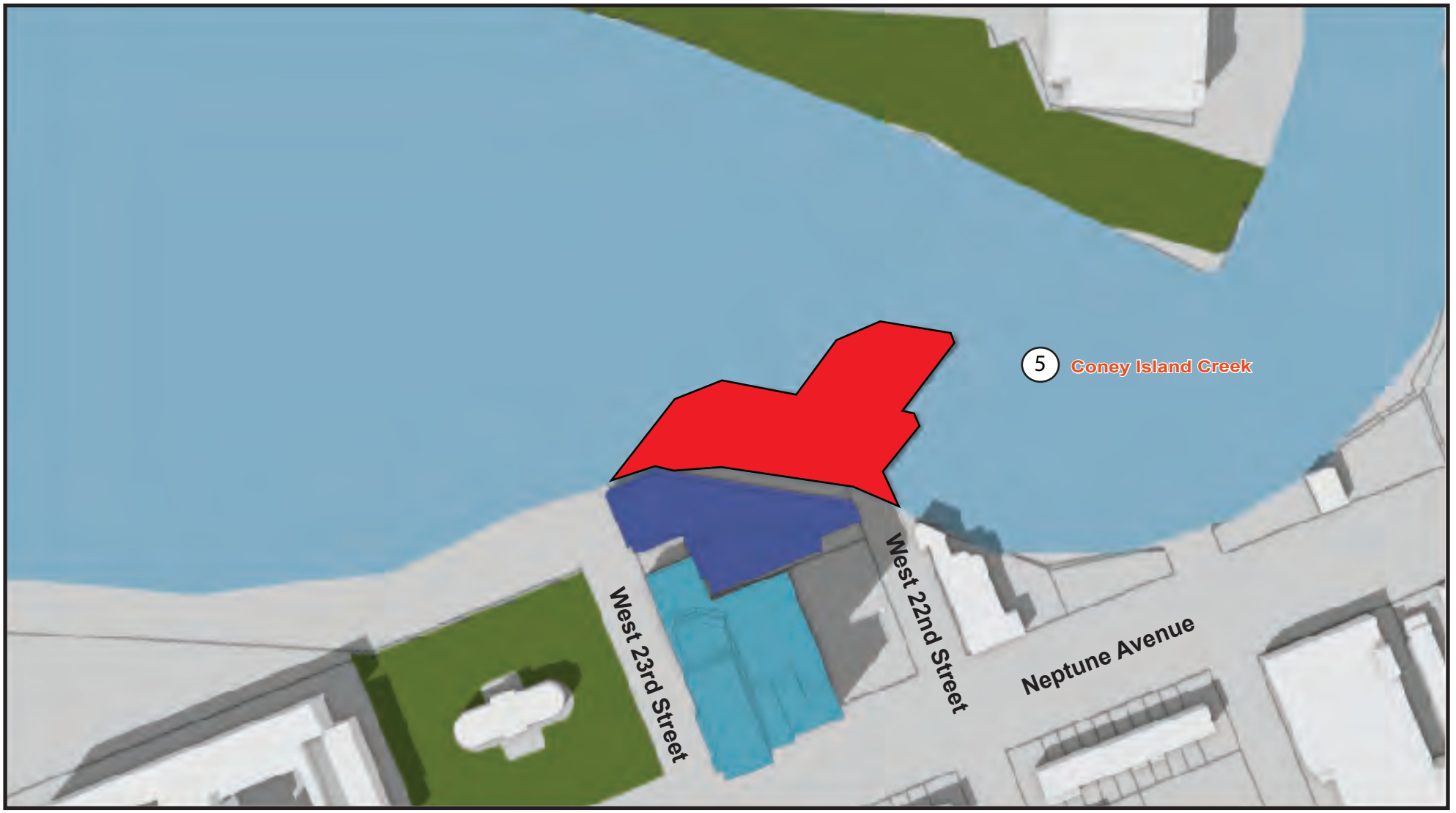
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 1:36 PM

March 21st Analysis Day

Figure D-55



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

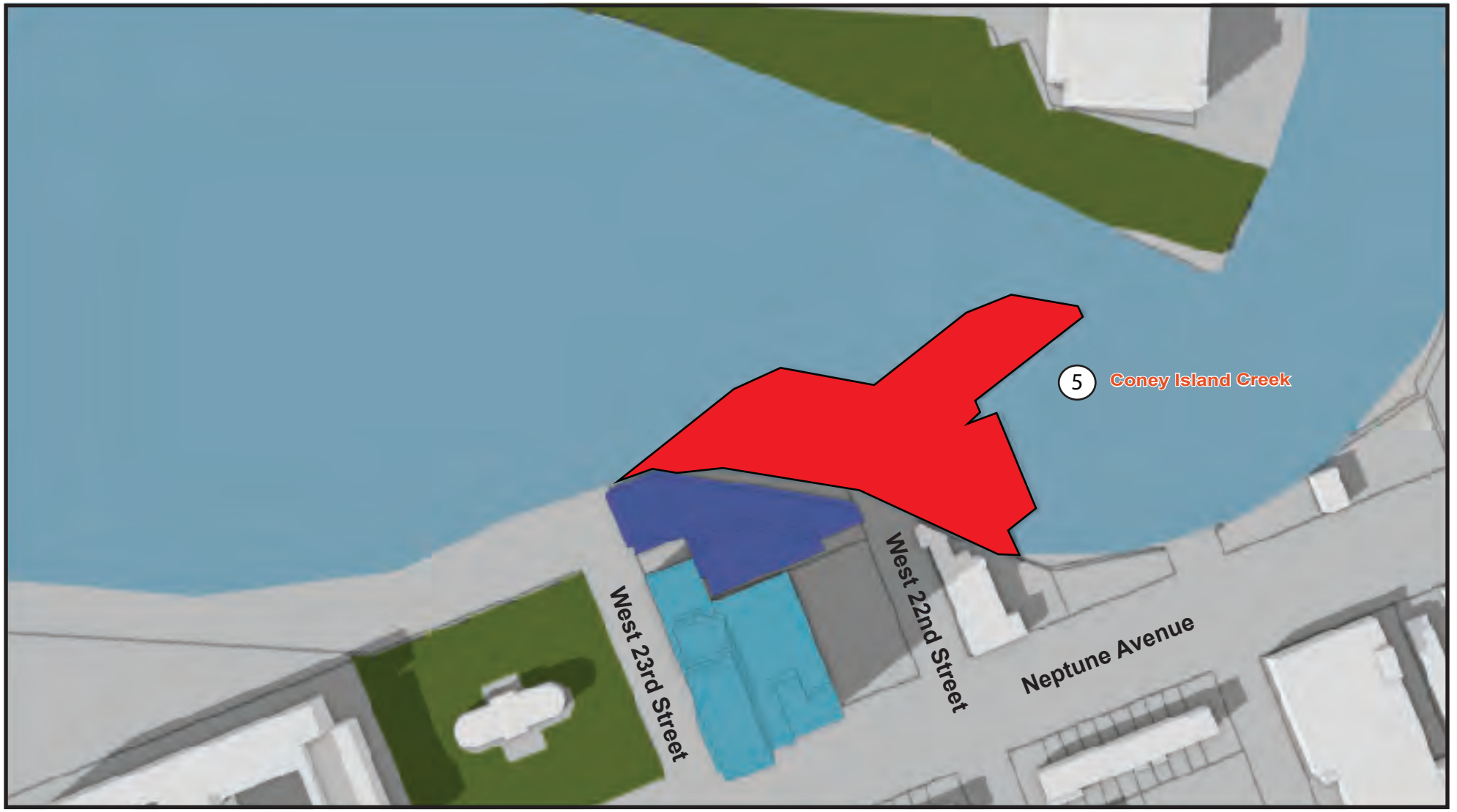
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 2:36 PM

March 21st Analysis Day

Figure D-56



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

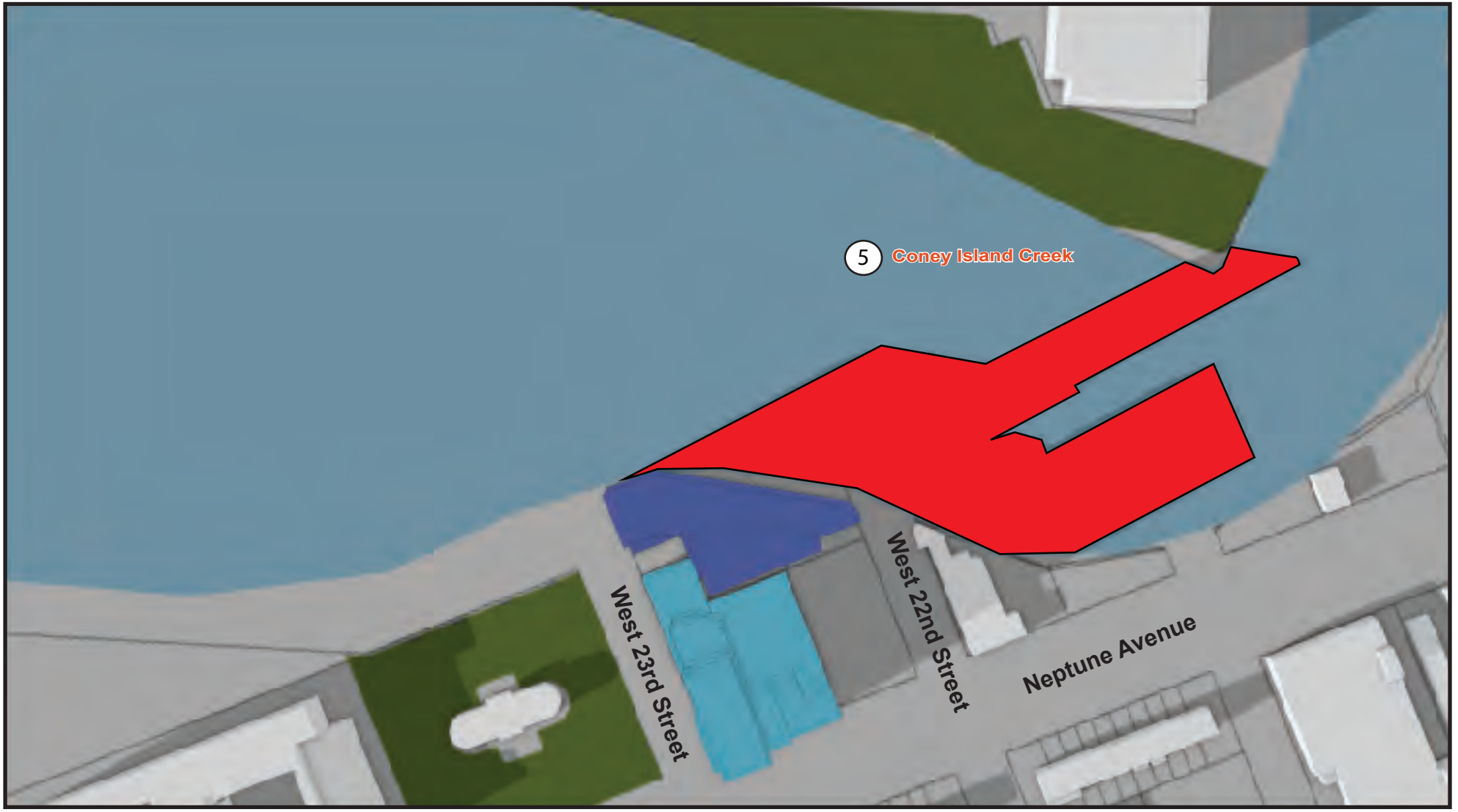
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 3:36 PM

March 21st Analysis Day

Figure D-57



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

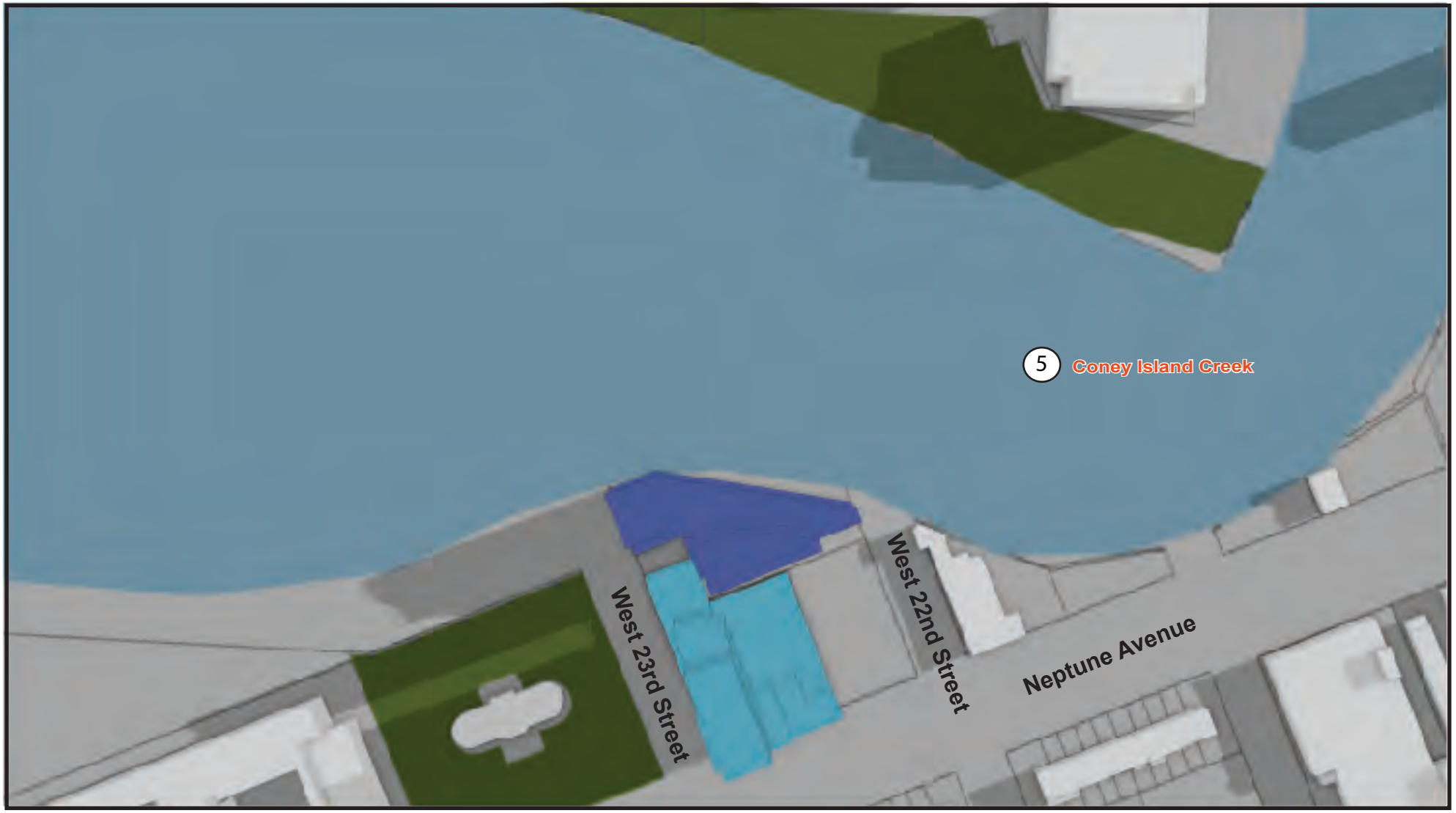
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 4:29 PM

March 21st Analysis Day

Figure D-58



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

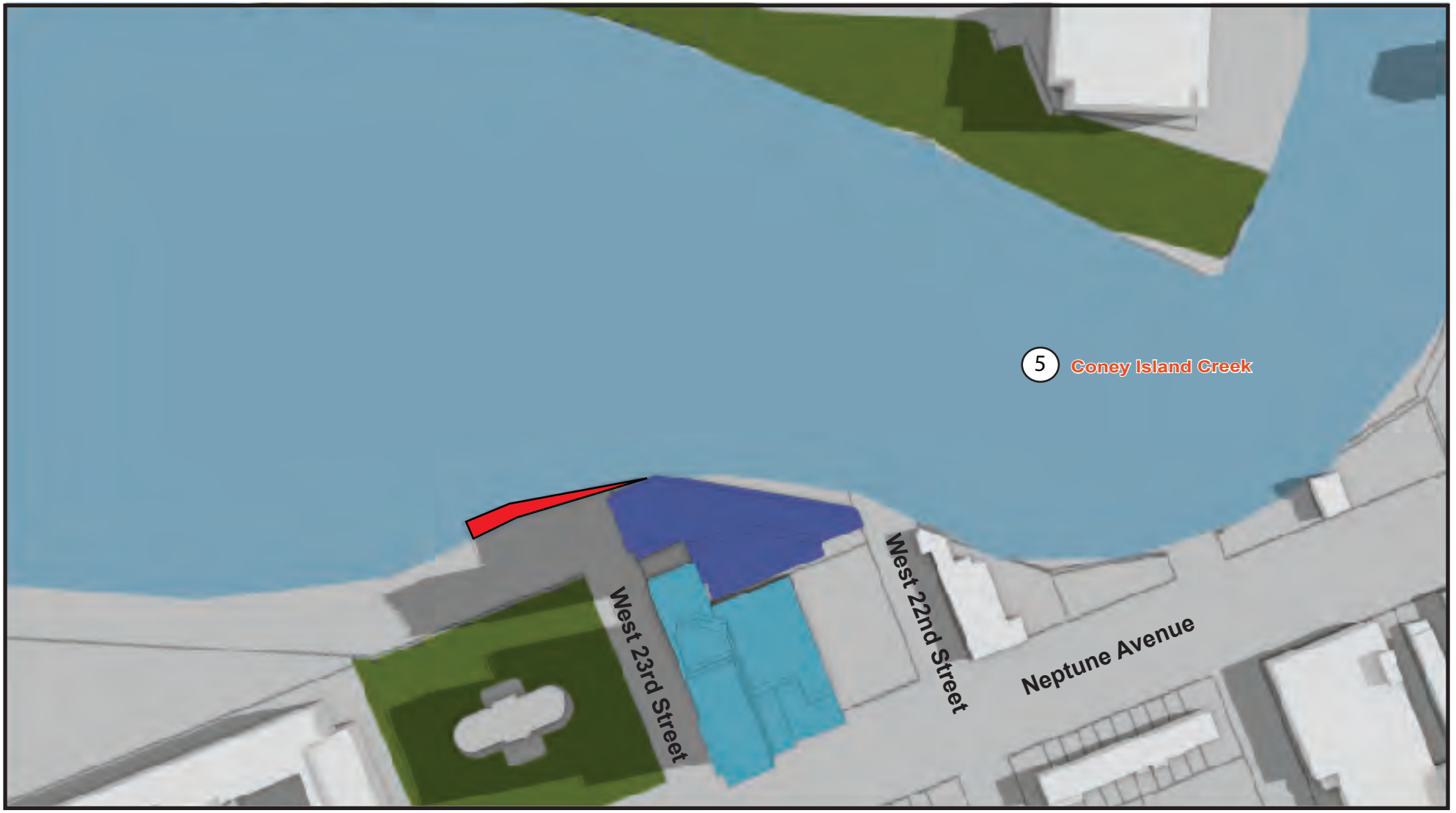
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 6:27 AM

May 6th Analysis Day

Figure D-59



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

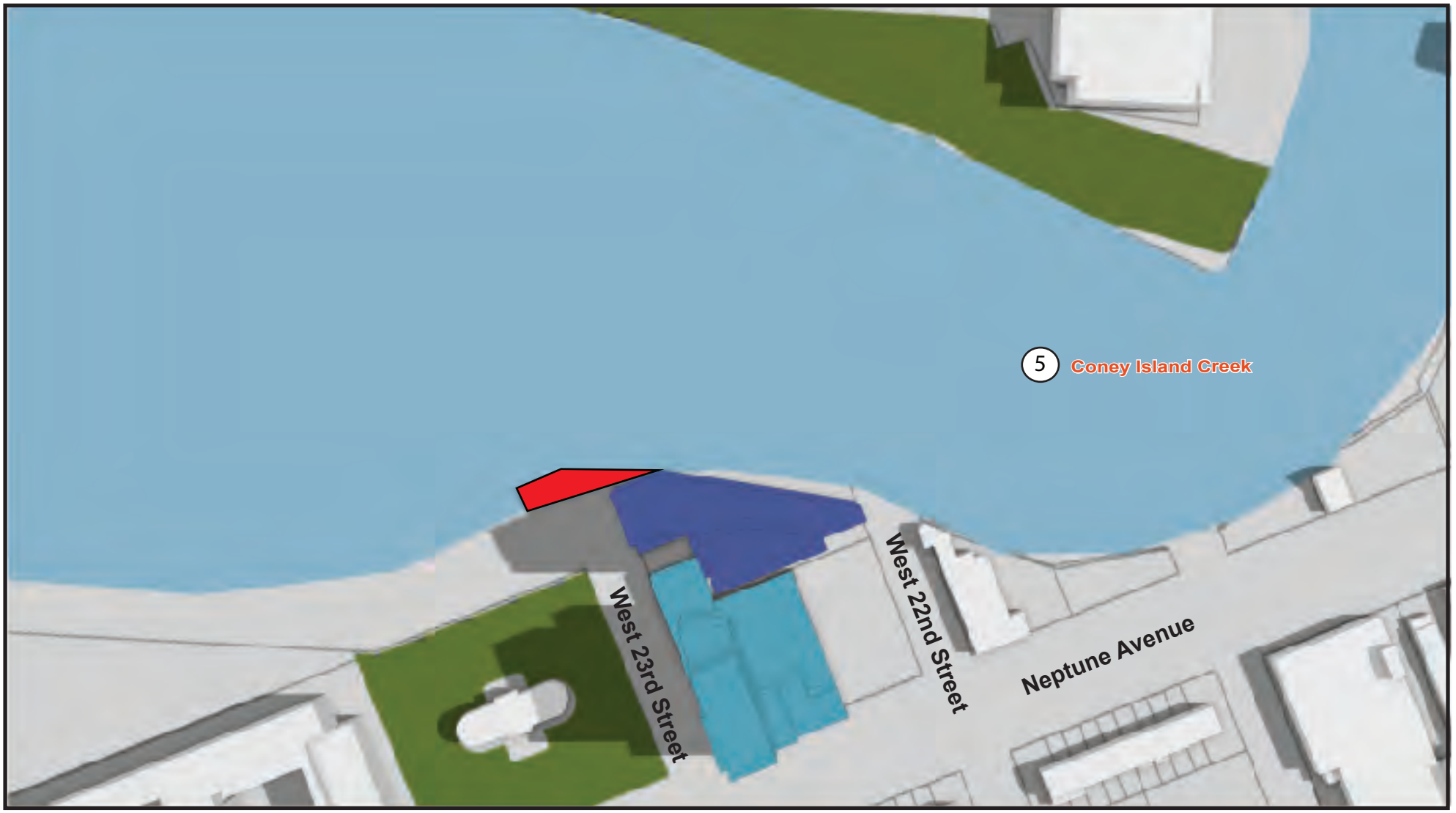
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:27 AM

May 6th Analysis Day

Figure D-60



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

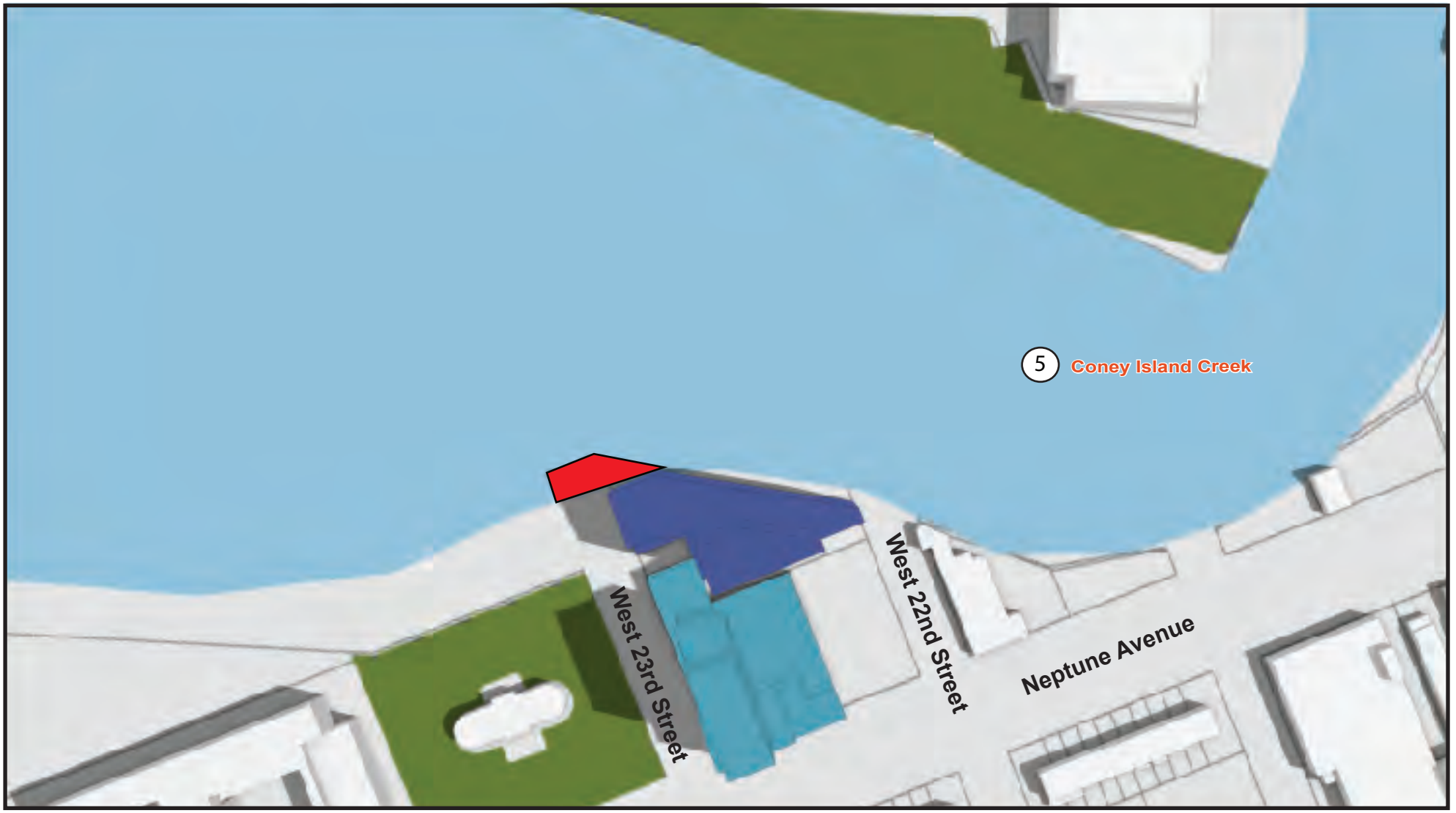
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:27 AM

May 6th Analysis Day

Figure D-61



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

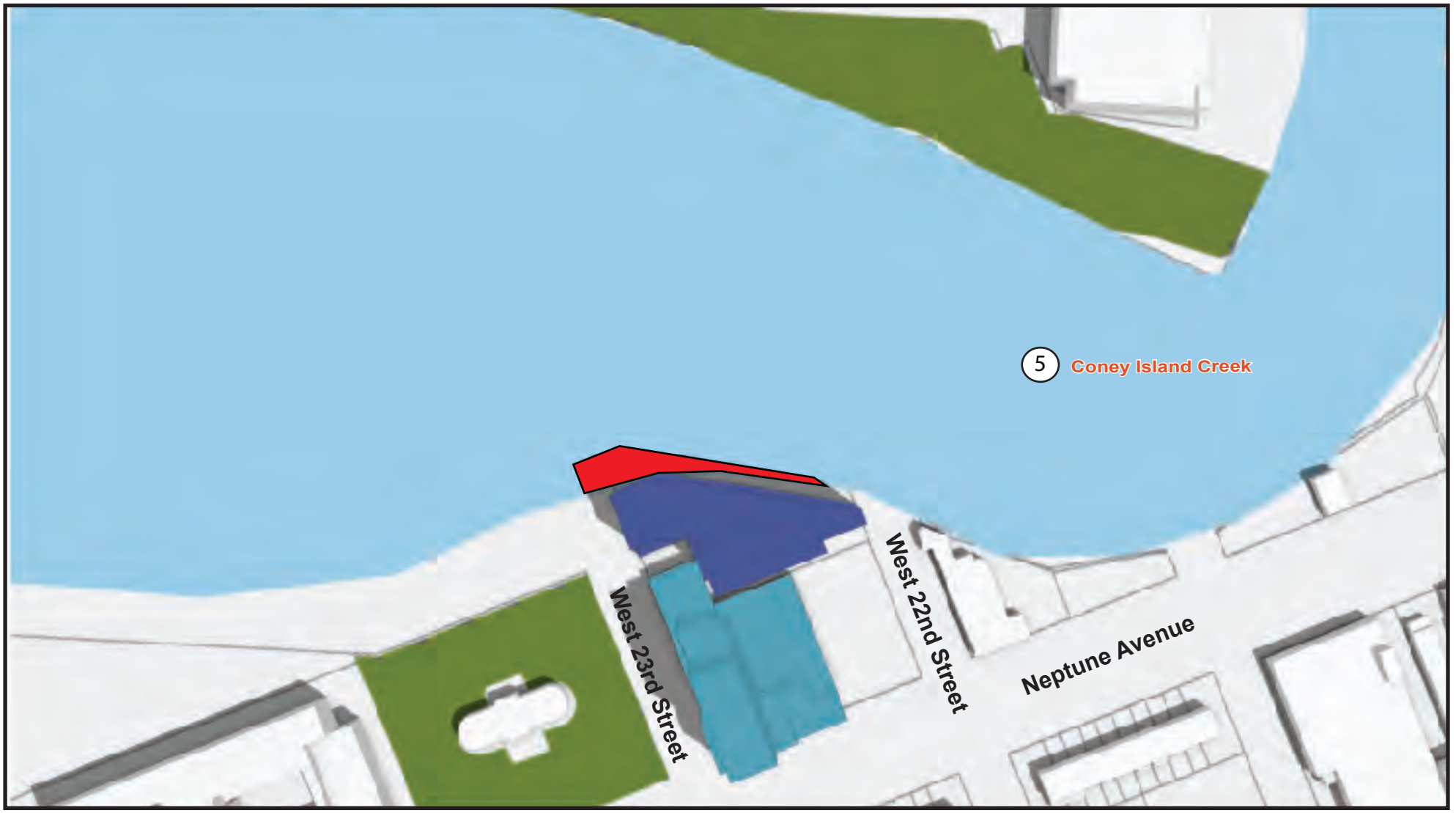
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 9:27 AM

May 6th Analysis Day

Figure D-62



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

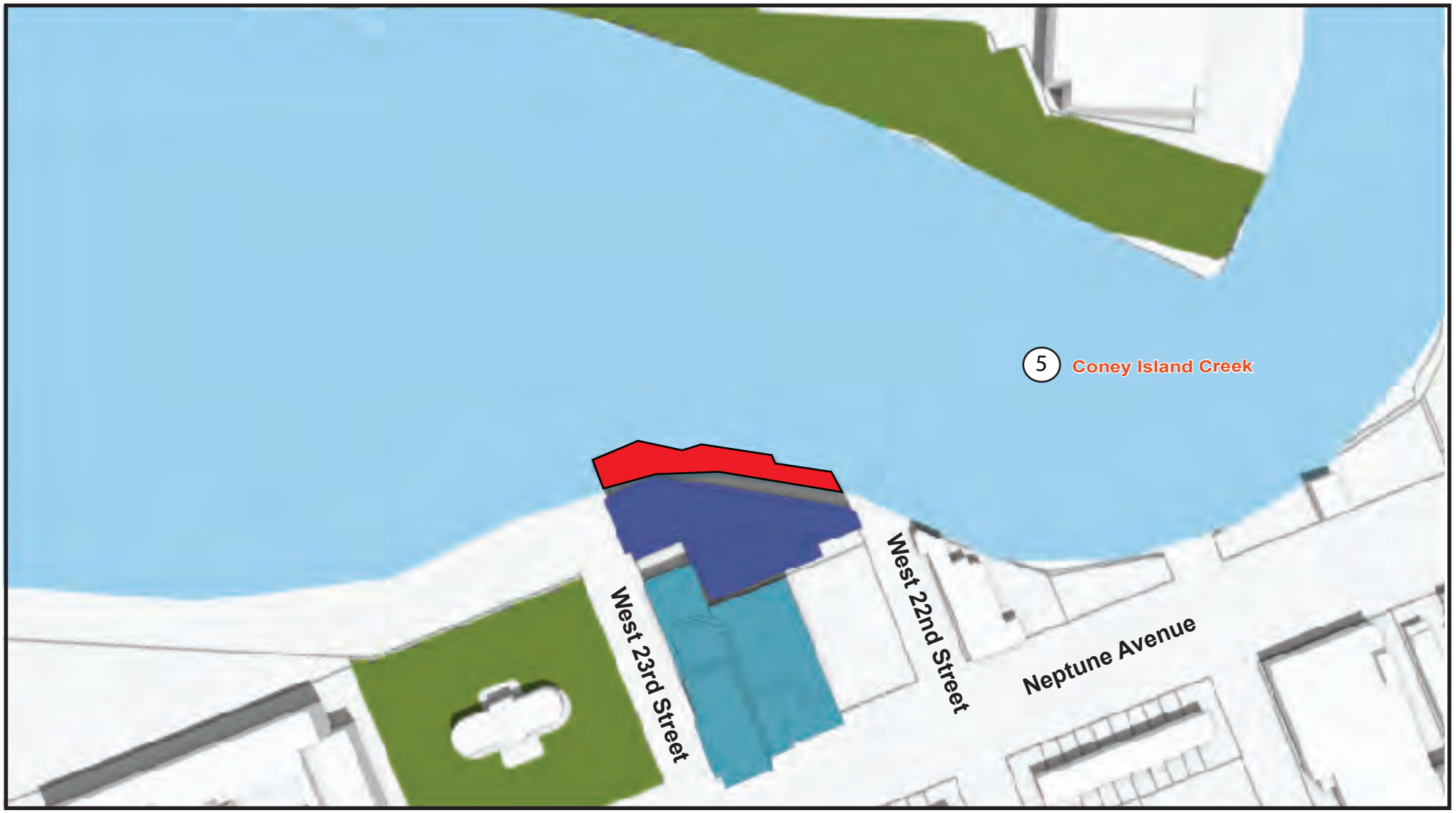
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 10:27 AM

May 6th Analysis Day

Figure D-63



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

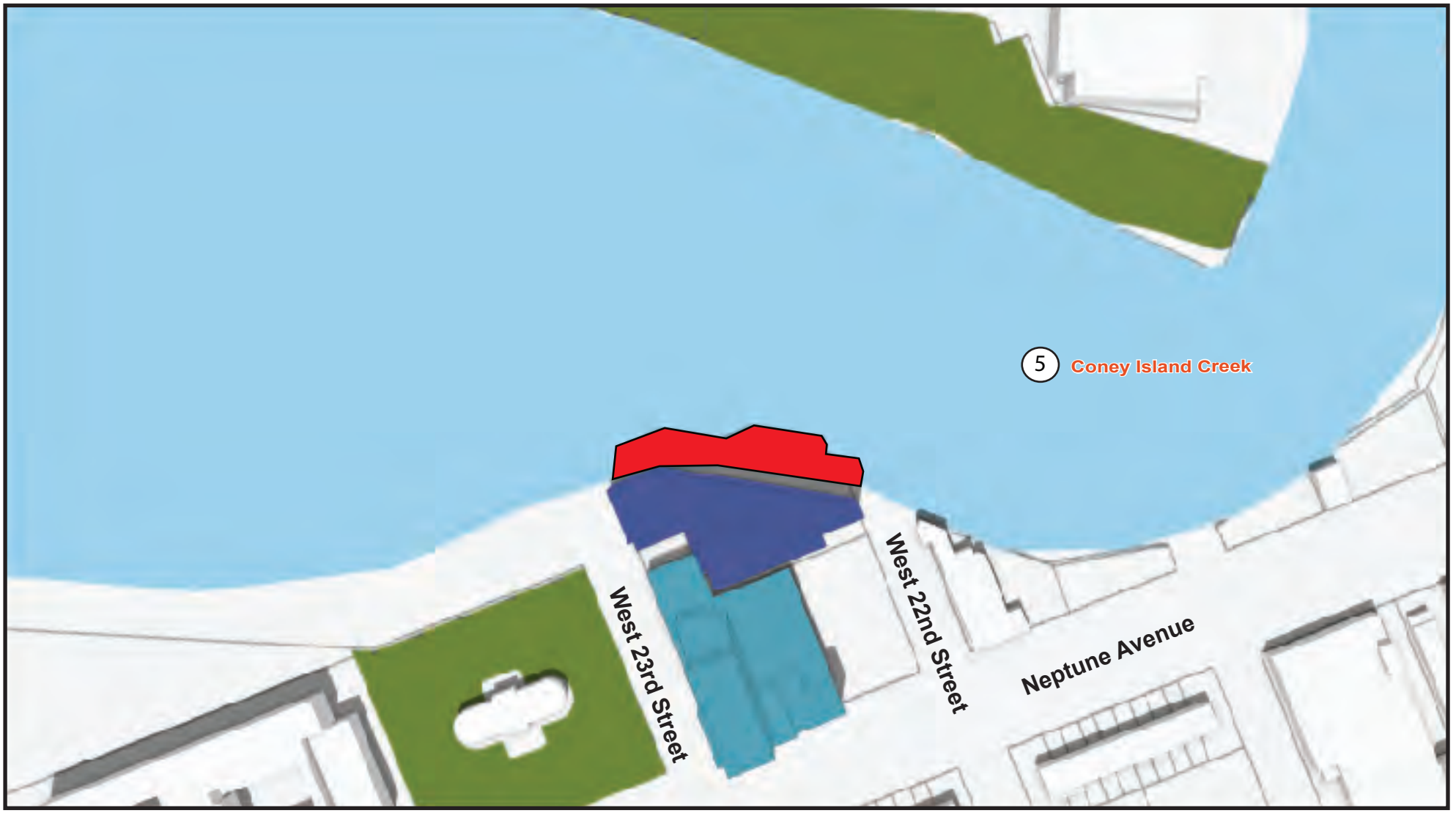
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 11:27 AM

