Revised ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) & SUPPLEMENTAL STUDIES TO THE EAS

41 Summit Street Rezoning

***Revised Environmental Assessment Statement**

41 Summit Street
Brooklyn, NY

CEQR # 18DCP123K

Prepared for:
41 Summit Street LLC
1556 59th Street
Brooklyn, NY 11219

Prepared by:
AECOM USA, Inc.
125 Broad Street
New York, NY 10004

AECOM Project No. 60570057

This Revised EAS and appended Technical Memorandum supersede the EAS issued on September 21st, 2018 for the 41 Summit Street Rezoning Proposal (CEQR # 18DCP123K). Since certification of the proposal on September 24th, 2018, the applicant has revised the proposed zoning map amendment over Brooklyn Block 354, Lots 1, 3, and 60 from M1-1 to an R6A/C2-4 zoning district. The first proposal called for an R7A/C2-4 zoning district. This revised EAS and tech memo reflect the updated zoning map amendment and updated Projected Development Site Future With-Action Scenarios. As the updated proposal contains a lower density zoning district, this updated proposal would not alter the conclusions of the original EAS, which found no significant adverse impacts. This revised EAS reflect the updated proposed project, including the potential CPC modifications.

September 21st, 2018
***Revised February 22nd, 2019**

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* 41 Summit Street Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
18DCP123K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
1802994ZMK , N180295ZRK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning			41 Summit Street LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Robert Dobruskin			Amanda Iannotti		
ADDRESS 120 Broadway			ADDRESS 18 East 41st Street, 5th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10016
TELEPHONE (212) 720-3423	EMAIL rdobrus@planning.nyc.gov		TELEPHONE (212) 725-2727	EMAIL aiannotti@sheldonlobelpc.com	

5. *Project Description*

The Applicant, 41 Summit Street LLC, seeks a zoning map amendment to rezone three tax lots (Block 352, Lots 1, 3 and 60) from an M1-1 zoning district to an R7A/C2-4 zoning district in the Carroll Gardens neighborhood of Brooklyn, Community District 6. The Applicant controls Block 352, Lot 60 and seeks to redevelop the site ("proposed development site") with a seven-story, 65-foot-tall residential building that contains seven dwelling units.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 6	STREET ADDRESS 41 Summit Street
TAX BLOCK(S) AND LOT(S) Block 352, Lots 1, 3 and 60		ZIP CODE 11231

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The rezoning area is a portion of the block bound by Summit Street to the south, Van Brunt Street to the west, Carroll Street to the north and Columbia Street to the east.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1 | ZONING SECTIONAL MAP NUMBER 16a

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

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

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.): Approx. 10,477 (rezoning area)
Waterbody area (sq. ft) and type: N/A
Roads, buildings, and other paved surfaces (sq. ft.): Approx. 10,477
Other, describe (sq. ft.): N/A

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): 46,694
10,000 (Lot 60), 36,694 (Lots 1 & 3)
NUMBER OF BUILDINGS: 2
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 10,000 (Lot 60); 36,694 (Lots 1 and 3)
HEIGHT OF EACH BUILDING (ft.): 65' (Lot 60) 95' (Lots 1 &3)
NUMBER OF STORIES OF EACH BUILDING: 5 (Lot 60) 8 (Lots 1 & 3)

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: 2,500 (Proposed Development Site)
The total square feet non-applicant owned area: 7,977

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: TBD sq. ft. (width x length)
VOLUME OF DISTURBANCE: TBD cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: TBD 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.)	36,217	10,477	0	0
Type (*e.g.,* retail, office, school)	43 units	Retail		

Does the proposed project increase the population of residents and/or on-side workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: +/-93 NUMBER OF ADDITIONAL WORKERS: +/-33
Provide a brief explanation of how these numbers were determined: Average household size for CD 6 (2.19); approximately 0.04 employees per dwelling unit plus 3 employees per 1,000 sf retail floor area

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): 2022
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 24
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☒	☐
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **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)	☐	☒
○ **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)	☐	☒
○ **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 proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒
5. *SHADOWS*: CEQR Technical Manual Chapter 8		

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

	YES	NO
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 4,072		
○ 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): 5,916,155 Million BTUs per year		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
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 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒

	YES	NO
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
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. Although no detailed analysis not required, a brief description of neighborhood character is included in the Supplemental Studies to the EAS report.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.		

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
Max Meltzer	September 21st, 2018

SIGNATURE 

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, EARD	Department of City Planning
NAME	DATE
Olga Abinader	September 21, 2018

SIGNATURE

NEGATIVE DECLARATION (Use of this form is optional)

Statement of No Significant Effect

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

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed action sought before the City Planning Commission would have no significant effect on the quality of the environment. Reasons supporting this determination are noted below.

Hazardous Materials, Air Quality & Noise: An (E) designation for Hazardous Materials, Air Quality & Noise (E-504) has been incorporated into the proposed action. Refer to "Appendix I: (E) Designation" for a list of the sites affected by the proposed (E) designation and applicable (E) designation requirements. With these measures in place, the proposed action would not result in significant adverse hazardous materials, air quality or noise impacts.

Shadows: A detailed analysis of shadows is included in this EAS. The analysis concludes that incremental shadows would be cast on two sunlight sensitive resources: The Harold Ickes Playground and The Backyard Garden. New incremental shadows would be cast on portions the Backyard Garden on all four analysis days. New shadows will cover between 5% and 50% of the garden for periods ranging from 6 hours and 2 minutes on December 21, to 8 hours and 53 minutes on March 21. No part of the garden would be in constant shadow, as the shadow would sweep across the garden during the course of the day. As a result, the garden would receive sufficient sunlight during the growing season. New incremental shadows would also be cast on the Harold Ickes Playground on the March, May and June analysis days with durations ranging from 19 minutes on March 21 to 2 hours and 28 minutes on June 21. These shadows would also sweep across the playground between the hours of 5:57a.m. and 8:25 a.m., which is typically prior to the time of substantial use. No other open space, historic, or other resources would be affected by shadows generated by the proposed actions. The proposed actions would not result in any significant adverse shadows impacts.

Urban Design and Visual Resources: The EAS contains a detailed analysis of urban design and visual resources. It concludes that the proposed actions would not result in any significant impacts to the visual resources, or any change to the arrangement or orientation of surrounding streets or sidewalks in the vicinity of the affected area. The proposed actions would not result in significant adverse impacts to urban design or visual resources.

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

TITLE	LEAD AGENCY
Acting Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME	DATE
Olga Abinader	09/21/2018
SIGNATURE	

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE 09/24/2018
SIGNATURE	

Appendix 1: (E) Designations

To ensure that there would be no significant adverse **hazardous materials** impacts associated with the proposed project, an E designation (E-**504**) will be placed on the project sites as follows:

Potential Development Site 2 (non-applicant owned): **Block 352, Lots 1, 3**

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

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To ensure that there would be no significant adverse **air quality** impacts associated with the proposed project, an E designation (E-**504**) will be placed on the project sites as follows:

Projected Development Site 1 (applicant owned): **Block 352, Lot 60**

Any new residential/commercial development or enlargement on the above-referenced property must use natural gas exclusively as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and ensure that the HVAC stack(s) is located at the highest tier, at least 68 feet above grade, and is at least 15 feet from the lot line facing Van Brunt Street.

Projected Development Site 2 (non- applicant owned): **Block 352, Lot 1, 3**

To preclude the potential for significant adverse air quality impacts from emissions from the Hugh L. Carey Tunnel ventilation building, for any new residential/commercial development or enlargement on the above-referenced property, no operable windows or air intakes would be permitted at the height of 90 feet or more above grade within 20 feet setback from the lot line facing Summit Street.

To ensure that there would be no significant adverse **noise** impacts associated with the proposed project, an E designation (E-**504**) will be placed on the project sites as follows:

Projected Development Site 1 (applicant owned): **Block 352, Lot 60**

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all building's facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

Projected Development Site 2 (non- applicant owned): **Block 352, Lot 1, 3**

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all building's facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

AECOM Environment

Prepared for:
41 Summit Street LLC
1556 59th Street
Brooklyn, NY 11219

Prepared by:
AECOM
125 Broad Street
New York, NY 10004

AECOM No. 60438124

41 Summit Street Rezoning

Supplemental Studies to the Environmental Assessment Statement

September, 2018

Proposed Development Site:

41 Summit Street (Block 352, Lot 60)
Brooklyn, NY

Prepared for:

41 Summit Street LLC
1556 59th Street
Brooklyn, NY 11219

Prepared by:

AECOM
125 Broad Street
New York, NY 10004

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1.0 PROJECT DESCRIPTION

1.1 Proposed Action

The Applicant, 41 Summit Street LLC, seeks a zoning map amendment to rezone three tax lots (Block 352, Lots 1, 3, and 60) from an M1-1 zoning district to an R7A/C2-4 zoning district in the Columbia Street Waterfront District of Brooklyn Community District (CD) 6, in order to facilitate the development of a residential building on Lot 60 (41 Summit Street). The Applicant also seeks a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the rezoning area. The Applicant proposes to develop a new seven-story (plus cellar) residential building at 41 Summit Street containing seven dwelling units. The proposed development would have a maximum residential floor area of 10,000 zoning square feet (zsf). This would represent a maximum floor area ratio (FAR) of 4.0, which is permitted in the proposed R7A/C2-4 district given Lot 60's constraints (discussed below). The proposed development site contains a vacant, approximately 3,500 square-foot (sf), industrial-use building.

1.2 Project Location

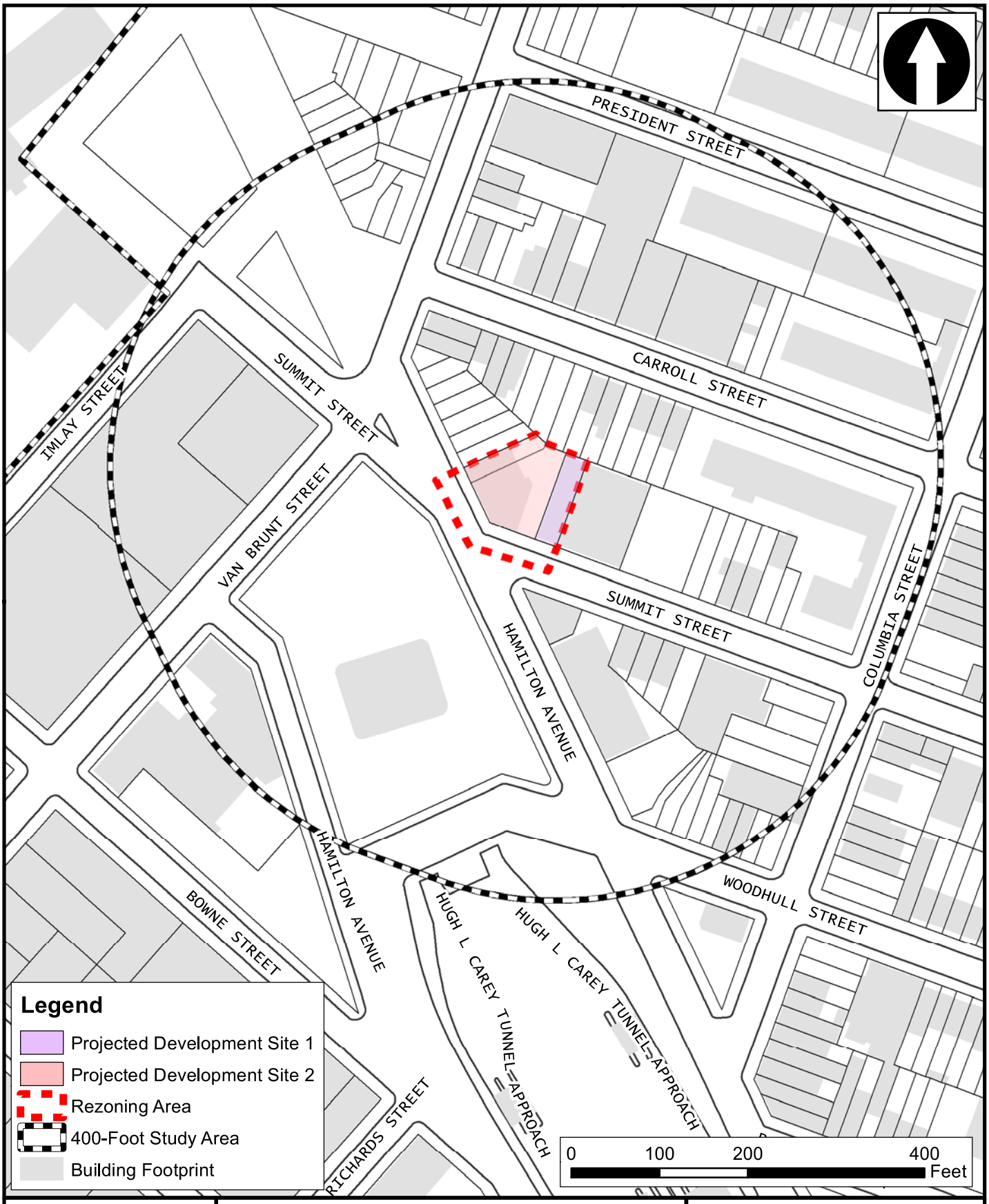
The rezoning area is located in the Columbia Street Waterfront District of Brooklyn (**Figure 1**). The proposed development site is located at 41 Summit Street on Block 352, Lot 60 (**Figure 2**). The total lot area is approximately 2,500 sf, and the site is presently improved with a two-story, vacant, approximately 3,500 square-foot (sf), industrial-use building. Other lots in the rezoning area include Block 352, Lots 1 and 3. Block 352, Lot 1 is an approximately 6,135 sf lot that is presently improved with a two-story bank. Block 352, Lot 3 is an approximately 1,842 sf lot that is presently improved with a three-story mixed residential and commercial building with ground floor commercial space and residential units on the second and third floors. A key to photographs of the site and surrounding area is shown in **Figure 3** with the photographs displayed in **Figure 4**.