May 6th Analysis Day

Figure D-64



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

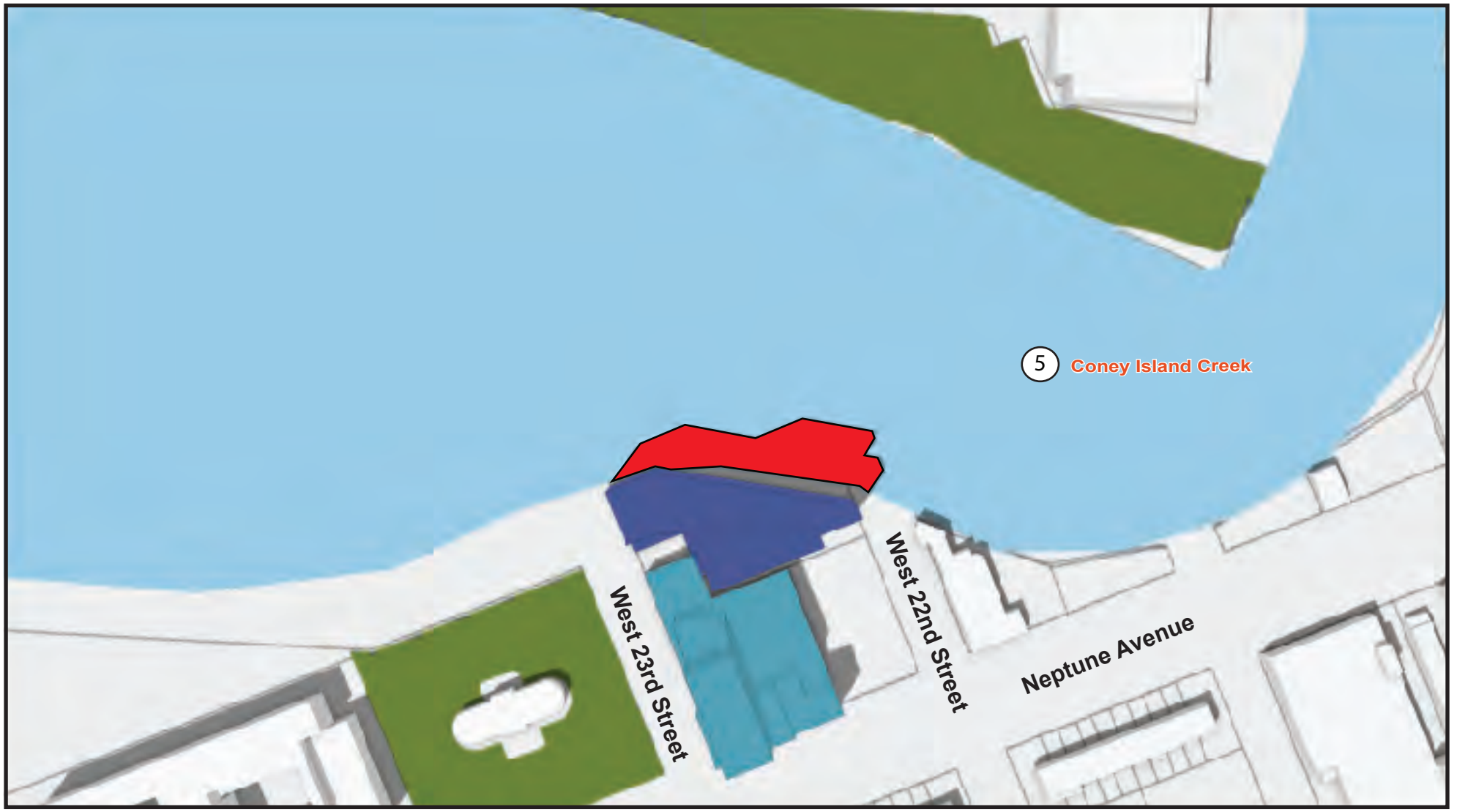
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 12:27 PM

May 6th Analysis Day

Figure D-65



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

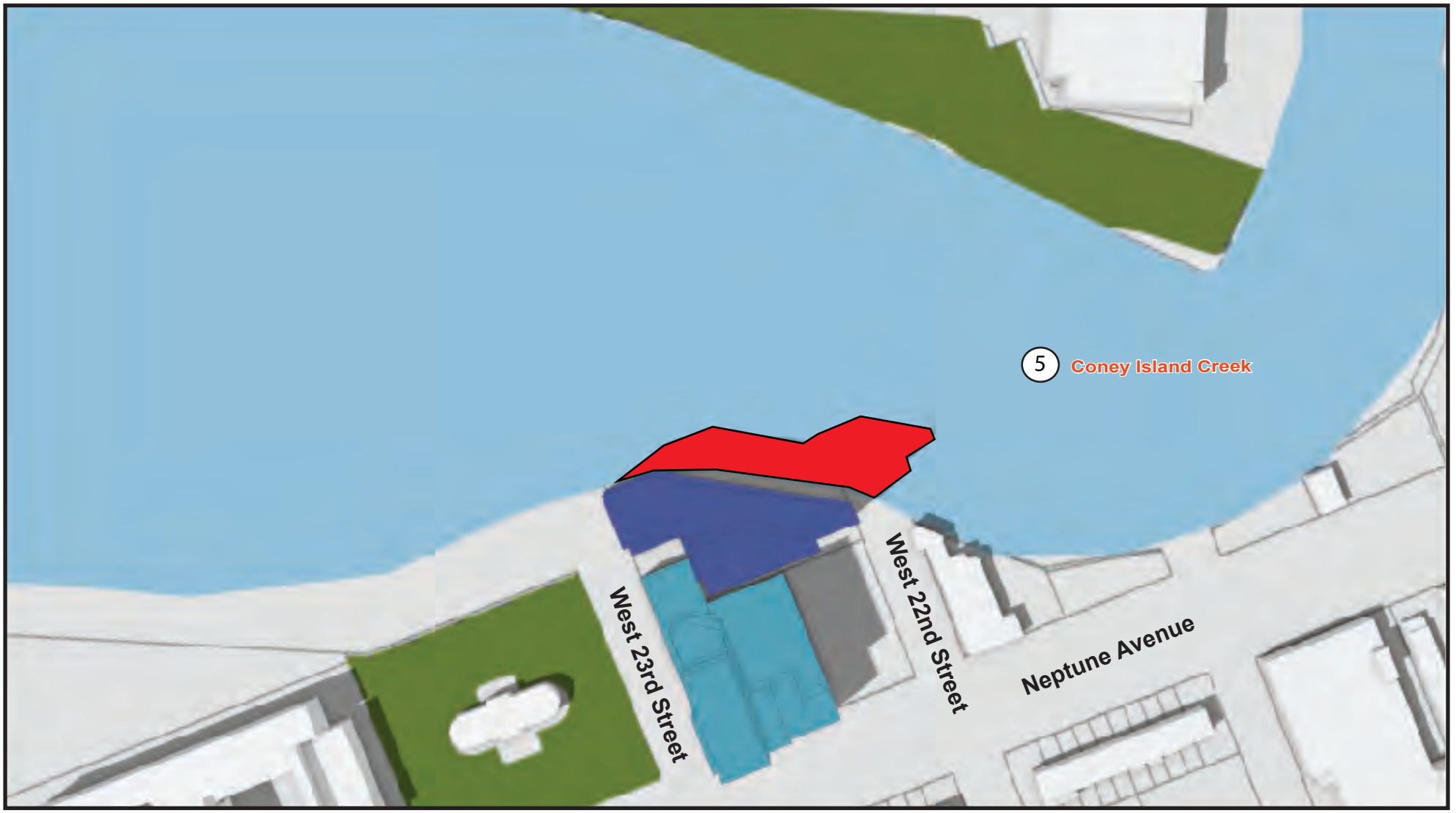
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 1:27 PM

May 6th Analysis Day

Figure D-66



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

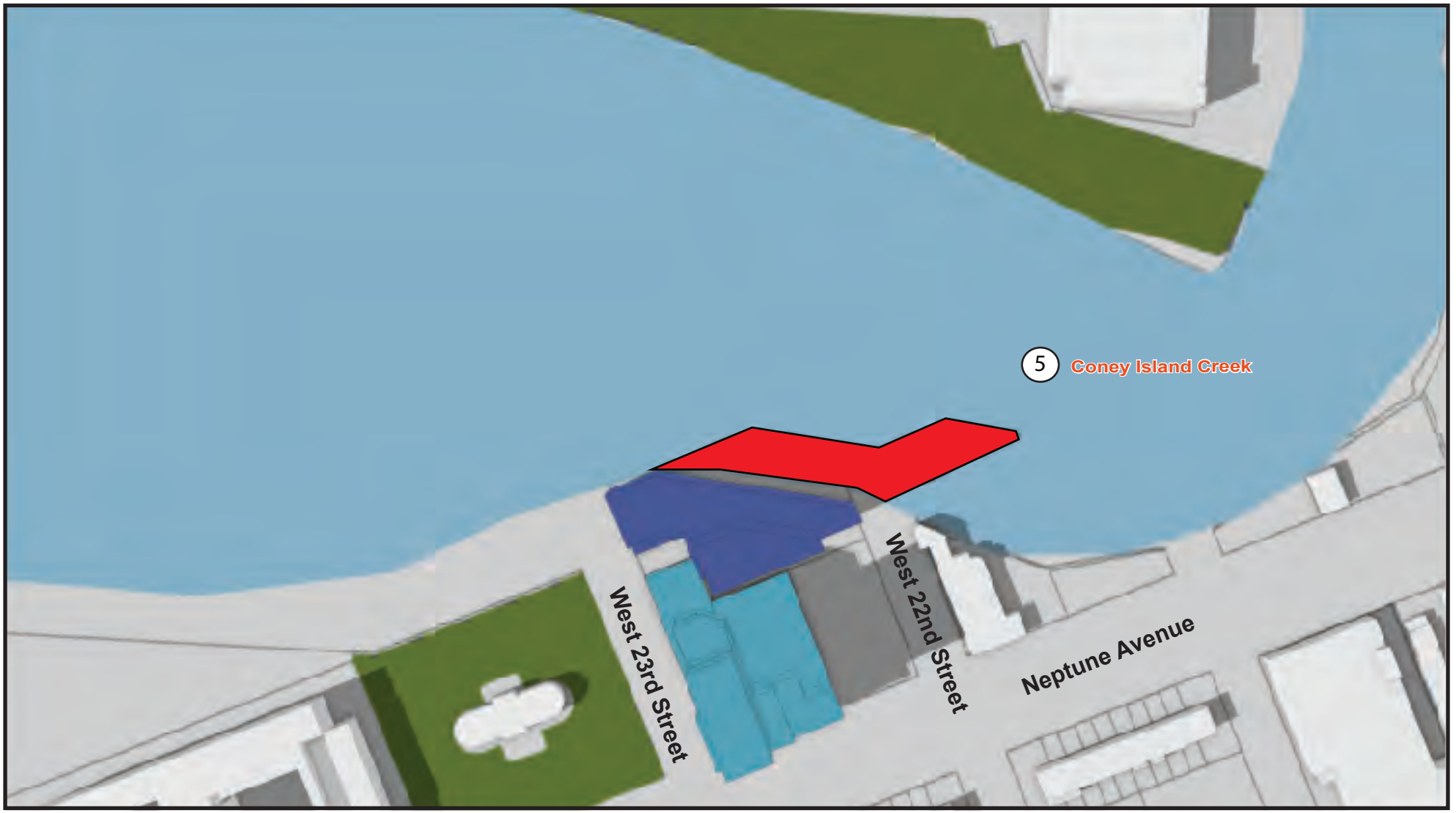
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 2:27 PM

May 6th Analysis Day

Figure D-67



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

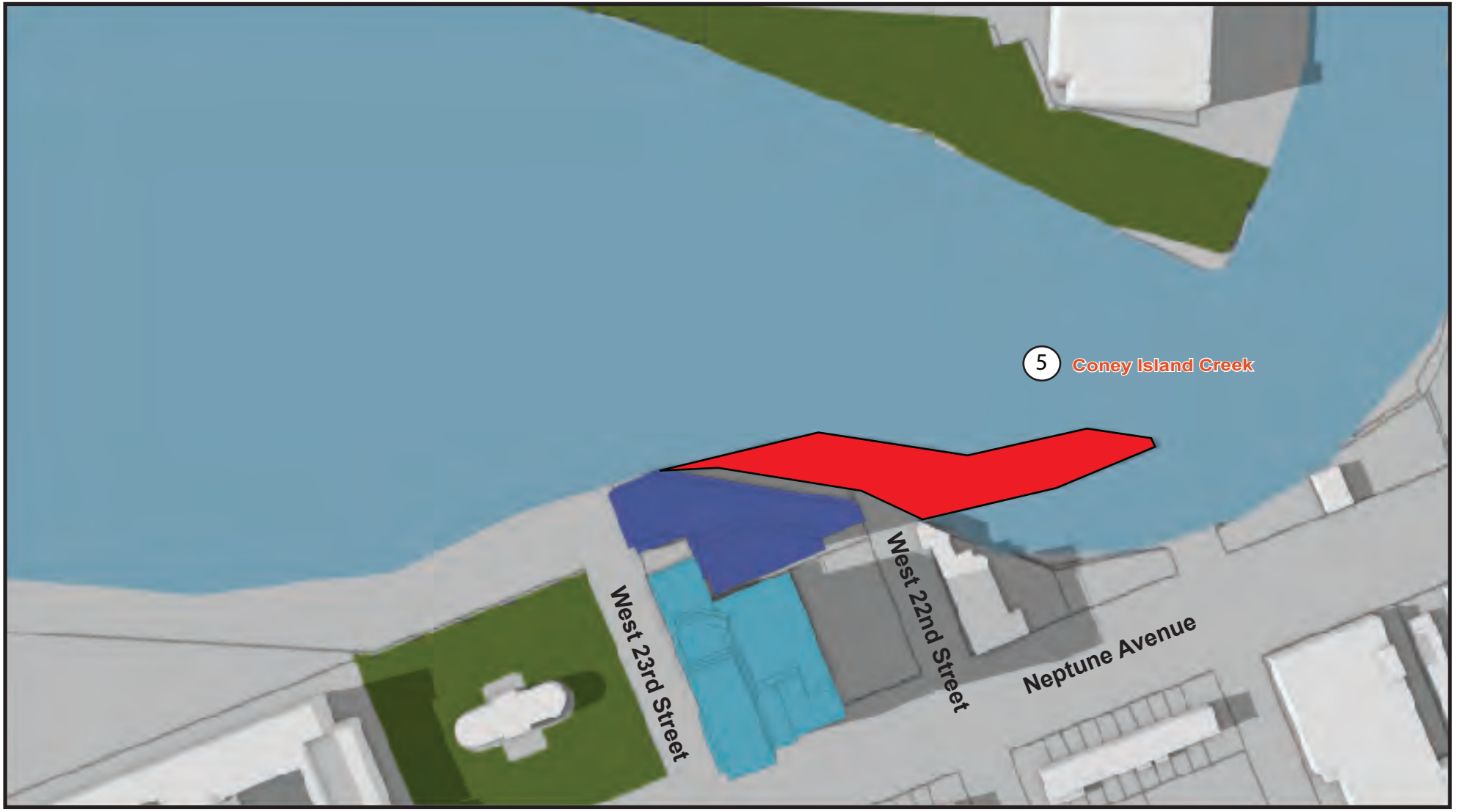
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 3:27 PM

May 6th Analysis Day

Figure D-68



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

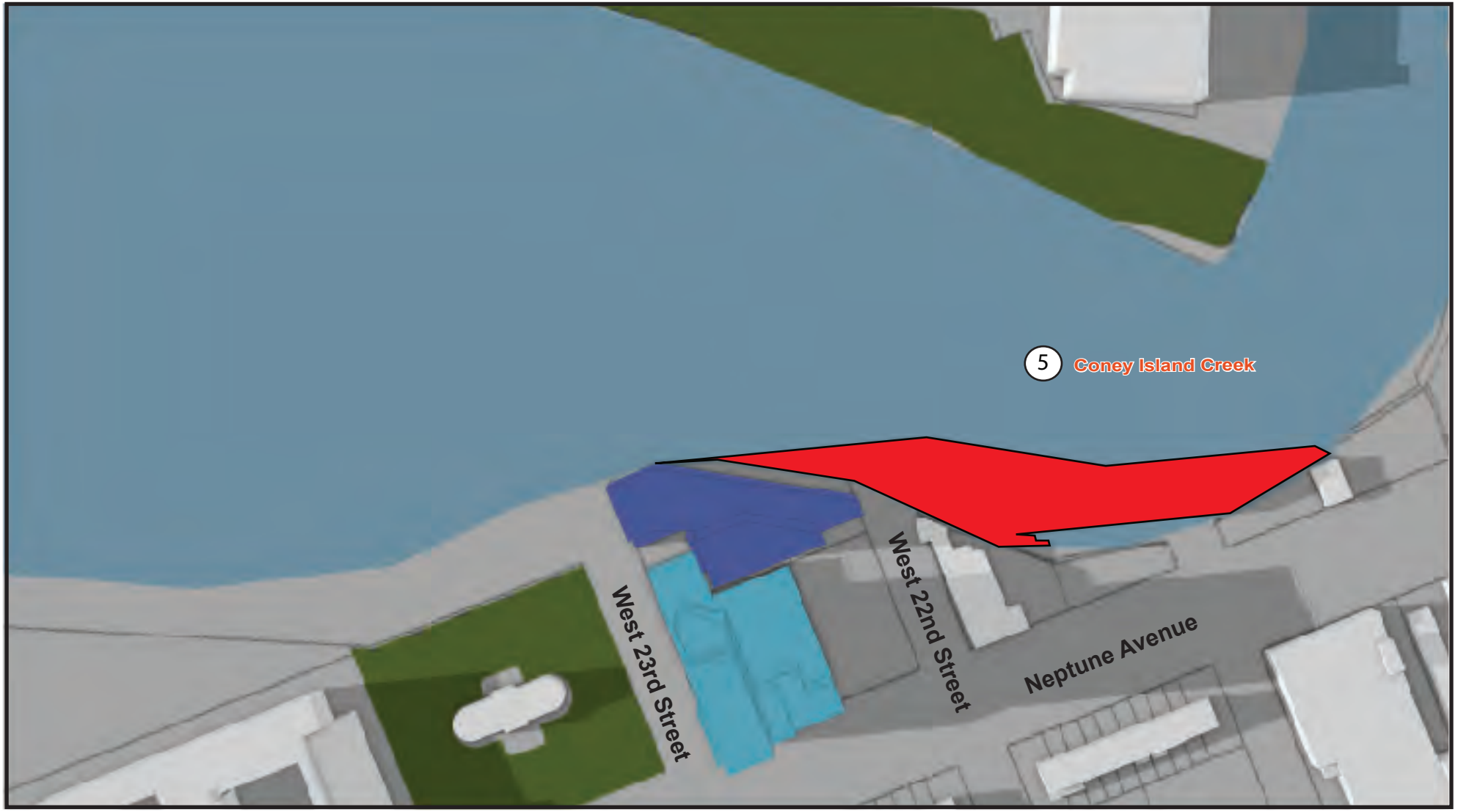
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 4:27 PM

May 6th Analysis Day

Figure D-69



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

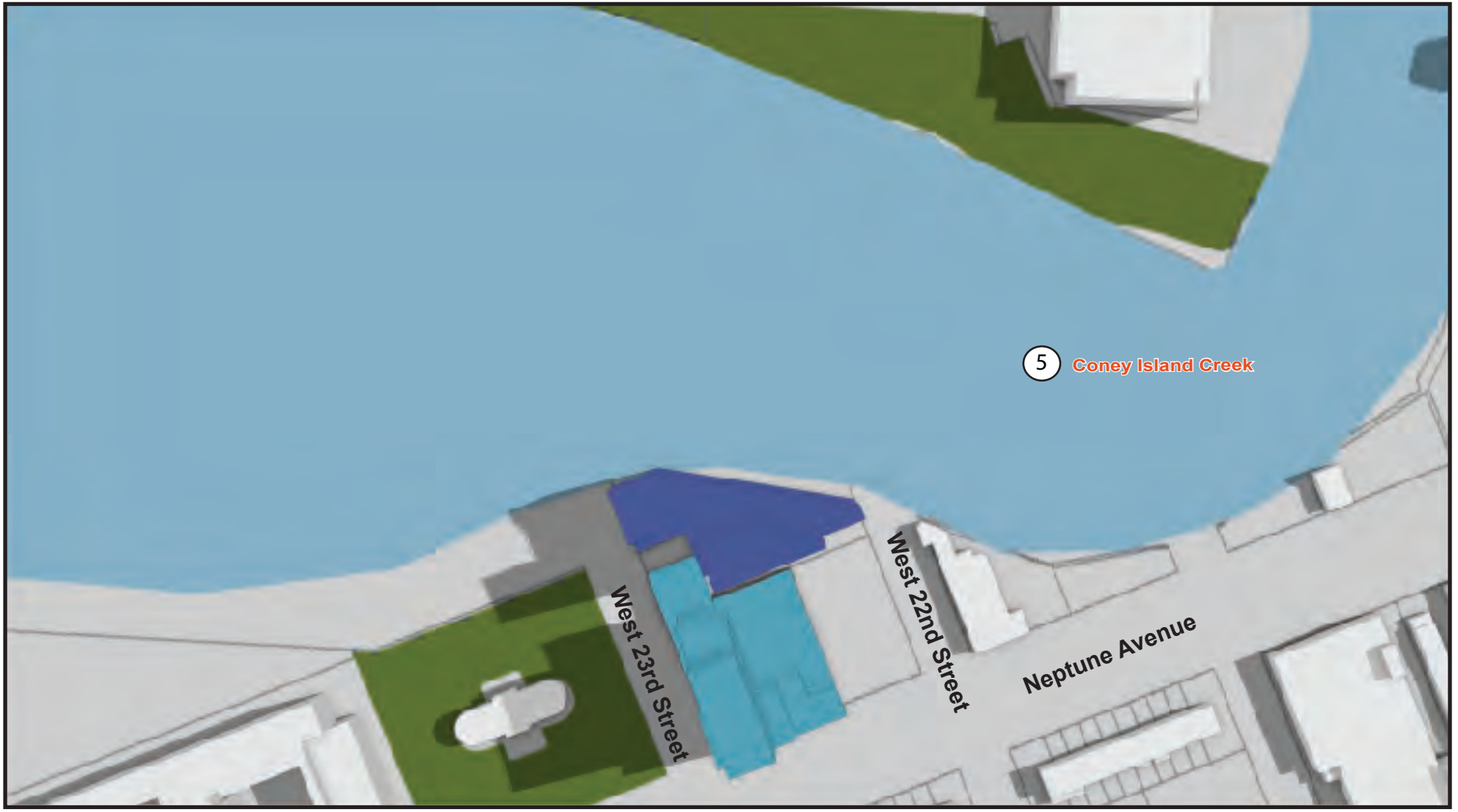
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 5:18 PM

May 6th Analysis Day

Figure D-70



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

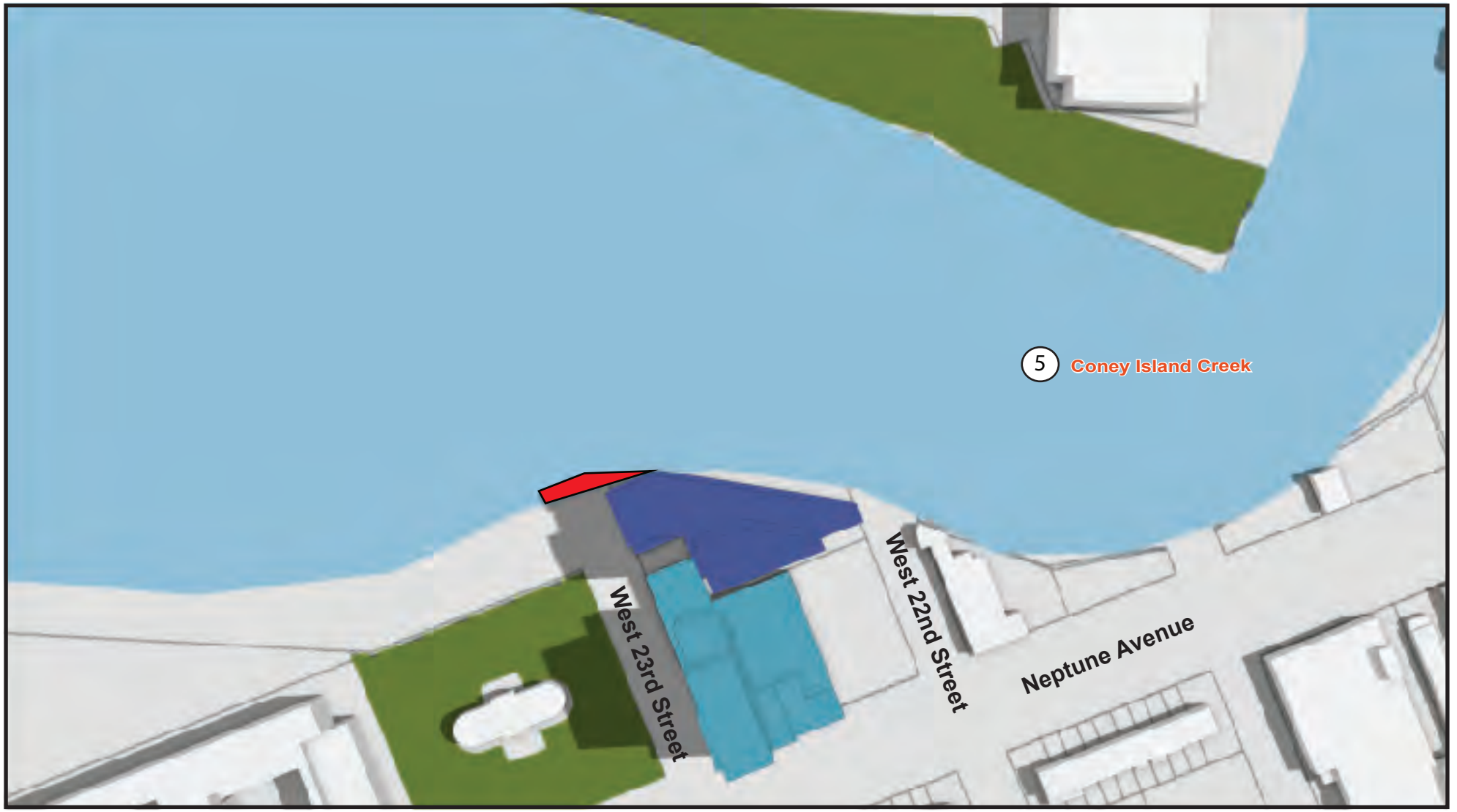
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 7:57 AM

June 21st Analysis Day

Figure D-71



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

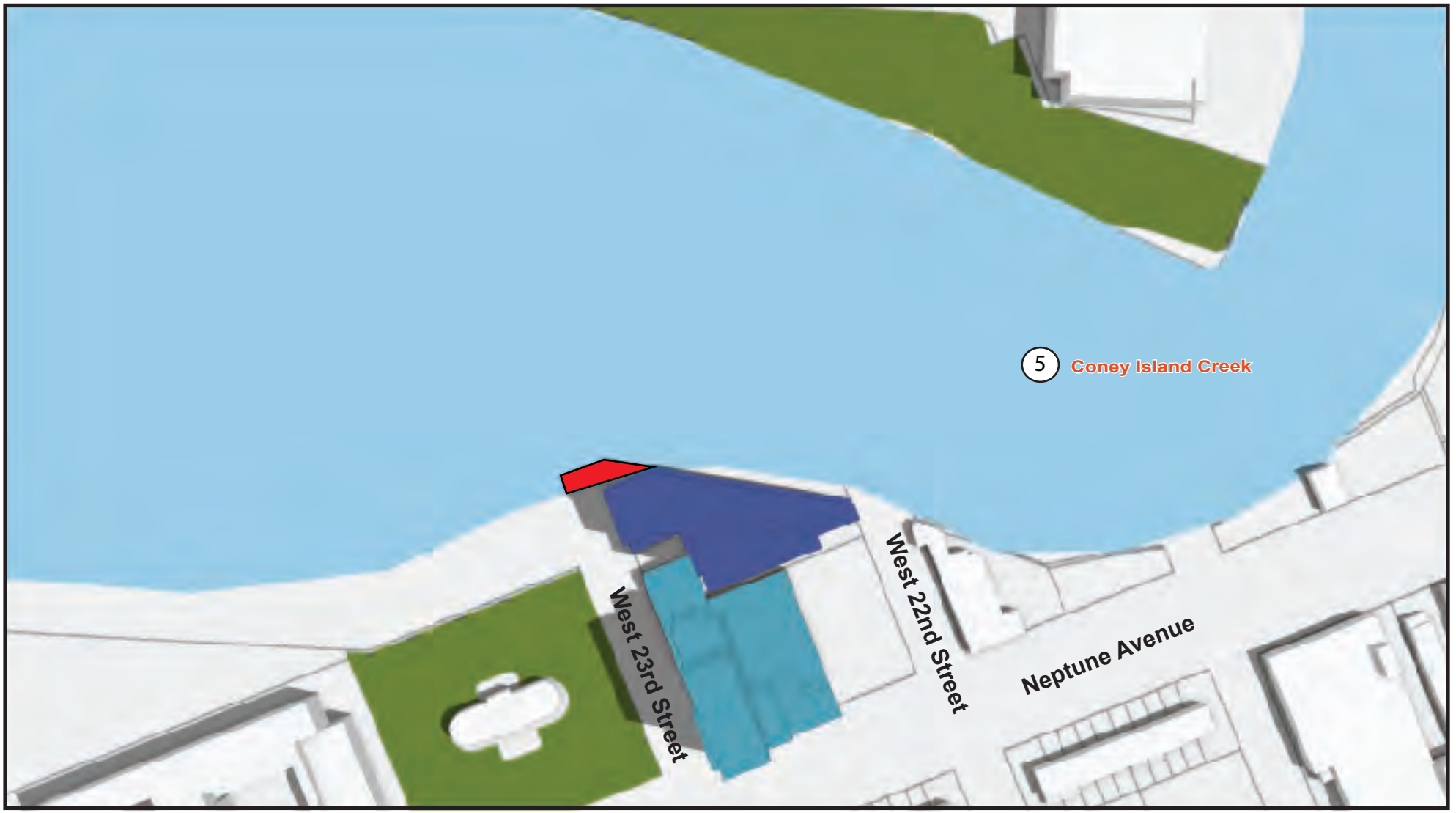
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 8:57 AM

June 21st Analysis Day

Figure D-72



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

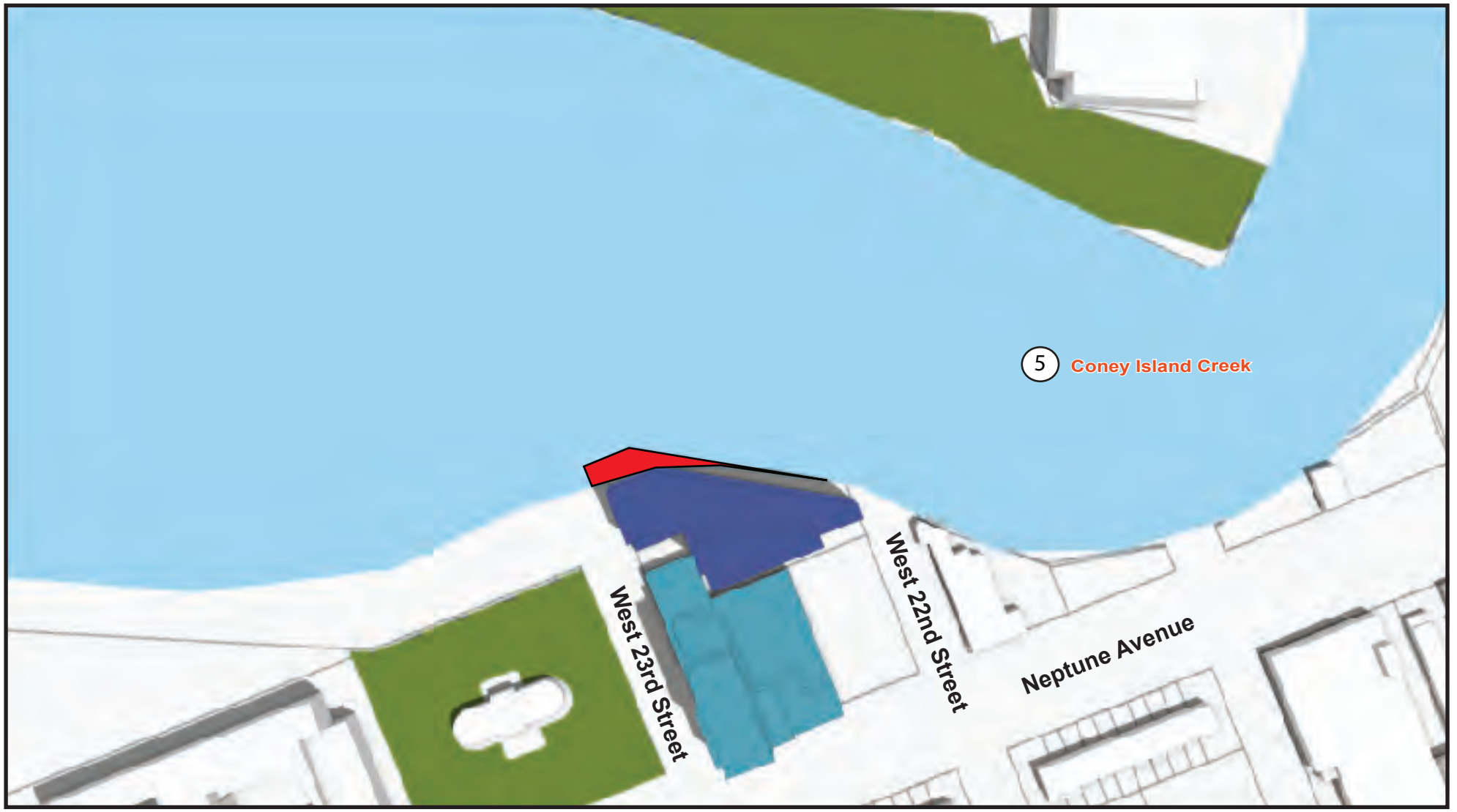
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 9:57 AM

June 21st Analysis Day

Figure D-73



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

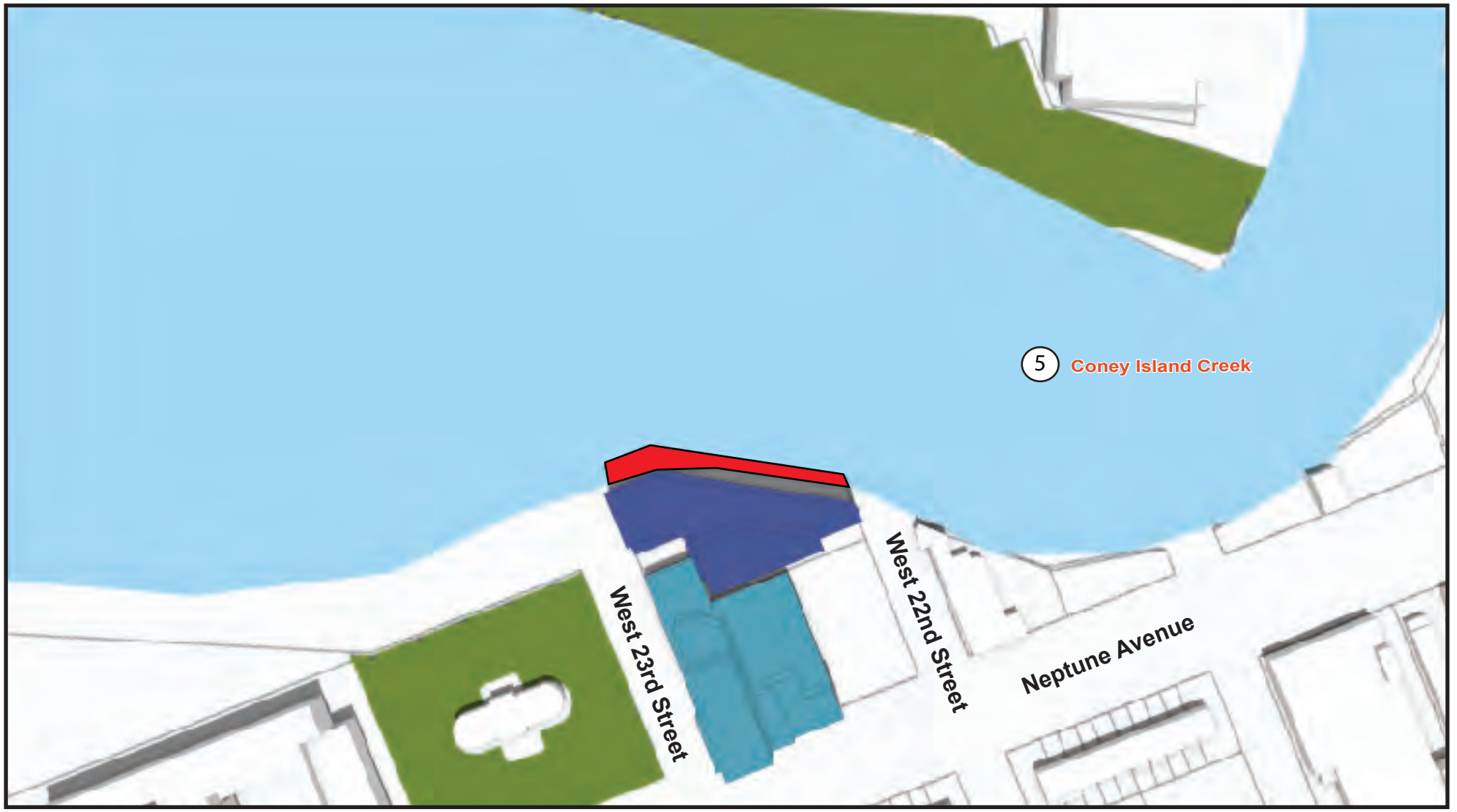
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 10:57 AM