This EAS studies the potential for individual and cumulative environmental impacts related to the proposed action occurring in a study area of approximately 400 feet around the rezoning area. The study area is generally bound by President Street to the north, Columbia Street to the east, Imlay Street to the west, and the midpoint between Hamilton Avenue and Bowne Street to the south.

1.3 Proposed Development

The Applicant proposes to develop a new seven-story (plus cellar) residential building at 41 Summit Street (Block 352, Lot 60) containing seven dwelling units. This building would be developed at 4.0 FAR, representing approximately 10,000 square feet of zoning floor area. Pursuant to the MIH Program development of less than ten units or less than 12,500 sf of residential floor area is exempt from providing affordable units. The proposed development is exempt from providing affordable units. The maximum building height would be 64.75 feet and parking requirements would be waived.[1]

[1] Pursuant to ZR § 25-241 the minimum required parking spaces for the proposed development would be two spaces, and these spaces would waived pursuant to ZR § 25-261 as less than 15 spaces are required.

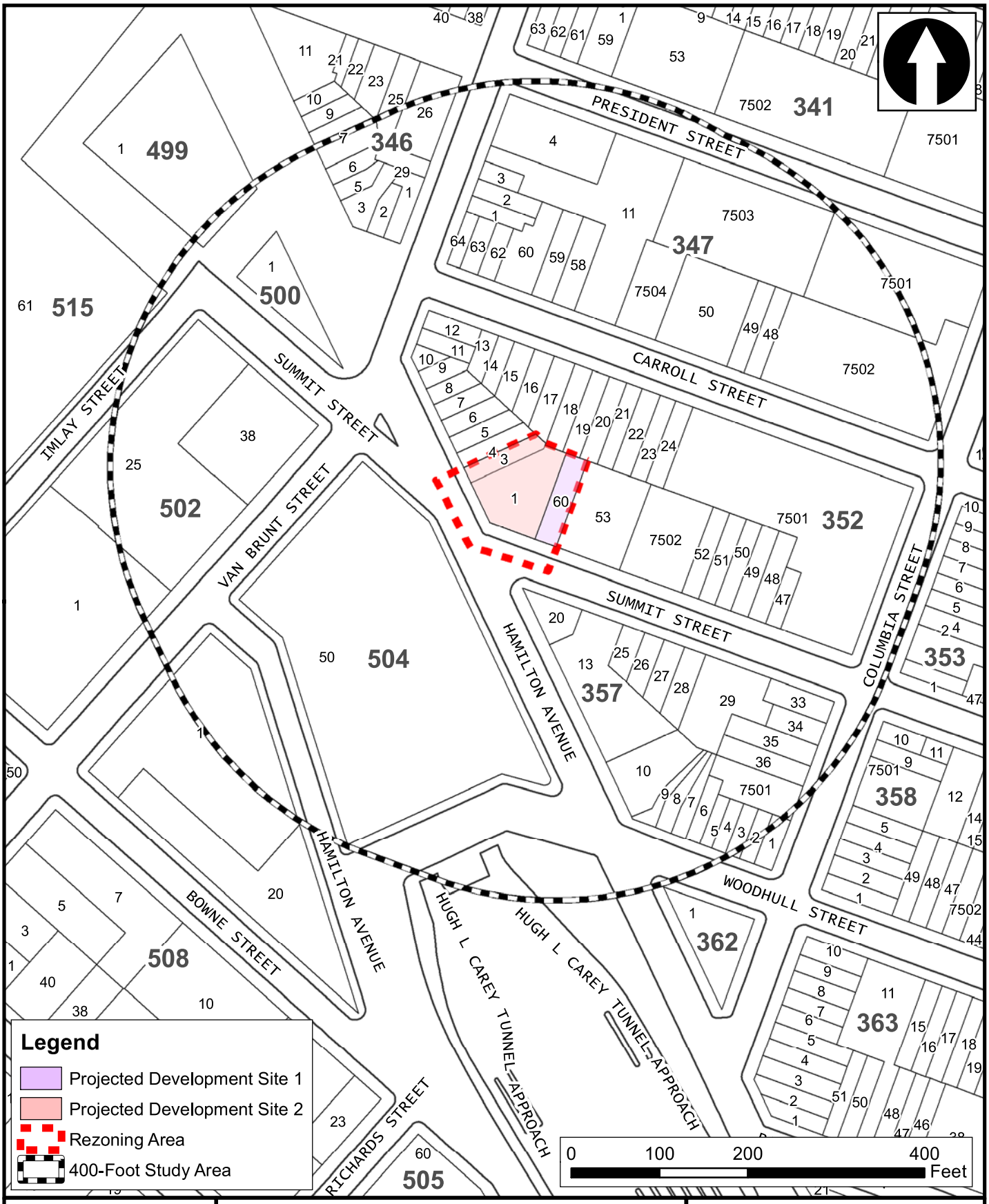


AECOM

Environmental Assessment Statement
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Project Site Location

Figure 1

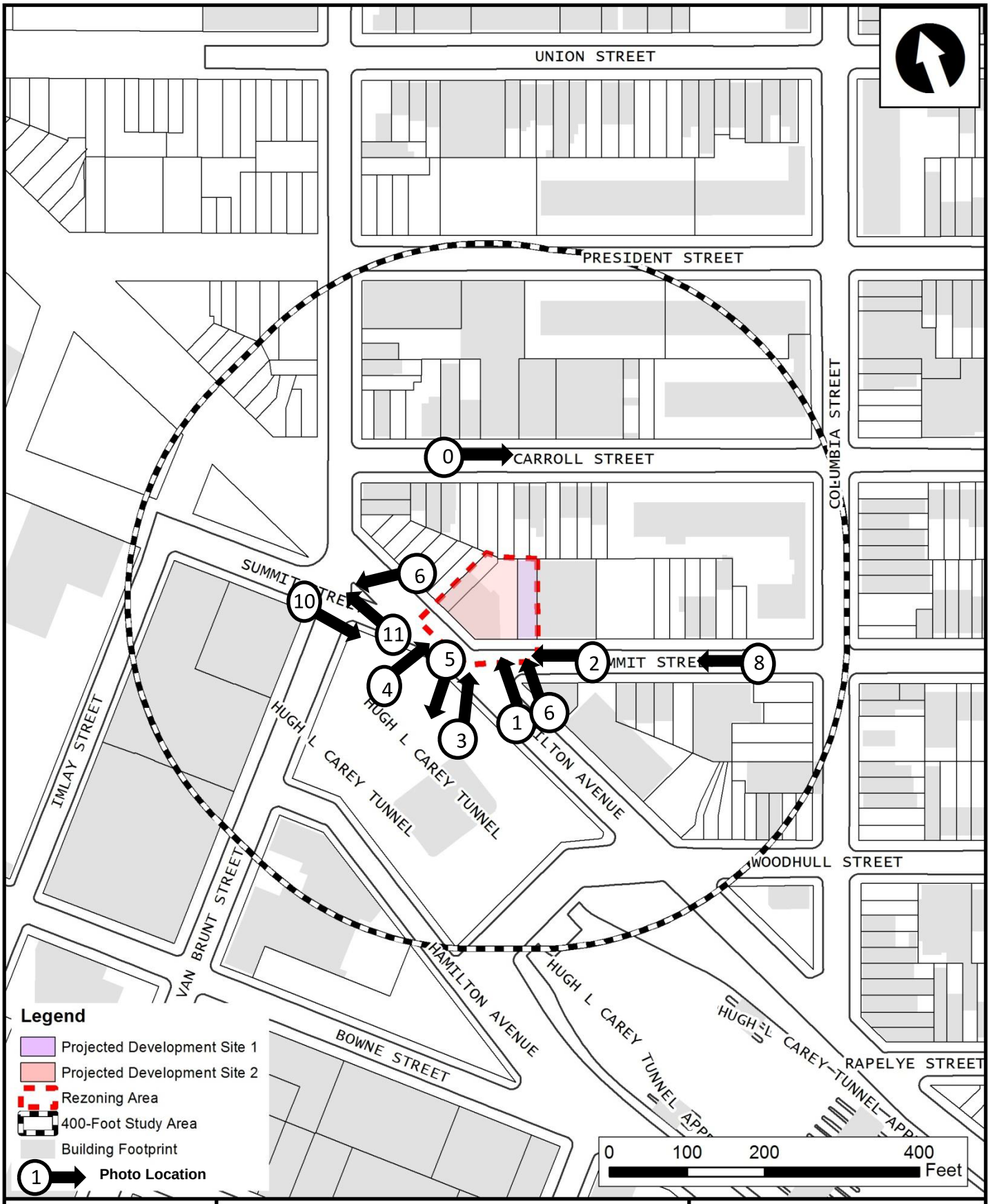


AECOM

Environmental Assessment Statement
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Tax Map

Figure 2



AECOM

Environmental Assessment Statement
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Photo Key Map

Figure 3

Figure 4 Photographs of the Site and Surrounding Area

Photograph 1 **Photos taken August 7th, 2018**

View of the proposed development site also referred to as Projected Development Site 1) at 41 Summit Street (Lot 60), looking north

Photograph 2

View of Summit Street adjacent to the projected development site, looking west toward Hamilton Avenue

Photographs 3 & 4

View of Projected Development Site 2 consisting of the two-story neighboring retail bank (Lot 1, above) and three-story mixed-use residential and commercial building (Lot 3, below)

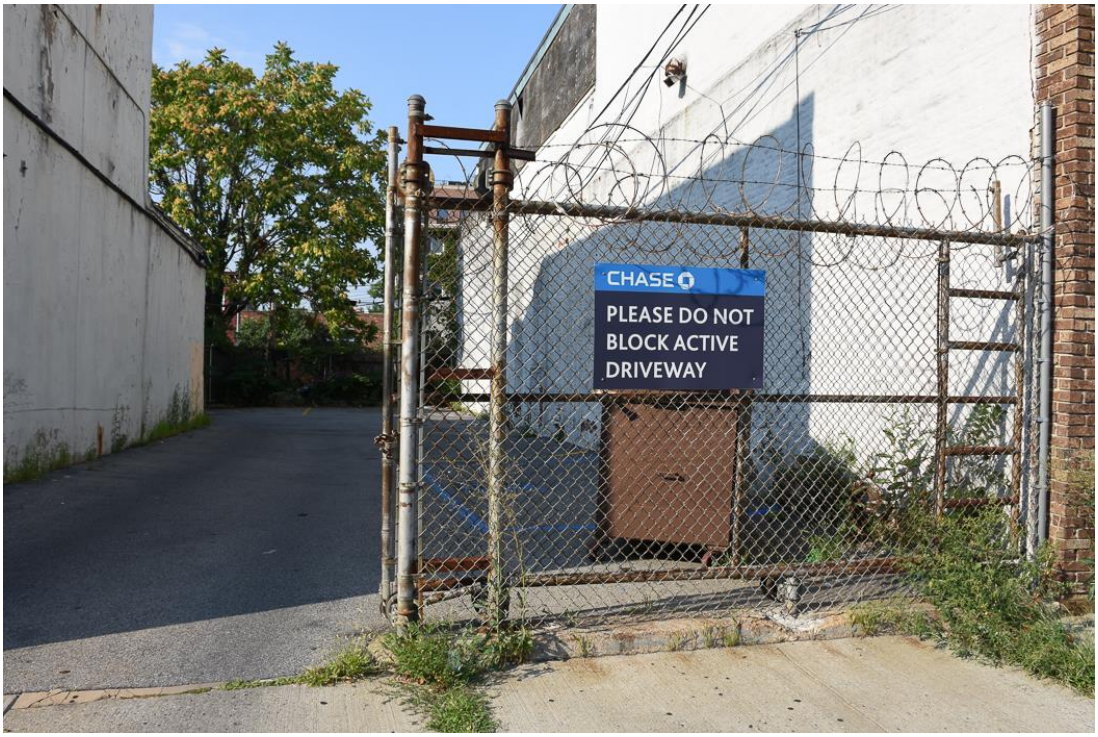
Photograph 5

View of the ventilation shaft for the Hugh L. Carey Tunnel and the Harold Ickes Playground from Projected Development Site 2, looking southwest