June 21st Analysis Day

Figure D-74



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

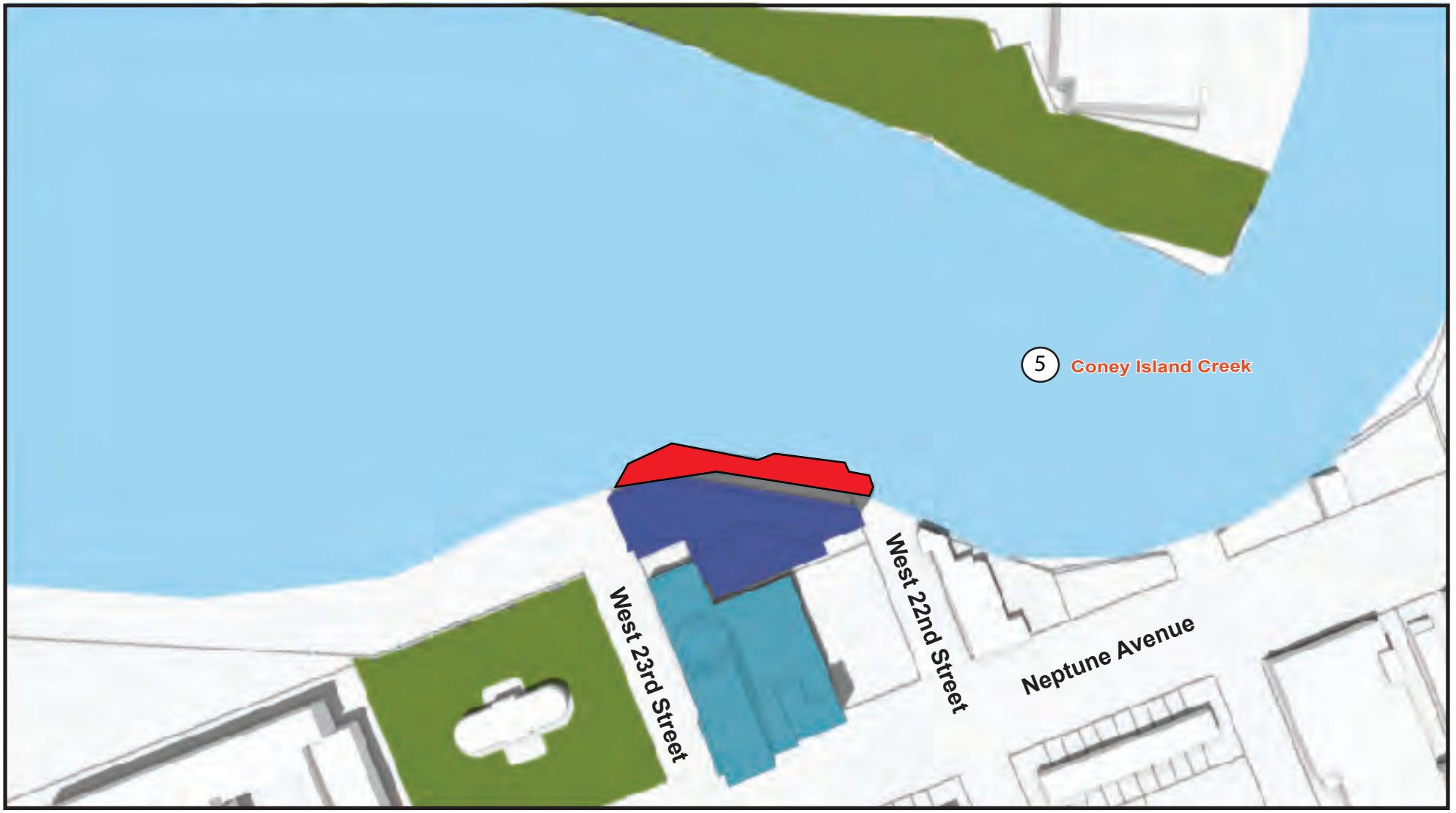
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 11:57 AM

June 21st Analysis Day

Figure D-75



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

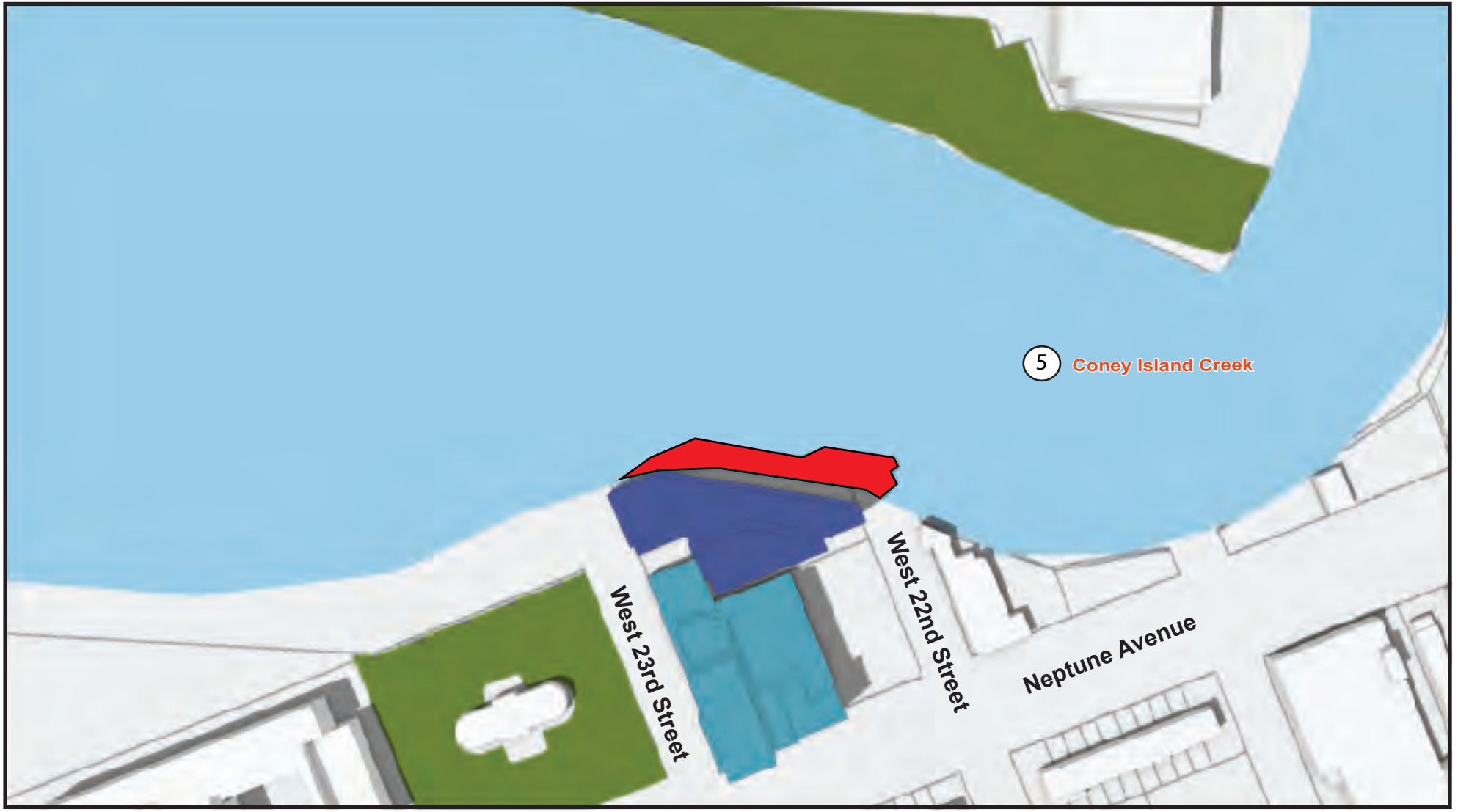
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 12:57 PM

June 21st Analysis Day

Figure D-76



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

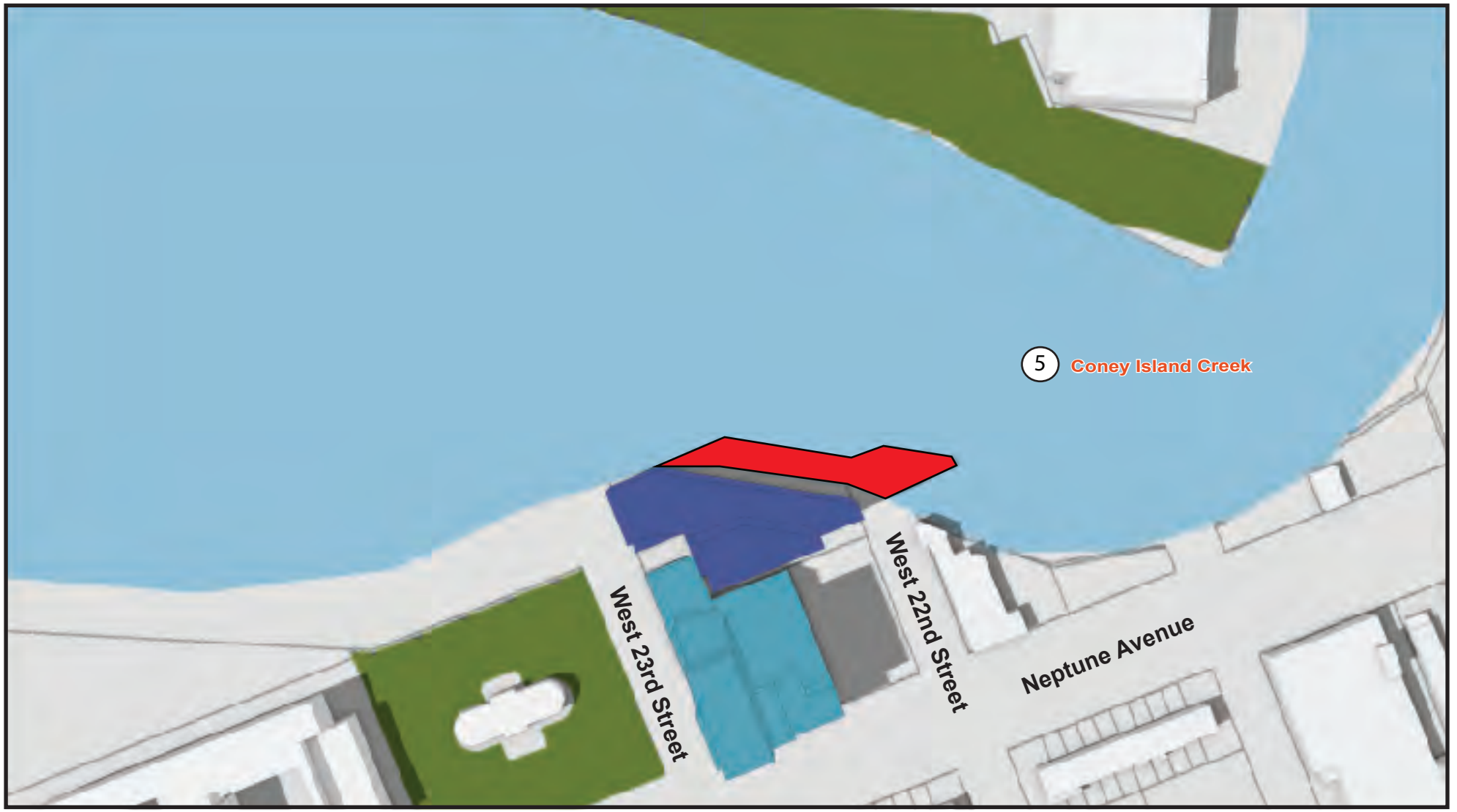
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 1:57 PM

June 21st Analysis Day

Figure D-77



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

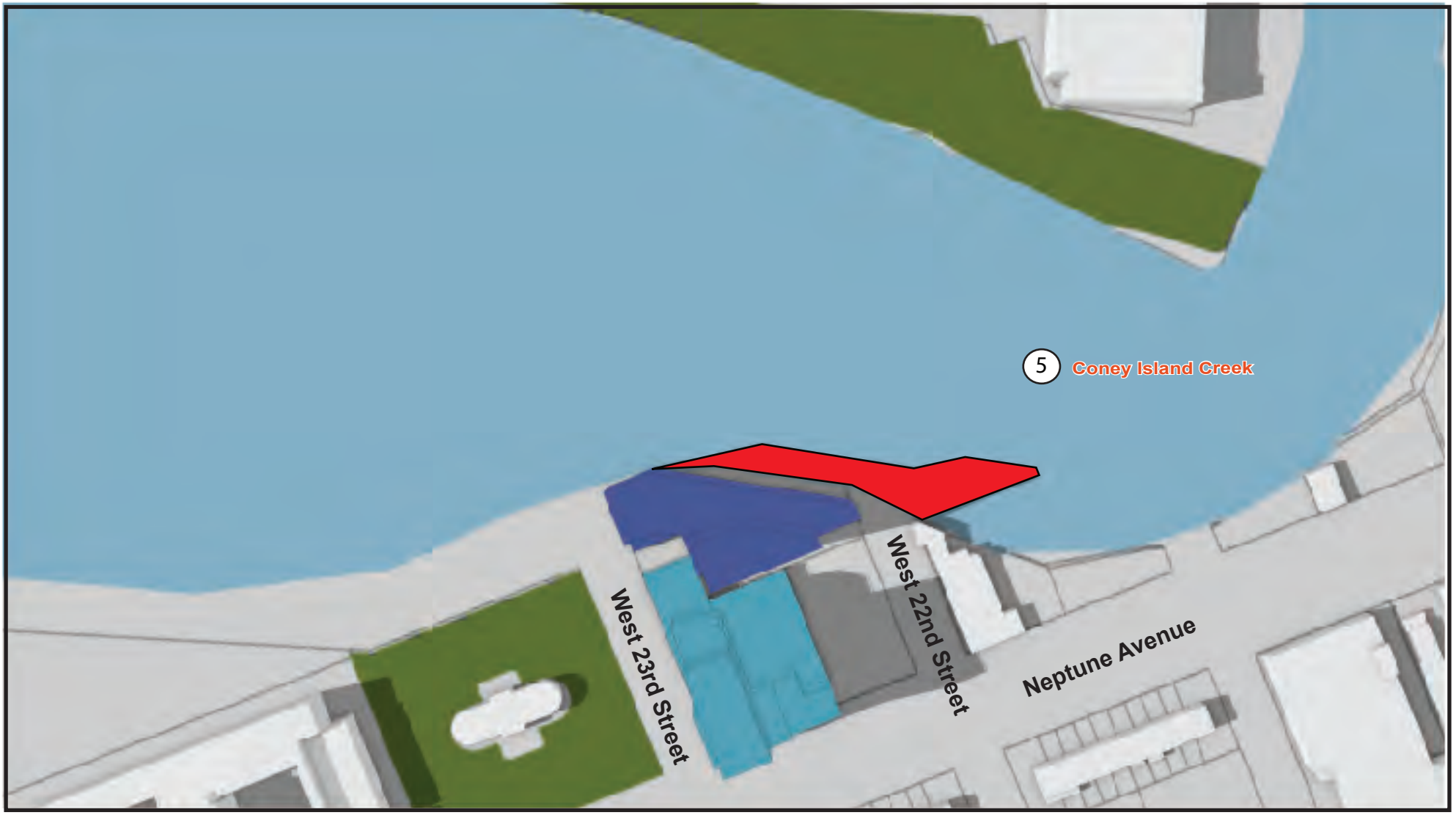
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 2:57 PM

June 21st Analysis Day

Figure D-78



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

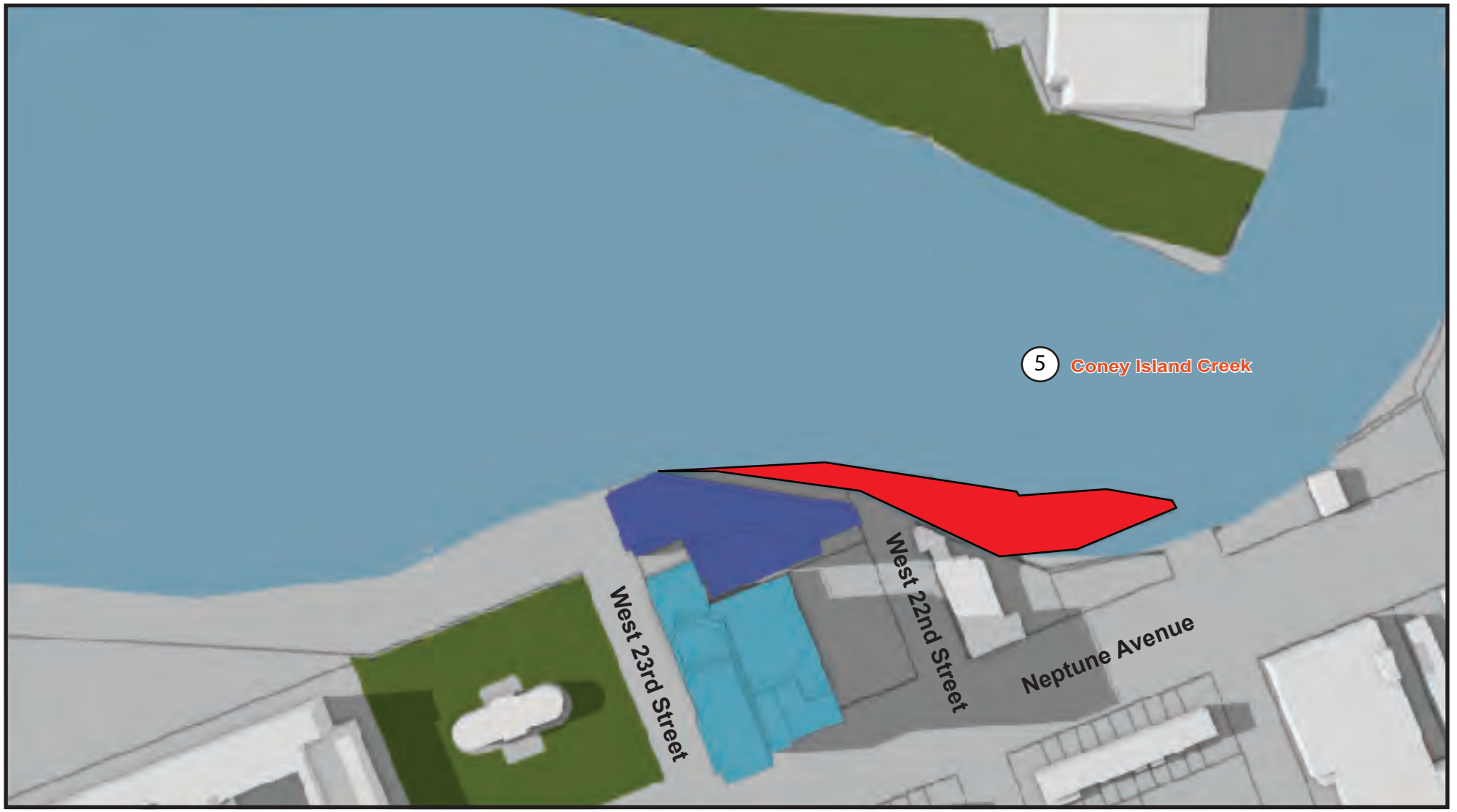
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 3:57 PM

June 21st Analysis Day

Figure D-79



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

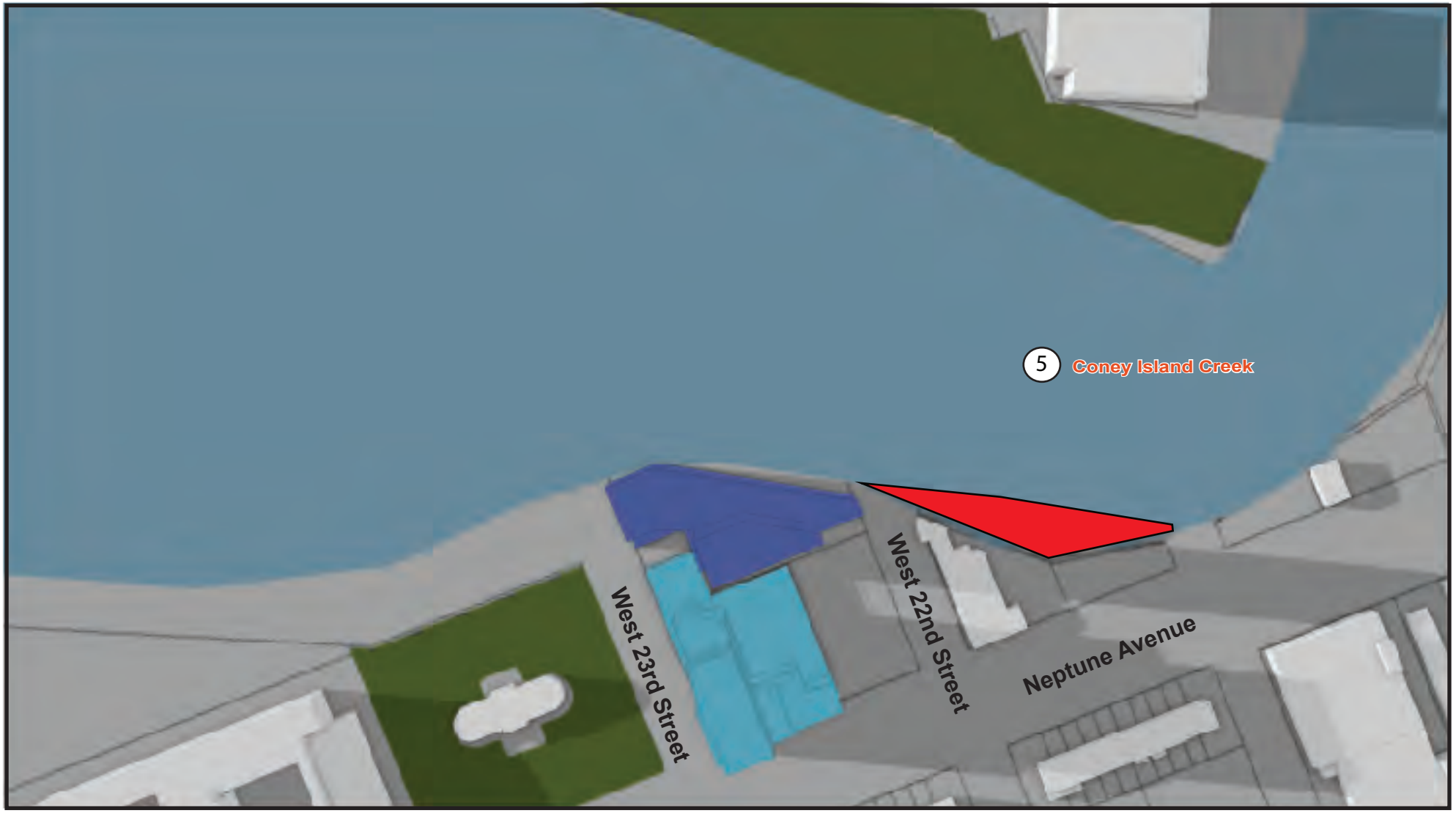
(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 4:57 PM

June 21st Analysis Day

Figure D-80



Projected Development Site 1

Potential Development Site 1

Incremental Shadows

(#) Sunlight-Sensitive Resources (Keyed to Table D-1)

Open Space

INCREMENTAL SHADOWS 6:01 PM

June 21st Analysis Day

Figure D-81

V. ASSESSMENT

CEQR Technical Manual guidelines indicate that the significance of shadow impacts on a sunlight-sensitive resource is based on (i) the information resulting from the detailed shadow analysis describing the extent and duration of incremental shadows; and (ii) an analysis of the resource's sensitivity to reduced sunlight. A shadows impact occurs when the incremental shadow from a proposed project falls on a sunlight-sensitive resource or feature and reduces its direct sunlight exposure. Determining whether this impact is significant or not depends on the extent and duration of the incremental shadow and the specific context in which the impact occurs.

For both open space and natural resources, the uses and features of the resource indicate its sensitivity to shadows. Sensitivity is assessed for both (i) warm-weather dependent features like wading pools and sand boxes, or vegetation that could be affected by a loss of sunlight during the growing season; and (ii) features, such as benches that could be affected by a loss of winter sunlight.

Coney Island Community Garden

The Proposed Project and the building on Potential Development Site 1 would cast incremental shadows over portions of the Coney Island Community Garden in the morning hours of all four analysis days. However, as per the NYC Parks website, the Coney Island Community Garden is not operational between October 31 and April 1. Shadows occurring during the cold-weather months of interest generally do not affect the growing season of outdoor vegetation. Consequently, the assessment does not include the analysis days of December 21st and March 21st. The community garden contains potentially sunlight sensitive features such as vegetation and benches for the people tending to the community garden to rest while gardening. According to the *CEQR Technical Manual,* the amount of sunlight typically considered to be the minimum that plantings and vegetation would need is six to eight hours of direct sunlight. As shown in **Figures D-14** through **D-18,** for the May 6th analysis day, the incremental shadows would travel west to east and would exit the community garden by 10:11 AM. Similarly, as shown in **Figures D-19** through **D-23,** on the June 21st analysis day, the vegetation in the community garden would be shaded by incremental shadows due to the Proposed Project and the building on Potential Development Site 1, between 5:57 AM and 10:11 AM. Although the incremental shadows would be cast on the vegetation during these hours, the garden would continue to receive between six to eight hours of sunlight throughout the rest of the day during growing season, when sun sets later in the day. Therefore, incremental shadows would not substantially affect the vegetation in the community garden. The community garden has benches inside as well as along the sidewalk on West 23rd Street. The benches are mainly used by the community garden members to rest while gardening. The highest incremental shadows would be cast earlier in the day and duration of the incremental shadows on the benches would be temporary as it would sweep eastward and exit the community garden by 10:11 AM.

The analysis days of May 6th, and June 21st, have longer days and more hours of sunlight and represent the growing season. Although the incremental shadows would sweep across the community garden for a few hours during the day, the vegetation would continue to receive between six to eight hours of sunlight throughout the rest of the day during growing season and would not affect the growth of the vegetation. Consequently, the Proposed Project and the building on Potential Development Site 1 would not result in a significant adverse shadows impact on Coney Island Community Garden.

Coney Island Boat Basin/Six Diamonds

For the December 21st analysis day, the Proposed Project and the building on Potential Development Site 1 would cast incremental shadows over the southeastern portion of the walkway along the water on Coney Island Boat Basin between 1:21 PM and 2:53 PM, which is the end of the analysis period, lasting approximately one hour and thirty-two minutes. According to the *CEQR Technical Manual*, the December 21st analysis day is considered a representative day for the cold-weather months, during which the concern is loss of sunlight on features used for passive recreation and active uses. There would be no incremental

shadows on the remaining analysis days. While portions of the walkway in the southeastern portion of the Coney Island Boat Basin would be cast in incremental shadows, this area represents less than five percent of the total area of the park where minimal use is expected.

Mark Twain IS 239 for the Gifted and Talented

The Proposed Project and the building on Potential Development Site 1 would cast incremental shadows over portions of the Mark Twain IS 239 for the Gifted and Talented in the morning hours of March 21st, May 6th, and June 21st. The incremental shadows on March 21st travels north on the northern façade and roof of the school. The incremental shadow for the March 21st analysis day would be only 12 minutes. Similarly, for May 6th analysis day, the incremental shadows would enter the school building at 6:27 AM, traveling north from the southern façade and roof to the northern façade and roof, lasting approximately 30 minutes before exiting the building at 6:57 AM. For June 21st, the incremental shadows would be cast for a total of 1 hour and six minutes. This historic resource is noted for its architectural significance and for the unique double hollow square plan. However, these design elements are not part of a recognized architectural style that depends on the contrast between light and dark design elements, nor do the exterior materials and color depend on direct sunlight for visual character. Consequently, the incremental shadows from the Proposed Project and the building on Potential Development Site 1 would not have a significant adverse impact on the Mark Twain IS 239 for the Gifted and Talented.

Coney Island Fire Station Pumping Station

The Proposed Project and the building on Potential Development Site 1 would cast incremental shadows over portions of the Coney Island Fire Station Pumping Station on March 21st, May 6th, and June 21st. These incremental shadows would cover the building's northern, southern, and eastern facade for two hours 55 minutes on March 21st, 3 hours 44 minutes on May 6th and four hour 14 minutes on June 21st. The incremental shadows would sweep eastward from the southern façade of the pumping station ultimately exiting the eastern facade. This historic resource is noted for its 'moderne' architecture. However, as defined in the *CEQR Technical Manual*, these design elements do not fall under the classification of being sunlight-sensitive resources. These design elements are not part of a recognized architectural style that depends on the contrast between light and dark design elements, nor do the exterior materials and color depend on direct sunlight for visual character. Consequently, the incremental shadows from the Proposed Project and the building on Potential Development Site 1 would not have a significant adverse impact on Coney Island Fire Station Pumping Station.

Coney Island Creek

Incremental shadows would move eastward at the start of the analysis days and would not affect one specific area of the Coney Island Creek for long durations. The areas that receive the longest durations of the incremental shadows would receive more than four hours of direct sunlight between the start and end of all the analysis days. The extent and duration of the incremental shadows would not significantly reduce or completely eliminate direct sunlight exposure on this natural resource. The specific areas of the creek that would receive incremental shadows would not alter the publics use of the creek. As a result, the Proposed Project and the building on Potential Development Site 1 would not result significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

VI. CONCLUSION

The Proposed Project and the building on Potential Development Site 1 would not result in a significant adverse impact from project-generated incremental shadows on potentially sunlight-sensitive resources.

As described above, incremental shadows cast on the Coney Island Community Garden would not substantially affect the viability of the vegetation. The vegetation in the community garden would continue to receive 6-8 hours of sunlight during the growing season. Similarity, incremental shadow would be cast on passive use amenities such as benches for a relatively short duration of time.

While portions of the walkway in the southeastern portion of the Coney Island Boat Basin would be cast in incremental shadows, they would be for an hour and thirty-two minutes during the cold weather months, when minimal use of the park would be expected. Therefore, the incremental shadows from the Proposed Project and Potential Development Site 1 would not substantially reduce or completely eliminate direct sunlight exposure in a way that would significantly alter the public's use of the open space resources; nor would it substantially reduce sunlight in a way which impedes vegetation growth.

While portions of Mark Twain IS 239 for the Gifted and Talented and Coney Island Fire Station Pumping Station would be cast in incremental shadows, the design elements withing these historic resources does not fall under the classification of being sunlight-sensitive resources. Consequently, the incremental shadows from the Proposed Project and the building on Potential Development Site 1 would not have a significant adverse impact on these two resources.

Since the extent and duration of the incremental shadows would not substantially reduce or completely eliminate direct sunlight exposure in a way that would significantly alter the public's use of Coney Island Creek, incremental shadows as a result of the Proposed Project and the building on Potential Development Site 1 would not result in a significant adverse impact on this natural resource.

Attachment E: Historic and Cultural Resources

I. INTRODUCTION

As indicated in Chapter 9 of the *CEQR Technical Manual*, an assessment of archaeological resources is usually needed for projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated. An assessment of architectural resources is needed if the proposed project would result in new construction, demolition, or significant alteration to any building, structure, or object; change in scale, visual prominence, or visual context of a building; construction activities; additions to or significant removal, grading, or replanting of significant historic landscape features; screening or elimination of publicly accessible views; or significant new shadows on a historic structure in which the features that make the structure significant depend on sunlight.

As described in Attachment A, "Project Description," the Proposed Actions would facilitate a new 18-story, approximately 203,360 gross square feet (gsf) mixed-use development, including 149 dwelling units (DUs), 37 of which is proposed to be affordable DUs, 22,600 gsf of commercial use, and 62 parking spaces ("Proposed Project") at 2201-2227 Neptune Avenue (Block 6990, Lot 10) ("Projected Development Site 1"). The Proposed Project is expected to be completed by 2027. Additionally, Block 6990, Lot 20 would also be affected by the Proposed Actions and is considered Potential Development Site 1.

Potential impacts to architectural resources can include both direct physical impacts and indirect, contextual impacts. Direct impacts include demolition of a resource and alterations to a resource that cause it to become a different visual entity. A resource could also be damaged from vibration (i.e., from construction blasting or pile driving), and additional damage from adjacent construction could occur from falling objects, subsidence, collapse, or damage from construction machinery. Contextual impacts can include the isolation of a property from its surrounding environment, or the introduction of visual, audible, or atmospheric elements that are out of character with a property or that alter its setting, such as the introduction of shadows. Therefore, a historic and cultural resources assessment is warranted.

II. METHODOLOGY

Archaeological Resources

Archaeological resources are physical remains, usually buried, of past activities on a site. They can include remains from Native American people who used or occupied a site, including tools, refuse from tool-making activities, habitation sites, etc. Archaeological resources can also include remains from activities that occurred during the historic period (beginning with European colonization of the New York area in the 17th century) that include European contact with Native Americans, as well as battle sites, foundations, wells, and privies.

Archaeological resources in developed areas may have been disturbed or destroyed by grading, excavation, and infrastructure installation and improvements. However, some resources do survive in an urban environment. Deposits may have been protected either by being paved over or by having a building with a shallow foundation constructed above them. In both scenarios, archaeological deposits may have been sealed beneath the surface, protected from further disturbance.

The study area for archaeological resources is the area that would be disturbed for project construction, i.e., Projected Development 1 and Potential Development Site 1. The New York City Landmarks Preservation Commission (LPC) has determined in a letter dated November 14, 2023, that Projected

Development Site 1 (2227 Neptune Avenue) and Potential Development Site 1 (2737 West 23rd Street) has no archaeological significance (see **Appendix B**). Therefore, no further consideration of archaeological resources is warranted.

Architectural Resources

Architectural resources are defined as properties or districts listed in the State/National Registers of Historic Places (S/NR) or determined eligible for such listing as National Historic Landmarks (NHLs), New York City (NYC) Landmarks (NYCL), and Historic Districts, and properties that have been found by the LPC to appear eligible for designation, considered for designation (i.e., "heard") by the LPC at a public hearing, or calendared for consideration at such a hearing (i.e., "pending" NYCLs).

The study area for architectural resources is determined based on the Proposed Project's area of potential effect on architectural resources, which accounts for both direct physical impacts and indirect impacts. Direct impacts include demolition of a resource and alterations to a resource that cause it to become a different visual entity. A resource could also be damaged by construction activities such as blasting, pile driving, falling objects, subsidence, collapse, or damage from construction machinery unless proper protection measures are put in place. Construction activity that would occur within 90 feet of an architectural resource may cause such damage. The NYC Building Code provides some measures of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. While these regulations serve to protect all structures adjacent to construction areas, they do not afford special consideration for historic structures. A second protective measure, TPPN #10/88, applies to NYCL, properties within NYC Historic Districts, and National Register-listed properties. TPPN #10/88 supplements the standard building protections afforded by the Building Code by requiring a monitoring program to reduce the likelihood of construction damage to adjacent NYCL and National Register-listed properties (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

Indirect impacts are contextual or visual impacts that could result from project construction or operation. According to the *CEQR Technical Manual* guidelines, indirect impacts could result from blocking significant public views of a resource; isolating a resource from its setting or relationship to the streetscape; altering the setting of a resource; introducing incompatible visual, audible, or atmospheric elements to a resource's setting; or introducing shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance (i.e., a church with stained glass windows). Significant adverse direct or indirect impacts can occur if a project would cause a change in the quality of a property that qualifies it for S/NR listing or for designation as a NYCL.

To account for potential physical and contextual impacts, the architectural resources study area is defined as the area within approximately 400 feet of the Project Site boundary. Architectural resources within 400-foot study area, identified in consultation with the LPC (see **Appendix B**), include one S/NR-listed resource and one S/NR-eligible resource. The Proposed Project was assessed for both direct physical impacts and indirect visual and contextual impacts on architectural resources.

III. EXISTING CONDITIONS

Architectural Resources

Project Site

The LPC (**Appendix B**), determined that no architectural resources exist on Projected Development Site 1 (2227 Neptune Avenue) or on Potential Development Site 1 (2737 West 23rd Street).