Photograph 6

View of industrial building at the corner of Summit Street and Van Brunt Street

Photograph 7



View of the surface parking lot between 41 Summit Street and the adjacent retail bank

Photograph 8

View of Summit Street, looking west toward Hamilton Avenue

Photograph 9

View of residential uses on Carroll Street, looking east toward Columbia Street

Photograph 10

View of warehouse at the intersection of Summit Street and Hamilton Avenue looking south

Photograph 11

Northwest view from Hamilton Avenue and Van Brunt Street, toward the Red Hook Container Terminal entrance and the Backyard Garden located west of Projected Development Site 2

1.4 Purpose and Need

R7A districts are contextual residential zoning districts designed to encourage the development of Quality Housing buildings with a maximum permitted FAR of 4.0, or 4.6 with inclusionary housing. The proposed rezoning to an R7A zoning district would enable the Applicant to develop the proposed development site – an underutilized, vacant site – with a residential building consistent with the built character of the surrounding area. Without the proposed rezoning, the site would likely remain vacant as it has for the past few years, due to the waning industrial interest in the area. An R7A district, the lowest density residential district that allows for an FAR of 4.0, is proposed as the site is unlikely to be redeveloped at a lower density.

Several rezonings and BSA variances within the surrounding area have been approved to reflect the changing conditions of the neighborhood from industrial to residential use. As discussed in more detail in Section 2.1, these land use approvals have facilitated residential development and have brought existing residential and commercial uses into conformance. The proposed rezoning would therefore be consistent with the increasing presence of residential uses and the built character of the neighborhood.

The proposed R7A zoning district is appropriate in terms of density and permitted bulk as the proposed rezoning area is (1) uniquely located at a node between the neighborhoods of Red Hook and Carroll Gardens, (2) located near the Gowanus Expressway and the entrance to the Hugh L. Carey Tunnel, and (3) located across from a park, allowing for greater light and air and distinguishing it from the more uniform mid-block character within the surrounding area. In addition, the proposed rezoning would bring the existing non-conforming and non-complying building on Lot 3 into conformance and compliance in terms of its existing residential use and its existing floor area and FAR. Moreover, the proposed C2-4 overlay over the proposed rezoning area is consistent with the existing commercial uses on Lots 1 (bank) and 3 (former restaurant, available commercial space), and would ensure the continued conformance of these existing buildings in terms of their existing commercial uses.

Finally, although the Applicant's proposed project is exempt from providing affordable units pursuant to ZR § 23-154(d)(4)(i), the proposed text map amendment to ZR Appendix F would allow the other lots located within the proposed rezoning area to develop in accordance with the MIH program.[2] The applicant proposes mapping MIH Options 1 and 2 within the proposed rezoning area to provide maximum flexibility for non-applicant controlled sites. Option 1 requires 25 percent of residential floor area to be set aside for affordable housing units for residents with incomes averaging 60 percent of the area median income (AMI), with a minimum of ten percent of housing to be affordable at 40 percent AMI. Option 2 requires 30 percent of residential floor area to be set aside for affordable housing units for residents with incomes averaging 80 percent AMI. The proposed affordable housing set asides will allow future residential development within the rezoning area to address the need for housing to serve a broad range of the City's diverse incomes.

1.5 Required Approvals

The proposed zoning map amendment is a discretionary public action which is subject to the City Environmental Quality Review (CEQR) as an Unlisted action. Through CEQR, agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment. The proposed zoning map and text amendment are also discretionary public actions which are subject to public comment under the Uniform Land Use Review Procedure (ULURP). The ULURP process was established to assure adequate opportunity for public review of proposed actions. ULURP dictates that every project be presented at four levels: the Community Board; the Borough President; the City Planning Commission (CPC); and, in some cases the City Council. The procedures mandate time limits for each stage to ensure a maximum review period of seven months.

[2] The proposed text map amendment would require residential developments, enlargement and conversions within the MIH Designated Area that meet the criteria set forth in the MIH program to develop in accordance with the MIH program.

1.6 Analysis Framework (Reasonable Worst Case Development Scenario)

The proposed rezoning area is located at the southwestern corner of Summit Street and Hamilton Avenue in Brooklyn, near the Columbia Street Waterfront, in Community District 6. The proposed rezoning would affect three tax lots on Brooklyn Block 352: Lots 1, 3 and 60. In addition to the Applicant's proposed development on Lot 60, the rezoning proposal is expected to induce development on Lots 1 and 3. The anticipated development is discussed in more detail below.

In general, the following factors are considered when evaluating whether some amount of development would likely be constructed by the build year on any nearby site. Known as Projected/ Potential Development Sites (or Soft Sites), the criteria include the following:

- *The uses and bulk allowed:* Buildings built to substantially less than the maximum allowable FAR under the existing zoning are considered "soft" enough such that there would likely be sufficient incentive to develop in the future, depending on other factors specific to the area, listed below; and
- *Size of the development site:* Lots must be large enough to be considered "soft." Generally, lots with a small lot size are not considered likely to be redeveloped, even if currently built to substantially less than the maximum allowable FAR. A small lot is often defined for this purpose as 5,000 square feet or less, but the lot size criteria is dependent on neighborhood specific trends, and common development sizes in the study area should be examined prior to establishing this criteria.

If sites meet both of the criteria above, then the following factors are considered:

- The amount and type of recent as-of-right development in the area;
- Recent real estate trends in the area;
- Recent and expected future changes in residential population and employment in the study area;
- Government policies or plans, such as a building on site being identified for a landmark designation, that may affect the development potential of a site or sites;
- Site specific conditions that make development difficult; and
- Issues relating to site control or site assemblage that may affect redevelopment potential.

Once sites are considered as development sites, they are divided into two categories – projected development sites and potential development sites. Projected development sites are considered more likely to be developed within analysis period (2020 build year) because of their size (they are either large lots or contiguous small lots in common ownership that together comprise a large site). Potential development sites are less likely to be developed within the analysis period because they are not entirely under common ownership, have an irregular shape or have some combination of these features.

1.6.1 Projected Development Sites

Based on the above and as illustrated in **Figures 1** and **2**, two projected development sites have been identified for the proposed action. Projected Development Site 1, under the Applicant's control, comprises Block 352, Lot 60; and Projected Development Site 2 consists of Block 352, Lots 1 and 3. These lots do not currently have a common owner but could be assembled in the future.

1.6.2 Build Year

Considering the time required for the environmental review and land use approval process, and assuming a construction period of approximately 16 to 20 months, the build year of the proposed development is 2020. However as discussed below, given that the rezoning is expected to spur development on a site not

controlled by the Applicant, an analysis year of 2022 will be used to assess the potential for environmental impacts.

1.6.3 Existing Conditions

The proposed development site controlled by the Applicant consists of one tax lot (Block 352, Lot 60) located at 41 Summit Street. The site contains a vacant, approximately 3,500 sf, industrial-use building. With a lot area of 2,500 square feet, the site has an FAR of approximately 1.4.

Block 352, Lot 1 (79 Hamilton Avenue), which is not controlled by the Applicant, contains a two-story, approximately 4,300 square-foot commercial office building and an accessory surface parking lot at. The ground floor of this building is occupied by a Use Group 6 retail bank. As the lot size is 1,842 sf, the site has an FAR of approximately 0.7.

Block 352, Lot 3 (75 Hamilton Avenue), also not controlled by the Applicant, is developed with a three-story mixed-use residential and commercial building containing approximately 2,400 square feet of floor area. The ground floor of this building is currently vacant (former restaurant space that has been vacant for approximately two years). Two Use Group 2 residential units are located on the upper floors of the building on Block 352, Lot 3, both of which are legal non-complying uses. With a lot area of 2,400 square feet, the site has an FAR of approximately 1.3.

1.6.4 Future No-Action Scenario

The proposed development site is located near the Columbia Street waterfront in Brooklyn. While there has been some construction occurring within 400 feet and some vacant lots are present, the reasonable worst-case development scenario (RWCDS) assumes that in the existing conditions would remain on the rezoning area lots in the Future No-Action scenario. As detailed below, as-of-right redevelopment of the rezoning area lots is not reasonably expected to occur on by the build year.

The proposed development site (Block 352, Lot 60), with an FAR of 1.4, is currently overbuilt and legally noncompliant. As such, it is not “soft” enough to assume that that there would be sufficient incentive to redevelop in the future. Therefore, a continuation of existing conditions is projected for the Future No-Action scenario.

Under the RWCDS, it is also assumed that Block 352, Lot 1 would remain unchanged in the Future No-Action scenario. As the site is developed to an FAR of approximately 0.7 and the maximum FAR is 1.0 under the existing zoning, there would be little incentive for redevelopment.

Similar to Lot 60, Block 352, Lot 3 is legally noncompliant as it is currently overbuilt to an FAR of 1.3. The lot also contains non-conforming residential uses. Therefore, it is not “soft” enough such that there would be sufficient incentive for redevelopment by the future build year.

1.6.5 Future With-Action Scenario

The boundaries of the proposed re zoning would encompass a portion of Brooklyn Block 352, including Lots 1, 3, and 60.

Under the Future With-Action scenario, the proposed rezoning would amend the zoning map to change the existing M1-1 district to an R7A district with a C2-4 commercial overlay, which would facilitate the Applicant’s proposed development of a seven-story residential building on Lot 60. The With-Action scenario assumes that the projected development sites would be constructed to the maximum allowable floor area under the proposed zoning (and per specific site constraints for Lot 60). In order to present a conservative assessment, an average dwelling unit size of 850 square feet was assumed, which diffes slightly from the Applicant’s proposal.

Site data for the lots included in the proposed zoning area are shown in **Table 1**, followed by a description of the projected development sites.

Table 1 Projected Development Under the Proposed Rezoning

Development Site No.	Block	Lot	Lot Area	Existing Zoning	Existing FAR	Proposed Zoning	Projected Res. (sf)	Projected CF (sf)	Projected FAR	DUs	Affordable Units	Parking Spaces	Building Height
1	352	60	2,500	M1-1	1.4	R7A/C2-4	7,500	2,500	4.0	9	N/A	N/A	65
2	352	1 &3	7,977	M1-1	0.84	R7A/C2-4	28,717	7,977	4.6	34	10	N/A	95
						Total	***36,217***	***10,477***		***43***	***10***	***N/A***	

Projected Development Site 1- Block 352, Lot 60

Under the Future With-Action Scenario, it is assumed that Block 352, Lot 60 would be developed to the maximum FAR of 4.0. Additionally, the mapping of a C2-4 commercial overlay over the rezoning area is assumed to induce a ground-floor commercial use on the proposed development site. The C2-4 overlay allows a FAR of 2.0 when mapped with the R7A district and allows typical retail uses, including neighborhood grocery stores, restaurants and beauty parlors. On the 2,500 sf lot, it is assumed that the proposed action would result in approximately 7,500 sf of residential floor area and 2,500 sf of commercial floor area. Estimating approximately 850 sf per dwelling unit, it is assumed that 9 residential units would be constructed on-site. As Projected Development Site 1 consists of a single development of not more than ten dwelling units and not more than 12,500 square feet of residential floor area, it is exempt from providing affordable units under the MIH program. It is assumed that parking requirements would be waived pursuant to ZR § 25-261 as the proposed development would require less than 15 spaces.

The maximum allowable height for an MIH development in an R7A district (95 feet) cannot be achieved at Projected Development Site 1 as the projected development would not include affordable units. A building height of 65 feet is assumed for Projected Development Site 1 due to the transition rule contained in ZR § 23-693, which limits the height of a building within 25 feet of an R6B zoning district to 65 feet.

Projected Development Site 2- Block 352, Lots 1 and 3

Under the Future With-Action Scenario, it is assumed that Block 352, Lots 1 and 3 would be combined and developed to the maximum FAR of 4.6. Additionally, the mapping of a C2-4 commercial overlay over the rezoning area is assumed to induce a ground-floor commercial use on the site. On a 7,997 sf lot, it is assumed that the proposed action would result in approximately 23,931 sf of residential floor area and 7,977 sf of commercial floor area. Estimating approximately 850 sf per dwelling unit, it is assumed approximately 34 residential units would be constructed on-site. Under the 30 percent MIH option, the proposed rezoning would result in the creation of approximately 10 units affordable to families with incomes averaging 80 percent of the AMI. It is assumed that parking requirements would be waived pursuant to ZR § 25-261 as the proposed development would require less than 15 spaces. A building height of 95 feet, the maximum allowable height for an MIH development with qualifying ground floor use, is assumed for Projected Development Site 2.

2.0 ENVIRONMENTAL REVIEW

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

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

- Land Use Zoning Public Policy
- Shadows
- Historic and Cultural Resources
- Urban Design and Visual Resources
- Hazardous Materials
- Air Quality
- Noise

In addition, although the proposed action did not require a 'YES' answer on the EAS Short Form, preliminary assessments were included to provide additional background information for the following technical analysis areas:

- Neighborhood Character
- Construction

In the following technical sections, where a preliminary or more detailed assessment was necessary, the discussion is divided into Existing Conditions, the Future No-Action Condition (the future without the proposed action), and the Future With-Action Condition (the future with the proposed action).

2.1 LAND USE, ZONING AND PUBLIC POLICY

The *CEQR Technical Manual* recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the surrounding area. Land use, zoning and public policy are described in detail below.

2.1.1 Land Use

The *CEQR Technical Manual* defines land use as the activity that is occurring on the land and within the structures that occupy it. Types of land use can include single- and multi-family residential, commercial (retail and office), community facility/institutional and industrial/manufacturing uses, as well as vacant land and public parks (open recreational space). The 2014 *CEQR Technical Manual* recommends that a proposed action be assessed in relation to land use, zoning, and public policy. For each of these areas, a determination is made of the potential for significant impact by the proposed action. If the action does have a potentially significant impact, appropriate analytical steps are taken to evaluate the nature of the impact, possible alternatives and possible mitigation.

Existing Conditions

The *CEQR Technical Manual* recommends a land use; zoning and public policy study area extending 400 feet from the site of a proposed action. This study area is generally bound by President Street to the north,

Columbia Street to the east, Imlay Street to the west, and the midpoint between Hamilton Avenue and Bowne Street to the south (**Figure 2.1-1**).

A field survey was conducted to determine the existing land use patterns and neighborhood characteristics of the study area. Existing land use immediately surrounding the project area is a mix of warehouse/distribution, open space, mixed-used residential and commercial, and residential uses (both non-conforming and conforming). The commercial uses are comprised of restaurant supplies outlets and some local retail. The prevailing built form of the area is a mix of low- to mid-rise non-residential buildings and two-to four-story residential buildings. There are numerous vacant lots located along Hamilton Avenue and Columbia Street.

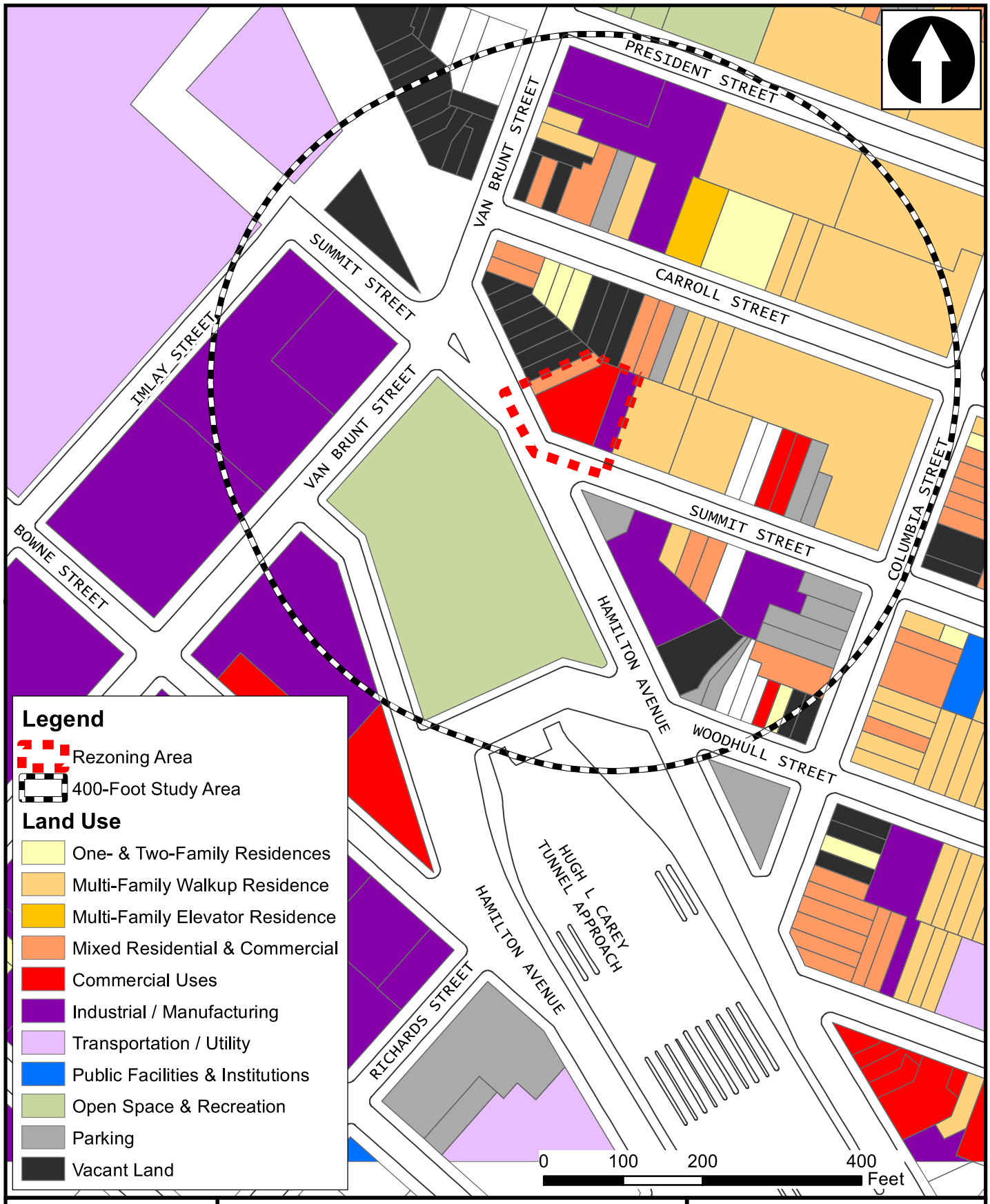
The proposed rezoning area is located at the corner of Hamilton Avenue and Summit Street. A vacant, approximately 3,500-sf industrial-use building is located on Projected Development Site 1 at 41 Summit Street. To the west, Projected Development Site 2 contains a two-story commercial building (J.P. Morgan & Chase bank) with a small accessory parking area at 79 Hamilton Avenue, and a three-story mixed-used residential and commercial building at 75 Hamilton Avenue. Further northwest, a community garden called “The Backyard Garden” occupies the vacant lots along the north side of Hamilton Avenue as it turns into Van Brunt Street. Directly southwest of the rezoning area, Hamilton Avenue flanks the Harold Ickes Playground, which occupies the lot north of the portal to the Hugh L. Carey Tunnel.

The surrounding study area comprises a mix of residential, commercial and manufacturing uses. Residential buildings in the area have a primarily medium-density character with three- to four-story rowhouses and walk-up apartment buildings. Columbia Street serves as a local retail corridor with ground-floor commercial uses and residences above. To the south of Summit Street and north of Carroll Street there are businesses with active industrial uses, as well as clusters of residential uses. There are also a few properties owned and operated by the New York City Department of Parks and Recreation (NYCDPR), including Mother Cabrini Park, Harold Ickes Playground and Backyard Garden, a community garden located to the west of the project area on Block 352. One block to the west is the Red Hook Container Terminal, an intermodal freight terminal operated by the Port Authority of New York and New Jersey (PANYNJ).

The northern portion of the study area contains development patterns that are consistent with the project site and adjacent buildings. Residential buildings, some of which contain ground-floor commercial uses, are found on the subject Block 352, which is located on the south side of Carroll Street between Van Brunt and Columbia Streets. A vacant commercial building with an accessory parking lot is located on the northern side of Summit Street amidst the residential uses. The southern side of the block includes residential and mixed-use buildings rest of the block consists as well as parking lots.

In the northernmost part of the study area, Block 347 is located between Carroll and President Streets and Van Brunt and Columbia Streets. This block primarily consists of multi-family residences on the eastern portion and a mix of industrial and residential uses on the western portion. A five-story residential building is located on the southern side of the block, at 25 Carroll Street. The Gowanus (Plant) Nursery is located on the corner of Van Brunt and Carroll Streets, and occupies three vacant lots and the ground floor of a three-story mixed-used residential and commercial building. At the northwestern limit of the study area is vacant land. Of note, a seven-story residential building is situated just outside the study area, on the eastern side of Columbia Street between Carroll Street and President Street.

The southern portion of the study area contains numerous industrial uses and parking lots, with a few residential and mixed-use (residential/ commercial) buildings interspersed. Buildings to the west (or south) of Hamilton Avenue are generally two stories in height and contain industrial uses. Buildings to the east (or north) of Hamilton Avenue continue this development pattern, with a few five-story mixed-use residential and commercial buildings on Block 357. Hamilton Avenue is a heavily-trafficked thoroughfare and is cut by the Woodhull Street overpass located at the southeast limit of the project area.



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Land Use

Figure 2.1-1

The general mix of land use observed in the study area generally reflects the distribution of land use observed throughout Brooklyn CD 6, which is summarized in **Table 2.1-1.** The most prominent land use within Brooklyn CD 6 is multi-family residences, followed by industrial uses and one- and two-family residences.

Table 2.1-1 2014 Land Use Distribution- Brooklyn Community District 6

LAND USE	PERCENT OF TOTAL
Residential Uses	
1-2 Family	12.7
Multi-Family	26.9
Mixed Residential/Commercial	5.9
Subtotal of Residential Uses	*45.5*
Non-Residential Uses	
Commercial/Office	6.6
Industrial	19.1
Transportation/Utility	6.7
Institutions	4.8
Open Space/Recreation	6.1
Parking Facilities	3.6
Vacant Land	4.3
Miscellaneous	3.4
Subtotal of Non-Residential Uses	*54.6*
TOTAL	**100.0**

Source: *Community District Profiles, New York City Department of City Planning.*
Note: Percentages may not add up to 100.0 percent due to rounding.

Future No-Action Scenario

In the Future No-Action scenario, it is assumed that existing conditions would remain within the proposed rezoning area. In the future without the proposed action, it is assumed that the existing vacant warehouse would remain unchanged on Projected Development Site 1. Similarly, no change in use or floor area is expected for Projected Development Site 2, which is presently developed with a commercial building (bank) and a mixed-use residential and commercial building.

The study area is located near the Columbia Street waterfront in Brooklyn, has experienced some construction activity over the past several years, and contains some vacant lots. Within the study area one No-Action project has been identified that is expected to be completed by the 2022 analysis year.[3] In addition, as-of-right development could occur within the study area by 2020. The No-Action project, 55-63 Summit Street Rezoning, will rezone five parcels located on the same block as the proposed action (Block 352, Lots 48, 49, 50, 51 and 52) from M1-1 to R6B to allow for residential use. Similar to the proposed action, the No-Action project includes a zoning text amendment to establish an MIH area coterminous with the rezoning area. It is assumed that the 55-63 Summit Street Rezoning will result in the development of four separate four-story residential buildings.

[3]It is assumed that the 55-63 Summit Street Rezoning project, currently in public review, will be approved. The Zoning Map Amendment (C 170047 ZMK) has been certified and the Zoning Text Amendment (N 170046 ZRK) has been referred.

Future With-Action Scenario

Under the Future With-Action scenario, the proposed rezoning would amend the zoning map to change the existing M1-1 district to an R7A district with a C2-4 commercial overlay, which would facilitate the Applicant's proposed development of a seven-story residential building. In order to present a conservative assessment, the Future With-Action scenario assumes that Projected Development Site 1 and Projected Development Sites 2 would be constructed to the maximum floor area allowed under the proposed zoning districts.