Study Area

LPC identified two known architectural resources within the 400-foot study area (**See Figure E-1: Historic Resources**):

#1 The Coney Island Fire Station Pumping Station

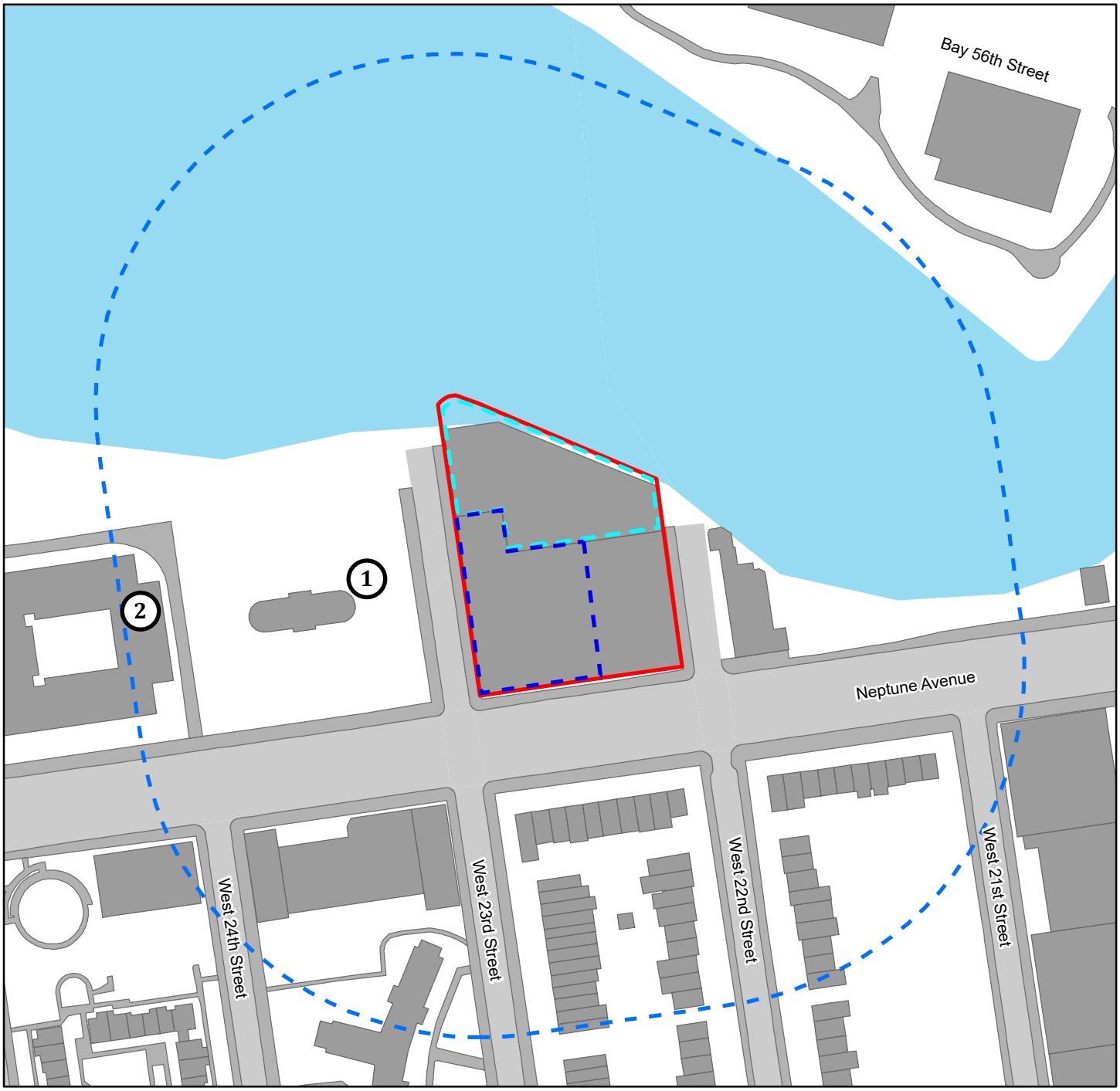
The S/NR-listed Coney Island Fire Station Pumping Station is located at 2301 Neptune Avenue (Block 6965, Lot 125), approximately 130 feet west of the Projected Development Site 1.

Built in 1938, this building represents the late Art Deco or Art Moderne Style in its "rounded corners, sparse décor, rich materials, and lozenge plan," a style that marks other structures built at that time period. Originally built to maintain water pressure for firefighting, the structure is fronted with limestone trimmed dark marble, with a raised entrance framed in marble. This served to differentiate this building from other public facilities more commonly built in the classical style at the time. Though not used for its original built purpose as of its closing in the late 20th century, the structure maintains visual prominence in the middle of the West 23rd Street Community Garden (Coney Island Community Garden). These design elements are not part of a recognized architectural style that depends on the contrast between light and dark design elements, nor do the exterior materials and color depend on direct sunlight for visual character and are therefore, not a sunlight sensitive resource.

#2 The Mark Twain IS 239 for the Gifted and Talented

The S/NR-eligible Mark Twain IS 239 for the Gifted and Talented is located at 2401 Neptune Avenue (Block 6965, Lot 140), approximately 330 feet west of the Projected Development Site 1.

Built between 1936 and 1937 and designed by architect Walter C. Martin, the building was built in the neoclassical revival style and was one of the first schools built in the "double hollow square" style which introduced more light and air through the building through the introduction of a large central courtyard to the east and two smaller courtyards to the west. The outside materials used for the school is light buff brick with limestone trim and a granite-faced base, paneled doors with terra cotta detailing, and decorative brickwork. Few alterations have been made to the school since being built and thus, the school has maintained its historic and architectural significance. These design elements are not part of a recognized architectural style that depends on the contrast between light and dark design elements, nor do the exterior materials and color depend on direct sunlight for visual character and are therefore, not a sunlight sensitive resource.



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Affected Area "Rezoning Area"

400-Foot Boundary

Projected Development Site 1

Potential Development Site 1

Historic Resources

HISTORIC RESOURCES

Figure E-1

2201-2227 Neptune Avenue EAS

IV. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

In the future without the Proposed Actions, Projected Development Site 1 would remain as under existing conditions and would continue to be occupied by the existing one-story 25,298 gsf manufacturing building, comprising of active warehouse and commercial uses. Potential Development Site 1 would continue to be occupied by a one-story 25,000 gsf manufacturing building.

V. FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

In the future with the Proposed Actions, Projected Development Site 1 and Potential Development Site 1 would be rezoned M1-5/R7-3 Special Mixed Use Zoning designation, which would allow a maximum of 5.0 FAR for uses such as, community facility, commercial, recreation, general services, and light manufacturing and a maximum residential use of 6.0 FAR, for zoning lots in MIH areas. The total allowable FAR under the Proposed Actions would be 6.0. The Proposed Project assumes the maximum development feasible under the Proposed Actions. In addition, the Proposed Actions may result in potential development on Potential Development Site 1 (Block 6990, Lot 20) under similar height and bulk as proposed on the Projected Development Site 1.

Direct Effects

No known architectural resources are located on or within 90 feet of Projected Development Site 1 or Potential Development Site 1; the S/NR-listed Coney Island Fire Station Pumping Station is located approximately 130 feet west of the Projected Development Site 1 and the S/NR-eligible Mark Twain IS 239 for the Gifted and Talented approximately 330 feet west of the Projected Development Site 1. Therefore, no direct effects to historic and cultural resources would occur.

Visual and Contextual Effects

Views of the Coney Island Fire Station Pumping Station or IS 239 would not be eliminated. Nor would the Proposed Project or potential development of Potential Development Site 1 diminish the visual prominence of these architectural resources. Though the Proposed Actions would allow taller structures on the Projected Development Site 1 and Potential Development Site 1 (up to 197 feet or 205 feet with bulkhead), buildings of similar height are located in the surrounding area, as described in Attachment F, “Urban Design and Visual Resources.” Though these architectural resources do not contain features that depend on sunlight, incremental shadows on these resources were analyzed; as described in Attachment D, “Shadows,” no significant adverse shadows impact would occur. Therefore, no significant adverse historic and cultural resources impact related to visual and contextual effects would occur.

VI. CONCLUSION

The Proposed Actions would not result in direct effects on architectural resources. The Proposed Project or potential development of Potential Development Site 1 would not eliminate views or diminish the visual prominence of architectural resources. No archeological resources are located on the two development sites. Therefore, no significant adverse impacts related historic and cultural resources would occur.

Attachment F: Urban Design and Visual Resources

I. Introduction

This attachment assesses the potential impact of the Proposed Project on urban design and visual resources. Urban design is the composite of elements that may affect a pedestrian's experience of public space. These elements include streets, buildings, visual resources, open space, natural features, and wind. As described in Chapter 10 of the 2021 edition of the *City Environmental Quality Review (CEQR) Technical Manual*, the urban design and visual resources assessment evaluates whether the Proposed Project may have effects on one or more of these elements of pedestrian experience.

As described in Attachment A, "Project Description," the Proposed Actions would facilitate a new 18-story, approximately 203,360 gsf mixed-use development, including 145 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces ("Proposed Project") at 2201-2227 Neptune Avenue (Block 6990, Lot 10) ("Projected Development Site 1"). The proposed actions may also facilitate a potential 198,480 gsf development including 175,580 gsf of residential on the non-applicant owned 2737 West 23rd Street (Block 6990, Lot 20) ("Potential Development Site 1"). The Proposed Project is expected to be completed by 2027.

The Proposed Site would be mapped with an M1-5/R7-3 (MX) zoning district with a maximum residential FAR of 6.0 and a FAR of 5.0 for other uses (community facility, commercial, and light manufacturing), which is greater than the maximum 2.0 FAR allowed under the existing M1-2 zoning designation. Therefore, a preliminary urban design assessment is prepared.

II. Methodology

The *CEQR Technical Manual* guidelines define urban design as the totality of components that may affect a pedestrian's experience of public space and that the following elements play an important role in that experience:

1. **Streets.** For many neighborhoods, streets are the primary component of public space. The arrangement and orientation of streets define the location and flow of activity in an area, set street views, and create the blocks on which buildings and open spaces are organized. The apportionment of street space between cars, bicycles, transit, and sidewalks and the careful design of street furniture, grade, materials used, and permanent fixtures, including plantings, streetlights, fire hydrants, curb cuts, or newsstands are critical to making a successful streetscape.
2. **Buildings.** Buildings support streets. A building's street walls are the most common backdrop in the city for public space. A building's size, shape, setbacks, lot coverage, and placement on the zoning lot and block; the orientation of active uses; and pedestrian and vehicular entrances all play major roles in the vitality of the streetscape. The public realm also extends to building facades and rooftops, offering more opportunity to enrich the visual character of an area.
3. **Visual Resources.** 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.
4. **Open Space.** For the purposes of urban design, open space includes public and private areas such as parks, yards, cemeteries, parking lots, and privately-owned public spaces.
5. **Natural Features.** Natural features include vegetation and geologic, topographic, and aquatic features. Rock outcroppings, steep slopes or varied ground elevation, beaches, or wetlands may help define the overall visual character of an area.

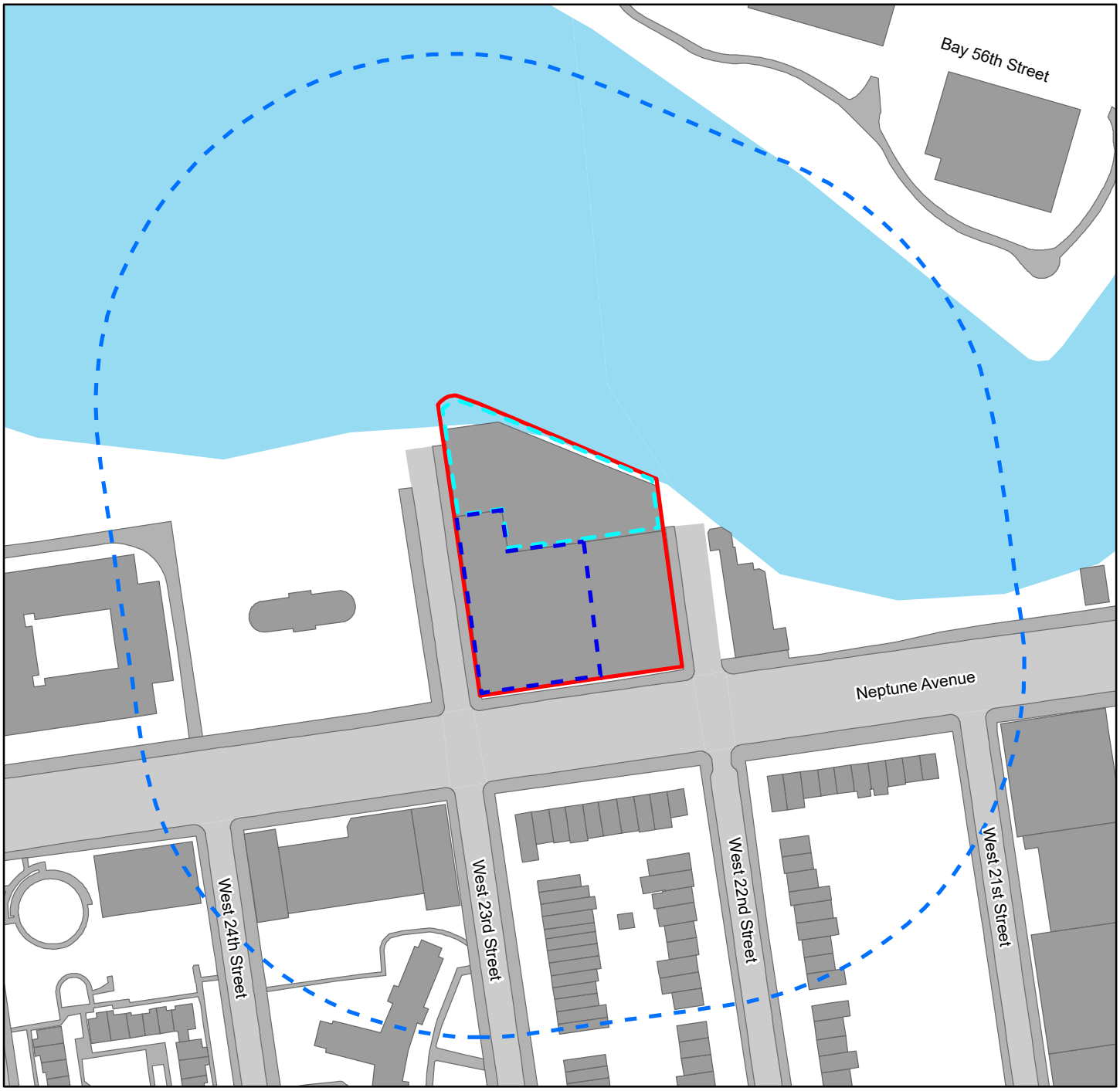
6. **Wind.** Channelized wind pressure from between tall buildings and downwashed wind pressure from parallel tall buildings may cause winds that affect pedestrian comfort and safety.

An urban design and visual resources assessment is necessary when a project may affect one or more of the defined elements that contribute to the pedestrian experience. According to *CEQR Technical Manual* guidelines, a preliminary assessment for urban design is appropriate when there is the potential for a pedestrian to observe, from the street, a physical alteration beyond that allowed by existing zoning, including projects that:

1. Permit the modification of yard, height, and setback requirements;
2. Result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the Proposed Project.

The Proposed Actions would facilitate development that would have the potential for a pedestrian to observe, from the street level, a physical alternation beyond that allowed by existing zoning. Consequently, a preliminary assessment was completed to determine what, if any, potential impact of the Proposed Project would have on urban design and visual resources.

The preliminary assessment describes existing urban design features and visual resources within 400 feet of the Projected Development Site 1 (Study Area), and future (2027) urban design features and visual resources in the Study Area in the No-Action and With-Action condition **(Figure F-1: Urban Design and Visual Resources Study Area Map)**. In conformance to guidance in the *CEQR Technical Manual*, changes that would occur between the No-Action and With-Action condition are disclosed.



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

400-Foot Boundary

Projected Development Site 1

Potential Development Site 1

URBAN DESIGN AND VISUAL RESOURCES STUDY AREA

Figure F-1

2201-2227 Neptune Avenue EAS

III. Existing Conditions

Projected Development Site 1

The Projected Development Site 1 is comprised of Block 6990, Lot 10 along Neptune Avenue between West 22nd Street and West 23rd Street. Lot 10 is currently improved with a one-story 25,298 gsf manufacturing building, comprising of active warehouse and commercial uses. It is accessible from West 23rd Street and Neptune Avenue.

Potential Development Site 1

Potential Development Site 1 is comprised of Block 6990, Lot 20, which fronts West 23rd Street. Lot 20 is currently improved with a one-story 25,000 gsf manufacturing building consisting of an office supply store, which is a long-standing use.

Study Area

According to the *CEQR Technical Manual*, the study area for the urban design and visual resources assessment is the area where the project may influence land use patterns and the built environment and is consistent with that used for the land use analysis. Consequently, the study area for the assessment of potential impacts of the Proposed Actions on urban design and visual resources is the same as the land use study area, i.e., the area within a 400-foot radius of the Projected Development Site 1.

Streets

The Projected Development Site 1 has approximately 25,628 sf of lot area with 143' of street frontage on Neptune Avenue and 210' of street frontage on West 23rd Street. Streets in the study area follow a grid pattern, with the main thoroughfare being Neptune Avenue, running west and east and is served by two bike lanes in either direction, street parking on both sides of the street, two travel lanes on both sides, and an alternating left turn lane.

To the west and east of the Block 6990 and adjacent to Neptune Avenue, is West 23rd Street and West 22nd Street respectively, both single lane, one-way streets. These streets end at the Coney Island Creek, north of Neptune Avenue. To the south of Neptune Avenue, West 22nd Streets is residential in nature fronting R5 and R6 residential districts. Both West 22nd Street and West 23rd Street feature moderate street tree coverage. In its current condition, the eastern sidewalk along West 23rd Street, north of Neptune is currently inaccessible to pedestrians due to cars parked on the sidewalk in front of garage entrances of the existing buildings on the Projected Development Site 1 and Potential Development Site 1.

Streetscape elements within the study area include sidewalks lined with trees without tree guards. Street furniture includes standard street signs, bus stop signs, fire hydrants, cobra head lampposts, chain-link fencing, wrought-iron fencing, wooden electrical poles, and mailboxes. Publicly accessible benches exist on West 23rd Street fronting the Coney Island Community Garden. All rights-of-way in the study area include sidewalks of varying widths and conditions ranging from adequate to poor. Vehicles are parked mostly on-street and in driveways with some surface parking to serve the residents of the Carey Gardens New York City Housing Authority (NYCHA) housing complex, southwest of the Proposed Project Area.

Buildings

The study area is characterized by a mix of low- and high-rise residential uses, one-story manufacturing uses, **auto-oriented** and occasional commercial uses. Building heights in the study area are predominantly one- to two-story buildings with the exception of the sixteen-story NYCHA housing complex on Block 7015, Lot 15 and a seven-story women's shelter on Block 6990, Lot 1. (**Figure F-2 Existing Building Heights**). FARs in the district range from 0 to 6.6 (**Figure F-3 Existing Density**).The NYCHA complex, known as Carey Gardens, approximately 248 feet southwest of the Projected Development Site 1, is a red-brick

tower-in-a-park style building surrounded by lawns and resident parking to the north and south of the building.

The one- to two-family homes in the study area are concentrated along West 22nd Street and West 23rd Street and are adjoined with red brick, mixed brick/wood, or wood paneled façades with private, fenced off driveways fronting the sidewalk. The buildings along Neptune Avenue include single-story manufacturing buildings, many of which have drive-in entrances through the adjacent sidewalks. Between West 21st Street and West 23rd Street, there are two blocks of adjoined one to two-family homes, identical in architectural style and density to those seen on West 22nd Street and West 23rd Street. Auto-oriented uses include an auto body shop at United AC, Inc across the Proposed Project on West 22nd Street.

Two known historic architectural resources exist within the 400-foot study area. The first architectural resource is the Coney Island Pump Station at 2327 Neptune Avenue (Block 6965, Lot 125) across W 23rd Street, approximately 130 feet west of Projected Development Site 1 and the second being the IS 239 Mark Twain School, approximately 350 feet west of Proposed Development Site 1 (Block 6965, Lot 140) (**Figure F-4: Aerial Map and Keyed Photographs**).

Open Space

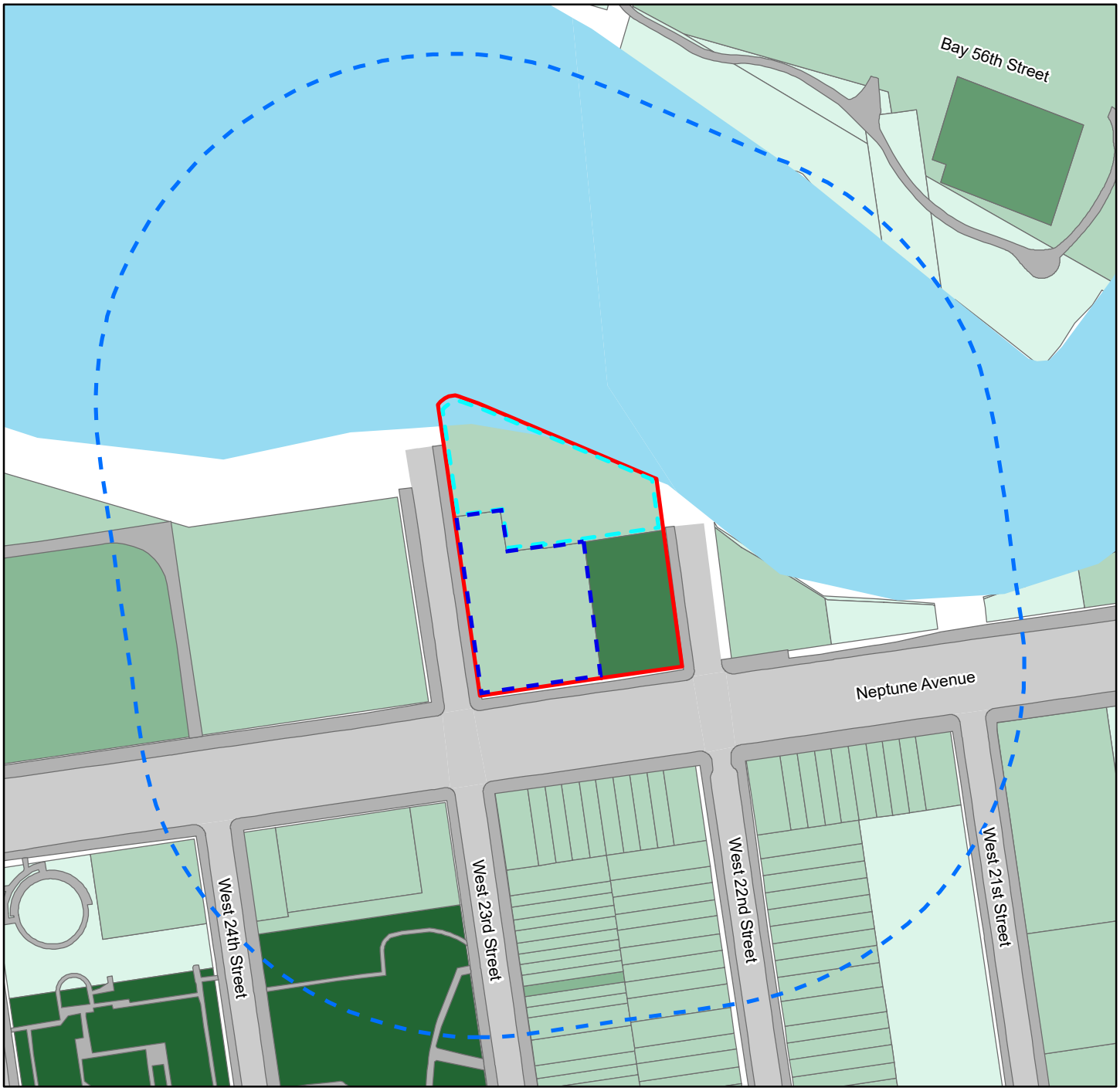
The study area contains the Coney Island Community Garden on Neptune Avenue between West 23rd Street and West 24th Street. In the middle of the garden is the Coney Island Pump Station that is no longer in use and built in the art deco architectural style circa 1938.

Natural Resources

The study area does not contain any significant natural features as defined in the *CEQR Technical Manual,* and is substantially void of vegetation or geologic, topographic, and aquatic features, including rock outcroppings, steep slopes or varied ground elevation, beaches, or wetlands.

Visual Resources

Visual resources in the study area include publicly accessible views along West 22nd Street and West 23rd Street of the Coney Island Creek waterfront featuring views of the Calvert Vaux Park in the Gravesend Neighborhood and west into Gravesend Bay and the Verrazzano Bridge.



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

400-Foot Boundary

Projected Development Site 1

Potential Development Site 1

0 Floors

1 - 2 Floors

2 - 4 Floors

4 - 6 Floors

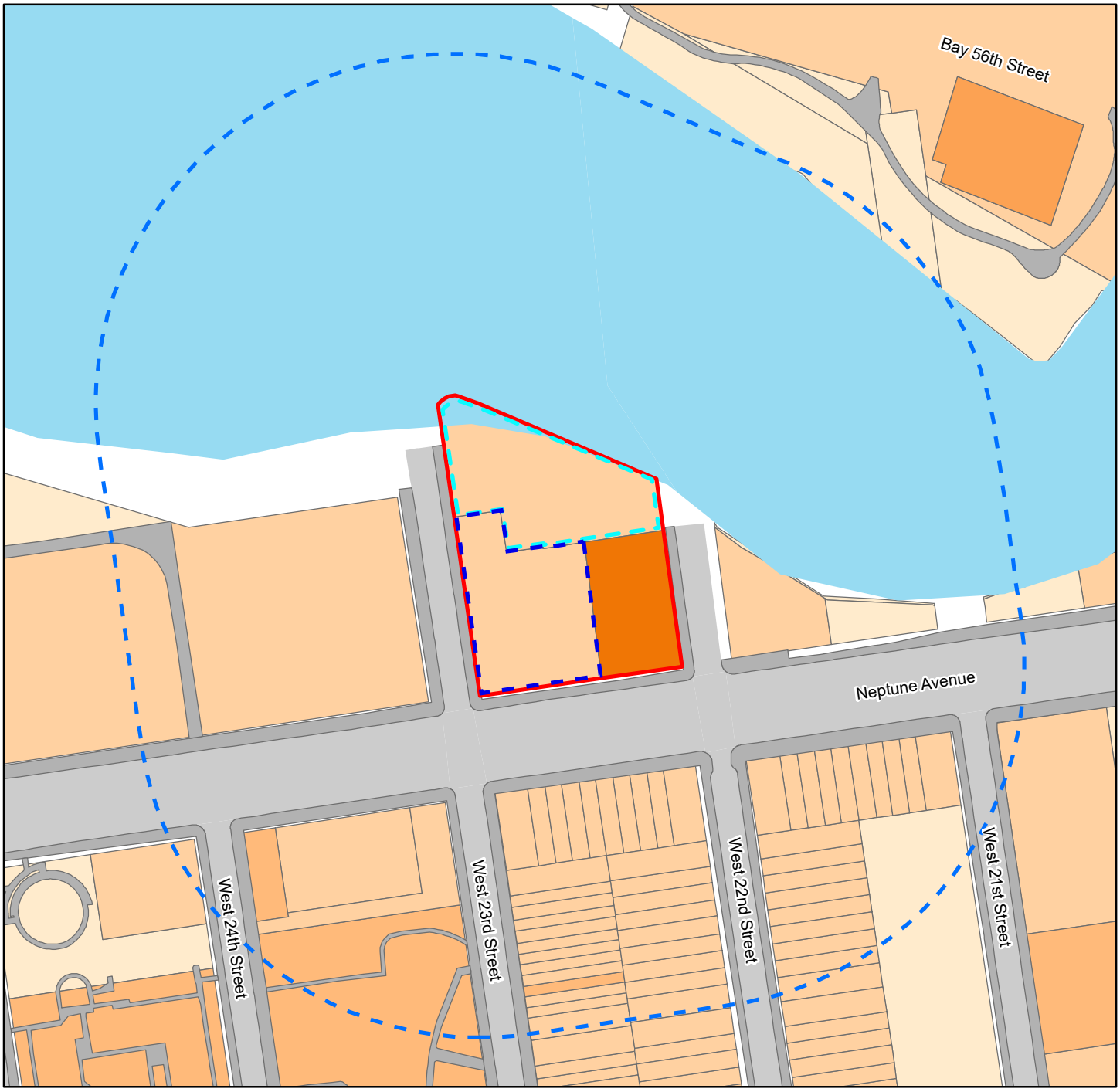
6 - 10 Floors

10 - 16 Floors

EXISTING BUILDING HEIGHTS

Figure F-2

2201-2227 Neptune Avenue EAS



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

400-Foot Boundary

Projected Development Site 1

Potential Development Site 1

0 FAR

0.1 - 1.0 FAR

1.1 - 3.0 FAR

3.1 - 5.0 FAR

5.1 - 6.0 FAR

6.1 - 10 FAR

EXISTING DENSITY (BUILT FAR)

Figure F-3

2201-2227 Neptune Avenue EAS



Source: 2023 PLUTO, DCP

0 100 200 400 Feet

Proposed Project Area

Projected Development Site 1

Potential Development Site 1

Keyed Photograph

AERIAL MAP

Figure F-4

2201-2227 Neptune Avenue EAS

Photograph 1: *View of Project Site, looking east from Neptune Avenue.*



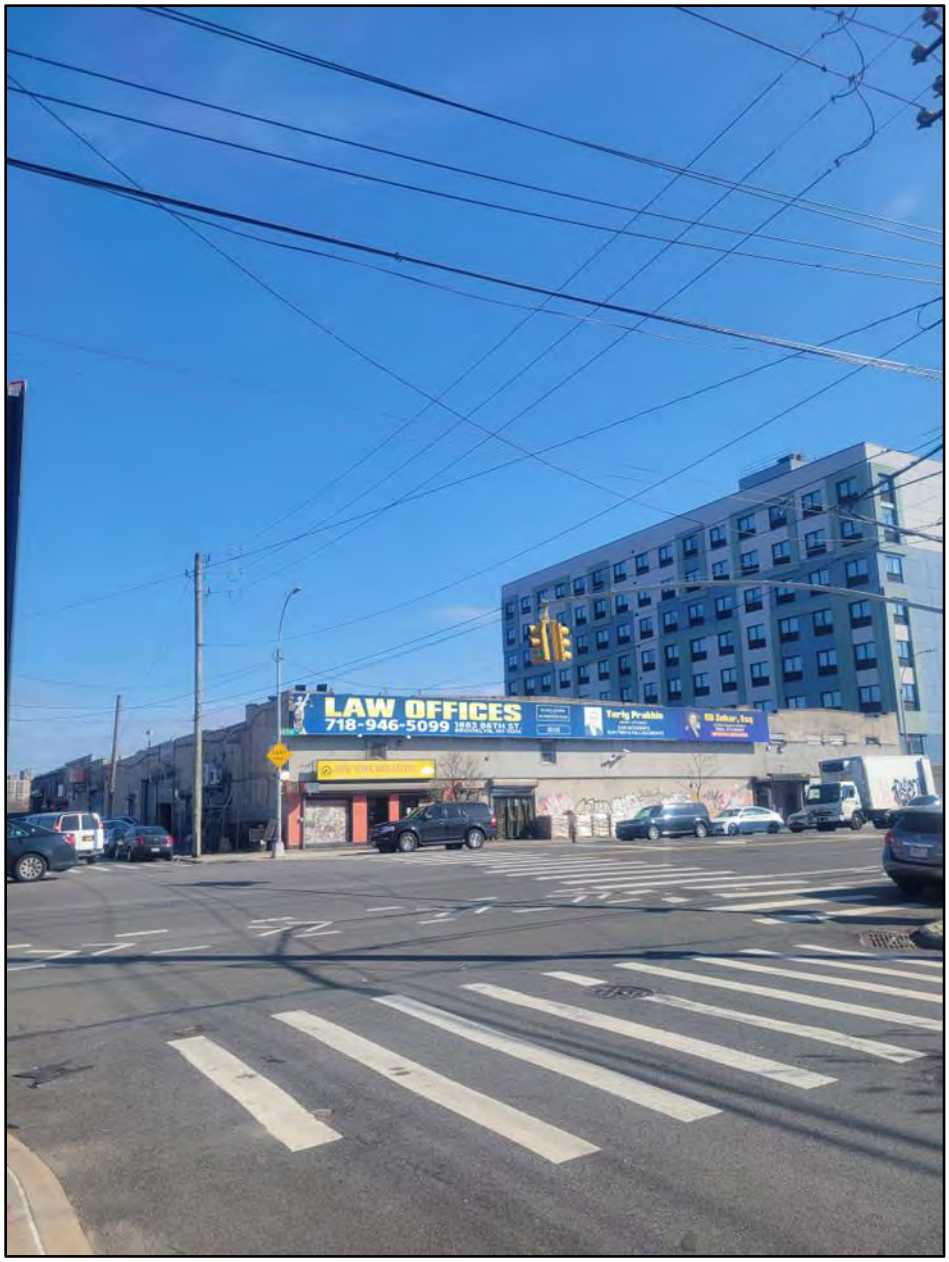
Note: All photographs taken on April 4, 2023

Photograph 2: *View of the Project Site, looking west from Neptune Avenue.*



Note: All photographs taken on April 4, 2023

Photograph 3: *View of the Project Site, looking north from West 23rd Street.*



Note: All photographs taken on April 4, 2023

Photograph 4: *View of the Project Site, looking south from West 23rd Street.*



Note: All photographs taken on April 4, 2023

Photograph 5: *View of the Project Site, looking north from West 22nd Street.*



Note: All photographs taken on April 4, 2023

IV. Future Without Proposed Actions (No-Action Condition)

Projected Development Site 1

Without the Proposed Actions in place, the Projected Development Site 1 would remain as under existing conditions. Lot 10, the Projected Development Site 1, would continue to be occupied by the existing one-story 25,298 gsf manufacturing building, comprising of active warehouse and commercial uses.

Potential Development Site 1

Potential Development Site 1, lot 20, would continue to be occupied by a one-story 25,000 gsf manufacturing building.

Study Area

Based on a review of information from CEQR Access and the Department of Buildings (DOB), four proposed developments were identified within the urban design study area with anticipated build completion dates in 2027 or earlier within 0.5 mile of the Projected Development Site 1 (**Table F-1: No-Action Development Projects**).

Table F-2: No-Action Development Projects

No.	Project Name	Description	Block	Lot	DUs
1	2905 W.17 St	An eight-story mixed-use building containing 77 dwelling units, (estimated) 10,082 sf of commercial space, and 45 enclosed parking spaces.	7062	1	77
2	2940 W. 15 St	A 26-story mixed use building containing 324 dwelling units, with 10,917 sf of commercial space, and 233 parking spaces.	7063	12	324
3	2938 W. 16 St	A 10-story, 361,361 sf, mixed -use building containing 376 dwelling units, 11,210 sf of commercial space, and 47 parking spaces.	7062	28	376
4	2925 W. 16 St	A 16-story mixed use building with 139 dwelling units	7063	12	139

V. Future With Proposed Actions (With-Action Condition)

In the future with the Proposed Actions, Projected Development Site 1 and Potential Development Site 1 would be rezoned M1-5/R7-3 Special Mixed Use Zoning designation, which would allow a maximum of 5.0 FAR for uses such as, community facility, commercial, recreation, general services, and light manufacturing and a maximum residential use of 6.0 FAR, for zoning lots in MIH areas. The total allowable FAR under the Proposed Actions would be 6.0. The Proposed Project assumes the maximum development feasible under the Proposed Actions. In addition, the Proposed Actions may result in potential development on Potential Development Site 1 (Block 6990, Lot 20) under similar height and bulk as proposed on the Projected Development Site 1.

Study Area

Streets

No significant adverse impact on urban design or visual resources would occur. The Proposed Actions would not alter the arrangement or orientation of streets within the study area. In its current condition, the eastern sidewalk along West 23rd Street north of Neptune is currently inaccessible to pedestrians due to cars parked on the sidewalk in front of garage entrances. The Proposed Actions would improve streetscape conditions around and near the Projected Development Site 1, by activating the sidewalks of both the street frontages by providing access to new residential and commercial/community facility space. The proposed commercial/community facility space on the Projected Development Site 1 would be accessed from Neptune Avenue, strengthening the street wall condition, and providing improved pedestrian access to those uses. Access to proposed residential use would be provided from West 23rd Street.

The Proposed Actions would improve streetscape conditions around the Potential Development Site 1, by activating the sidewalks on West 23rd Street and West 22nd Street frontages by providing access to new residential uses and commercial/community facility uses. Access to the building on Potential Development Site 1 would be provided from West 23rd Street and/or West 22nd Street (**Figure F-5: With-Action Site Plan and Figure F-6: Urban Design Views**).

Buildings

As described in Section VI, "WRP Consistency Assessment" of Attachment B, "Land Use, Zoning, and Public Policy," the Proposed Project would incorporate flood protection measures since the Projected Development Site 1 and Potential Development Site 1 is located within the 1% annual chance flood hazard area. Residential units would not be located below the current or future (until 2100) 1% annual chance flood elevation. The commercial/ community facility space, residential lobby, and the parking garage space with frontage below the 1% annual chance flood elevation would be dry floodproofed. The building structure would be designed to resist water loads and infiltration by using water resistant materials in combination with water-tight gates at entry points. The commercial space/community facility use and residential lobby will be protected by removable flood barriers, which would consist of permanent brackets installed on the facades and gates that are installed in advance of an anticipated storm event. The space below the design flood elevation (DFE) would be constructed with flood damage resistant materials in combination with water-tight gates at entry points. Doors, windows, and other openings below the DFE would be sealed through permanent flood gates, made from sheet metal with reinforcement and rubber joints, or deployable shields that will be installed in advance of a flood event.