Under the Future With-Action Scenario, it is assumed that the proejcted development sites would be developed to the maximum allowable FAR pursuant to the recently adopted *Zoning for Quality and Affordability* and *Mandatory Inclusionary Housing* standards, and per site conditions. Additionally, the mapping of a C2-4 commercial overlay over the rezoning area is assumed to induce a ground-floor commercial use over the proposed development site. The C2-4 allows typical retail uses including, neighborhood grocery stores, restaurants and beauty parlors. Combined, Projected Development Sites 1 and 2 would have a total maximum resdential floor area of 36,217 sf and a total maximum commercial floor area of 10,477 sf.

Recent years have seen residential, commercial and community facility development in close proximity to the rezoning area, with several non-conforming residential uses within 400 feet of the rezoning area. The character of the neighborhood has been changing from industrial to residential over the course of the past decade or so. The proposed action would reinforce this trend towards more active residential and ground-floor retail uses, which are common in the residentially zoned areas to the east. The proposed mixed residential and commercial development would be compatible with the surrounding uses. Therefore, the proposed action would not result in a significant adverse land use impact and further study is not warranted.

2.1.2 Zoning

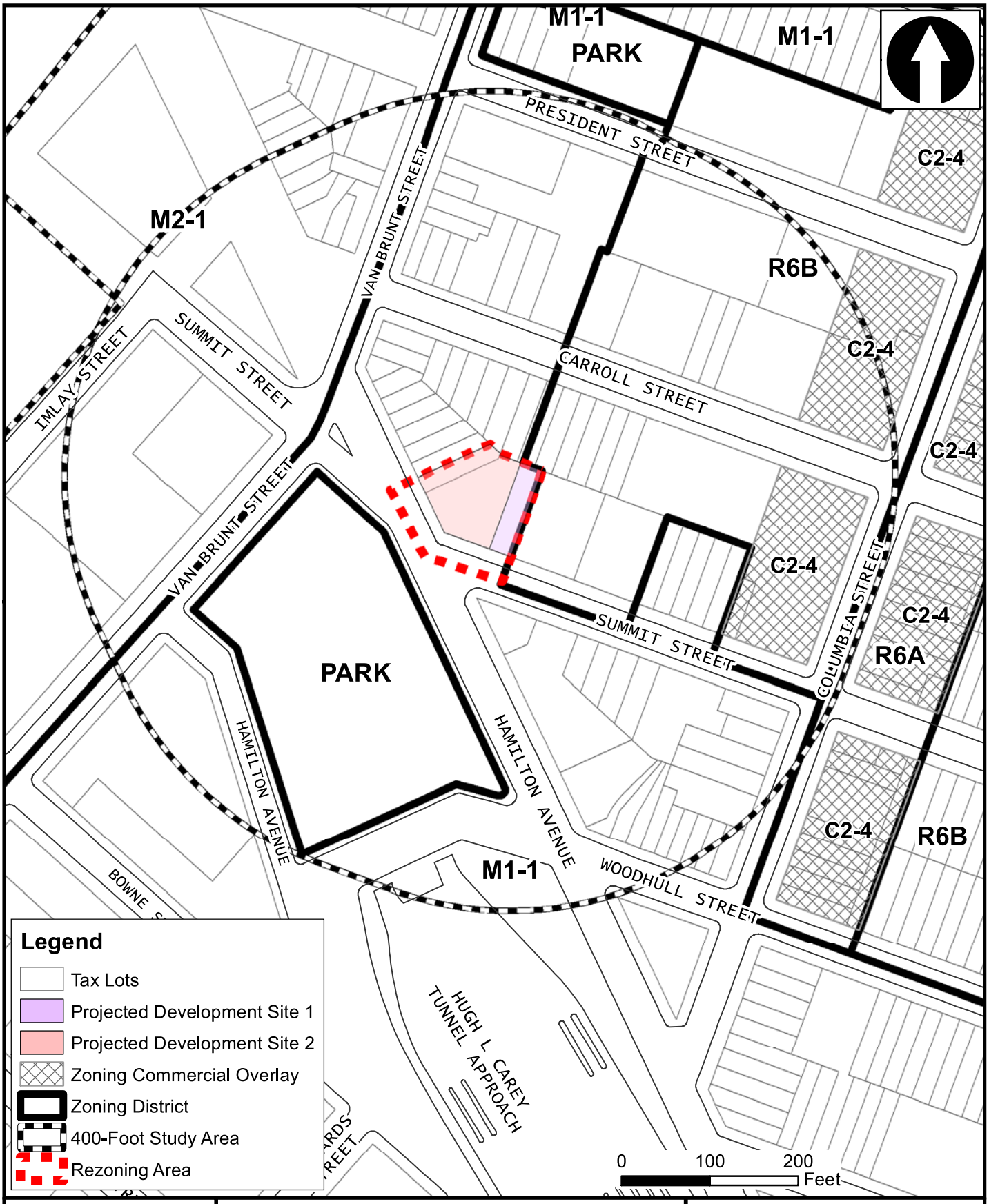
The *New York City Zoning Resolution* dictates the use, density and bulk of developments within New York City. Additionally, the Zoning Resolution provides required and permitted accessory parking regulations. The City has three basic zoning district classifications – residential (R), commercial (C), and manufacturing (M). These classifications are further divided into low-, medium-, and high-density districts.

Existing Conditions

Zoning designations within and around the study area are depicted in **Figure 2.1-2**, while **Table 2.1-2** summarizes use, floor area and parking requirements for the zoning districts in the study area.

The rezoning area and much of the study area to the south and west are located within an M1-1 zoning district. The M1-1 district is a light-performance and low-density manufacturing zoning district in which Use Groups 4 to 14, 16 and 17 are allowed. Light industries typically found such zoning districts include woodworking shops, auto shops and wholesale service and storage facilities. Offices and most retail uses are also permitted, as are certain community facilities as-of-right or by special permit. M1-1 districts permit an FAR for manufacturing and commercial uses of up to 1.0, and an FAR for community facilities up to a 2.4.

The study area north and west of Summit and Columbia Streets is zoned R6B, which often has traditional row-houses and attempts to preserve the scale and harmonious streetscape of neighborhoods. The FAR of 2.0 and the mandatory Quality Housing regulations also accommodate apartment buildings at a similar four- to five-story scale. The base height of a new building before setback must be between 30 and 40 feet, with a maximum height of 50 feet. A small portion of the study area along Columbia Street is also zoned R6B with a C2-4 commercial overlay. The overlay district allows a wide range of uses, including neighborhood grocery stores, restaurants, beauty parlors, funeral homes and local repair shops. The maximum commercial FAR is 2.0 when mapped within R6-R10 zoning districts.



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Zoning

Figure 2.1-2

Table 2.1-2 Summary of Zoning Regulations

Zoning District	Type and Use Group (UG)	Floor Area Ratio (FAR)	Parking (Required Spaces)
M1-1	Light Manufacturing UGs 4-14, 16, 17	1.0 FAR – Manufacturing 1.0 FAR – Commercial 2.4 FAR – Community Facility	Varies by Use
R6B	Residential UGs 1-4	2.0 – 2.2 FAR for Residential 2.0 FAR for Community Facility	50 percent of dwelling units (waived if 5 or fewer spaces required)
C2-4	Commercial Overlay UGs 1-9 & 14	2.0 FAR – Commercial	Generally Not Required

Sources: *New York City Zoning Handbook*, 2011; *New York City Zoning Resolution.*

Future No-Action Scenario

In the future without the proposed action, zoning changes are not expected to occur in the rezoning area. Because the Applicant may not construct any new residential square footage on Projected Development Site 1 without the proposed zoning map amendment, it is assumed that the Future No-Action Scenario would remain consistent with existing conditions. Therefore, if the proposed rezoning is not approved, the rezoning area's existing conditions would continue in the future no-action scenario.

As previously noted, one No-Action project has been identified in the study area, 55-63 Summit Street Rezoning. The No-Action project would rezone five parcels on Block 352 (Lots 48, 49, 50, 51 and 52) from M1-1 to R6B to allow for the development of four separate four-story residential buildings.

To provide additional context and enable a comprehensive understanding of the study area's development background, a summary of recent discretionary actions undertaken within the vicinity of the proposed rezoning area follows.

- The Carroll St Rezoning (C 060018 ZMK), approved by the CPC on February 28, 2007, and adopted by the City Council on March 28, 2007, rezoned two lots on the north side of Carroll Street, between Columbia Street and Van Brunt Street, from an M1-1 zoning district to an R6 zoning district to facilitate the construction of two, four-unit residential buildings on Block 347, Lots 48 and 49.
- The 45 Summit Street Rezoning (C 060477 ZMK), approved by the CPC on September 19, 2007, and adopted by the City Council on October 29, 2007, rezoned four lots on the north side of Summit Street, between Columbia Street and Hamilton Avenue, from an M1-1 zoning district to an R6 zoning district to facilitate the construction of a 35-unit residential building on Block 352, Lot 53.
- The Carroll Gardens and Columbia Street Rezoning (C 090462 ZMK), approved by the CPC on September 23, 2009, and adopted by the City Council on October 28, 2009, rezoned an approximately 86 block area of the Carroll Gardens and Columbia Street neighborhoods from an R6 zoning district to contextual zoning districts, including R6A, R6B, and R7A districts, to preserve the neighborhood character and scale. This rezoning also established C2-4 overlays along Columbia Street to support and promote the local, vibrant retail corridors, while protecting the residential character of the nearby side streets.
- The Carroll Street Rezoning (C 090225 ZMK), approved by the CPC on March 16, 2011, and adopted by the City Council on April 29, 2011, rezoned two lots on the north side of Carroll Street, between Columbia Street and Van Brunt Street, from an M1-1 zoning district to an R6B zoning district to facilitate the construction of an 8-unit residential building on Block 347, Lot 50.
- The 20-30 Carroll Street Rezoning (C 110118 ZMK), approved by the CPC on March 16, 2011, and adopted by the City Council on April 29, 2011, rezoned six lots on the south side of Carroll Street, between Columbia Street and Van Brunt Street, from an M1-1

zoning district to an R6B zoning district to bring existing residential structures into conformance and compliance.

- The 14-18 Carroll Street Rezoning (C 150360 ZMK) sought to rezone three vacant lots on the south side of Carroll Street, between Columbia Street and Van Brunt Street, from an M1-1 zoning district to an R6B zoning district. This application entered the public review process, but was subsequently disapproved by the City Council.
- The 55-63 Summit Street Rezoning application (C 170047 ZMK, N 170046 ZRK) is currently in ULURP and seeks to rezone several parcels east of the rezoning area from an M1-1 zoning district to an R6B zoning district and map a MIH Designated Area to facilitate new residential development.
- In addition, the Board of Standards and Appeals (BSA) has issued land use approvals within (and adjacent to) the 400-foot study area. On December 11, 2007, the BSA granted a variance pursuant to ZR § 72-21, under BSA Cal. No. 33-07-BZ, to allow the conversion of the upper four floors of an existing five-story manufacturing building at 25 Carroll Street (Block 347, Lot 54) to residential use. On September 13, 2005, the BSA granted a variance pursuant to ZR § 72-21, under BSA Cal. No. 302-04-BZ, to permit the construction of a residential building on a vacant lot, located in am M1-1 zoning district, at 40 Woodhull Street (Block 363, Lot 20). On April 8, 2008, the BSA granted a variance pursuant to ZR § 72-21, under BSA Cal. No. 311 thru 313-06-BZ, to allow the construction of three, four-story residential buildings with a total of six dwelling units at 300/302/304 Columbia Street (Block 357, Lots 38, 39, 40), located in an M1-1 zoning district.

Future With-Action Scenario

As discussed above, within the study area several rezonings and BSA variances have been approved to reflect the changing conditions of the neighborhood from industrial to residential use. The proposed rezoning would be consistent with the development of the neighborhood. The proposed R7A zoning district is appropriate in terms of density and permitted bulk as rezoning area is uniquely located at a node between the neighborhoods of Red Hook and Carroll Gardens, is located near the Gowanus Expressway and the entrance to the Hugh L. Carey Tunnel, and is located across from a park, allowing for greater light and air and distinguishing it from the more uniform mid-block character within other portions of the study area. In addition, the proposed rezoning will bring the existing non-conforming and non-complying building on Lot 3 into conformance and compliance in terms of its existing residential use and its existing floor area and FAR. Moreover, the proposed C2-4 overlay is consistent with the existing commercial uses on Lots 1 (bank) and 3 (former restaurant, available commercial space), and would ensure the continued conformance of these existing buildings in terms of their existing commercial uses.

The proposed action would change the existing M1-1 district to an R7A/C2-4 district over Block 352, Lots 1, 3, and 60. The proposed action would not have a significant impact on the extent of conformity with the current zoning in the surrounding area, and it would not adversely affect the viability of conforming uses on nearby properties. Significant adverse impacts to zoning are not anticipated and further zoning analysis is not warranted.

2.1.3 Public Policy

The project site is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The proposed action is also not a large publically sponsored project, and as such, consistency with the City's *PlaNYC 2030* for sustainability is not warranted. However, as the rezoning area is located in the Coastal Management Zone, a consistency review with the New York City Waterfront Revitalization Program is warranted.

Waterfront Revitalization Program

The rezoning area is located within New York City's designated coastal zone and, as such, is subject to review for its consistency with the City's Waterfront Revitalization Program (WRP). In accordance with the guidelines of the 2014 *CEQR Technical Manual*, a preliminary evaluation of the proposed action's potential for inconsistency with the new WRP policies was undertaken. Actions located within the City's Coastal Zone generally require submission of the WRP Consistency Assessment Form (CAF). This form is intended to assist an applicant in certifying that a proposed action is consistent with the WRP. The completed CAF and accompanying information is used by City and State agencies to review the applicant's certification of consistency. A copy of the completed CAF has been attached to this document as **Appendix A**.

The City's WRP is comprised of ten principal policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. A proposed action may be deemed consistent with the WRP when it would not substantially hinder and, where possible, would promote one or more of the ten WRP policies dealing with: (1) residential and commercial development; (2) water-dependent and industrial uses; (3) commercial and recreation boating; (4) coastal ecological systems; (5) water quality; (6) flooding and erosion; (7) solid waste and hazardous substances; (8) public access; (9) scenic resources; and (10) historical and cultural resources.

The CAF requires a proposed action to be characterized according to a list of 45 sub-policies that fall under the ten major policy objectives. For each sub-policy the action is to be characterized as to whether it will "promote," "hinder," or have no relevance to the policy. A "Promote" or "Hinder" response to any of the CAF questions indicates that a particular policy of the WRP may be relevant, thus warranting further examination. An "N/A" response indicates the particular policy is not applicable to the proposed action. Per the CAF, the following policies warranted further assessment: 1.1, 1.3, 1.5 and 6.2. An assessment of the proposed action's consistency with each of these policies is provided below.

POLICY 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.

The proposed action would create opportunities for new housing and commercial development on an underutilized parcel formerly used for manufacturing, where there is no longer a concentration of industrial activity and where strong demand for housing exists. The section of the coastal zone falling within the boundaries of the rezoning area does not contain any natural or topographic features that would hinder redevelopment. Therefore, this area is appropriate for the residential and commercial redevelopment that would be facilitated by the proposed action. As the proposed action would facilitate redevelopment in an area currently characterized by underutilized waterfront properties, it is therefore consistent with this policy.

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

The proposed action encourages the redevelopment of residential and commercial uses in a portion of the coastal zone where infrastructure and public facilities are adequate. The rezoning area is well-served by transit. The B61 bus route has a stop located one block from the rezoning area, and the Carroll Street station on "F" and "G" subway lines it is located slightly more than 0.5 mile to the east/ southeast.

The projected development sites are connected to the City's sewer system and served by the Red Hook Wastewater Treatment Plant (WWTP). The Plant has a capacity of 60 million gallons per day (MGD) and would be able to accommodate flows from the proposed mixed use building. Further, the proposed action is not located in one of the drainage areas specified in the *CEQR Technical Manual* (i.e., Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek), and would not require improvements to existing public infrastructure. As such, the

proposed action would encourage redevelopment in an appropriate area within the coastal zone and is supportive of WRP Policy 1.3.

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.

See response to Policy 6.2, below.

POLICY SIX Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

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

The WRP Climate Change Adaptation Guidance document and corresponding Flood Elevation Worksheet were used to complete the Policy 6.2 detailed assessment. Note that this detailed assessment evaluates the Applicant's proposed project only, which differs slightly from the RWCDS that is evaluated in the other sections of the EAS. As illustrated in **Figure 2.1-3**, FEMA's 2015 Preliminary Flood Insurance Rate Map (FIRM) indicates that the Applicant's proposed development site (Projected Development Site 1) is located within the current 0.2% annual chance floodplain. The northeastern-most portion of the site also lies within the 1% annual chance floodplain (AE zone, 11'). During the lifespan of the proposed building, climate change and sea level rise projections indicate that the entire project site would be within the 1% annual chance floodplain by the 2080s (see **Figure 2.1-4**). According to projections and as illustrated in **Figure 2.1-5**, the project site (at grade level) would not be affected by future high tides throughout the proposed project's lifespan. As the proposed project would be within the 1% annual chance floodplain over the course of the proposed building's lifespan, the detailed methodology for a site-specific WRP Policy 6.2 assessment was followed. The results of the detailed analysis are discussed below.[4]

The critical building systems generally would be located on the roof of the building.[5] Refer to **Figure 2.1-6** for a sectional elevation drawing that depicts the building elevations as well as the elevations of the current and future 1% annual chance floodplain and current and future Mean Higher High Water (MHHW), over the proposed project's lifespan.

While the northernmost portion of the site is within the current 1% annual chance floodplain, the footprint of the proposed building lies within the current 0.2% annual chance floodplain. The proposed building's cellar could be below the 1% annual chance floodplain by the 2020s under all sea level rise (SLR) projections. According to the architect, the cellar would be used for storage, utilities and mechanicals. All required building utilities – gas, water, electric and sewer – would be located in the proposed building's cellar.[6] If flooded, all utilities would need to be cut off and the building tenants would have to vacate the premises until repairs could be made. Thus potential consequences of flooding include property damage, structural damage to the building, and temporary displacement of residents.

The first floor (the lowest residential floor) could be below the elevation of the 1% annual chance floodplain by the 2050s under the high SLR projection, or the by the 2080s under the high projection. If

[4] Refer to **Appendix A** for the Flood Elevation Worksheet's two main output charts: Mean Higher High Water + Sea Level Rise and 1% Flood Elevation + Sea Level Rise. These charts depict the elevations of the various features of the proposed building relative to future flood level projections.

[5] Per the architect, the heating, ventilation and air conditioning (HVAC) units would be located on the proposed building's roof, while heating systems would be located in the building within the individual apartments.

[6] A section of the proposed building that shows below-grade space (i.e., cellar) is included at the end of **Appendix A**. According to the architect, elevating the utilities or placing the on the roof was not discussed during the design phase because the proposed building footprint is located outside of the current 1% annual chance floodplain. Typically, for a building with no side yards, utilities are located in the cellar to reduce impact on the rentable/above ground square footage.

flooded, this could lead to property damage, the potential displacement of residents and potentially increased flood insurance costs.

Most of the critical building systems would remain above the elevation of the 1% annual chance floodplain through 2080 under all projection scenarios.

The cellar is the only feature of the proposed building that is currently below the elevation of the MHHW. As previously noted, the cellar would be used for storage, utilities and mechanicals. No other building features would be below the elevation of the MHHW over its lifespan.

The project site currently is outside of the Coastal A or V zones. However, future coastal storms could bring high winds in addition to flood hazards described above.

The proposed building is outside of the current 1% annual chance floodplain and would not be required to meet NYC Building Code requirements for flood resistant construction (i.e., compliance with NYC Building Code Appendix G, Flood-Resistant Construction).[7] If the floodplain covers the site in the future, retrofits could be pursued to dry floodproof the cellar and reinforce the foundation, or to wet floodproof the cellar. The use of temporary flood barriers also could be explored.

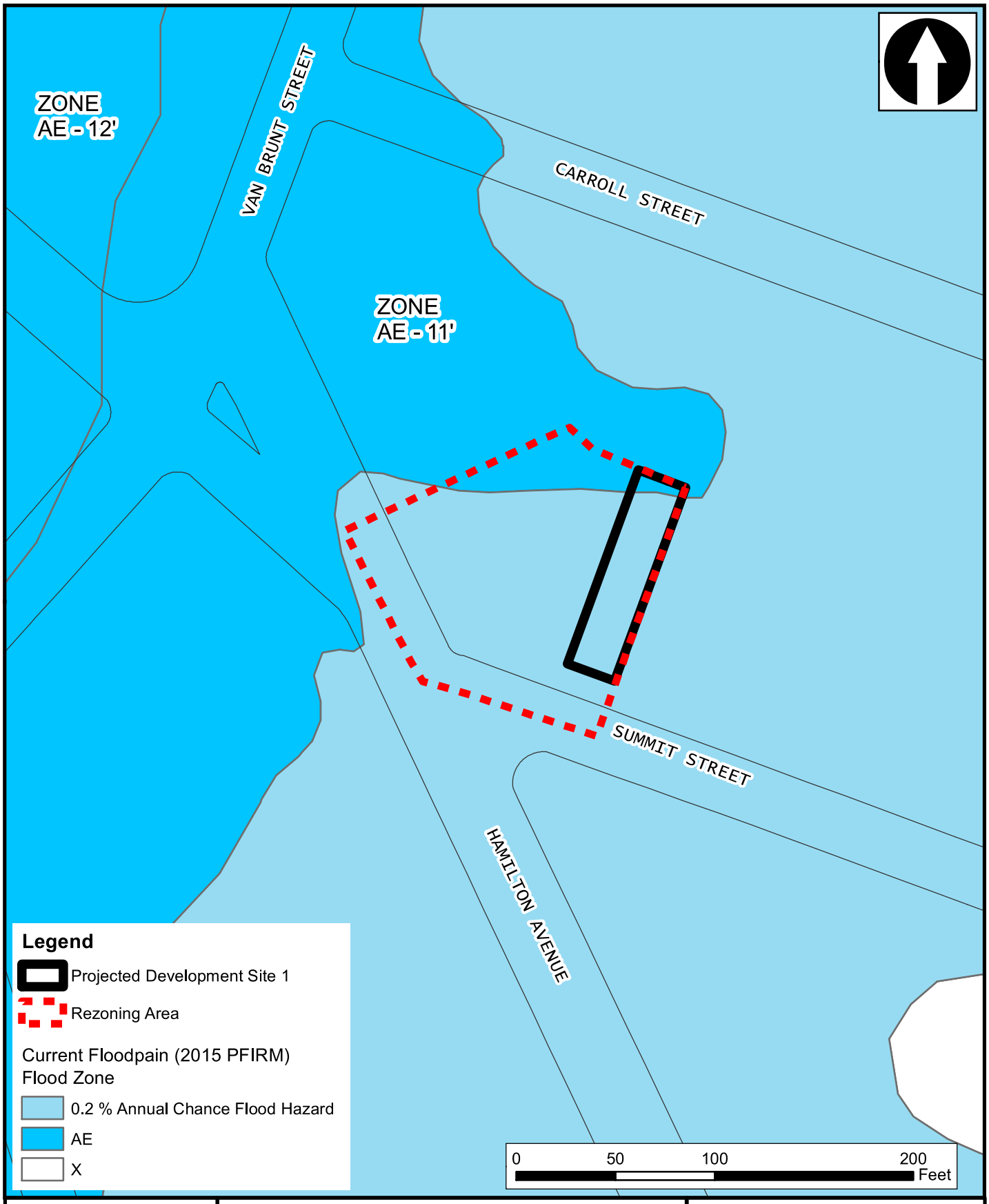
The measures described above (i.e., retrofits and temporary flood barriers) would also address the potential susceptibility of the cellar to future MHHW.

The Applicant's proposed project is not expected to include additional measures to protect the proposed building from additional coastal hazards such as waves or high winds.

The proposed project would not affect the flood protection of adjacent sites, nor would it be expected to increase flooding on adjacent sites or protect upland areas from costal hazards.

Overall, the proposed project advances Policy 6.2. Although the cellar of the Applicant's proposed building would be below the 2080s future 1% annual chance floodplain and may be flooded by high tide during the project's lifespan, most of the building's critical infrastructure and vulnerable (residential) population would remain above the future 1% annual chance floodplain and would not be flooded by high tide during the project's expected lifespan.

[7] Per the architect, a brief description of the proposed structure of the building is for the footings and foundation walls to be poured concrete, while everything above that would consist of load bearing masonry walls with clear span metal floor joists for construction.