The Proposed Actions would not have a direct effect on buildings outside of the Projected Development Site 1 and Potential Development Site 1. The proposed building on Projected Development Site 1 would rise to an initial base height of 93 feet (nine stories) before setting back 15 feet on the barrow street frontage of West 23rd Street and 10 feet on the wide street frontage of Neptune Avenue. The required 15- and 10-feet building setback would provide adequate light and air along the sidewalks, which would help provide a more spacious atmosphere at the street level, enhancing the pedestrian experience and preserving the existing character of the streets. The exterior of the building would be broken up with small setbacks giving the impression of variety and multiple buildings rather than one singular building mass. The proposed building is further setback toward the back of the building creating a second-floor residential terrace, a third-floor terrace and additional terraces on the seventh floor and ninth floors, conforming to the permitted zoning envelope under R7-3 zoning. Although the building height of the proposed building on Projected Development Site 1 is taller than the study area buildings found under existing conditions, multiple buildings that are the same height or taller exist within a half-mile distance of the Projected Development Site 1, found mostly along nearby Surf Avenue.



Source: Dattner Architects
Note: For Illustrative Purposes Only

WITH-ACTION MASSING DIAGRAM

Figure F-5
2201 - 2227 Neptune Avenue EAS

View 1: *View looking east from Neptune Avenue north sidewalk.*

No-Action Scenario



With-Action Scenario

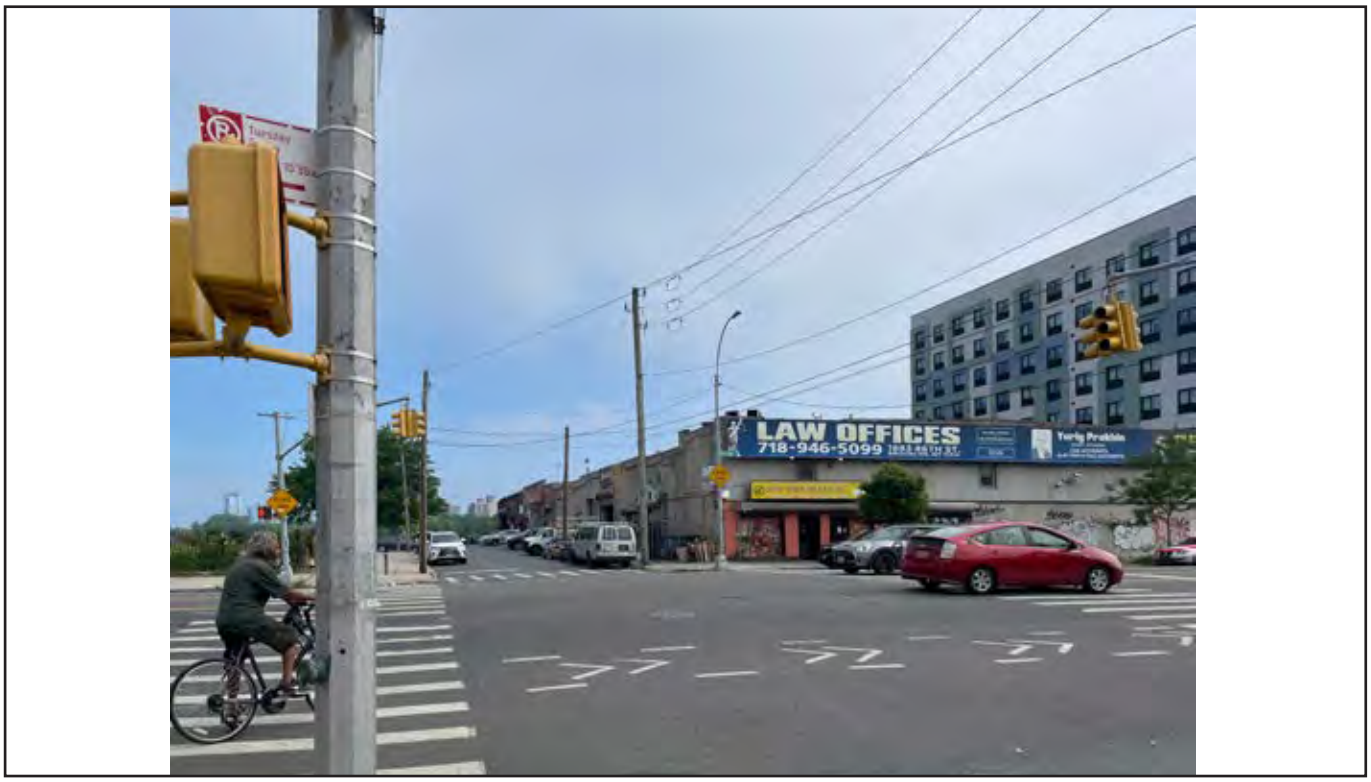


Source: Dattner Architects

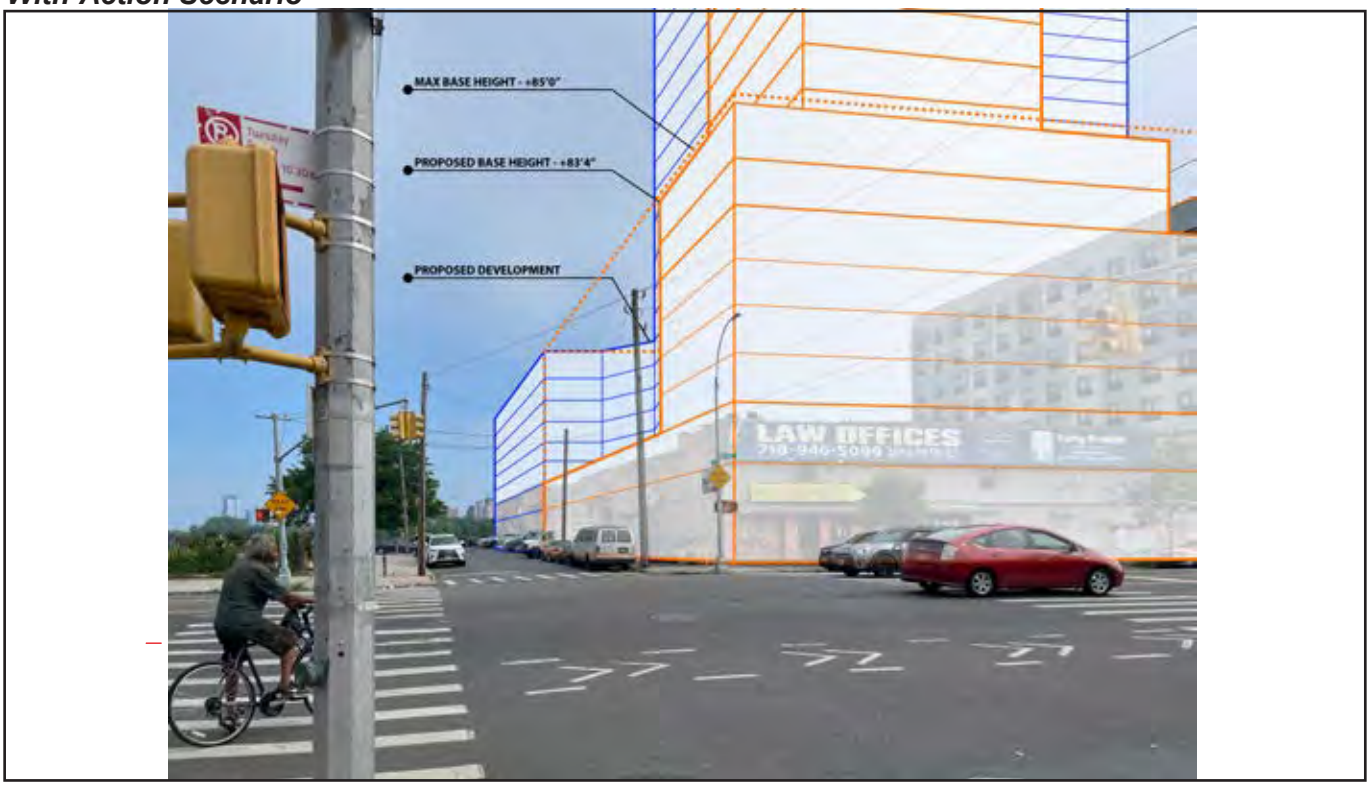
Figure F-6: Urban Design Views

View 2: *View looking north east from West 23rd Street/Neptune Avenue south sidewalk.*

No-Action Scenario



With-Action Scenario



Source: Dattner Architects

Figure F-6: Urban Design Views

View 3: *View looking west from Neptune Avenue south sidewalk.*

No-Action Scenario



With-Action Scenario



Source: Dattner Architects

Figure F-6: Urban Design Views

View 4: *View looking west from Neptune Avenue north sidewalk.*

No-Action Scenario



With-Action Scenario



Source: Dattner Architects

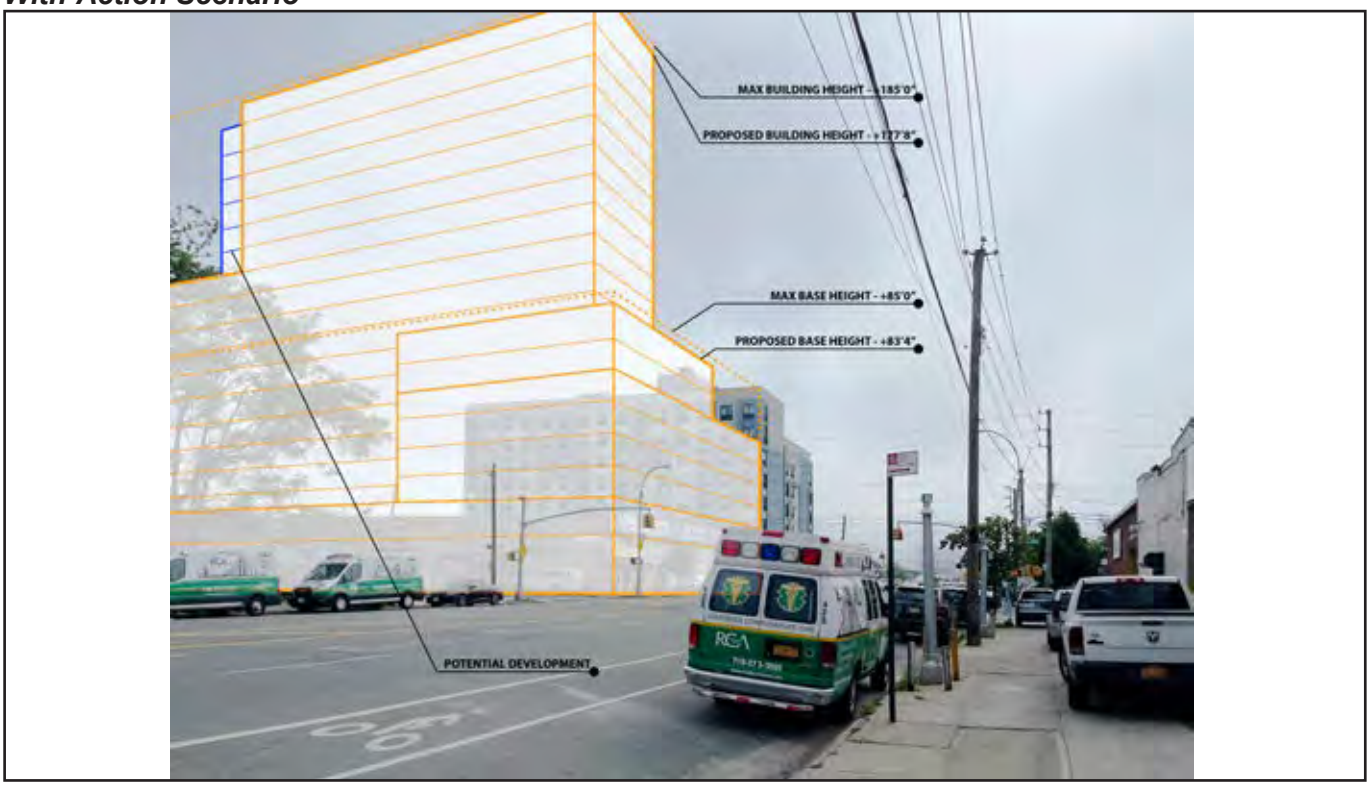
Figure F-6: Urban Design Views

View 5: *View looking east from Neptune Avenue south sidewalk.*

No-Action Scenario



With-Action Scenario



Source: Dattner Architects

Figure F-6: Urban Design Views

View 6: *View looking south from West 23rd Street west sidewalk.*

No-Action Scenario



With-Action Scenario



Source: Dattner Architects

Figure F-6: Urban Design Views

VI. CONCLUSION

The Proposed Actions would not result in any changes to block form or street arrangement and orientation; nor would it have a significant adverse impact on visual resources.

The Proposed Actions would result in a new building on the Projected Development Site 1 and potential development on Potential Development Site 1, with scale, bulk, and design consistent with its urban design context. The architectural design would be consistent with the diversity of styles and design currently present in the study area. Consequently, the Proposed Actions would not result in a change to the built environment's arrangement, appearance, or functionality in a way that would result in a significant adverse impact on a pedestrian's experience of the area. Therefore, no significant adverse impacts related to urban design or visual resources would occur.

Attachment G: Natural Resources

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions to affect natural resources.

As described in Attachment A, "Project Description," the Proposed Actions would facilitate a new 18-story, approximately 203,360 gsf mixed-use development, including 149 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 62 parking spaces ("Proposed Project") at 2201-2227 Neptune Avenue (Block 6990, Lot 10) ("Projected Development Site 1"). The Proposed Project is expected to be completed by 2027. The Proposed Actions may also facilitate a potential 198,480 gsf development, including 175,580 gsf of residential use, on 2737 West 23rd Street (Block 6990, Lot 20) ("Potential Development Site 1"). Since Potential Development Site 1 is located adjacent to Coney Island Creek, and natural resources assessment is warranted.

II. METHODOLOGY

According to *2021 City Environmental Quality Review (CEQR) Technical Manual* guidelines, a natural resource is defined as (1) the City's biodiversity (plants, wildlife, and other organisms); (2) any aquatic or terrestrial areas capable of providing suitable habitat to sustain the life processes of plants, wildlife, and other organisms; and (3) any areas capable of functioning in support of the ecological systems that maintain the City's environmental stability. Under CEQR, a natural resources assessment considers species in the context of the surrounding environment, habitat, or ecosystem and examines a project's potential to impact those resources. The Proposed Actions would result in development on Projected Development Site 1, and potentially on Potential Development Site 1. Projected Development Site 1 is an upland improved urban site with an existing building with active commercial use. As such, Projected Development Site 1 is not located within or immediately adjacent to a natural resource. Potential Development Site 1 is located adjacent to Coney Island Creek, which is designated as a tidal wetland by the New York State Department of Environmental Conservation (NYSDEC) and as estuarine and marine deepwater habitats in the National Wetlands Inventory (NWI). Therefore, the potential of Potential Development Site 1 to result in a significant adverse impact on natural resources is assessed in this attachment.

III. EXISTING CONDITIONS

The Proposed Actions would result in development on Projected Development Site 1, and potentially on Potential Development Site 1. Projected Development Site 1, controlled by the Applicant, is an upland improved urban site consisting of a one-story 25,298 gsf building, comprising active warehouse and commercial uses. As such, Projected Development Site 1 is not located within or immediately adjacent to a natural resource. Potential Development Site 1 is located adjacent to Coney Island Creek, which is designated as a tidal wetland by NYSDEC and as estuarine and marine deepwater habitats in the NWI. Potential Development Site 1 is not controlled by the Applicant and is improved with a one-story 25,000 gsf manufacturing building consisting of an office supply store, which is a long-standing active use.

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IV. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Absent the Proposed Actions (the No-Action scenario), Projected Development Site 1 and Potential Development Site 1 would remain as under existing conditions.

V. FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

In the With-Action scenario, Potential Development Site 1 could be developed with a potential 198,480 gsf building, including 175,580 gsf of residential use. Under the Tidal Wetlands Act, NYSDEC administers a permit program regulating activities in tidal wetlands and their adjacent areas, which extend up to 150 feet inland within New York City. The U.S. Army Corps of Engineers (USACE) has jurisdiction over navigable waters of the United States (Section 10 of the Rivers and Harbors Act) and waters of the United States (Section 404 of the Clean Water Act). Since Potential Development Site 1 is located adjacent to Coney Island Creek, development on that site will be subject to a joint permit application to NYSDEC and USACE. Specific Federal and State permits applicable to the site would be contingent on the development and site improvement to be undertaken and will be established by USACE and NYSDEC as part of the joint application process. With future development adjacent to Coney Island Creek subject to permits from NYSDEC and USACE, no significant adverse impacts related to natural resources would occur.

As described in Attachment D, “Shadows”, incremental shadows due to the Proposed Actions would move eastward at the start of the analysis days and would not affect one specific area of the Coney Island Creek for long durations. The areas that receive the longest durations of the incremental shadows would receive more than four hours of direct sunlight between the start and end of all the analysis days. The extent and duration of the incremental shadows would not significantly reduce or completely eliminate direct sunlight exposure on this natural resource. As a result, the Proposed Actions would not result in a significant adverse impact related to shadows on Coney Island Creek.

Stormwater best management practices will be implemented during construction as well as compliance to all applicable NYC Department of Environmental Protection (DEP) guidelines and requirements. The Proposed Project would include a stormwater detention tank located at the building’s base to control the amount of outflowing stormwater. Additional measures to mitigate for stormwater using green infrastructure may include green roofs and “rain garden” tree pits per NYC Department of Transportation and NYC Parks and Recreation standards. Additionally, the Proposed Actions would not result in the increase of impermeable surface area currently present in the rezoning area.

VI. CONCLUSION

The Proposed Actions would result in development on Projected Development Site 1, and potential development on Potential Development Site 1. Projected Development Site 1 is an upland improved urban site with an existing building with active commercial use. As such, Projected Development Site 1 is not located within or immediately adjacent to a natural resource. Development adjacent to Coney Island Creek on Potential Development Site 1 would be subject to permits from NYSDEC and USACE. Stormwater best management practices will be implemented during construction of the Proposed Project, which would include a detention basin. No significant shadows related impacts would occur. Therefore, the Proposed Actions would not result in a significant adverse impact related to natural resources.

Attachment H: Hazardous Materials

I. INTRODUCTION

This attachment assesses the potential for the presence of hazardous materials in soil, groundwater, and/or soil vapor, and further evaluates the potential for hazardous materials impacts resulting from the Proposed Project. According to 2021 *City Environmental Quality Review (CEQR) Technical Manual* guidelines, a hazardous materials assessment may be necessary when a Proposed Action could lead to increased exposure of people or the environment to hazardous materials, or whether increased exposure would lead to significant public health impacts or environmental damage.

As described in Attachment A, "Project Description," the Proposed Actions would facilitate a new 18-story, approximately 203,360 gsf mixed-use development, including 149 dwelling units (DUs), 37 to 45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 62 parking spaces ("Proposed Project") at 2201-2227 Neptune Avenue (Block 6990, Lot 10) ("Projected Development Site 1"). The Proposed Project is expected to be completed by 2027.

II. METHODOLOGY

The presence or likely presence of any hazardous substance or petroleum products on a site under conditions that indicate an existing release, 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 is known as a Recognized Environmental Condition (REC), as defined by the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments (ESAs): Phase I ESA Process (ASTM E-1527). An REC should be disclosed under CEQR. A Phase I ESA, dated October 2022, was prepared in conformance to ASTM International Standard Practice E-1527-13, and served as the basis of the hazardous materials assessment. Additionally, a Tier 1 vapor encroachment screening was completed in accordance with ASTM E 2600-10.

III. EXISTING CONDITIONS

Phase I ESA

The existing building on Projected Development Site 1 was constructed in 1910 and historically operated as a commercial/industrial type building, which appears similar to the present-day building. It has always been used for commercial purposes including NYC Sanitation Department, Electro-Knit Fabrics, and construction companies. No spills, remedial actions, or bulk storage were listed for the Projected Development Site 1. All Leaking Storage Tanks (LTANKS) and SPILLS within the minimum search distance have been closed to the satisfaction of New York State Department of Environmental Conservation (NYSDEC). Existing Underground Storage Tanks (UST) and Aboveground Storage Tanks (AST) within the minimum search distance are not expected to have a direct negative impact on Projected Development Site 1. Projected Development Site 1 is not identified as a Chemical Bulk Storage Facility (CBS), Major Oil Storage Facility (MOSF), or Brownfields property. There are no New York Engineering (ENG) or Institutional (INST) controls or (E) designations on Projected Development Site 1. Based on a vapor encroachment screening, there is also no potential for vapor intrusion on Projected Development Site 1. The Phase I ESA did not identify any RECs, Controlled RECs (CRECs) or Historical RECs (HRECs) in connection with the Projected Development Site 1.

Phase II Environmental Site Investigation (ESI)

Based on a review of the Phase I ESA, the New York City Department of Environmental Protection (DEP) determined that a Phase II ESI is required. The Phase II ESI cannot be conducted at present because the Projected Development Site 1, though owned by the Applicant, is currently 100% occupied with six tenants. Tenant lease terms do not allow disruption to tenant operations outside of structural or emergency repair. It will be prepared prior to construction in accordance with an (E) designation for Projected Development Site 1.

IV. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Absent the Proposed Actions (the No-Action scenario), the Projected Development Site 1 would remain the same as under existing condition, which is a one-story 25,298 gsf manufacturing building, comprising of active warehouse and commercial uses.

V. FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

Projected Development Site 1

In the future with the Proposed Actions, the Proposed Project Area, including the Projected Development Site 1 and Potential Development Site 1, would be rezoned from M1-2 to M1-5/R7-3 (MX). The Proposed Project includes an approximately 203,360 gsf mixed-use development, including 149 DUs, 37-45 of which is proposed to be affordable DUs, approximately 22,600 gsf of commercial use, and 60 parking spaces on Projected Development Site 1.

Projected Development Site 1 is currently occupied with active manufacturing and commercial tenants with the basement area being utilized as storage and mechanical space to service these active uses. Conducting Phase II subsurface testing would require removing a substantial portion of the basement area which would disturb the business operations of these active uses. As a Phase II ESA cannot be conducted at this time, an E-Designation would require a Phase II be conducted once the property is vacated prior to construction of the Proposed Project and submitted to the Mayor's Office of Environmental Remediation (OER) for review and approval.

The following (E) designation related to hazardous materials pursuant to Section 11-15 of the New York City Zoning Resolution, **E- 816,** will be mapped for the Projected Development Site 1:

> **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.

With the (E) designation on Projected Development Site 1, no significant adverse impacts related to hazardous materials would occur.

Potential Development Site 1

As a result of the Proposed Actions, Potential Development Site 1 (Block 6990, Lot 20) can be developed with approximately 198,480 gsf development, including approximately 175,580 gsf of residential use, and approximately 22,900 gsf of ground floor commercial use. Given the existing M1-2 zoning on the site and on-site and surrounding land uses, an (E) designation will be placed on the Potential Development 1.

The following (E) designation related to hazardous materials pursuant to Section 11-15 of the New York City Zoning Resolution, **E- 816,** will be mapped for the Potential Development Site 1:

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.

With the (E) designation on Potential Development Site 1, no significant adverse impacts related to hazardous materials would occur.

VI. CONCLUSION

An (E) designation related to hazardous materials pursuant to Section 11-15 of the New York City Zoning Resolution, **E-816**, will be mapped on Projected Development Site 1 and Potential Development Site 1. With the mapping of the (E) designation, and related requirements for a RAP and CHASP, no significant adverse impacts related to hazardous materials would occur.

Attachment I: Air Quality

I. INTRODUCTION

This chapter assesses the potential impact of the Proposed Actions to result in significant adverse impacts to air quality due to air pollutant emissions. Ambient air quality, or the quality of the surrounding outdoor 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. The assessment also evaluates the impact of existing air pollutant sources near the Projected Development Site 1 on the Proposed Project. The analyses conformed to the procedures outlined in the *2021 City Environmental Quality Review (CEQR) Technical Manual*.

As described in Attachment A, "Project Description," the Proposed Actions would facilitate the development of an approximately 203,360 gsf mixed-use development, including 149 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 62 parking spaces on Block 6990, Lot 10 ("Projected Development Site 1") in Brooklyn, NY. The ground floor would include 25,298 gsf of commercial space, along with the residential lobby. Access to the residential lobby would be provided along West 23rd Street. Parking entrance/exit would be provided via a 24' ramp on West 23rd Street. The Proposed Project would be operational in 2027.

In addition to the Projected Development Site 1, a Potential Development Site was identified on 2737 West 23rd Street (Block 6990, Lot 20) ("Potential Development Site 1") as per the soft site criteria in the *CEQR Technical Manual*. Potential Development Site 1 is under separate ownership and can be developed into an 18-story, 198,480 gsf mixed-use development, including 175,580 gsf of residential and 22,900 gsf of ground floor commercial use pursuant to the Proposed Actions.

II. METHODOLOGY

Standards and Guidelines

National Ambient Air Quality Standards

National Ambient Air Quality Standards (NAAQS) have been promulgated by the U.S. Environmental Protection Agency (EPA) for six major pollutants, deemed criteria pollutants, because threshold criteria can be established for determining adverse effects on human health. They consist of primary ambient air quality standards, established to protect public health, and secondary ambient air quality standards, established to protect plants and animals and to prevent economic damage. These six pollutants are:

- Carbon Monoxide (CO), which is a colorless, odorless gas produced from the incomplete combustion of gasoline and other fossil fuels.
- Lead (Pb) is a heavy metal principally associated with industrial sources.
- Nitrogen dioxide (NO_2), which is formed by chemical conversion from nitric oxide (NO), is emitted primarily by industrial furnaces, power plants, and motor vehicles.
- Ozone (O_3), a principal component of smog, is formed through a series of chemical reactions between hydrocarbons and nitrogen oxides in the presence of sunlight.

- Inhalable Particulates (PM_{10}/$PM_{2.5}$) are primarily generated by diesel fuel combustion, brake and tire wear on motor vehicles, and the disturbance of dust on roadways. The PM_{10} standard covers those particulates with diameters of 10 micrometers or less. The $PM_{2.5}$ standard covers particulates with diameters of 2.5 micrometers or less.
- Sulfur dioxides (SO_2) are heavy gases primarily associated with the combustion of sulfur-containing fuels such as coal and oil.

Table I-1 National and New York State Ambient Air Quality Standards shows the New York and NAAQS, as well as monitored concentrations at stations closest to the Project Site.

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

Pollutant	Averaging Period	Standard	2022 Concentrations	Monitoring Station
Carbon Monoxide	Maximum 8-hour average[a]	10,000 µg/m^3 (9 ppm)	1,835 µg/m^3 (1.6 ppm)	Queens
	Maximum 1-hour average[a]	40,000 µg/m^3 (35 ppm)	1,489 µg/m^3 (1.3 ppm)	
Lead	Rolling 3-month average	0.15 µg/m^3	0.0036 µg/m^3	IS 52
Nitrogen Dioxide	Annual arithmetic average	100 µg/m^3 (0.053 ppm)	25.7 µg/m^3 (13.66 ppb)	Queens
	Maximum 1-hr average[d]	188 µg/m^3 (0.100 ppm)	96.9 µg/m^3 (51.53 ppb)	
Ozone	8-hr maximum average[b]	0.070 ppm	0.071 ppm	Queens
Inhalable Particulates (PM_{10})	Maximum 24-hour average[a]	150 µg/m^3	24 µg/m^3	Queens
Inhalable Particulates ($PM_{2.5}$)	3-yr average annual mean	9 µg/m^3	7.2 µg/m^3	PS 314
	3-yr average of 24-hr[c]	35 µg/m^3	17.0 µg/m^3	
Sulfur Dioxide	Maximum 1-hour average[e]	196 µg/m^3 (0.075 ppm)	15.01 µg/m^3 (5.73 ppb)	Queens

Notes: ppm = parts per million; ppb = parts per billion; µ/m^3 = micrograms per cubic meter.
a. Not to be exceeded more than once a year.

b. Three-year average of the annual fourth highest daily maximum 8-hour average concentration effective May 27, 2008.

c. Not to be exceeded by the 98th percentile of 24-hour $PM_{2.5}$ concentrations (averaged over 3 years).

d. Three-year average of the 98th percentile of the daily maximum 1-hour average, effective January 22, 2010.

e. Three-year average of the 99th percentile of the daily maximum 1-hour average, final rule signed June 2, 2010.

Sources: NYSDEC: New York State Ambient Air Quality Development Report, 2022

NYC De Minimis Criteria and Interim Guidelines

NYC *de minimis* criteria are used to determine the significance of the incremental increases in CO concentrations that would result from a proposed action. These set the minimum change in an 8-hour average CO concentration that would constitute a significant environmental impact. These criteria indicate that a significant CO impact would occur with:

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

Based on the New York State Department of Environmental Conservation's (NYSDEC's) annual air quality reports for 2018-2022, the background value for 8-hour CO would be 1.6, which is the second highest value during the past five years. The de minimis value for 8-hour CO would therefore be 3.7 ppm.

NYC has also established *de minimis* criteria for $PM_{2.5}$. These *de minimis* criteria indicate that a significant $PM_{2.5}$ impact would occur with:

- Predicted increase of more than half the difference between the background concentration and the 24-hour standard;
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.1 ug/m^3 at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately one 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
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 µg/m^3 at a discrete or ground-level receptor location.

Based on the New York State Department of Environmental Conservation's (NYSDEC) *Annual Air Quality Report, 2022*, which lists a 24-hour background value of 17.0 ug/m^3 for $PM_{2.5}$ for the PS 314 station in Brooklyn, the *de minimis* criterion for the 24-hour concentration of $PM_{2.5}$ would be 9.0 ug/m^3. An incremental change in the 24-hour concentration of $PM_{2.5}$ greater than 9.0 ug/m^3 due to the Proposed Project would be considered a significant air quality impact.

New York State Short-Term and Annual Guideline Concentrations

NYSDEC has established Short-Term (one-hour) Guideline Concentrations (SGCs) and Annual Guideline Concentrations (AGCs) for certain toxic or carcinogenic non-criteria pollutants. They are maximum allowable 1-hour and annual concentrations, respectively, that are considered acceptable and below which there should be no adverse effects on the health of the general public. The Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) have established standards for these pollutants.

SGCs are intended to protect the public from acute, short-term effects of pollutant exposures, and AGCs are intended to protect the public from chronic, long-term effects of the exposures. However, NYC Department of Environmental Protection (DEP) considers that, for pollutants for which the NYSDEC-established AGC is based on health risk criteria (i.e., a one-in-a-million cancer risk), impacts less than 10 times the AGC are not considered significant. This is because NYSDEC developed the AGCs for these pollutants by reducing the health risk criteria by a factor of 10 as an added safety measure. In determining potential impacts, therefore, DEP considers concentrations within ten times the AGC to be acceptable. Pollutants with no known acute effects have no SGC criteria but do have AGC criteria. NYSDEC DAR-1 (August 10, 2016) contains the most recent compilation of the SGC and AGC guideline concentrations.

No NAAQs, SGCs, or AGCs exist for emissions of air toxic pollutants that are grouped together such as total solid particulates, total hydrocarbons, or total organic solvents. Therefore, total particulates are not analyzed, and as recommended by DEP, all solid particulates are assumed to be $PM_{2.5}$. For total organic solvents or total hydrocarbons, the SGCs and AGCs for specific compounds should be obtained and used in an analysis.

Mobile Source Screening

Localized increases in pollutant levels may result from increased vehicular traffic volumes and modified traffic patterns in the study area due to the Proposed Actions. The mobile source analysis outlined in the

CEQR Technical Manual addresses such actions to determine whether they may have significant adverse air quality impacts. The first step is a screening analysis for CO and $PM_{2.5}$ based on traffic volume.

As identified in the *CEQR Technical Manual*, the threshold volume for a more detailed CO analysis in this section of Brooklyn is an increment of 170 vehicles through an intersection during a peak traffic hour. Since the project-generated volumes would be less than the 170-vehicle threshold, a detailed analysis of intersections for CO is not required.

The threshold to determine whether an analysis of $PM_{2.5}$ is warranted is based on the exhaust emissions of heavy-duty diesel vehicles (or equivalent volume of mixed traffic). It is calculated using spreadsheets associated with the *CEQR Technical Manual*. These spreadsheet formulas indicate that the threshold is the equivalent of 12 additional heavy-duty diesel vehicles (HDDV) on roads with <5,000 vehicles per day, 19 or more additional HDDV on collectors, or 23 or more additional HDDV on arterials, expressways, and limited access roads. Neptune Avenue is classified by the New York State Department of Transportation as an arterial roadway and West 23rd Street is classified as a local road. Since Neptune Avenue is the dominant leg with higher traffic volumes, project-generated volumes on West 23rd Street do not reach or exceed the equivalent of 23 HDDVs.

The residential parking entrance would be located approximately 100 feet from Neptune Avenue on West 23rd Street, which is a dead-end street. Ninety percent of the project-generated residential auto trips from Neptune Avenue would enter and exit Projected Development Site 1 on West 23rd Street to park on-site, while 10 percent of the project generated autos would utilize neighborhood street parking. Therefore, all project-generated trips were added to Neptune Avenue traffic, and 90 percent of the project generated residential auto trips would be on West 23rd Street. Consequently, the Proposed Project would screen out for $PM_{2.5}$ impact analysis.

Stationary Source Screening Assessment

Projected Development Site 1

Consistent with *CEQR Technical Manual* guidelines, the first step in the assessment of HVAC systems for the Proposed Project is to determine the potential for significant adverse impacts on existing and proposed buildings. The Proposed Project would be approximately 187 feet high.

Since the applicant has committed to a fully electric HVAC system, the Proposed Project would not result in stationary source HVAC impacts on the existing buildings beyond the Projected Development Site 1. An (E) designation will be mapped on Projected Development Site 1 to require the use of electric HVAC heating and cooling systems.

In December 2021, the New York City Council passed legislation to phase fossil fuels out of new construction starting in 2024. As per New York City's Local Law 154 of 2021, by mid-2027, the onsite combustion of fuels is prohibited for all buildings seven stories or taller.

Potential Development Site 1

The non-applicant owned Potential Development Site 1 may be developed to approximately 198,480 gsf and approximately 190 feet in height. The nearest planned future building is the applicant-owned Projected Development Site 1, which shares a lot line with Potential Development Site 1 and would rise to approximately 187 feet. Due to the Potential Development Site 1 being under separate ownership and Local Law 154 not being in effect until 2027, a natural gas-powered HVAC stationary source was assumed for Potential Development Site 1 and a detailed analysis for stationary source impacts is warranted.

Heating Ventilation and Air Conditioning (HVAC) Screen Analysis

An assessment of emissions from on-site HVAC stationary sources associated with Potential Development Site 1 was completed. In conformance with guidance in the *CEQR Technical Manual*, the assessment of

stationary sources was completed through a multi-step air quality impact assessment procedure. The first step in the analysis was a screening analysis using the nomographs in the *CEQR Technical Manual Appendices*. The nomographs represent different fuel types and building uses. For each one, the size of the proposed building is plotted against the distance to the nearest building of similar or greater height (receptor building). The distance is calculated as the distance between the lots on which the buildings stand. Because Potential Development Site 1 shares a lot line with Projected Development Site 1 and the distance between them would be under 30 feet, the site does not pass the screen and a detailed analysis is needed using AERMOD modeling.

AERMOD Modeling

AERMOD is a steady-state Gaussian plume model with three separate components: AERMOD (a dispersion model), AERMAP (a terrain preprocessor), and AERMET (a meteorological preprocessor). AERMOD can model emissions from point, line, area, and volume sources. The model is run with five years of meteorological data that include surface mixing height, wind speed, temperature, and wind direction.

Model Parameters

- The model was run with flat and elevated terrain. Elevations of all buildings and receptors were obtained using AERMAP.
- The one-hour and annual NO_2 emissions were run with the Plume Volume Molar Ratio Method (PVMRM) method and ozone files for 2017-2021. The nearest major airport (LGA) and the Project Site are in urban locations. Therefore, AERMOD's URBAN option was selected. The population used for the urban area was 8,000,000.
- The Building Profile Input Program (BPIP) was run in conjunction with AERMOD.
- Per guidance from NYSDEC, the model was run with concatenated meteorological data from JFK Airport for years 2017 through 2021. The upper air station used is Brookhaven, NY. NYSDEC provided hourly ozone concentrations from the IS 52 monitor for use in modeling NO2. The raw ozone files provided by NYSDEC were processed and formatted within AERMOD.
- The modeled parameters to be added to background concentrations were the 8th highest of the 24-hour concentrations modeled at each receptor and the highest modeled annual concentration predicted over the entire receptor network.

Stack Parameters

The EPA defines good engineering practice stack height as the height necessary to ensure that emissions from a building's stack do not result in excessive concentrations of any air pollutant in the immediate vicinity of the source as a result of atmospheric downwash, eddies, or wakes that may be created by the source itself, nearby structures, or nearby terrain obstacles.

- The model was run both with and without building downwash to determine which condition would provide worst-case results.
- The stack parameters were based on the DEP CA Permit database and the heat input (with units of 10^6 Btu) of the boilers. Based on the calculated Btu of their boilers, the stacks were assigned an exhaust temperature of 293 K and inside stack diameters of 1.0 feet. The average exhaust velocity was 7.8 m/s.
- Stacks were assumed to be three feet higher than the roof. They were placed as close as feasible to the receptor building, but at least ten feet from the edge of the roof.

- For NO_2, the PVMRM option was used with an equilibrium ratio of 0.9, and an in-stack ratio of 0.2.

Pollutant Emissions

The use of natural gas in the HVAC system may occur on Potential Development Site 1. Consequently, emission estimates for NO_2 (one-hour, annual) and $PM_{2.5}$ (24-hour, annual) were based on emission rates for uncontrolled natural gas-fired boilers.

The residential consumption rate for natural gas was estimated using an energy expenditure of 49.1 thousand Btu per square foot for apartments in buildings with 5 or more units from U.S. EIA, 2015 Residential Energy Consumption Survey, *Table CE1.2 Summary annual household site consumption and expenditures in the Northeast*. The value of 49.1 thousand Btu per square foot was converted to cubic feet of natural gas per square foot by dividing by the heating value of 1,020 Btu per square foot. The resulting value of 48.1 cubic feet of natural gas per square foot was used to estimate short-term and annual consumption rates for the residential and commercial square footage Potential Development Site 1. Treating all square footage of Potential Development Site 1 is conservative.

Annual natural gas consumption in cubic feet was used to calculate both short-term and annual NO_2 emissions using an emission factor of 100 lb per 1 million cubic feet of natural gas for uncontrolled boilers. The $PM_{2.5}$ emission factor from natural gas fired boilers is 7.6 lbs/million cubic feet of natural gas as recommended in EPA's AP-42 document, *Chapter 1.4 Natural Gas Combustion (July 1998)*. The resulting annual emissions were converted to hourly emission rates in grams per second based on a worst case of 2,400 hours per year for short-term averaging periods and 8,760 hours per year for all annual averaging periods. This assumes that the HVAC units are used only for heating in the winter period and are not used for air conditioning during hot weather.

The AERMOD model was run with the calculated emission rates for the short-term and annual averaging periods shown in **Table I-2: NO2 and PM2.5 Emission Rates**. The option for variable emissions for seasons was used for the short-term (one-hour and 24-hour) runs with full emissions occurring during the winter months to account for heating and hot water systems and half emissions occurring for the rest of the seasons to account for hot water use.

Table I-2: NO2 and PM2.5 Emission Rates

Source Building	Heated Area (sf)	Consumption Rate[1] (cf/sf)	Annual Consumption (10^6 scf)	Annual Hours of Use	NO2 EF[2] (lb/10^6 scf)	NO2 Emission Rate[3]		PM2.5 EF[2] (lb/10^6 scf)	PM2.5 Emission Rates[3]	
						Short-term (g/sec)	Annual (g/sec)		Short-term (g/sec)	Annual (g/sec)
Potential Development Site 1	198,480	48.1	9.55	2,400	100.0	0.0502	0.0137	7.6	0.0038	0.0010

Notes:

[1]US EIA: Table CE1.2 Summary annual household site consumption and expenditures in the Northeast—totals and intensities, 2015: 49.1 mbtu for 5 or more unit buildings converted to cf/sf using 1,020 btu/sf heating value

[2]AP-42 Emission Factors for Natural Gas: NO2 = 100 lb/Mcf; PM2.5 = 7.6 lb/Mcf

[3]Emission Rates based on hours of use.

Receptors

Receptors were placed across all the exposed residential window façades on Projected Development Site 1 spaced horizontally at five-meter intervals and vertically at three-meter intervals, as well as the proposed terraced areas, rooftop air shafts, and three sidewalk receptors on W 23rd Street, Neptune Avenue, and W 22nd Street.

Building Downwash

EPA defines GEP (good engineering practice) stack height as the height necessary to ensure that emissions from a building's stack do not result in excessive concentrations of any air pollutant in the immediate vicinity of the source as a result of atmospheric downwash, eddies, or wakes that may be created by the source itself, nearby structures, or nearby terrain obstacles. The Building Profile Input Program (BPIP) was run prior to running AERMOD. AERMOD was run with and without building downwash to determine which condition would cause the highest concentrations.

Large or Major Sources

Existing land uses within 1,000 feet of the Project Site were reviewed to identify large or major sources. Based on the *CEQR Technical Manual,* major/large emission sources include solid waste or medical waste incinerators, cogeneration facilities, asphalt and concrete plants, or power generating plants. In addition, online permit information from the New York State Department of Environmental Conservation (NYSDEC) State Facility Register was reviewed. A review of this available information indicated that no large or major sources are within 1,000 feet of the Project Site, and, consequently, an assessment of major sources is not warranted.

Air Toxics

A manufacturing survey for potential toxic air emissions within 400 feet of the Projected Development Site 1 and Potential Development Site 1 was completed in conformance to the guidelines in the *CEQR Technical Manual.* Existing facilities with the potential to cause adverse air quality impacts are those that would require permitting under City, state, and federal regulations. The following types of uses are a source of concern for air toxics:

- a medical, chemical, or research laboratory nearby;
- a manufacturing or processing facility within 400 feet; and
- an odor producing facility within 1,000 feet.

To identify facilities in the categories listed above, NYSDEC Air Permit Facilities Registry, the USEPA Facility Registry System for permitted facilities, New York City Department of Buildings (DOB) online data, and the NYC Open Accessibly Space Information System (OASIS) permit registries were reviewed within 400-feet of the Project Site in conformance to the guidelines in the CEQR Technical Manual. Three industrial sources were identified within the 400-foot radius. These sites are listed below:

1. An existing autobody shop, United Auto Collision, Inc. located at 2127 Neptune Avenue (Block 6991, Lot 48) is approximately 150 feet from Projected Development Site 1 and approximately 170 feet from Potential Development Site 1. An expired DEP 2010 permit for a spray booth was identified for Rys Enterprises, Inc. at this location. However, the manager at the facility confirmed that there were no spray booths located on site. As a result, further analysis was not carried out.
2. Abilene, Inc. at 2402 Neptune Avenue (Block 7014, Lot 7) is located approximately 370 feet from Projected Development Site 1 and approximately 480 feet from the Potential Development Site. No industrial permits were found after an NYC Clean Air Tracking System (CATS) permit search.
3. Phoenix Energy Management, Inc. at 2328 Neptune Avenue (Block 7015, Lot 1) is located approximately 280 feet from Projected Development Site 1 and approximately 410 feet from the Potential Development Site. This facility is an office use with no emissions.

III. DETAILED ANALYSIS

Proposed Project on Existing and Future Buildings

Projected Development Site 1

The applicant has committed to a fully electric HVAC system for Projected Development Site 1 building heating and cooling and thus, no air quality impacts are projected to nearby existing or future buildings.

Potential Development Site 1

Potential Development Site 1 may be developed to approximately 198,480 gsf at approximately 18 stories. This site may be developed with a natural gas-powered HVAC unit with an estimated stack release height of approximately 193 feet.

HVAC Analysis, No-Action Condition

Absent the Proposed Actions, Projected Development Site 1 and Potential Development Site 1 would not procure the certification required for any new development and therefore, would remain the same as under existing conditions.

HVAC Analysis, With-Action Condition

If developed under the Proposed Actions, Potential Development Site 1 would replace an existing 25,000 gsf manufacturing building consisting of an office supply store, with an approximately 198,480 gsf mixed-use commercial and residential development. The Potential Development Site 1 maximum height is assumed to be 18-stories under the proposed actions and the HVAC stack estimated at 3-feet above the projected building height and at least 10 feet from the southern and western boundary, the closest point of the roof to Projected Development Site 1 (the receptor building) while maintaining at least 10 feet distance to the roof edge. Pollutants that were modeled using AERMOD include NO_2 and $PM_{2.5}$ from the combustion of natural gas boilers for the heat and hot water system. Sensitive receptors were placed across all the exposed residential window façades on Projected Development Site 1 spaced horizontally at five-meter intervals and vertically at three-meter intervals, as well as the proposed terraced areas, rooftop air shafts, and three sidewalk receptors on W 23rd Street, Neptune Avenue, and W 22nd Street.

Table I-3: 1-Hour and Annual NO_2 Concentrations and **Table I-4: 24-Hour and Annual $PM_{2.5}$ Concentrations** summarizes the modeled results and background concentrations. The modeling was carried out with and without building downwash. The modeled results were based on project features related to the type of HVAC and stack location, as described above. Based on the methodology described above, no significant adverse impacts would occur.

Table I-3: 1-Hour and Annual NO_2 Concentrations

Source Building		NO_2 Concentrations (µg/m³)						Comments
		1-Hr Modeled	Background	1-Hr Total	Annual Modeled	Background	Annual Total	
Potential Development Site 1	With Downwash	6.16	96.9	103.0	0.09	25.7	25.8	Pass
	Without Downwash	5.59		102.5	0.09		25.8	Pass
NAAQS (ug/m³)				**188**			**100**	

Table I-4: 24-Hour and Annual PM2.5 Concentrations

Source Building		$PM_{2.5}$ Concentrations ($\mu g/m^3$)						Comments
		24-Hr Modeled	Background	24-Hr Total	Annual Modeled	Background	Annual Total	
Potential Development Site 1	With Building Downwash	0.47	17	17.5	0.03	7.2	7.23	Pass
	Without Building Downwash	0.43		17.4	0.01		7.21	Pass
NAAQS (ug/m^3)		**-**		**35**	**-**		**9**	**-**
De Minimis		**9.0**		**-**	**0.3**		-	

Air Quality E-Designations

Projected Development Site 1 requires an (E) designation because the HVAC analysis was based on use of electric heat and hot water systems. The following (E) designation related to air quality pursuant to Section 11-15 of the New York City Zoning Resolution, **E-[816]**, will be mapped for the Projected Development Site 1:

> **Block 6900, Lot 10 (Projected Development Site 1): Any new residential and/or commercial development on the above-referenced property must utilize electric-powered HVAC system and hot water equipment with no venting or stacks to avoid any potential significant adverse air quality impact.**
>
> **Block 6900, Lot 20 (Potential Development Site 1): Any new residential and/or commercial development on the above-referenced property must use natural gas as the type of fuel for heating, ventilation, and air conditioning for the (HVAC) system and hot water equipment, and ensure the HVAC system and hot water equipment stack is located at the highest tier and at least 193.8 feet above grade, and at most 157 feet from the eastern lot line to avoid any potential significant adverse air quality impact.**

IV. CONCLUSION

The Proposed Project would not result in any significant adverse stationary source or mobile air quality impacts. Project-generated traffic would not exceed *CEQR Technical Manual* screening thresholds for mobile source analysis. Development on Projected Development Site 1 would utilize an electric heat and hot water system, and, therefore, would not generate stationary source emissions. Stationary source emissions from Potential Development Site 1 would not exceed NAAQS thresholds.

Attachment J: Noise

I. INTRODUCTION

This attachment assesses the potential for the Proposed Project to result in a significant adverse noise impact. Noise, in its simplest definition, is unwanted sound. While high noise levels may cause hearing loss, the noise levels associated with projects reviewed under the *CEQR Technical Manual* are generally below this hazardous range. However, noise levels that are not considered hazardous may cause stress-related illnesses, disrupt sleep, and interrupt activities requiring concentration. This attachment assesses the potential for the Proposed Actions to result in significant noise impacts. As described in Section 200 of Chapter 19 of the *CEQR Technical Manual*, the noise assessment defines technical terms, identifies evaluation methods and criteria used to assess the potential for noise impacts, discloses the impacts of the Proposed Actions, and, where significant adverse noise impacts are anticipated, identifies measures to avoid or mitigate potential impacts. Included are assessments of the impact of the Proposed Project on sensitive noise receptors and of the potential effects of ambient noise levels on sensitive noise uses introduced by the Proposed Project.

As described in Attachment A, "Project Description," the Proposed Actions would facilitate the development of an approximately 203,360 gsf mixed-use development, including 149 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces on Block 6990, Lot 10 ("Projected Development Site 1"). The ground floor would include 25,298 gsf of commercial space, along with the residential lobby. Access to the residential lobby would be provided along West 23rd Street. Parking entrance/exit would be provided via a 24' ramp on West 23rd Street. The Proposed Project would be operational in 2027. Additionally, Block 6990, Lot 20 would also be affected by the Proposed Actions and is considered Potential Development Site 1.

II. METHODOLOGY

Scope of Analysis

In conformance to guidance in the *CEQR Technical Manual*, the goal of the noise analysis is to determine:

1) the effect of the Proposed Project on sensitive noise receptors, including the effects on noise levels within residential, commercial, and institutional facilities, and at open spaces; and,
2) the effects of ambient noise levels on new sensitive uses introduced by the Proposed Project.

The Proposed Project would introduce new residential and commercial uses to the Projected Development Site 1. The major sources of existing noise at the Projected Development Site 1 and Potential Development Site 1 are vehicular traffic on Neptune Avenue. No new schools or playgrounds are proposed as part of the Proposed Project. However, an existing playground is located within 1,500 feet of and would have a direct line of sight to the Proposed Project. The only industrial noise source within 400 feet of the Projected Development Site 1 and Potential Development Site 1 is the auto repair shop at 2103 Neptune Avenue, which is located approximately 155 feet east of Projected Development Site 1. Based on these factors, the scope of noise assessment included:

- Obtain existing traffic noise levels and vehicular mix at receptor location subject to project-generated traffic;
- Project existing traffic noise levels into the future analysis year;
- Incorporate existing playground noise levels into the analysis;

- Determine whether the relative increase in future traffic noise levels would exceed the thresholds identified under the discussion on Evaluation Criteria;
- Identify new sensitive receptors on the Projected Development Site 1 as part of the Proposed Project that would need protection from ambient noise levels; and,
- Identify the required noise attenuation to ensure acceptable interior noise levels at sensitive receptors on the Projected Development Site 1.

Analysis Year

The assessment of noise was completed for the year 2027, the year in which the Proposed Project would be complete.

Noise Fundamentals

Noise Descriptors

Noise is measured on the basis of sound pressure level (SPL), which is converted to a decibel scale. The decibel is a relative measure of the sound level pressure with respect to a standardized reference quantity. Decibels on the "A-weighted scale" are termed "dBA." The A-weighted scale is used for evaluating the effects of noise in the environment since it most closely approximates the response of the human ear to noise. On this scale, the threshold of discomfort is 120 dBA, and the threshold of pain is about 140 dBA.

Table J-1: Sound Pressure Level and Loudness of Typical Noises in Indoor and Outdoor Environments shows the range of noise levels for a variety of indoor and outdoor sources. Because the scale is logarithmic, a relative increase of 10 decibels represents an acoustic energy that is 10 times higher than base levels. Humans perceive a 10 dBA increase in noise levels as twice as loud. The following are typical human responses to relative changes in noise level:

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

Table J-1: Sound Pressure Level and Loudness of Typical Noises in Indoor and Outdoor Environments

Noise Level (dBA)	Subjective Impression	Typical Sources		Relative Loudness (Human Response)
		Outdoor	Indoor	
120-130	Uncomfortably Loud	Air raid siren at 50 feet (threshold of pain)	Oxygen torch	32 times as loud
110-120	Uncomfortably Loud	Turbo-fan aircraft at take-off power at 200 feet	Riveting machine Rock band	16 times as loud
100-110	Uncomfortably Loud	Jackhammer at 3 feet		8 times as loud
90-100	Very Loud	Gas lawn mower at 3 feet Subway train at 30 feet Train whistle at crossing Woodchipper shredding trees. Chain saw cutting trees at 10 feet	Newspaper press	4 times as loud
80-90	Very Loud	Passing freight train at 30 feet Steamroller at 30 feet Leaf blower at 5 feet Power lawn mower at 5 feet	Food blender Milling machine Garbage disposal Crowd noise at sports event	2 times as loud
70-80	Moderately Loud	NJ Turnpike at 50 feet Truck idling at 30 feet Traffic in downtown urban area	Loud stereo Vacuum cleaner Food blender	Reference loudness (70 dBA)
60-70	Moderately Loud	Residential air conditioner at 100 feet Gas lawn mower at 100 feet Waves breaking on beach at 65 feet	Cash register Dishwasher Theater lobby Normal speech at 3 feet	2 as loud
50-60	Quiet	Large transformers at 100 feet Traffic in suburban area	Living room with TV on Classroom Business office Dehumidifier Normal speech at 10 feet	1/4 as loud
40-50	Quiet	Bird calls, Trees rustling, Crickets, Water flowing in brook	Folding clothes Using computer	1/8 as loud
30-40	Very quiet		Walking on carpet Clock ticking in adjacent room	1/16 as loud
20-30	Very quiet		Bedroom at night	1/32 as loud
10-20	Extremely quiet		Broadcast and recording studio	
0-10	Threshold of hearing			

Sources: Noise Assessment Guidelines Technical Background, by Theodore J. Schultz, Bolt Beranek and Newman, Inc., prepared for U.S. HUD, Office of Research and Technology, Washington, D.C., undated; Sandstone Environmental Associates, Inc.; Highway Noise Fundamentals, prepared by the Federal Highway Administration, U.S. Department of Transportation, September 1980; Handbook of Environmental Acoustics, by James P. Cowan, Van Nostrand Reinhold, 1994.

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

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

- L_{max} is the highest SPL measured during a given period of time. It is useful in evaluating the L_{eq} for time periods that have an especially wide range of noise levels.
- L_{10} is the SPL exceeded 10%of the time. Similar descriptors are the L_1, L_{50}, and L_{90}.
- L_{dn} is the day-night equivalent sound level. It is similar to a 24-hour L_{eq}, but with 10 dBA added to SPL measurements between 10 pm and 7 am to reflect the greater intrusiveness of noise experienced during these hours. DNL is based on average values of L_{dn} over a year period.

Noise Attenuation

Noise levels from a given source reduce with distance. Noise from a "line" source (e.g., roadways) typically attenuates at the rate of 3 dBA per distance doubling, based on a reference distance of 50 feet, for noise traveling through air or over a hard surface, and 4.5 dBA per doubling of distance for noise traveling over a soft surface. Noise from a stationary source attenuates at a rate of 6 dBA when traveling through air or over a hard surface and up to 7 or 8 dBA when traveling over a soft surface.

Passenger Car Equivalent Values

Noise impacts from vehicular traffic are based on "Passenger Car Equivalents" (PCEs). PCEs are the number of autos that would generate the same noise level as the observed mix of autos, medium trucks (trucks with a gross weight between 9,900 and 26,400 pounds), heavy trucks (trucks with a gross weight of more than 26,400 pounds), and buses (capable of carrying more than nine passengers). As identified in the *CEQR Technical Manual*:

- One auto or light truck = One PCE
- One medium truck = 13 PCEs
- One heavy truck = 47 PCEs
- One bus = 18 PCEs

Motorcycles are considered to be equivalent to medium trucks[1]. PCEs are useful for comparing the effects of traffic noise on different roadways or for different future scenarios.

Where traffic volumes are projected to change, proportional modeling techniques, as described in the *CEQR Technical Manual*, typically are used to project incremental changes in traffic noise levels. Using this technique, the prediction of representative existing and future noise levels (where traffic is the dominant noise source) is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine Existing, No-Build, and Build noise levels. The change in future noise levels is calculated using the following equation:

$FNL = ENL + 10 \times \log_{10}(FPCE/EPCE)$ where:

FNL= Future Noise Level

ENL= Existing Noise Level

FPCE= Future PCEs

EPCE= Existing PCEs

Since sound levels use a logarithmic scale, this model proportions logarithmically with traffic change ratios. For example, assuming that traffic is the dominant noise source at a location, if the existing traffic volume

[1]As per the Federal Highway Administration's *Traffic Noise Model 3.1 Technical Manual*, the A-weighted noise emissions of motorcycles fall between autos and medium trucks, up to speeds of approximately 40 mph vehicle speed and closely resembling medium truck noise emissions at higher speeds (Appx. B, Fig. 26). Therefore, when calculating PCE noise levels for vehicles on NYC local streets with a speed limit of less than 40 mph, motorcycles are included with medium trucks.

on a street is 100 PCEs, and the future traffic volume were increased by 50 PCEs to a total of 150 PCEs, the noise level would increase by 1.8 dBA above the exiting noise level. Similarly, if future traffic increased by 100 PCEs, (i.e., doubled to a total of 200 PCEs), the noise level would increase by 3.0 dBA above the existing noise level.

Window/Wall Attenuation Ratings

The attenuation of noise for a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Typically, a building facade is composed of the wall, glazing, and any vents or louvers for heating, ventilation, and air conditioning (HVAC) systems in various ratios of area. All new facades would need to provide composite Outdoor-Indoor Transmission Class (OITC) ratings greater than or equal to the attenuation needed to provide interior noise levels of 45 dBA or less, depending on the dominant noise source. The OITC classification is defined by the American Society of Testing and Materials (ASTM E1332-90) and provides a single-number rating that is used to design a building facade including walls, doors, glazing, and combinations thereof. The OITC rating is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation. It is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation noise. Higher OITC values reflect greater efficiencies to block airborne sound.

Noise Standards and Guidelines

CEQR Guidelines

In 1983, the New York City (NYC) Department of Environmental Protection (DEP) adopted City Environmental Protection Order - CEQR noise standards for exterior noise levels. These standards are used to classify noise exposure into four categories: Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable (see **Table J-2: CEQR Noise Exposure Guidelines for Use in City Environmental Impact Review)**.

Table J-3: Required Attenuation Values to Achieve Acceptable Interior Noise Levels shows the required attenuation for sensitive uses for marginally unacceptable and clearly unacceptable noise exposure categories listed in **Table J-2**, which contains four different noise exposure categories. For example, an L_{10} may approach 80 dBA provided buildings are constructed of materials that reduce exterior to interior noise levels by at least 35 dBA to achieve an interior L_{10} noise level of 45 dBA for residential and community facility uses.

Table J-2: CEQR Noise Exposure Guidelines for Use in City Environmental Impact Review[1]

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

Source: DEP (adopted policy, 1983)
Notes:

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

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

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

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

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

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

Noise Level with Proposed Project	Marginally Unacceptable				Clearly Unacceptable
	$70<L_{10}\leq 73$	$73<L_{10}\leq 76$	$76<L_{10}\leq 78$	$78<L_{10}\leq 80$	$80<L_{10}$
Attenuation[A]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	L_{build} minus $L_{interior}$[B]

Notes: [A] The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed-window situation and hence an alternate means of ventilation.
[B] Where: Lbuild is the projected noise level under the build condition rounded up to the whole number and Linterior is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise)
Source: DEP, *2021 CEQR Technical Manual*, Table 19-3.

Evaluation Criteria

The selection of incremental values and absolute noise levels should be responsive to the nuisance levels of noise and critical time periods when nuisance levels are most acute. During "daytime" hours (between 7 am and 10 pm), nuisance levels for noise are generally considered to be more than 45 dBA indoors and 70 to 75 dBA outdoors. Indoor activities are subject to task interference above this level, and 70 to 75 dBA is the level at which speech interference occurs outdoors. Nighttime (between 10 pm and 7 am) is a particularly critical time period relative to potential nuisance values for noise level increases. Single-glazed windows provide a minimum noise attenuation of 25 dBA when closed. Double-glazed windows typically provide at least 28 dBA of noise attenuation when closed.

Based on the foregoing, the *CEQR Technical Manual* provides the following relative noise level increases for determining impacts from a proposed action:

- An increase of five dBA or more in With-Action $L_{eq(1)}$ noise levels at sensitive receptors (including residences, play areas, parks, schools, libraries, and houses of worship) over those calculated for the No-Action condition, if the No-Action levels are 60 dBA $L_{eq(1)}$ or less, and the analysis period is not a nighttime period.
- An increase of four dBA or more in With-Action $L_{eq(1)}$ noise levels at sensitive receptors over those calculated for the No-Action condition, if the No-Action levels are 61 dBA $L_{eq(1)}$ and the analysis period is not a nighttime period.
- An increase of three dBA or more in With-Action $L_{eq(1)}$ noise levels at sensitive receptors over those calculated for the No-Action condition, if the No-Action levels are 62 dBA $L_{eq(1)}$ or more, and the analysis period is not a nighttime period.
- An increase of three dBA or more in With-Action $L_{eq(1)}$ noise levels at sensitive receptors over those calculated for the No-Action condition, if the analysis period is a nighttime period.

Impact thresholds for proposed projects that introduce sensitive receptors are more straightforward. Typically, potential significant impacts on the newly created receptor relate to absolute noise limits. The Noise Exposure Guidelines shown in **Table J-2** are followed for this purpose. If a project is within an area where the projected noise levels exceed the marginally acceptable limit shown in the Noise Exposure Guidelines (as measured at the proposed building line or property line), a significant impact would occur. For this project, a potential impact would be identified if the Proposed Project would place new residential and commercial uses in an area with an exterior L_{10} noise level of 70 dBA or more.

If noise levels would exceed the marginally acceptable levels, a significant impact would occur unless the building design as proposed provides a composite building attenuation that would be sufficient to reduce these levels to an acceptable interior noise level based on Table 19-3 of *CEQR Technical Manual*.

III. EXISTING CONDITIONS

Existing noise levels were estimated based on on-site monitoring. Weekday ambient noise levels were monitored on Tuesday, May 30th, 2023. Noise monitoring was completed during the peak AM, Midday, School Midday and PM traffic periods at three locations. The Saturday Midday readings were done on April 22nd, 2023. The noise monitoring locations are indicated below and shown in **Figure J-1: Noise Monitoring Locations.**

1. Site frontage along Neptune Avenue,
2. Site frontage along West 22nd Street, and
3. Site frontage along West 23rd Street.

Noise monitoring identified the traffic was the dominant noise source. Monitoring was carried out for a duration of 20 minutes during peak periods at all three locations. Monitoring at West 23rd Street and West 22nd Street was conducted approximately 50 feet from the Neptune Avenue intersection. Noise was monitored on the sidewalk by the community garden across the Projected Development Site 1 because there was lot of pedestrian activity and cars parked on the sidewalk adjacent to the Projected Development Site 1. Traffic volumes by vehicle classification were counted concurrently during the noise monitoring periods:

- Passenger cars and light duty trucks (including small gasoline school buses)
- Medium trucks (two axles, six tires)
- Heavy duty trucks (three or more axles)
- Buses
- Motorcycles (counted as equivalent to medium trucks)



Source: Google Earth

0 300 600 1200 Feet

Proposed Project Area

Projected Development Site 1

Noise Monitoring Locations

NOISE MONITORING LOCATIONS

Figure J-1

2201-2227 Neptune Avenue EAS

Table J-4: Observed Noise Levels (dBA) summarizes monitored noise levels. Neptune Avenue had the highest noise levels, partly due to its volume and vehicular mix and partly due to numerous sources of non-vehicular noise. The main sources of noise on Neptune Avenue besides traffic noise included vehicle horns, ambulance sirens, idling trucks and pedestrian noise.

The main source of noise on West 22nd Street was the noise from the auto body shop at 2127 Neptune Avenue and traffic on Neptune Avenue.

At the West 23rd Street location, non-traffic sources of noise that were generally constant included pedestrian voices, traffic on Neptune Avenue and opening of garage doors at the Projected Development Site 1. Otherwise, West 23rd Street was relatively quiet because the street terminates at Coney Island Creek and there were very few trucks that traveled past the location of the noise monitor. The L_{eq} is higher than the L_{10} for the MD peak due to the siren from a firetruck passing by on Neptune Avenue. Therefore, the L_{eq} was used to determine the CEQR Category since it is higher than L_{10}.

Table J-4: Observed Noise Levels (dBA)

Site ID	Location	Date and Time		L_{eq}	L_{10}	L_{min}	L_{max}	L_1	L_{90}
1	Neptune Avenue	5/30/2023	7:02 am-7:22 am	69.0	**71.4**	57.1	86.0	78.1	60.1
			12:00 pm-12:22 pm	64.4	66.0	55.6	82.7	73.3	57.8
			2:00 pm - 2:21 pm	65.0	67.4	55.5	91.5	74.8	58.2
			4:40 pm- 5:00 pm	64.1	67.3	53.3	74.3	71.5	56.9
		4/22/2023	12:29 pm- 12:49 pm	68.6	70.1	49.8	89.5	79.4	56.1
2	West 22nd Street	5/30/2023	7:19 am-7:39 am	62.3	64.1	58.2	72.7	69.1	59.5
			12:37 pm-12:57 pm	62.3	63.6	60.4	73.7	65.8	61.0
			2:29 pm -2:53 pm	64.1	**64.8**	60.0	78.9	73.5	61.1
			4:34 pm- 4:54 pm	61.7	63.8	56.8	73.7	68.6	58.3
		4/22/2023	12:00 pm-12:20 pm	60.8	62.6	56.2	74.5	68.8	57.3
3	West 23rd Street	5/30/2023	7:49 am-8:17 am	58.9	60.4	50.3	78.3	68.4	52.1
			12:03 pm-12:26 pm	61.9[1]	60.5	52.4	82.3	74.1	54.2
			2:01 pm -2:22 pm	59.1	**61.5**	52.4	77.0	68.0	54.1
			4:10 pm- 4:30 pm	58.3	60.9	51.5	70.5	65.0	54.1
		4/22/2023	12:55 pm-1:15 pm	58.6	59.8	50.8	75.9	67.1	53.6

***Notes**:* 1. L_{eq} for West 23rd Street in the peak Midday was higher than the L_{10} due to the siren from a firetruck passing by on Neptune Avenue. Highest L_{10} was used to determine the potential for impacts.
Numbers in bold type are the highest for that site.

Table J-5: Peak Hour Noise Levels (dBA), Traffic Volumes, Existing Conditions summarizes the noise levels, traffic volumes and equivalent PCEs for the three monitoring locations. As discussed previously, the unusually high MD L_{eq} noise levels on West 23rd Street were due to sources unrelated to traffic volume, which were considered atypical.

Table J-5: Peak Hour Noise Levels (dBA) and Traffic Volumes, Existing Condition

Site ID	Location	Peak period	L_{eq}	L_{10}	Auto	Medium Trucks	Heavy Trucks	Bus	Total	PCEs
1	Neptune Avenue	AM	69.0	**71.4**	1,434	99	9	42	1,584	3,900
		MD	64.4	66.0	1,224	42	9	15	1,290	2,463
		School MD	65.0	67.4	1,290	33	6	33	1,362	2,595
		PM	64.1	67.3	1,395	48	0	18	1,461	2,343
		Sat Midday	68.6	70.1	1,086	18	12	3	1,119	1,938
2	West 22nd Street	AM	62.3	64.1	3	0	0	0	3	3
		MD	62.3	63.6	6	0	0	0	6	6
		School MD	64.1	**64.8**	12	0	0	0	12	12
		PM	61.7	63.8	3	0	0	0	3	3
		Sat Midday	60.8	62.6	12	0	0	0	12	12
3	West 23rd Street	AM	58.9	60.4	30	0	0	0	30	30
		MD	61.9	60.5	15	0	0	0	15	15
		School MD	59.1	**61.5**	12	0	0	0	12	12
		PM	58.3	60.9	3	0	3	0	6	144
		Sat Midday	58.6	59.8	9	0	0	0	9	9

Note: Numbers in bold type are the highest for that site.

IV. FUTURE WITHOUT PROPOSED ACTION (NO-ACTION CONDITION)

Without the Proposed Actions in place, the Proposed Project Area would not be rezoned, and the Projected Development Site 1 would not procure the certification required for any new development. Therefore, the Proposed Project Area would remain the same as under existing conditions,

Table J-6: 2027 Traffic Volumes and Noise Levels (dBA), No-Action Conditions summarizes the future one-hour traffic volumes and noise levels for the three noise monitoring locations without the Proposed Action. Adjustments to the noise levels were made using the proportionality equation for the existing condition volumes and the volumes for the No-Action traffic. The adjustments were 0.03 dBA for all monitoring locations. Noise levels would be highest on Neptune Avenue. The L_{10} noise level at Neptune Avenue was used to determine the attenuation requirement, which would be in the Marginally Unacceptable I category. The West 22nd Street and West 23rd Street monitoring locations would be in the Acceptable categories.

Table J-6: 2027 Traffic Volumes and Noise Levels (dBA), No-Action Condition

ID	Location	Time Period	Existing				No-Action					CEQR Category[1]
			Volumes	PCEs	L_{eq}	L_{10}	Volumes	PCEs	Noise Increase	L_{eq}	L_{10}	
1	Neptune Avenue	AM	1,584	3,900	69.0	71.4	1,596	3,929	0.033	69.0	71.4	MU I
		MD	1,290	2,463	64.4	66.0	1,300	2,482	0.033	64.4	66.0	MA
		School MD	1,362	2,595	65.0	67.4	1,372	2,615	0.033	65.0	67.4	MA
		PM	1,461	2,343	64.1	67.3	1,472	2,361	0.033	64.1	67.3	MA
		Sat Midday	1,119	1,938	68.6	70.1	1,127	1,953	0.033	68.6	70.1	MU I
2	West 22nd Street	AM	3	3	62.3	64.1	3	3	0.033	62.3	64.1	Acceptable
		MD	6	6	62.3	63.6	6	6	0.033	62.3	63.6	Acceptable
		School MD	12	12	64.1	64.8	12	12	0.033	64.1	64.8	Acceptable
		PM	3	3	61.7	63.8	3	3	0.033	61.7	63.8	Acceptable
		Sat Midday	12	12	60.8	62.6	12	12	0.033	60.8	62.6	Acceptable
3	West 23rd Street	AM	30	30	58.9	60.4	30	30	0.033	58.9	60.4	Acceptable
		MD	15	15	61.9	60.5	15	15	0.033	61.9*	60.5	Acceptable
		School MD	12	12	59.1	61.5	12	12	0.033	59.1	61.5	Acceptable
		PM	6	144	58.3	60.9	6	145	0.033	58.3	60.9	Acceptable
		Sat Midday	9	9	58.6	59.8	9	9	0.033	58.6	59.8	Acceptable

Note: 1. MA = Marginally Acceptable; MU I = Marginally Unacceptable I; MU II = Marginally Unacceptable II; MU III = Marginally Unacceptable III; MU IV = Marginally Unacceptable IV

*L_{eq} was used to determine the CEQR Category since it is higher than L_{10}

V. FUTURE WITH THE PROPOSED ACTION (WITH-ACTION CONDITION)

In the future with the Proposed Actions, the Proposed Project Area, including the Projected Development Site 1, would be rezoned from M1-2 to M1-5/R7-3 (MX). The Proposed Project would result in a 203,360 gsf mixed-use development, including 149 DUs, 22,600 gsf of commercial use, and 62 parking spaces. Any stationary noise sources associated with the proposed project (i.e., mechanical equipment) would be designed to meet all applicable noise regulations and would not generate any significant increase in ambient noise levels. The Proposed Project is depicted on **Figure J-2: With-Action Massing Diagram**.

Traffic Noise

To calculate future traffic volumes, the incremental increases in traffic were added to No-Action traffic volumes. Incremental changes in traffic between the No-Action and With-Action conditions were assumed to be autos and two medium trucks. **Table J-7: Peak Hour Traffic Volumes and Noise Levels (dBA) 2027, With-Action Condition** summarizes the future one-hour traffic volumes and noise levels for the three noise monitoring locations. The L_{10} noise level at Neptune Avenue was used to determine the attenuation requirement, which would be in the Marginally Unacceptable I category. The monitoring locations on West 22nd Street and West 23rd Street are within the Acceptable category.

The residential parking entrance would be located approximately 100 feet from Neptune Avenue on West 23rd Street, which is a dead-end street. It is assumed that 90 percent of the project-generated residential auto trips from Neptune Avenue would enter and exit Projected Development Site 1 on West 23rd Street to park on-site, while 10 percent of the project generated autos would utilize neighborhood street parking. Therefore, all project-generated trips were added to Neptune Avenue traffic, and only 90 percent of the project generated residential auto trips were added to West 23rd Street traffic to estimate the With-Action noise levels. No project-generated trips were added to the West 22nd Street traffic, which is also a dead-end street with no access to the Projected Development Site 1.

Projected incremental changes in noise levels on Neptune Avenue in the With-Action and No-Action conditions ranged between 0.03 and 0.05 dBA and on West 23rd Street ranged between 0.5 and 4.9 dBA, which is below the impact threshold.

Table J-7: Peak Hour Traffic Volumes and Noise Levels (dBA) 2027, With-Action Condition

ID	Location	Time Period	No-Action				With-Action					CEQR Category*
			Volumes	PCEs	L_{eq}	L_{10}	Volumes	PCEs	Noise Increase	L_{eq}	L_{10}	
1	Neptune Avenue	AM	1596	3,929	69.0	71.4	1,622	3,979	0.05	69.1	71.5	MU I
		MD	1300	2,482	64.4	66.0	1316	2,498	0.03	64.5	66.1	MA
		School MD	1372	2,615	65.0	67.4	1,388	2,631	0.03	65.1	67.5	MA
		PM	1472	2,361	64.1	67.3	1,497	2,386	0.05	64.2	67.4	MA
		SAT	1127	1,953	68.6	70.1	1,152	1,978	0.06	68.7	70.2	MU I
2	West 22nd Street	AM	3	3	62.3	64.1	3	3	0	62.3	64.1	Acceptable
		MD	6	6	62.3	63.6	6	6	0	62.3	63.6	Acceptable
		School MD	12	12	64.1	64.8	12	12	0	64.1	64.8	Acceptable
		PM	3	3	61.7	63.8	3	3	0	61.7	63.8	Acceptable
		SAT	12	12	60.8	62.6	12	12	0	60.8	62.6	Acceptable
3	West 23rd Street	AM	30	30	58.9	60.4	54	78	4.1	63.0	64.5	Acceptable
		MD	15	15	61.9	60.5	26	26	2.3	64.3**	62.9	Acceptable
		School MD	12	12	59.1	61.5	23	23	2.8	61.9	64.3	Acceptable
		PM	6	145	58.3	60.9	23	162	0.5	58.8	61.4	Acceptable
		SAT	9	9	58.6	59.8	28	28	4.9	63.5	64.7	Acceptable

Note: *CEQR Category: MA = Marginally Acceptable; MU I = Marginally Unacceptable I; MU II = Marginally Unacceptable II; MU III = Marginally Unacceptable III; MU IV = Marginally Unacceptable IV
**L_{eq} was used to determine the CEQR Category since it is higher than L_{10}

Playground Noise

Kaiser Park is located west of the Project Site, approximately 930 feet from the edge of the proposed building. Noise from the baseball park and tennis courts at the park is a potential source of stationary noise for the façade that faces it. According to the *CEQR Technical Manual*, $Leq_{(1)}$ noise levels from the playground would be 75 dBA at the boundary of the playground, 73 dBA 15 feet from the boundary, and 70 dBA 30 feet from the boundary. Beyond 30 feet, the noise level would decrease by 4.5 dBA per distance doubling. Based on the vertical and horizontal distances between the playground and the proposed building, noise levels due to the playground activities would range from an L_{eq} of 47.5 dBA on the 18th floor to 47.6 dBA on the first floor. As a worst-case analysis, the highest L_{eq} for playground noise, 47.6 dBA, was added logarithmically to the peak traffic noise L_{eq} of 63.5 dBA for With-Action conditions. This resulted in a total L_{eq} of 63.6 dBA and a total L_{10} of 64.8 dBA.