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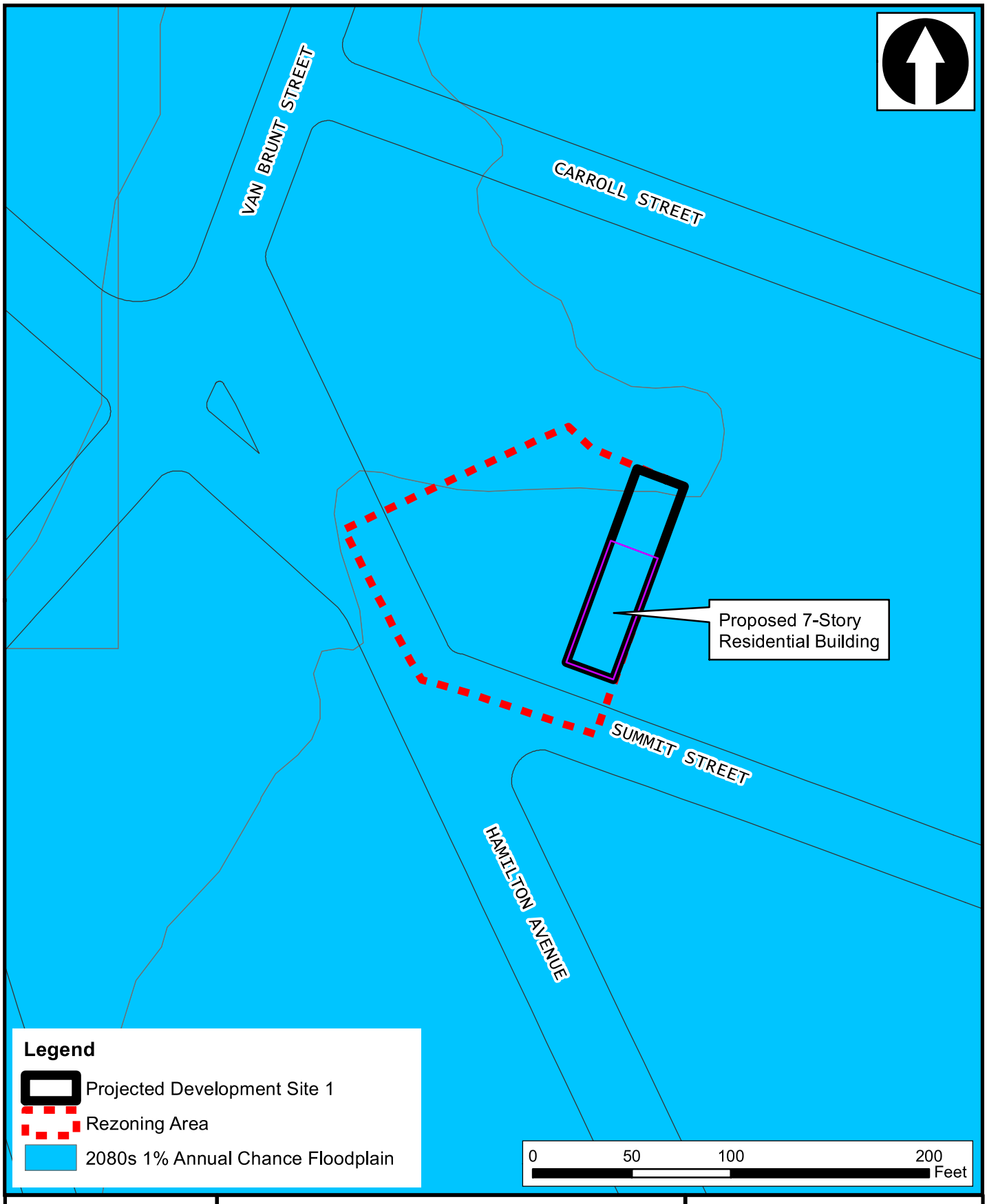
Illustrative Site Plan
Current Floodplain
(2015 PFIRM)
Figure 2.1-3



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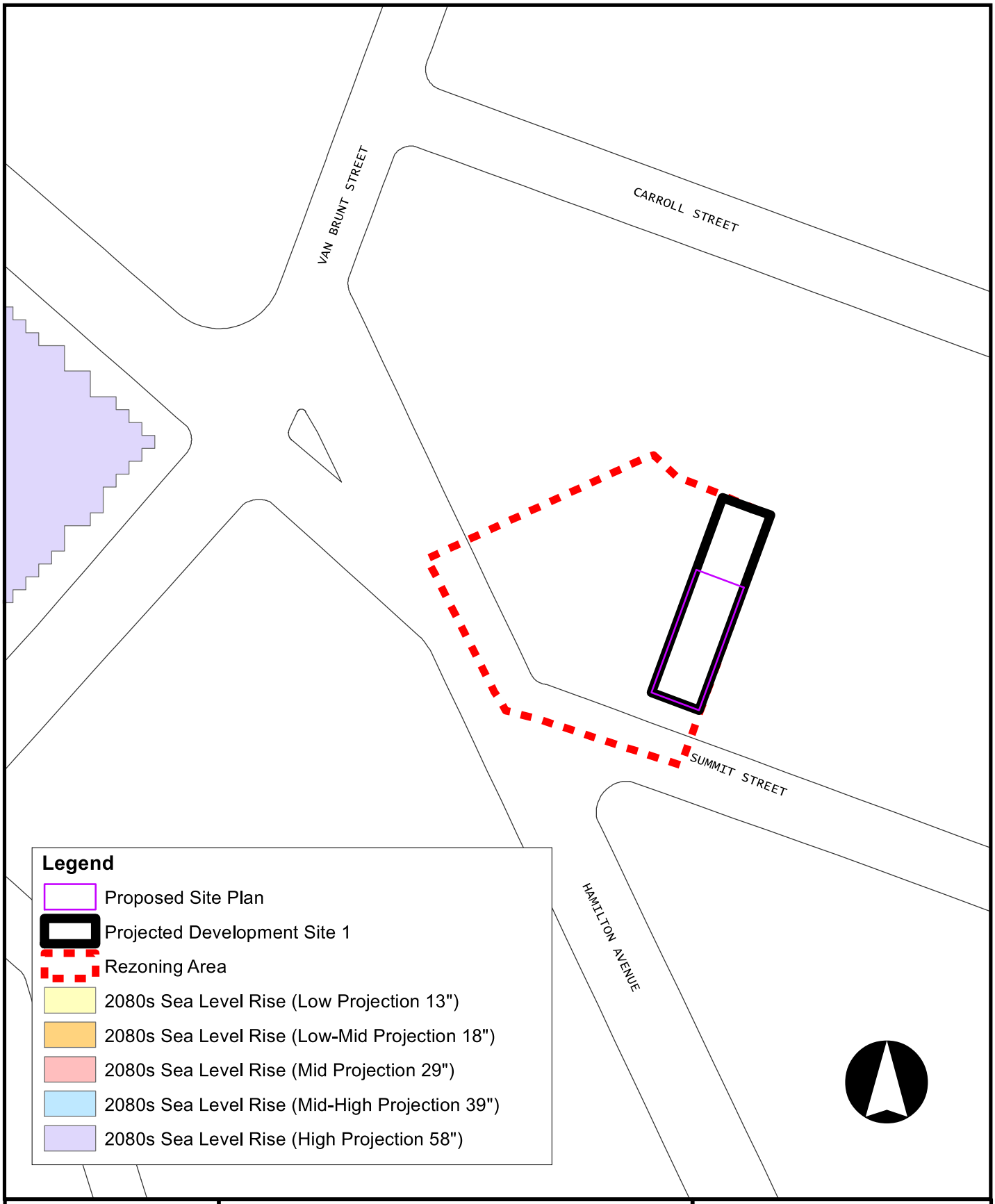
Illustrative Site Plan
Future Floodplain

Figure 2.1-4



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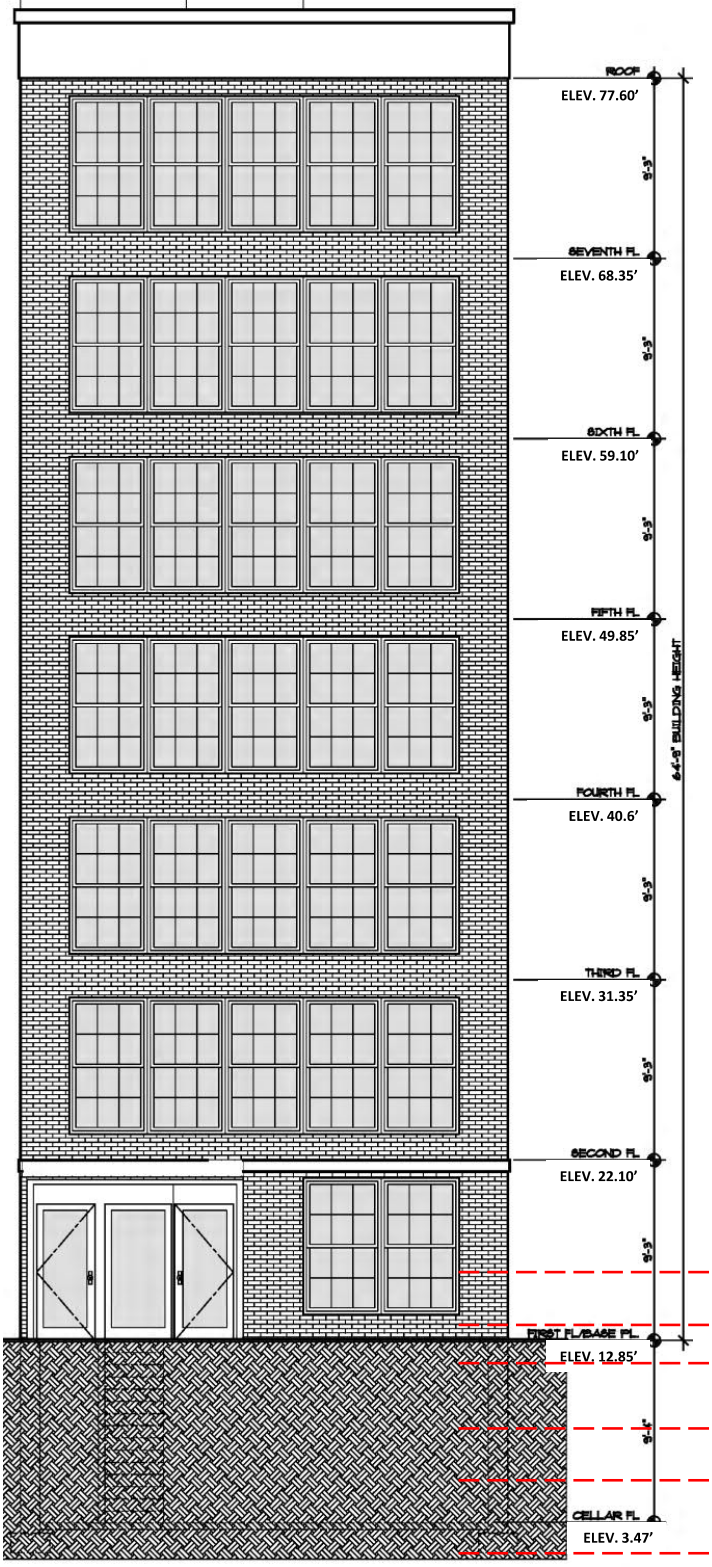
Illustrative Site Plan - Future Tides

Figure 2.1-5

Per the site survey, the project site elevation ranges from 12.90' feet (NAVD88) at the western lot line and 12.80' at the eastern lot line, yielding an average site elevation of 12.85'.



2080s 1% Flood Elevation - High Projection (15.83')

2050s 1% Flood Elevation - High Projection (13.5')

Current 1% Flood Elevation (11.0')

2080s MHHW - High Projection (7.11')

2050s MHHW - High Projection (4.78')

Current MHHW (2.28')

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Building, Flood and MHHW Elevations

Figure 2.1-6

2.2 SHADOWS

The *CEQR Technical Manual* defines a shadow as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space or feature. An incremental shadow is the additional or new shadow that a building or other built structure resulting from a proposed project would cast on a sunlight-sensitive resource during the year. Sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource' usability or architectural integrity, including public open space, architectural resources and natural resources. Shadows can have impacts on publicly accessible open spaces or natural features by adversely affecting their use, important landscaping and/or vegetation.

Shadows vary according to time of day and season. Shadows cast during the morning and evening, when the sun is low in the sky, are longer, while midday shadows are shorter in length. Shadows in winter, when the sun arcs low across the southern sky, are also longer throughout the day than at corresponding times in spring and fall seasons.

The *CEQR Technical Manual* states that a shadow assessment considers projects that result in new shadows long enough to reach a sunlight-sensitive resource. Therefore, a shadow assessment is warranted only if the project would either: (a) result in new structures (or additions to existing structures including the addition of rooftop mechanical equipment) of 50 feet or more; or, (b) be located adjacent to, or across the street from, a sunlight-sensitive resource. However, a project located adjacent to or across the street from a sunlight-sensitive open space resource (which is not a designated New York City Landmark or listed on the State/National Registers of Historic Places, or eligible for these programs) may not require a detailed shadow assessment if the project's height increase is ten feet or less.