HVAC Noise

The design and specifications for mechanical equipment – such as heating, ventilation, and air conditioning – would incorporate sufficient noise reduction to comply with applicable noise regulations and standards, including the standards contained in the revised New York City Noise Control Code, Subchapter 5, §24-227, the New York City Department of Building Code. This would ensure that mechanical equipment does not result in any significant increase in noise levels, either by itself or cumulatively with other project noise sources.



Source: Dattner Architects
Note: For Illustrative Purposes Only

WITH-ACTION MASSING DIAGRAM

Figure J-2
2201 - 2227 Neptune Avenue EAS

Building Attenuation

The façade of the Proposed Project would be designed to provide a composite OITC rating greater than or equal to the attenuation requirement listed in **Table J-8: Required Attenuation for Proposed Project.** By designing the proposed building to provide a composite OITC rating greater than or equal to the attenuation requirement listed in **Table J-8**, the proposed building would provide sufficient attenuation to achieve the CEQR interior noise level guideline of 45 dBA or lower for residential uses (50 dBA for commercial uses). Windows typically installed in new construction to meet energy requirements (double panel windows) meet the 28 dBA noise attenuation requirement. Therefore, no additional analysis is required, and no significant adverse impacts related to noise would occur.

Table J-8: Required Attenuation for Proposed Project

Façade Facing	Floors	Direction	Total L_{10}	CEQR Category	Proposed Use	Minimum Required Attenuation
Neptune Avenue	Floor 1	South	71.5	Marginally Unacceptable I	Commercial	N/A[3]
	Floors 2-18		71.5	Marginally Unacceptable I	Residential	28 dBA
West 22nd Street	Floor 1	East	64.8	Acceptable	Residential	None
	Floors 2-18		64.8	Acceptable	Residential	None
West 23rd Street	Floor 1	West	64.7	Acceptable	Commercial/Residential Lobby	None
	Floors 2-18		64.7	Acceptable	Residential	None

Notes: 1. CEQR Category: MA = Marginally Acceptable; MU I = Marginally Unacceptable I; MU II = Marginally Unacceptable II; MU III = Marginally Unacceptable III; MU IV = Marginally Unacceptable IV
2. Highest L_{eq} at Monitoring Location 3 for the midday peak is considered atypical and therefore the Saturday MD L_{eq} noise level at Monitoring Location 3 was used for attenuation purposes.
3. Attenuation requirement for Commercial Office would be 5 dBA less in order to maintain an interior noise level not greater than 50 dBA.

VI. CONCLUSION

Traffic generated by the Proposed Project would not result in a doubling of PCEs. Consequently, it would not result in a significant increase in noise levels. Projected future noise levels at residential windows in the Proposed Project would have an L_{10} of 71.5 dBA, requiring a minimum 28 dBA attenuation, which will be incorporated into the Proposed Project. Mechanical equipment associated with the Proposed Project would be designed to meet all applicable noise regulations. As a conforming use within an M1-5 zoning district, the Proposed Project would be required to meet the performance standards related to noise, as detailed in the NYC Zoning Resolution. No significant adverse noise impacts would occur.

Attachment K: Water and Sewer Infrastructure

I. INTRODUCTION

New York City's (NYC's) water and sewer network is fundamental to the operation, health, safety, and quality of life of the City and the environment. This chapter assesses the potential effects of the Proposed Project on the City's water supply, wastewater treatment, and storm water management infrastructure in conformance to guidance in the *City Environmental Quality Review (CEQR) Technical Manual*.

As described in Attachment A, "Project Description," the Applicant is seeking a zoning map amendment (M1-2 to M1-5/R7-3 (MX)) of a waterfront block (Block 6990, Lots 1, 10, and 20) ("Proposed Project Area"); zoning text amendment pursuant to Appendix F and Article 12, Chapter 3; and waterfront certification pursuant to ZR Section 62-811, ("Proposed Actions"), to facilitate the construction of the new mixed-use development at 2201-2227 Neptune Avenue (Block 6990, Lot 10), ("Projected Development Site 1"), in the Coney Island neighborhood of Brooklyn, Community District 13 (CD 13). The Proposed Actions would facilitate the development of an approximately 203,360 gsf mixed-use development, including 149 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces. The Proposed Project would be operational in 2027.

The Project Site is contained within the City's Municipal Separate Storm Sewer System (MS4). Wastewater from the area is conveyed to the Coney Island Wastewater Resource Recovery Facility (WRRF), which has a total capacity of approximately 110 million gallons per day (mgd).

Section 200 of Chapter 13 Water and Sewer Infrastructure of the *CEQR Technical Manual* identifies the types of projects that require at least a preliminary assessment of their impact on the City's water supply and wastewater and stormwater conveyance and treatment systems. Guidance provided in this section of the *CEQR Technical Manual* indicates that a preliminary infrastructure analysis is needed based on the project being in the City's MS4 area and generating more than 100 residential units in the existing M1-2 zoning district.

II. METHODOLOGY

Water Supply

According to the *CEQR Technical Manual*, a preliminary water supply infrastructure analysis is needed if a project would result in an exceptionally large demand for water (e.g., more than one mgd) or is in an area that experiences low water pressure (e.g., areas at the end of the water supply distribution system). Because the Proposed Project does not result in an exceptionally large demand for water or is located in an area that experiences low water pressure, a preliminary assessment of water supply is not required.

Wastewater and Stormwater Conveyance and Treatment

As indicated in Section 220 of Chapter 13 of the *CEQR Technical Manual*, a preliminary assessment of the impact of the Proposed Project on wastewater and stormwater conveyance and treatment is needed if the Proposed Project:

- Is in a combined sewer area and would exceed the following incremental development of DUs or commercial, public facility, and institution and/or community facility space above the predicted No-Action condition:
    - 1,000 DUs or 250,000 sf of commercial, public facility, and institution and/or community facility space in Manhattan; or,
    - 400 DUs or 150,000 sf of commercial, public facility, and institution and/or community facility space or more in the Bronx, Brooklyn, Staten Island, or Queens.
- Is in a separately sewered area and would exceed the following incremental development (above the predicted No-Action condition) of DUs or commercial, public facility, and institution and/or community facility space per site:
    - 25 residential units or 50,000 sq. ft. of commercial/public and institution/community facility use in an existing R1, R2, or R3 zoning district.
    - 50 residential units or 100,000 sq ft. of commercial/public and institution/community facility use in an existing R4 or R5 zoning district.
    - 100 residential units or 100,000 sq ft. of commercial/public and institution/community facility use in all remaining zoning districts, including C, M, and Mixed-use districts.
- Is in an area that is partially sewered or currently unsewered.
- Involves development on a site five acres or larger where the amount of impervious surface would increase.
- Would involve development on a site one acre or larger where the amount of impervious surface would increase and one of the following would apply: Located within the Jamaica Bay watershed; or located in certain specific drainage areas including the Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek.
- Would involve construction of a new stormwater outfall that requires federal and/or state permits.

Because the Proposed Project is in a separate sewer area and would result in approximately 159,780 gsf of residential use comprising approximately 145 DUs in an existing M1-2 zoning district, a preliminary assessment of wastewater and stormwater conveyance and treatment impacts of the Proposed Project was conducted. However, since the Proposed Actions would not allow for new industrial/manufacturing uses, an assessment of potential effects of proposed industrial facilities is not needed.

To assess the Proposed Project's potential impacts on water and sewer infrastructure, this chapter will:

- Describe the existing water and sewer infrastructure serving the Project Site and estimate water demand and wastewater generation on the Project Site under existing and No-Action conditions. Existing and future water demand and sewage generation are calculated based on use generation rates provided in the *CEQR Technical Manual*. Sanitary flows are calculated using NYC Department of Environmental Protection's (NYCDEP's) Volume Calculation Matrix;
- Describe planned No-Action infrastructure improvements in the surrounding area, project components, and current schedules;

- Forecast water demand and sewage and stormwater generation by the Proposed Project based on the *CEQR Technical Manual* guidelines; and
- Assess the effects of the With-Action water demand and sewage and stormwater generation on the City's water and sewer infrastructure, in conformance to the *CEQR Technical Manual* guidelines.

III. EXISTING CONDITIONS

Projected Development Site 1

The Projected Development Site 1 is comprised of Block 6990, Lot 10 along Neptune Avenue between West 22nd Street and West 23rd Street. Lot 10 is currently improved with a one-story 25,298 gsf manufacturing building, comprising of active warehouse and commercial uses. It is accessible from West 23rd Street and Neptune Avenue.

Wastewater Treatment

According to the *CEQR Technical Manual*, wastewater includes sanitary sewage, wastewater generated by industries, and stormwater. Water used for air conditioning generates a negligible amount of wastewater as it recirculates or evaporates in the cooling and heating process.

The majority of NYC's wastewater treatment system comprises the sewer network beneath the streets and the 14 WRRFs located throughout the City. Many of NYC's sewers are called "combined sewers," since they receive sanitary wastewater and stormwater runoff. Wastewater generated in a "drainage basin" (the area served by a WRRF) is conveyed through a network of combined sewers to the WRRF. The Project Site is located is a separate sewered area and thus, stormwater is redirected to outfalls to the closest waterway, which is this case is the Coney Island Creek. Wastewater is conveyed to the Coney Island WRRF through interceptor force mains, the closest of which is 252 feet from the Project Site.

During dry weather, the WRRF primarily treats sanitary sewage. The average daily flow during dry weather is known as the average "dry-weather flow." WRRFs have treatment capacities set at twice their dry weather design flow for a limited amount of time. However, because most of NYC's sewers are combined sewers, they also receive stormwater and rainwater runoff from impermeable surfaces that contain pollutants such as oil and floatable debris. During wet weather, stormwater enters the combined sewer system along with sanitary sewage and both are treated at a WRRF. During wet weather, rainfall runoff can reach ten to 50 times the dry weather flow, which is well above the WRRF design capacity. To avoid flooding the WRRFs, built-in regulators act as relief valves to direct the excess water to an outfall. During storm events, sanitary sewage entering, or already in, the combined sewer system and stormwater and debris can be discharged, untreated, into the nearest body of water. This untreated flow is known as the CSO.

During the 1990s, the City instituted a range of water conservation measures in response to excess flows to the City's WRRFs that exceeded the dry weather flow allowed under their respective State Pollutant Discharge Elimination System (SPDES) permits. Conservation measures included equipping fire hydrants with locks to prevent illegal uses and requiring that all new plumbing fixtures in the City (including replacements in existing structures and new fixtures in new structures) be of a low-flow design (Local Law No. 29, 1989). The City also implemented a metering program in which water meters were installed at thousands of properties where water fees had previously been based on property frontage rather than usage. This metering provided a new financial incentive to identify and repair leaks in the water distribution system. These programs have reduced water treatment load at the City's WRRFs. At many WRRFs, this reduction has been in the order of magnitude of several million gallons per day. Overall, water demand is more than 30% less than in the 1990s, despite increases in population. NYCDEP projects that savings from

the continued implementation of these and other conservation measures over the next decade will exceed any increases in water demand from consumers.

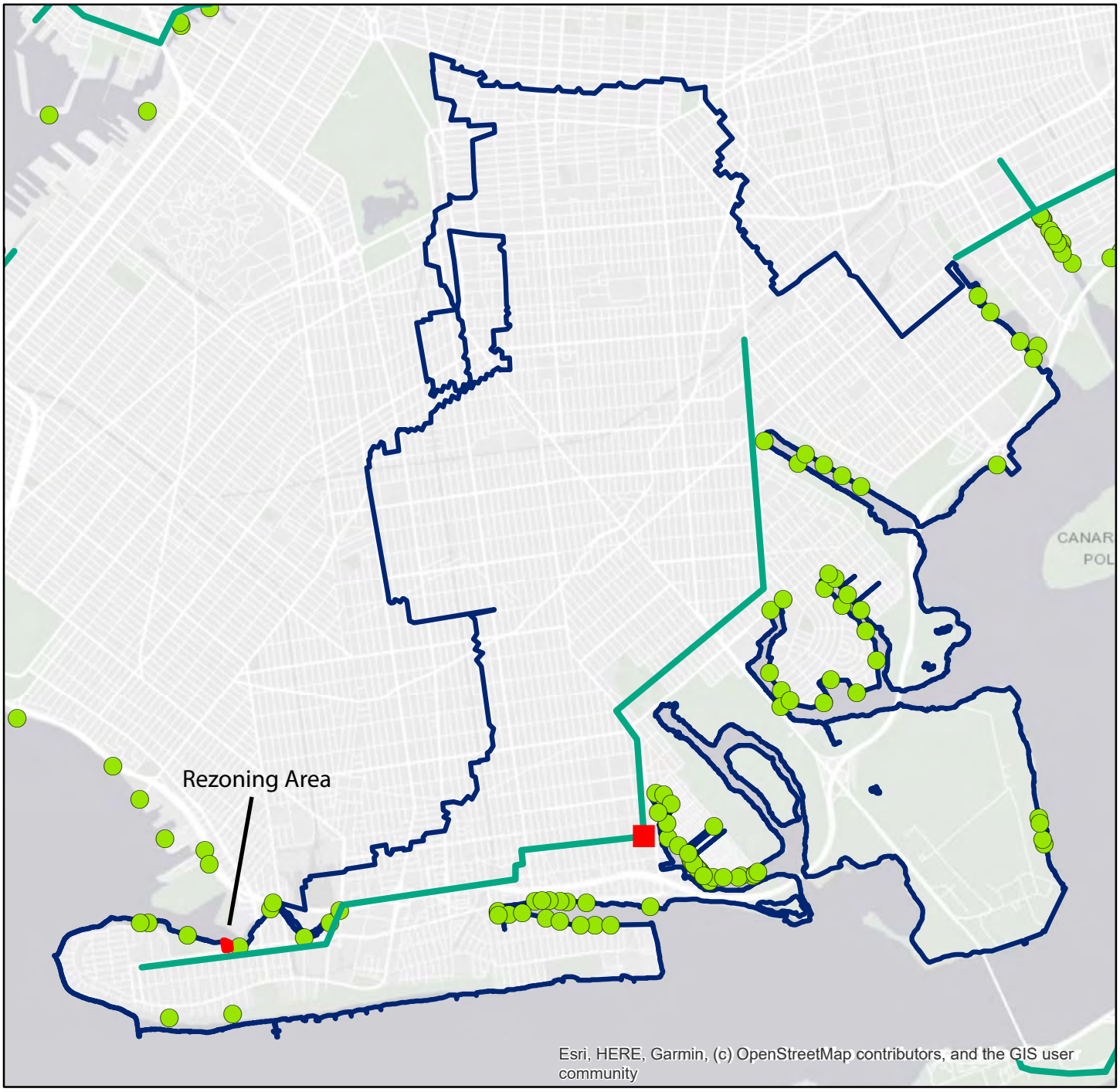
As shown in **Figure K-1:** Coney Island WRRF Sub-Catchment Areas, the Project Site is served by the Coney Island WRRF. The Coney Island WRRF has a permitted capacity of 110 mgd. As summarized in **Table K-1: Monthly Average Dry Weather Flows from the Coney Island** , average monthly flow to the Coney Island WRRF over the past 12 months (2023) has been 89 mgd, which is approximately 81% of the permitted capacity.

Table K-1: Monthly Average Dry Weather Flows from the Coney Island WRRF

Month	Monthly Avg Flow (MDG)
Jan-2023	88
Feb-2023	80
Mar-2023	87
Apr-2023	85
May-2023	84
Jun-2023	76
Jul-2023	88
Aug-2023	88
Sep-2023	110
Oct-2023	99
Nov-2023	86
Dec-2023	100

Source: NYCDEP

Based on *CEQR Technical Manual* guidelines, estimates of an area's daily sanitary sewage generation are typically equivalent to the domestic water usage rates. Since the Project Site is currently used as an active commercial use, sanitary sewage is currently generated on the Project Site. As part of the Site Connection Proposal Application process, DEP will determine if a hydraulic analysis of the existing sewer system is needed. The existing drainage plan may need to be amended based on hydraulic analysis calculations.



Sources: 2023 PLUTO, DCP, NYS GIS Program Office (GPO) 2021

0 1 2 Miles

Rezoning Area

Coney Island Sewershed

Municipal Separate Storm Sewer System (MS4) Outfall

Wastewater Resource Recovery Facility

Interceptor

CONEY ISLAND WRRF MAP

Figure K-1

2201-2227 Neptune Avenue EAS

Stormwater Drainage and Management

Stormwater runoff from impermeable surfaces on the Project Site is currently discharged through existing catch basins located on the corners of Neptune Avenue and W 23rd Street and Neptune Avenue and W 22nd Street, southwest and southeast of the Project Site respectively. Runoff from these catch basins is then conveyed to MS4 outflows, the closest of which is CI-665 approximately 300 feet east of the Project Site and which discharges to the Coney Island Creek. CI-665 serves a drainage area of approximately 58 acres (**Figure K-2: Stormwater Drainage**). Because the Project Site is located in a separate storm sewer system, runoff from the Project Site does not combine with wastewater generated from the existing land uses.

Stormwater runoff is generated by rainwater that collects on the surfaces of land or built structures. The volume of runoff generated by these surfaces varies depending on the type of land cover, which can range from impervious surfaces such as paved parking lots to pervious surfaces, such as soil, grassed or landscaped features that allow water to percolate into the ground below. Runoff from pervious surfaces can percolate into the ground, reducing the amount of runoff to a local street. Runoff "coefficients" used to estimate the amount of stormwater flow to the drainage system, vary based on the type of surface. The runoff coefficient from a pervious land surface is typically about 0.20, compared to the runoff coefficient from an impervious building roof, which is set as 1.00, while the runoff coefficient from paved areas such as streets and sidewalks is 0.85.

The Project Site is currently occupied by a commercial use with impervious surfaces that have high runoff coefficients. A visual inspection of the Project Site also indicated an absence of on-site stormwater detention systems. **Table K-2: Surface Types on the Project Site, Existing Conditions** provides a summary of surface types under existing conditions.

Table K-2: Surface Types on the Project Site, Existing Conditions

Surface Type[1]	Roof	Pavement & Walks	Grass & Softscape	Total
Percentage of Total Area	100%	0%	0%	100%
Surface Area (sf)	25,628	0	0	25,628
Runoff Coefficient	1.00	0.85	0.20	1.00

Notes:

1. Runoff coefficient for each surface type are as per NYCDEP.

Total existing flows to the MS4 were estimated for the Project Site using the NYCDEP calculation matrix provided in the *CEQR Technical Manual* shown in **Table K-3: Wastewater Generation on the Project Site, Existing Conditions**.

Table K-3: Wastewater Generation on the Project Site, Existing Conditions

Use	Rate[1]	Existing Condition		
		Units (DU) / Area (gsf)	Domestic Water / Wastewater Generation – gallons per day (gpd)	A/C (gpd)
Residential	100 gpd/person[2]	0	0	0
	A/C: 0.17 gpd/sf			
Commercial/Office	0.10 gpd/sf	25,298	2,530	4301
	A/C: 0.17 gpd/sf			
Water Consumption Subtotals			2,530	4,301
Sewage Generation Subtotal			2,530	
Total Water Consumption			**6,830**	
Total Wastewater Generation			**2,530**	

Notes:

1. Use and generation rates from Table 13-2, *2021 CEQR Technical Manual*, unless otherwise noted

2. Using a multiplier of 2.39 persons per household (DU) for average household size in Brooklyn CD 13 according to 2020 Census data

3. Retail uses include supermarket and local retail

IV. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Absent the Proposed Actions (the No-Action scenario), the Proposed Project Area would not be rezoned, and the Projected Development Site 1 would not procure the certification required for any new development. Therefore, the Proposed Project Area would remain the same as under existing conditions, as described in Section III.

V. FUTRE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

The Proposed Actions would facilitate a new 18-story, approximately 203,360 gsf mixed-use development, including 145 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces (“Proposed Project”) at 2201-2227 Neptune Avenue (Block 6990, Lot 10) (“Projected Development Site 1”) to be completed by 2027.

Wastewater Treatment

The anticipated sewage demand from the Proposed Project would increase by approximately 34,385 gallons per day (gpd) from the No-Action condition to the With-Action condition. This incremental increase in sanitary flow would not result in a significant adverse impact to the sewage system or the treatment capacity at the North River WRRF as it is less than 0.1% of the WRRF current dry weather capacity, see **Table K-4: Water Consumption and Sewer Generation on the Project Site, No-Action and With-Action Conditions**. The Proposed Actions would likely result in an increase of sanitary flow to the adjacent sewers. A hydraulic analysis of the existing sewer system will likely be required prior to the submittal of the Site Connection Proposal Application (SCP) to determine whether the existing sewer system is capable of supporting higher density development and related increase in wastewater flow, or whether there will be a need to upgrade the existing sewer system. In addition, there might be a need to amend the exiting drainage plan based on the hydraulic analysis calculations.

Table K-4: Water Consumption and Sewer Generation on the Project Site, Existing/No-Action and With-Action Conditions

Use	Rate[1]	Conditions in the Future Without the Proposed Action			Conditions in the Future with the Proposed Action			Incremental Change with the Proposed Action		
		Units (DU) / Area (gsf)	Domestic Water / Wastewater Generation (gpd)	A/C (gpd)	Persons[2] / Seat / Room / Occupant Area (gsf)	Domestic Water / Wastewater Generation (gpd)	A/C (gpd)	Units (DU) / Area (gsf)	Domestic Water / Wastewater Generation (gpd)	A/C (gpd)
Residential	100 gpd/person[2]	0	0	0	347	34,655	27,163	347	34,655	27,163
	A/C: 0.17 gpd/sf				159,780					
Commercial	0.10 gpd/sf	25,298	2,530	4301	22,600	2,260	3,842	-2,698	-270	-459
	A/C: 0.17 gpd/sf									
Water Consumption Subtotals			2,530	4,301		36,915	31,005		34,385	26,704
Sewage Generation Subtotal			2,530			36,915			34,385	
Total Water Consumption			**6,830**			**67,920**			**61,089**	
Total Wastewater Generation			**2,530**			**36,915**			**34,385**	

Notes:

1. Use and generation rates from Table 13-2, *2021 CEQR Technical Manual*, unless otherwise noted

2. Using a multiplier of 2.39 persons per household (DU) for average household size in Brooklyn CD 13 according to 2020 Census data

3. Retail uses include supermarket and local retail

NYCDEP will be consulted during the submittal of the site connection proposal application to determine if a hydraulic analysis is needed and whether the existing sewer system is capable of supporting higher density development and related increase in wastewater flow, or whether the existing sewer system will need to be upgraded. In addition, DEP will determine if there will be a need to amend the existing drainage plan.

Based on the assimilative capacity of the Coney Island WRRF, the Proposed Actions would not result in significant adverse impacts on the sewer system.

Stormwater Drainage and Management

The Proposed Project would have the same coverage of impervious surfaces on the Project Site as in existing conditions, see **Table K-3: Surface Types on the Project Site, With-Action Condition**.

Table K-3: Surface Types on the Project Site, With-Action Condition

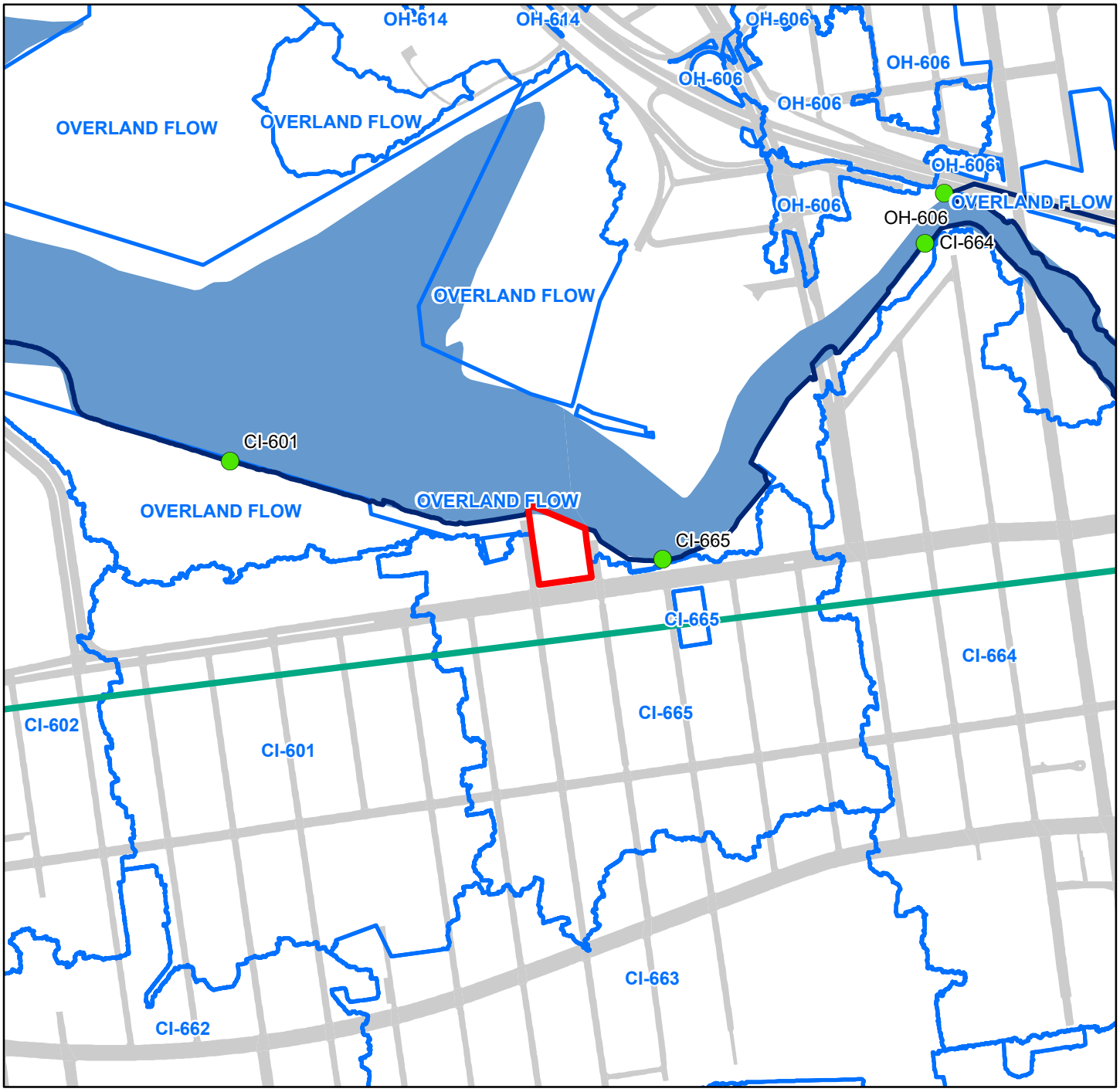
Surface Type[1]	Roof[2]	Pavement & Walks	Grass & Softscape	Total
Percentage of Total Area	100%	0%	0%	100%
Surface Area (sf)	25,628	0	0	25,628
Runoff Coefficient	1.00	0.85	0.20	1.00

Notes:
1. Runoff coefficient for each surface type are as per NYCDEP
2. Total roof areas within the catchment area

As part of the DEP site connection approval process, the Proposed Project will demonstrate compliance with the required stormwater release rate. Therefore, the Proposed Project would not result in changes to stormwater runoff, drainage, or management.

VI. CONCLUSION

The Proposed Project would not result in an exceptionally large demand in water (i.e., one mgd). The coverage of pervious surfaces on the Project Site would remain unchanged. Additionally, the Proposed Project would generate less than 0.1% of the Coney Island's WRRF dry weather capacity. Therefore, the Proposed Project would not result in an significant adverse impact to Water and Sewer Infrastructure.



Sources: 2023 PLUTO, DCP, NYS GIS Program Office (GPO) 2021

0 0.125 0.25 Miles

Rezoning Area

MS4 Drainage Areas

MS4 Outfalls

Interceptor

STORMWATER DRAINAGE

Figure K-2

2201-2227 Neptune Avenue EAS

APPENDIX A

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

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

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

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

A. APPLICANT INFORMATION

Name of Applicant: Neptune Avenue Commercial LLC

Name of Applicant Representative: Eric Vath

Address: 475 Park Ave S Suite 2803, New York, NY-10016

Telephone: 212-935-1622 Email: evath@goldmanharris.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 is seeking a zoning map amendment (M1-2 to M1-5/R7-3 (MX)) of a waterfront block (Block 6990, Lots 1, 10, and 20) ("Proposed Project Area"); zoning text amendment pursuant to Appendix F and Article 12, Chapter 3; and waterfront certification pursuant to ZR Section 62-811, ("Proposed Actions"), to facilitate the construction of a new 18-story, approximately 203,360 gross square feet (gsf) mixed-use development at 2201-2227 Neptune Avenue (Block 6990, Lot 10), ("Projected Development Site 1"), in the Coney Island neighborhood of Brooklyn, Community District 13 (CD 13).The proposed building is a mixed-use development, including 149 dwelling units (DUs), 37 of which is proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces ("Proposed Project") on Projected Development Site 1. The Proposed Project is expected to be completed by 2027.

2. Purpose of activity

The existing M1-2 zoning district would not allow development of any residential use and has a high parking requirement for other non-residential uses. Additionally, due to the Project Site being located on a waterfront block, no development would be allowed without a zoning certification pursuant to Section 68-811 of the Zoning Resolution. The proposed zoning map amendment to a M1-5/R7-3 Special Mixed Use Zoning District would support the policies and strategies outlined in Housing Our Neighbors: A Blueprint for Housing and Homelessness by enabling the Applicant to create new affordable housing and new retail space with reduce parking needs in a transit-rich neighborhood. Under the proposed zoning text amendment, the Proposed Project would be able to provide approximately 37 to 45 new income-restricted DUs in Brooklyn CD 13, where 45.5% of households are rent burdened (households spending 35% or more of their income on rent), according to the American Community Survey 2014-2018 5-year estimates.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 6990; Lot 10

Street Address: 2201-2227 Neptune Avenue

Name of water body (if located on the waterfront): Coney Island 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: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

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

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

E. LOCATION QUESTIONS

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

   ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)

   ☐ Special Natural Waterfront Area (SNWA) (*4.1*)

   ☐ Priority Maritime Activity Zone (PMAZ) (*3.5*)

   ☐ Recognized Ecological Complex (REC) (*4.4*)

   ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

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

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

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

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

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

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

G. CERTIFICATION

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

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

Applicant/Agent's Name: Smitha Krishnan

Address: 322 8th Avenue, New York,NY-10001

Telephone: +1 929.438.0426 Email: smitha.krishnan@samschwartz.com

Applicant/Agent's Signature: _____

Date: _____

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☑ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☑ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☑ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

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.



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	2201-2227 Neptune Avenue Rezoning EAS
Location	2201-2227 Neptune Avenue, Brooklyn, NY.Block 6990, Lot 10
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 is seeking a zoning map amendment (M1-2 to M1-5/R7-3 (MX)) of a waterfront block (Block 6990, Lots 1, 10, and 20) (“Proposed Project Area”); zoning text amendment pursuant to Appendix F and Article 12, Chapter 3; and waterfront certification pursuant to ZR Section 62-811, (“Proposed Actions”), to facilitate the construction of a new 18-story, approximately 203,360 gross square feet (gsf) mixed-use development at 2201-2227 Neptune Avenue (Block 6990, Lot 10), (“Projected Development Site 1”), in the Coney Island neighborhood of Brooklyn, Community District 13 (CD 13).The proposed building is a mixed-use development, including 149 dwelling units (DUs), 37 of which is proposed to be affordable DUs, 22,600 gsf of
Planned Completion Date	2027
Expected Project Lifespan	2087 (60 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	2.46	**2.46**	**NAVD88**	*NOAA VDATUM*
1% flood height	10.00	**10.00**	**NAVD88**	*FEMA pFIRM 2015*
Design flood elevation	12.00	**12.00**	**NAVD88**	*Project Architect*
As relevant:				
0.2% flood height	14.40	14.40	**NAVD88**	*FEMA Preliminary Flood Insurance Study (FIS) Report,2013*

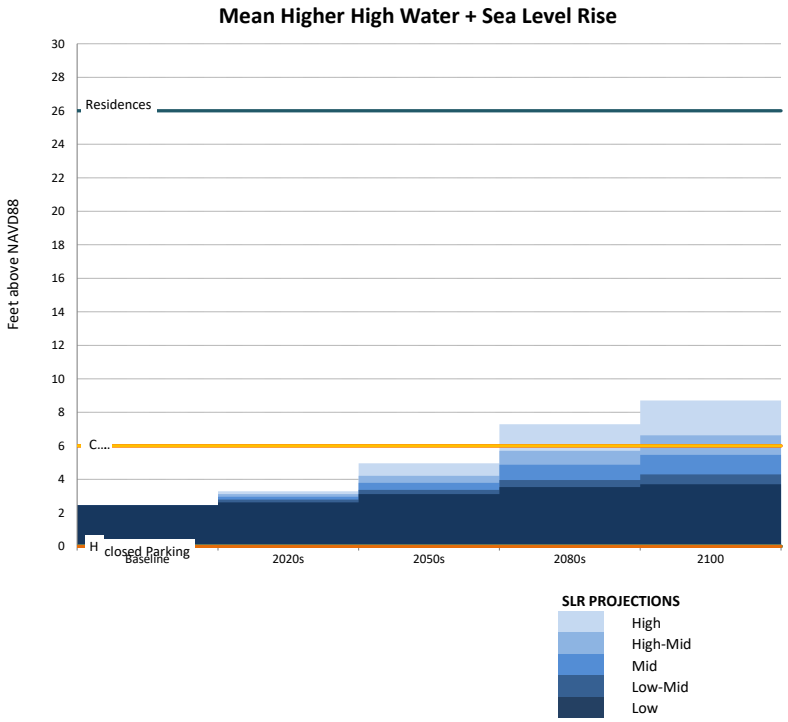
Data will be converted based on the following datums:

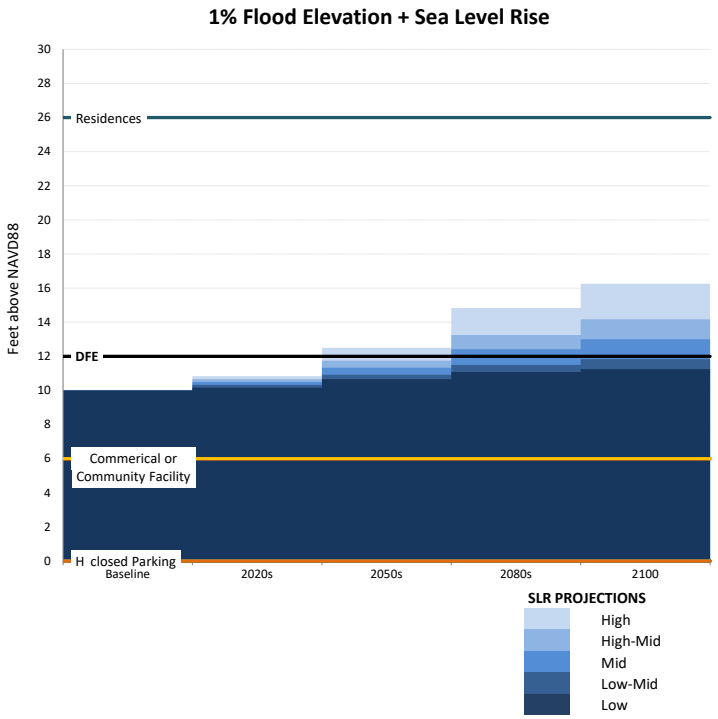
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

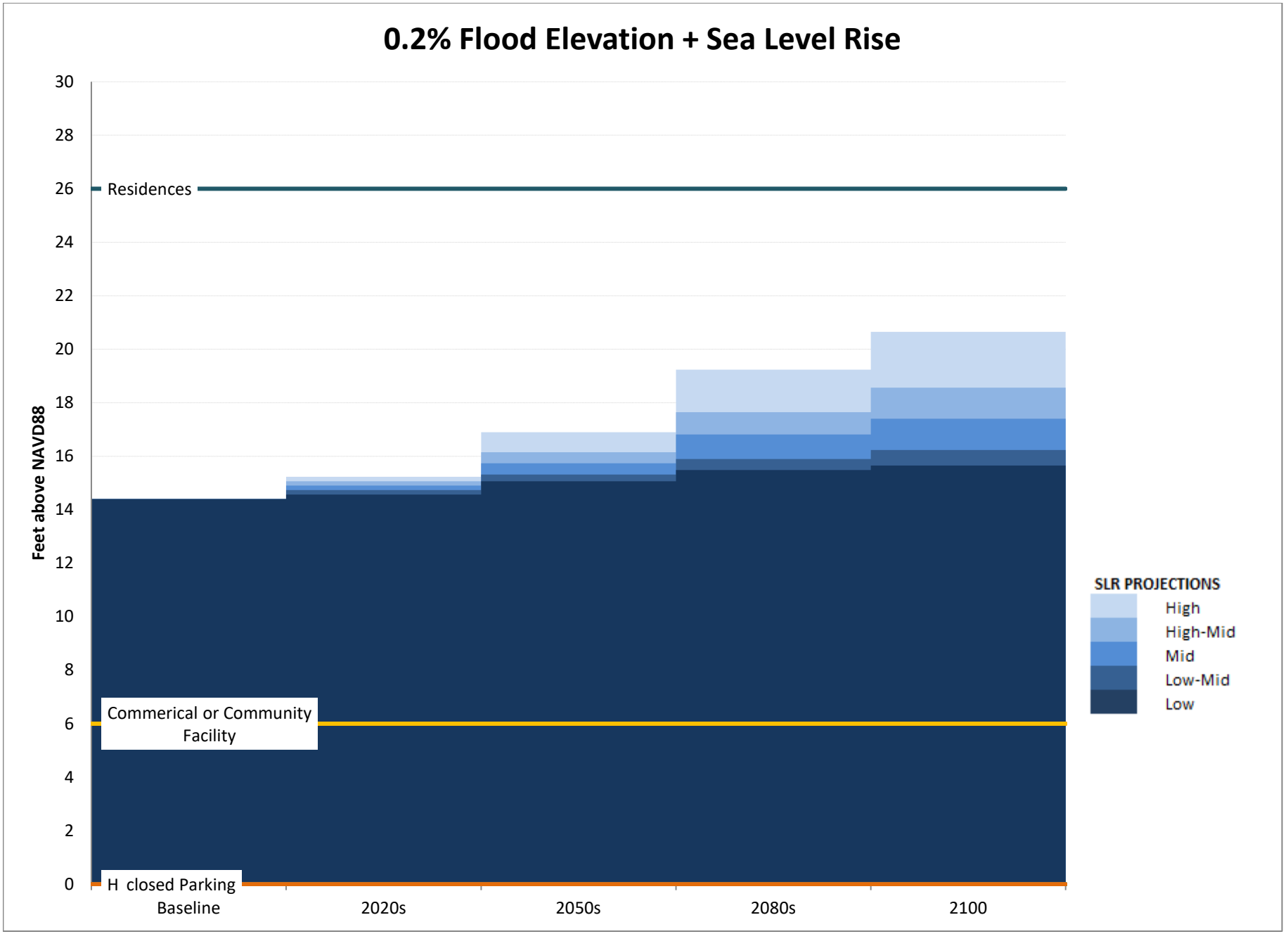
Describe key physical features of the project.

Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Residential Lobby	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2086	6.0	Feet	NAVD88	*6.0*	*6.0*	*3.5*	*-8.4*
Residential lobby on the first floor									
Commerical or Community Facili	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2086	6.0	Feet	NAVD88	*6.0*	*6.0*	*3.5*	*-8.4*
Commerical or Community Facility us on the first floor									
Enclosed Parking	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2086	0.0	Feet	NAVD88	*0.0*	*0.0*	*-2.5*	*-14.4*
Parking in the cellar of the building.									
Residences	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2086	26.0	Feet	NAVD88	*26.0*	*26.0*	*23.5*	*11.6*
Residential apartment units on second through eighteenth floor of building.									
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
Residences
Commerical or Community Facility
H closed Parking
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	2.46	2.46	2.46	2.46	2.46
2020s	2.62	2.79	2.96	3.12	3.29
2050s	3.12	3.37	3.79	4.21	4.96
2080s	3.54	3.96	4.87	5.71	7.29
2100	3.71	4.29	5.46	6.62	8.71

	1%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	10.00	10.00	10.00	10.00	10.00
2020s	10.17	10.33	10.50	10.67	10.83
2050s	10.67	10.92	11.33	11.75	12.50
2080s	11.08	11.50	12.42	13.25	14.83
2100	11.25	11.83	13.00	14.17	16.25

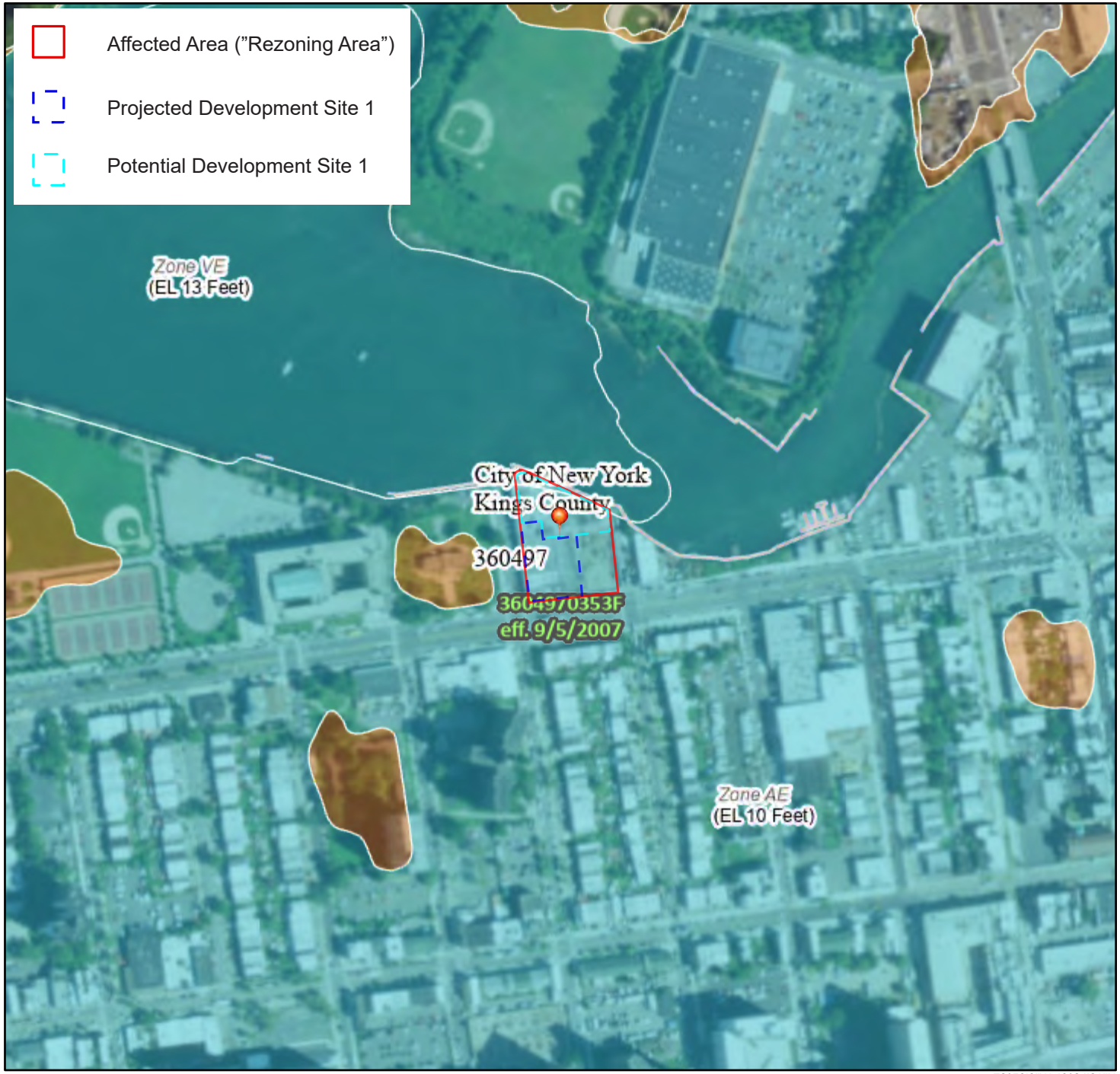
	0.2%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	14.40	14.40	14.40	14.40	14.40
2020s	14.57	14.73	14.90	15.07	15.23
2050s	15.07	15.32	15.73	16.15	16.90
2080s	15.48	15.90	16.82	17.65	19.23
2100	15.65	16.23	17.40	18.57	20.65

	0	1
Residential Lobby	6	6
Commerical or Community Fa	6	6
Enclosed Parking	0	0
Residences	26	26
E	0	0
F	0	0
G	0	0
H	0	0
DFE	12.00	12.00

National Flood Hazard Layer FIRMette

FEMA

73°59'43"W 40°34'58"N



73°59'6"W 40°34'31"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/14/2023 at 3:13 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX B

NYC Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project:
Date Received: 11/13/2023

Properties with no Architectural or Archaeological significance:
1) 2227 NEPTUNE AVENUE, BBL: 3069900010
2) 2737 WEST 23 STREET, BBL: 3069900020

Comments:

S/NR LISTED CONEY ISLAND FIRE STATION PUMPING STATION, 2301 NEPTUNE AVENUE; S/NR ELIGIBLE MARK TWAIN IS 239 FOR THE GIFTED AND TALENTED, 2401 NEPTUNE AVENUE WITHIN THE RADIUS.

Gina Santucci 11/14/2023

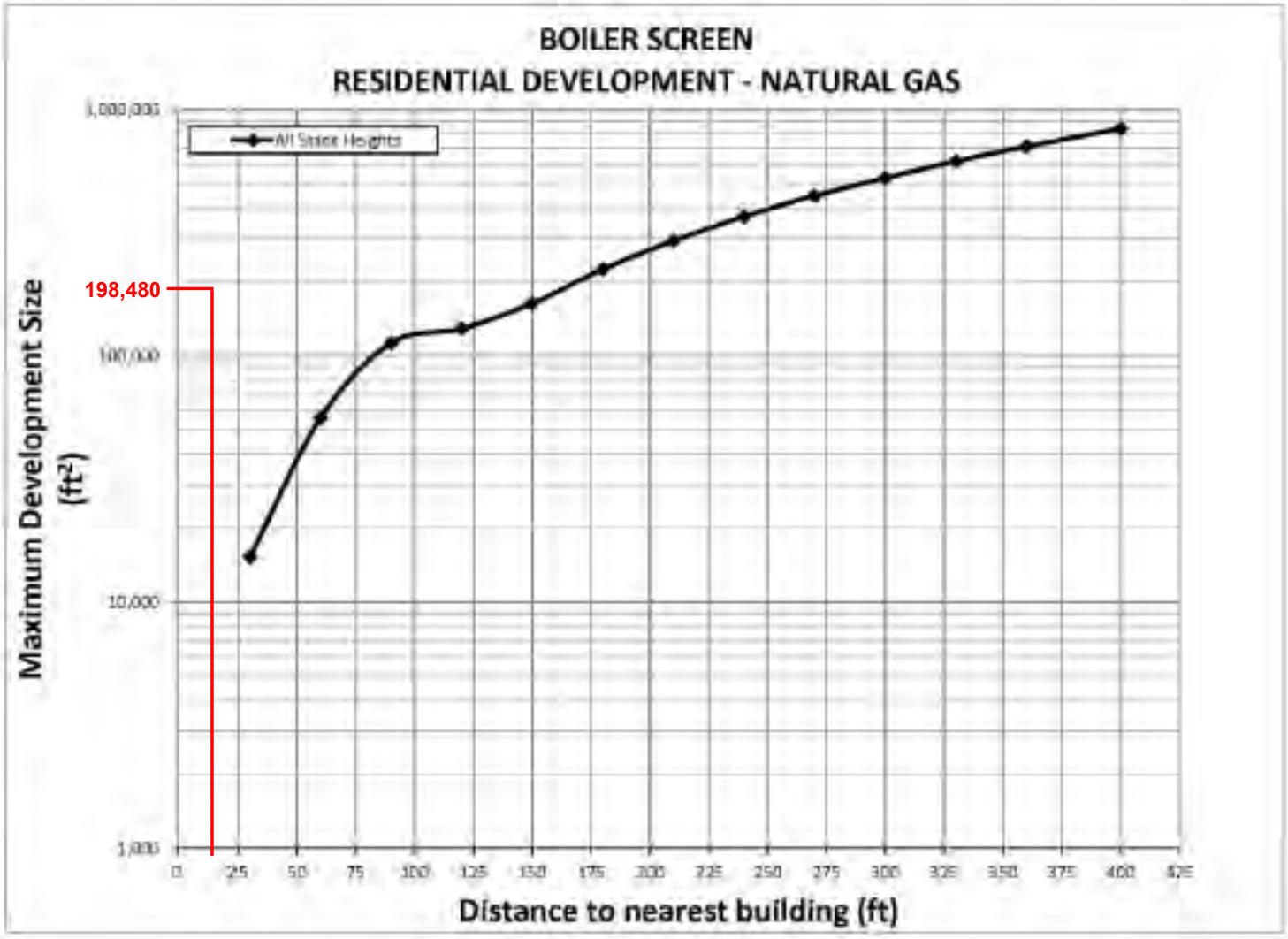
SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 37124_FSO_GS_11142023.docx

Appendix C

2201-2227 Neptune Avenue Rezoning
Potential Development Site 1: Block 6990, Lot 20
Building Height: 190'- 4"
Total Project Area: 198,480 ft²
Screens Out: No

Figure App 17-2



2201-2227 Neptune Avenue
Air Toxics Survey

Date: 4/4/23

Name	Address	Block	Lot	Notes
United Auto Collision, Inc	2127 Neptune Avenue	6991	48	Manager stated no paint booth / spray paint on-site.
Abilene, Inc *	2402 Neptune Avenue	7014	7	Closed / no visible emissions
Phoenix Energy Management, Inc.	2328 Neptune Avenue	7015	1	Office front.

*Subsequent review has determined Abilene is still operating at the above mentioned address. "Attachment I: Air Quality" reflects this updated finding.

Appendix D

Technical Memorandum for 2201-2227 Neptune Avenue EAS CEQR No. 24DCP108K

I. INTRODUCTION

Neptune Avenue Commercial LLC (the "Applicant") is seeking a zoning map amendment (M1-2 to M1-5/R7-3 (MX)) of a waterfront block (Block 6990, Lots 1, 10, and 20) ("Proposed Project Area"); zoning text amendment pursuant to Appendix F and ZR 123-90; and waterfront certification pursuant to ZR Section 62-811, ("Proposed Actions"), to facilitate the construction of a new 18-story, approximately 203,360 gross square feet (gsf) mixed-use development at 2201-2227 Neptune Avenue (Block 6990, Lot 10), ("Projected Development Site 1"), in the Coney Island neighborhood of Brooklyn, Community District 13 (CD 13).

The Proposed Actions would facilitate an approximately 203,360 gsf mixed-use development, including 145 dwelling units (DUs), 37-45 of which are proposed to be affordable DUs, 22,600 gsf of commercial use, and 60 parking spaces ("Proposed Project") on Projected Development Site 1. The Proposed Project is expected to be completed by 2026. The Proposed Actions are subject to the Uniform Land Use Review Procedure (ULURP) and environmental review pursuant to the State Environmental Quality Review Act (SEQRA) and City Environmental Quality Review (CEQR) guidelines and procedures. An Environmental Assessment Statement (EAS) was prepared for the Proposed Actions. The New York City (NYC) Department of City Planning (DCP) is serving as the CEQR lead agency.

Separate from the Proposed Actions, DCP is proposing a citywide zoning text amendment, the *City of Yes for Housing Opportunity* "CHO" (CEQR No. 24DCP033Y) to expand opportunities for housing within all zoning districts, and across all 59 of the City's Community Districts. These changes to the Zoning Resolution would enable more housing and a wider variety of housing types in every neighborhood, from the lowest density districts to the highest, to address the housing shortage and high cost of housing in New York City.

The *CEQR Technical Manual* recommends documentation of assessment of changes to a proposed project in a "Technical Memorandum." This technical memorandum assesses whether the proposed CHO text amendments would alter the conclusions of the EAS. The potential for this proposal to modify the Proposed Project is described in Section III, "Potential Project Modification" of this memorandum.

II. RWCDS ANALYZED IN THE EAS

The RWCDS analyzed in the EAS is summarized in **Table 1**.

Table 1: Reasonable Worst Case Development Scenario

Land Use	Existing Condition (gsf)	No-Action Condition (gsf)	With-Action Condition (gsf)	Increment (gsf)
Projected Development Sites 1 (Block 6990, Lot 10)				
Residential (gsf)	0	0	159,780	159,780
dwelling units (DUs)	*0*	*0*	*(145 DUs)*	*(145 DUs)*
Parking (gsf)	0	0	20,980	20,980
(spaces)	*0*	*0*	*60*	60
Commercial: Retail (gsf)	25,298	25,298	22,600	-2,698
Total (gsf)	25,298	25,298	**203,360**	**178,062**
Potential Development Site 1 (Block 6990, Lot 20)				
Residential (gsf)	0	0	175,580	175,580
dwelling units (DUs)	0	0	(N/A)	N/A
Commercial: Retail (gsf)	25,000	25,000	22,900	-2,100
Total (gsf)	**25,000**	**25,000**	**198,480**	**173,480**

POTENTIAL FOR PROJECT MODIFICATION UNDER CHO (CEQR No. 24DCP033Y)

The CHO text amendment seeks to enable more housing and wider variety of housing types in all neighborhoods citywide, but particularly in areas that are transit-rich, from the lowest-density districts to the highest, to address the housing shortage and high cost of housing in New York City. To that end, CHO comprises project components in four broad categories: Medium- and High-Density proposals in R6-R10 districts and equivalents; Low-Density proposals in R1-R5 districts and equivalents; Parking proposals, which span the full range of districts and densities; and assorted other changes in line with project goals. In general, these changes will apply in underlying zoning districts, Special Districts, and other geographies that modify underlying zoning, with limited adjustments to reflect planning goals in specific areas. An assessment of CHO components and their applicability to the Proposed Project is provided below.

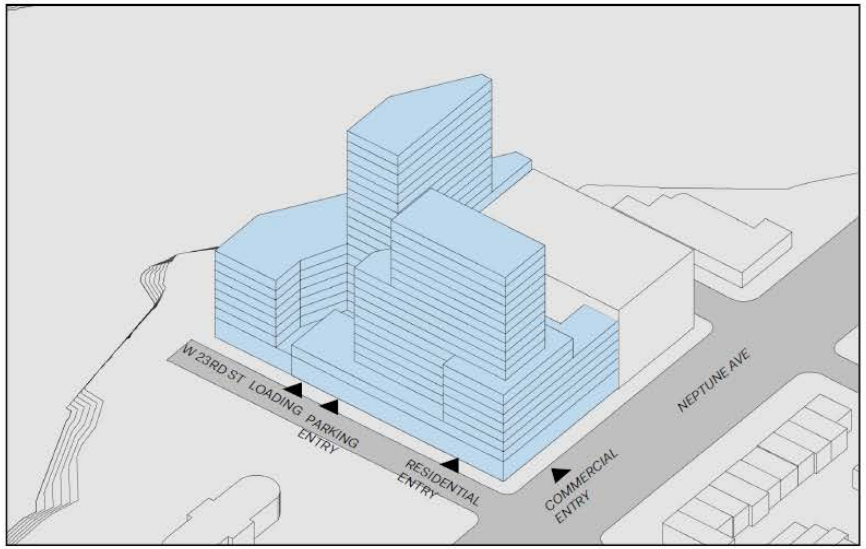
Under the Proposed Actions, CHO would allow for an increase in the maximum permitted base height from 85 feet to 105 feet, the reduction of dwelling unit factor (DUF) from 680 to 500, and the elimination of parking requirements for new dwelling units. CHO would not result in changes to allowable residential FAR or permitted accessory parking, though community facility FAR could be increased up to 6.5 FAR.

III. ASSESSMENT OF IMPACTS OF PROPOSED MODIFICATIONS TO THE PROPOSED PROJECT

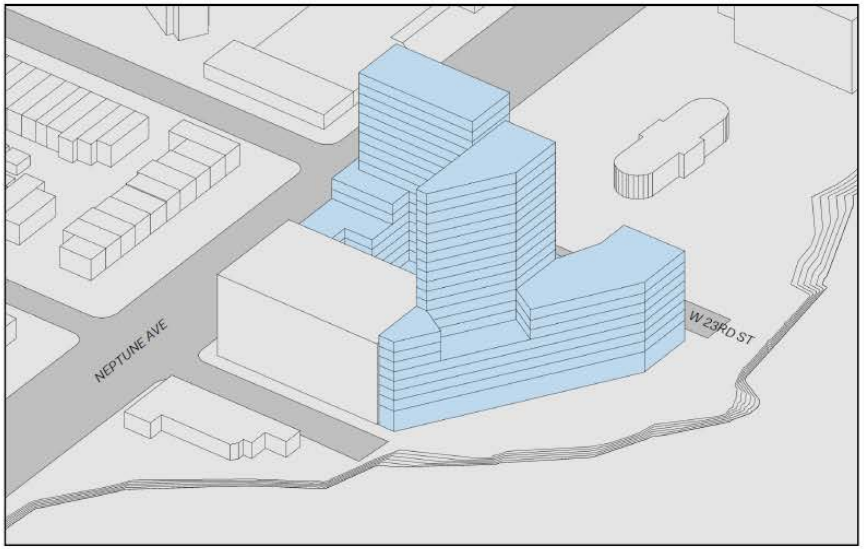
Under the CHO proposal, the maximum permitted number of dwelling units will be based on the calculation of the maximum permitted residential floor area (minus any non-residential floor area provided on the zoning lot) divided by a reduced factor of 500. Projected Development Site 1 is located within a zoning lot that comprises an existing women's shelter with 198 rooming units, which are permitted to be classified as a residential use under CHO. If the existing shelter units are qualified as residential use, the number of dwelling units that are permitted on the Projected Development Site 1 would be limited to approximately 219 DUs under CHO. This maximum number of dwelling units would be further reduced by Mandatory Inclusionary Housing requirements, including unit mix, distribution and layout requirements as set forth in the New York City Department of Housing Preservation and Development's guidelines. Additional practical

limitations further constrain the addition of more than 145 DUs on the zoning lot, including flood zone requirements, distance between building requirements, 485-x thresholds for projects with 150 or more dwellings, and the local preference for 2-3 bedroom-units as stated by elected officials and community board members. The currently proposed base height is contextual to the adjacent shelter building, and any increase in base height (without any increase in FAR) would not affect the dwelling unit density. CHO, as proposed, would result in the elimination of parking requirements for new dwelling units on Projected Development Site 1. However, a similar amount of off-street accessory parking would be provided onsite as an amenity for new residents of Projected Development Site 1 based on feedback received from elected officials and community board members.

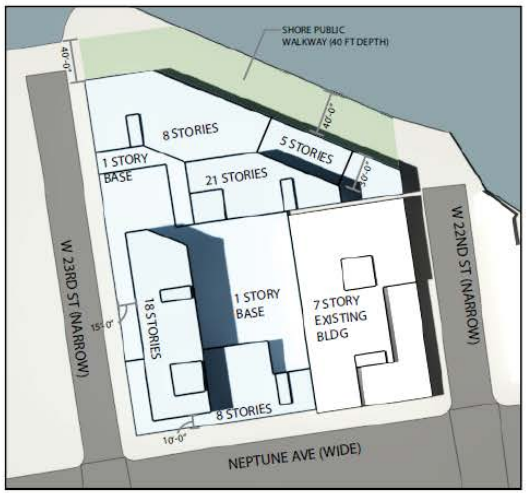
However, Potential Development Site 1 may be influenced by two provisions under CHO, including waterfront provisions (ZR 62-343(a)), which allows a maximum building height of 375 feet, and penthouse provisions (ZR 62-34(c)) which allows a 15% height increase, if the gross area of the highest stories do not exceed 90% of the gross area of the story directly below it. Development constraints that prevent the most conservative assumption of 375 feet for a building on Potential Development Site 1 include site geometry, waterfront access requirements, height and tower restrictions, and FAR limitations. The non-CHO massing maxes out the available floor area on the site, however, with the CHO street wall requirement along the shoreline public walkway, a portion of floor area on the façade fronting the walkway can be taken out and transferred to the topmost tier of the building, resulting in an additional two stories on the highest building tier and totaling 21 stories (**Figure 1: CHO Massing**). This would result in a revised building height of approximately 215 feet for Potential Development Site 1, which would be approximately 25 feet higher than the building height in absence of CHO. The following section analyzes changes to relevant City Environmental Quality Review (CEQR) technical areas resulting from this change in building height.



South-West Axonometric View



North-East Axonometric View



Site Plan

Source: Dattner Architects
For Illustrative Purposes Only

WITH CITY OF YES HOUSING OPPORTUNITY (CHO) MASSING

Figure 1
2201-2227 Neptune Avenue Rezoning EAS - CHO Technical Memorandum

IV. ANALYSIS OF CEQR TECHNICAL AREAS FROM CHO

Since the CHO provisions may affect Potential Development Site 1, an evaluation of the potential for changes to conclusions of site-specific analyses is presented below.

Shadows

Due to the potential height increase with CHO, incremental shadows were analyzed to evaluate the increased duration of shadows on nearby sunlight-sensitive resources. Five sunlight sensitive resources were analyzed in EAS Attachment D, "Shadows." A Tier 3 Screening Assessment was conducted to identify any additional increases in shadows from CHO. The adjusted building height analyzed in the Tier 3 assessment, with the changes from CHO on Potential Development Site 1, was 225 feet (215-foot building height plus a ten-foot bulkhead) (**Figures 2 - 6: Tier 3 Incremental Shadows**). This increased the longest shadow radius to 967.7 feet from the previous 881.5-foot without CHO. The Tier 3 Screening assessment indicates that incremental shadows would increase marginally across all sunlight sensitive resources.

For the Coney Island Community Garden, the Proposed Actions (without CHO) would result in a 3.5 and 4 hours of shadows at the beginning of the May 6th and June 21st analysis days, which represent the growing season. The shadows would leave the resource area at 10:11am both analysis days. With the increased building height facilitated by CHO, this assessment does not change, and the vegetation would continue to receive six to eight hours of sunlight each day during the summer months. The 20-foot height increase on Potential Development Site 1 facilitated by CHO would not change the conclusions made in Attachment D, "Shadows" for the Coney Island Community Garden.

For the Mark Twain IS 239 for the Gifted and Talented, the Proposed Actions (without CHO) would result in 12 minutes of shadows during the March 21st analysis day, 30 minutes of shadows during the May 6th analysis day, and 1 hour and 6 minutes for the June 21st analysis day. The increased shadows with CHO would slightly increase the duration of shadows on the Mark Twain IS 239 school as shown in the Tier 3 assessment. However, as noted in the shadows attachment, the design elements of this resource are not part of a recognized architectural style that depend on the contrast between light and dark design elements, nor do the exterior materials and color depend on direct sunlight for visual character. Therefore, the slight increase in shadows with CHO would not change the conclusions made in Attachment D, "Shadows" for the Mark Twain IS 239 for the Gifted and Talented.

For the Coney Island Fire Station Pumping Station, the Proposed Actions (without CHO) would result in 2 hours and 55 minutes during the March 21st analysis day, 3 hours and 44 minutes during the May 6th analysis day, and 4 hours and 14 minutes on the June 21st analysis day. The increased shadows facilitated by CHO would slightly increase the duration of shadows on the Coney Island Fire Station Pumping Station, as shown in the Tier 3 assessment. However, as noted in the shadows attachment, the design elements of this resource are not part of a recognized architectural style that depend on the contrast between light and dark design elements, nor do the exterior materials and color depend on direct sunlight for visual character. Therefore, the slight increase in shadows with CHO would not change the conclusions made in Attachment D, "Shadows" for the Coney Island Fire Station Pumping Station.

For the Coney Island Creek, the shadows created by the Proposed Actions (without CHO) would move eastward at the start of all analysis days and would not affect one specific area of the Coney Island Creek for long durations. The areas that would receive the longest durations of shadows would receive more than four hours of direct sunlight between the start and end of all analysis days. The increased height with CHO would result in a larger shadow area, but the duration of shadows over the Coney Island Creek would remain the same. The slightly increased shadow area would not change the conclusions made in the Attachment D, "Shadows" for the Coney Island Creek.

For the Coney Island Boat Basin, the shadows created by the Proposed Actions (without CHO) would only affect the resource on the December 21st analysis for a period of 1 hour and 32 minutes. The result of the

Tier 3 assessment with the revised CHO building height on Potential Development Site 1 indicates a portion of shadow touching the walkway at the very end of the March 21st analysis day, at approximately 4:15pm, as well as a slightly increased duration of shadows experienced on the December 21st analysis day. This change would not alter the conclusions made in Attachment D, “Shadows”, that although the walkway on the southeastern portion of the Coney Island Boat Basin would be cast in incremental shadows, this area represents less than five percent of the total area of the park where minimal use is expected and therefore, no significant adverse impacts to the resource would occur to the Coney Island Boat Basin as a result of the shadows.



Sources: 2023 PLUTO, DCP, NYS GIS Program Office (GPO) 2021

0 250 500 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

(#) Sunlight-Sensitive Resources (Keyed to Table C-1)

(WITH CHO) TIER 3 SHADOW SCREENING ASSESSMENT MAP

December 21st Analysis Day

2201-2227 Neptune Avenue EAS



Sources: 2023 PLUTO, DCP, NYS GIS Program Office (GPO) 2021

0 250 500 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

(#) Sunlight-Sensitive Resources (Keyed to Table C-1)

(WITH CHO) TIER 3 SHADOW SCREENING ASSESSMENT MAP

March 21st Analysis Day

2201-2227 Neptune Avenue EAS



Sources: 2023 PLUTO, DCP, NYS GIS Program Office (GPO) 2021

0 250 500 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

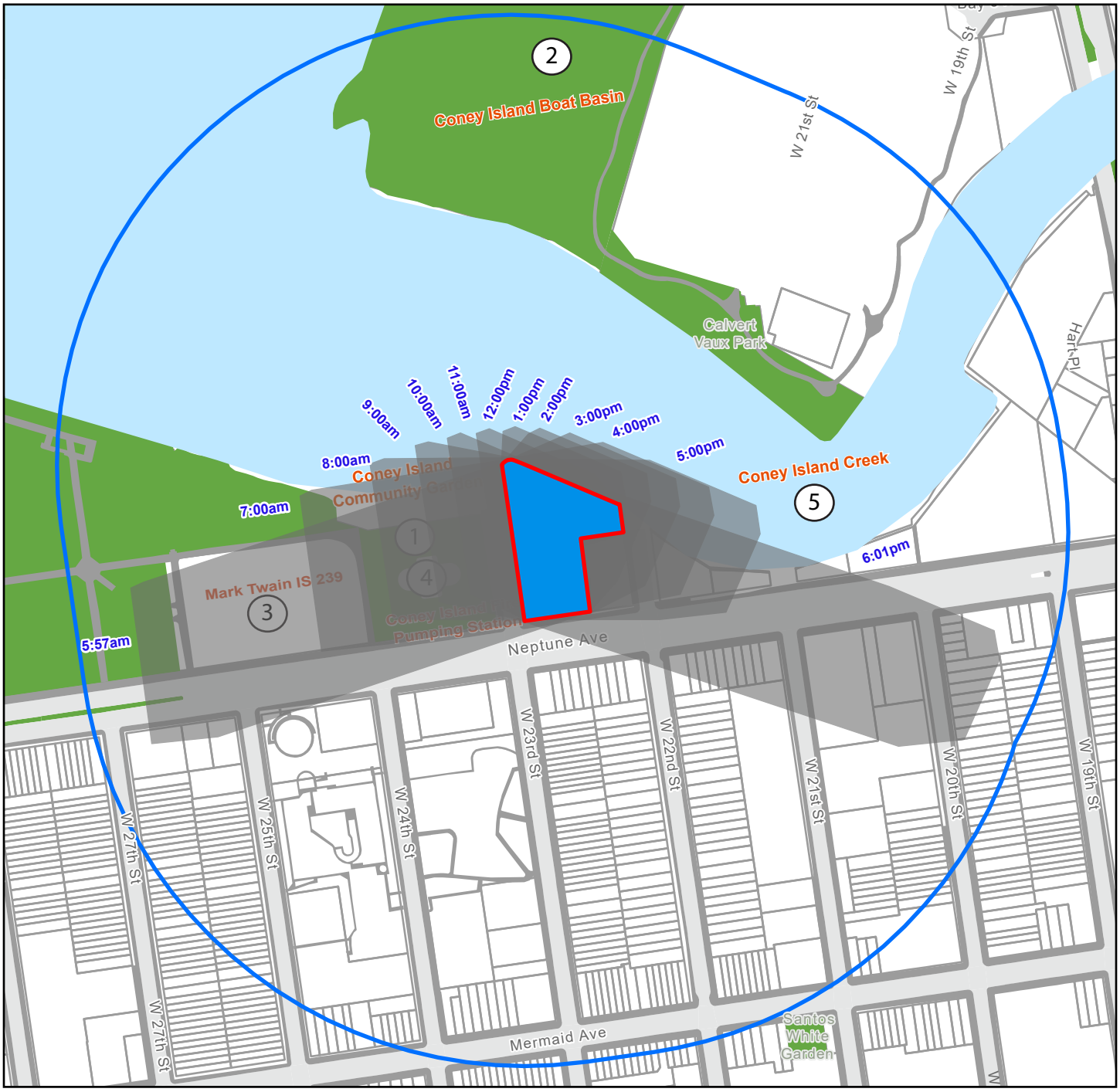
Longest Shadow Study Area Boundary

(#) Sunlight-Sensitive Resources (Keyed to Table C-1)

(WITH CHO) TIER 3 SHADOW SCREENING ASSESSMENT MAP

May 6th Analysis Day

2201-2227 Neptune Avenue EAS



Sources: 2023 PLUTO, DCP, NYS GIS Program Office (GPO) 2021

0 250 500 1,000 Feet

Projected Development Site 1 and Potential Development Site 1

Longest Shadow Study Area Boundary

(#) Sunlight-Sensitive Resources (Keyed to Table C-1)

(WITH CHO) TIER 3 SHADOW SCREENING ASSESSMENT MAP

June 21st Analysis Day

2201-2227 Neptune Avenue EAS

Historic and Cultural Resources

Attachment E, “Historic and Cultural Resources”, established two resources within a 400-foot study area including: the Coney Island Fire Station Pumping Station and the Mark Twain IS 239 school. These resources were analyzed for any potential increases in incremental shadows resulting from the additional height facilitated by CHO and the tier 3 assessment indicated a marginal increase in shadows. However, this increase in shadows would not change the conclusions made in Attachment D, “Shadows”, and Attachment E, “Historic and Cultural Resources”, that despite the duration of shadows on these resources, the design elements of these resources are not part of a recognized architectural style that depends on the contrast between light and dark design elements, nor do the exterior materials and color depend on direct sunlight for visual character. Therefore, the historic resources would not be affected by the increase in shadows with CHO and no significant adverse impacts to historic and cultural resources would occur.

Urban Design and Visual Resources

Compared to the With-Action condition analyzed in the EAS, the potential changes to the building height on Potential Development Site 1 as facilitated by CHO could allow for the development of a 215’ mixed residential and commercial building. This building would be setback from Neptune Avenue behind the Proposed Project on Projected Development Site 1 and would be visually obstructed by the Proposed Project as seen from pedestrians walking along Neptune Avenue. Where views of the full building height are expected, the changes in height to Potential Development Site 1 facilitated by CHO would not result in alterations large enough to change the determination disclosed in Attachment F, “Urban Design and Visual Resources”. Therefore, no significant adverse impacts to Urban Design and Visual Resources would occur as a result of CHO.

Natural Resources

As described in Attachment G, “Natural Resources”, Coney Island Creek is an established natural resource and is adjacent to Potential Development Site 1. Any development that would occur on Potential Development Site 1 would be subject to permits from New York State Department of Environmental Conservation and U.S. Army Corps of Engineers. Although the height increase facilitated by CHO would slightly increase the shadow area, the duration of shadows would remain largely unchanged from what was analyzed in Attachment D, “Shadows”. Therefore, no significant adverse impacts to natural resources would occur.

Hazardous Materials

As described in Attachment H, “Hazardous Materials”, because of the current M1-2 zoning on Potential Development Site 1 and the current manufacturing uses that exist on the site, the potential for Recognized Environmental Conditions (REC) exists and an (E) designation is required to ensure any sampling, testing, and remediation of potential RECs would occur before development of the site. Any future changes to development on Potential Development Site 1 facilitated by CHO would be covered under the (E) designation (**E-816**) established in Attachment H, “Hazardous Materials” and no significant adverse impacts related to hazardous materials would occur.

Air Quality

As described in Attachment I, “Air Quality”, due to the Potential Development Site 1 being under separate ownership and Local Law 154 (prohibiting use of fossil fuels on all buildings seven stories or taller) not being in effect until 2027, a natural gas-powered HVAC stack was assumed in the stationary source modeling. The stationary source analysis determined that an (E) designation (**E-816**) was required for any new residential development and/or commercial development on Potential Development Site 1 to ensure the use of natural gas for the HVAC system and the placement of the HVAC and hot water equipment stack at a minimum height of 193.8 feet above grade. The additional height enabled under CHO would increase the building height to 215 feet, above the minimum height identified by the **E-816** and would therefore, meet

the height requirements of the (E) designation. Therefore, the additional height enabled under CHO would be covered under the (E) designation (**E-816**) and no significant adverse impacts to air quality would occur.

V. CONCLUSION

This Technical Memorandum concludes that the proposed changes that would be facilitated by CHO would not result in any significant adverse impacts, nor would the proposed changes affect the conclusions presented within the EAS.