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

Per zoning regulations and site restrictions, the proposed rezoning would permit a maximum building height of 65 feet on Projected Development Site 1, and a maximum building height of 95 feet on Projected Development Site 2. The rezoning area is located on the same block as the community garden known as "The Backyard Garden" and is located northeast of the City's Harold Ickes Playground. Consequently, further shadow screening assessments were undertaken.

2.2.1 Preliminary Shadow Screening Assessment

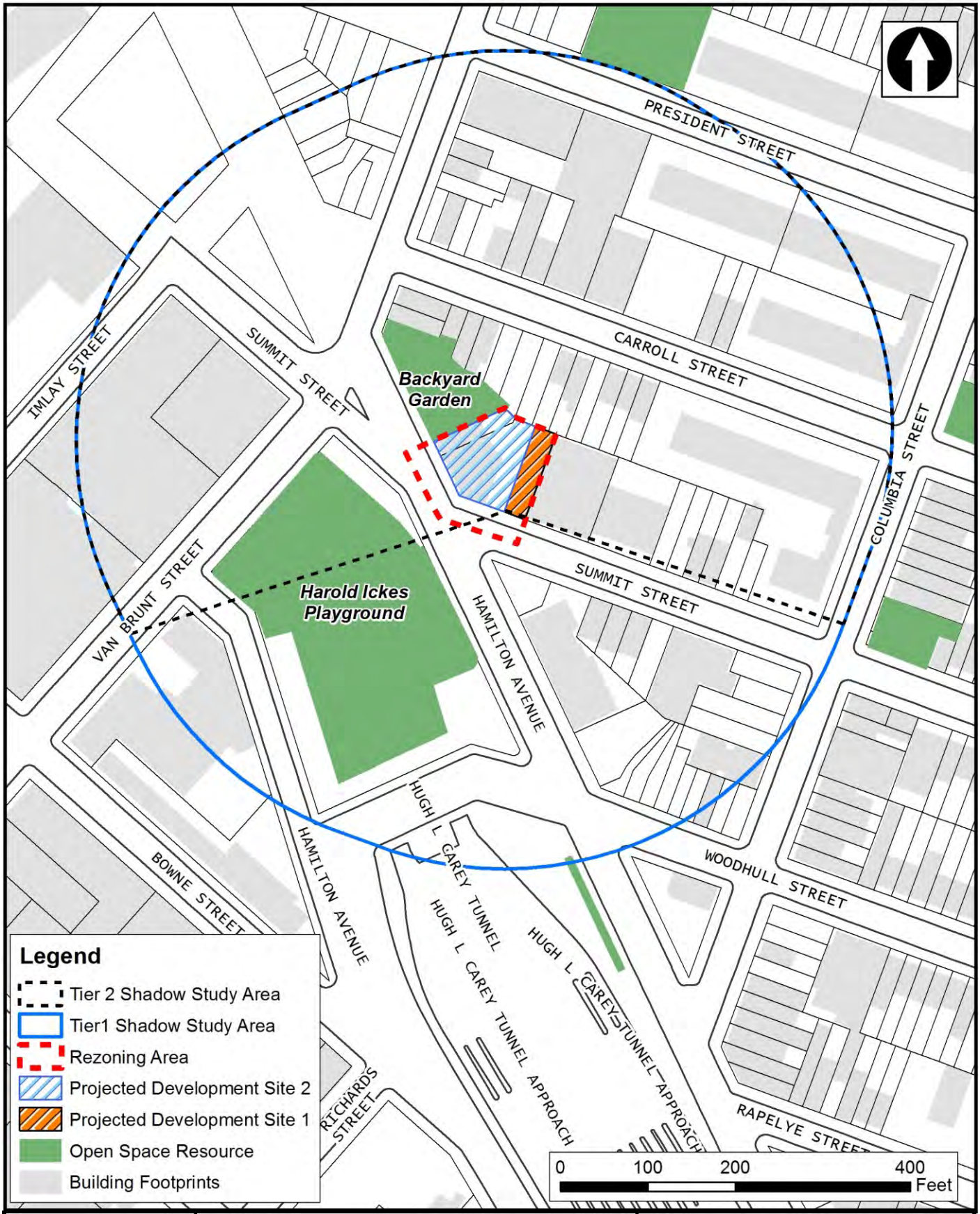
The shadow assessment begins with a preliminary screening assessment to ascertain whether a project's shadow may reach any sunlight-sensitive resources at any time of the year. If the screening assessment does not eliminate this possibility, a detailed shadow analysis is generally warranted in order to determine the extent and duration of the net incremental shadow resulting from the project.

Tier 1 and 2 Screening Assessments

The first step in the preliminary shadow screening assessment is a Tier 1 Screening Assessment. A base map is developed that illustrates the proposed site location in relationship to any sunlight-sensitive resources. The longest shadow study area is then determined, which encompasses the site of the

proposed project and a perimeter around the site's boundary with a radius equal to the longest shadow that could be cast by the proposed structure. To determine the longest shadow length which occurs on December 21st, the winter solstice, the maximum height of the structure (including any rooftop mechanical equipment) is multiplied by the factor of 4.3.

Shadow radii equal to 4.3 times the maximum building heights that could be developed on projected development sites 1 and 2 (65 feet and 95 feet, respectively) were calculated. The resulting shadow radii of approximately 280 feet for Projected Development Site 1 and 409 feet for Projected Development Site 2, were then merged to delineate the Tier 1 maximum shadow analysis area. As shown in **Figure 2.2-1**, the Tier 1 screening assessment results show that the above-mentioned two open space resources are situated within the Tier 1 maximum shadow analysis area. These two open spaces are considered sunlight-sensitive resources, as the Backyard Garden contains flowering plants and the Harold Ickes Playground contains seating areas.



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Tier 1 and 2 Shadow Screening

Figure 2.2-1

The *CEQR Technical Manual* states that if any portion of a sunlight-sensitive resource lies within the longest shadow study area, a Tier 2 screening assessment should be performed. Because of the path that the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north.

For a Tier 2 screening assessment, sunlight sensitive resources within the triangular area that cannot be shaded by the proposed project site, starting from the southernmost portion of the site covering the area between -108° degrees from true north and +108 degrees from true north, are screened out. The complementing portion to the north within the longest shadow study area is the area that can be shaded by the proposed project. Per CEQR guidance, if an architectural resource's sunlight-sensitive is located on a façade that faces directly away from a project site, no further shadow assessment is needed for that particular resource because no shadows from the project could fall on that sunlight-sensitive face.

As also shown in **Figure 2.2-1**, the results of the Tier 2 screening assessment indicate that approximately the western third of the Harold Ickes Playground is situated within the Tier 2 area, and as such, would still have the potential to be covered by shadows from the proposed action. Consequently, a Tier 3 assessment is warranted.

Tier 3 Screening Assessment

A Tier 3 screening assessment is used to determine if shadows resulting from the proposed action can reach a sunlight-sensitive resource. In order to determine whether the sun-sensitive features of the nearby open space resources would potentially be affected by shadows cast from the proposed building, three-dimensional models were created surrounding the Tier 3 identified resources of concern.

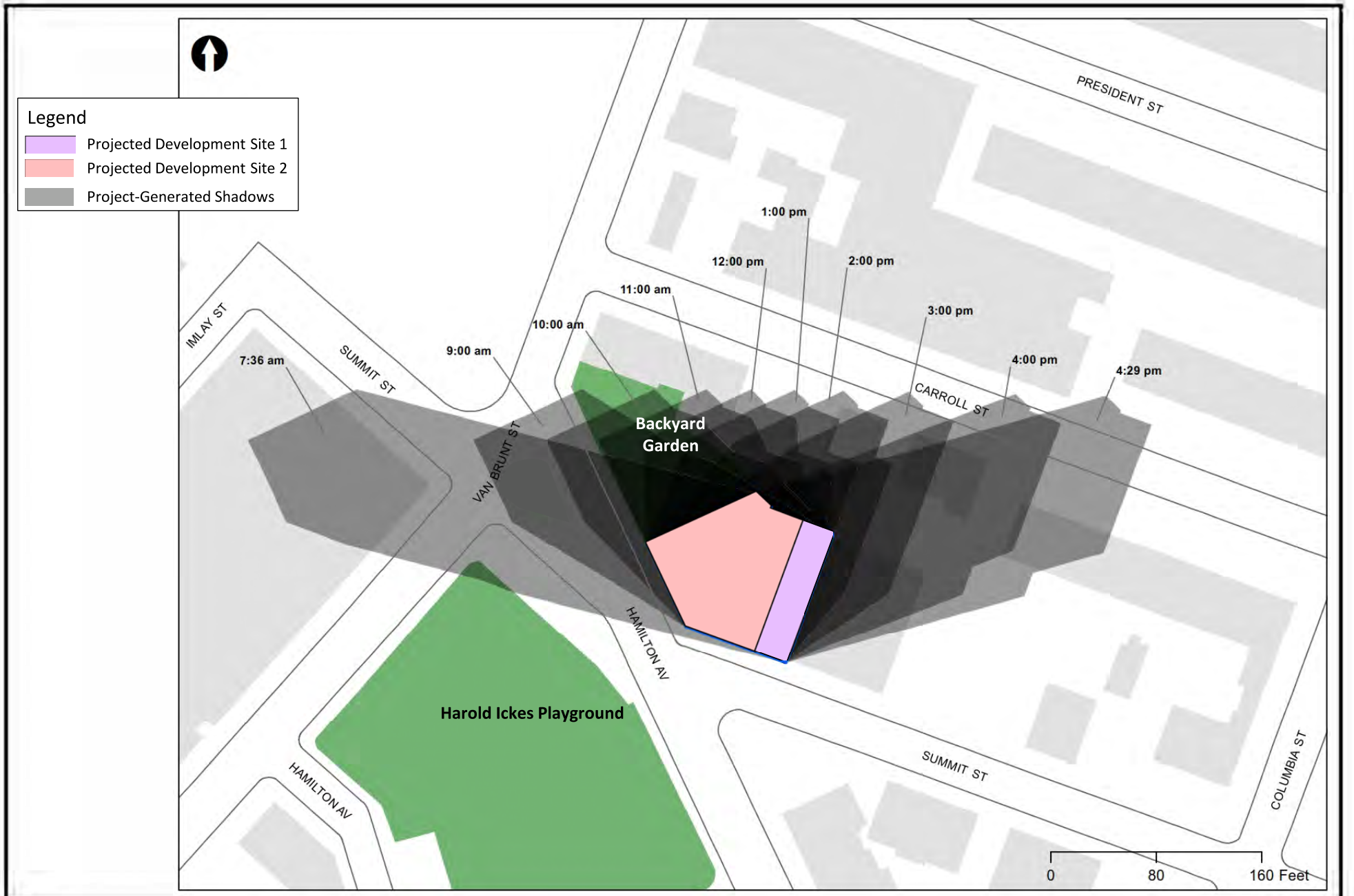
The *CEQR Technical Manual* states that for the New York City area, the months of interest for an open space resource encompass the growing season (March through October) and one month between November and February (usually December) representing a cold-weather month.

Representative days for the growing season are generally the vernal equinox (or the autumnal equinox, which is approximately the same), the summer solstice, and a spring or summer day halfway between the summer solstice and equinox. For the cold-weather months, the winter solstice is usually included to demonstrate conditions during cold-weather when people who do use open spaces rely most heavily on available sunlight for warmth. As representative of the full range of possible shadows, these months and days are used for assessing shadows on historic or sunlight-sensitive resources.

Assessments of the incremental shadows cast during four representative dates were made in accordance with the *CEQR Technical Manual* to encompass the growing season and December, representing a cold-weather month (and the longest shadow of the year), with the following dates: March 21/ September 21; May 6/ August 6; June 21; and December 21. On these dates, shadows occurring within one and one-half hour of sunrise or sunset generally are not considered significant in accordance with the *CEQR Technical Manual*, and thus were not included in the screening assessment.

The results of the Tier 3 screening, shown in **Figures 2.2-2a** through **2.2-2d**, indicate that shadows have the potential to reach into the Backyard Garden on all four analysis dates (March 21; May 6; June 21; and December 21) and into the Harold Ickes Playground on the March 21; May 6 and June 21 analysis periods. Therefore, detailed shadow analyses were undertaken.

It should be noted that the Tier 3 and detailed shadow studies represent a worst-case scenario of the proposed action, as they assume that the footprint of the future 65- and 95-foot-tall buildings would occupy the full width and length of each site. Actual shadows cast from the buildings would be somewhat reduced to reflect relevant zoning regulations such as required setbacks, and rear and yard side requirements.



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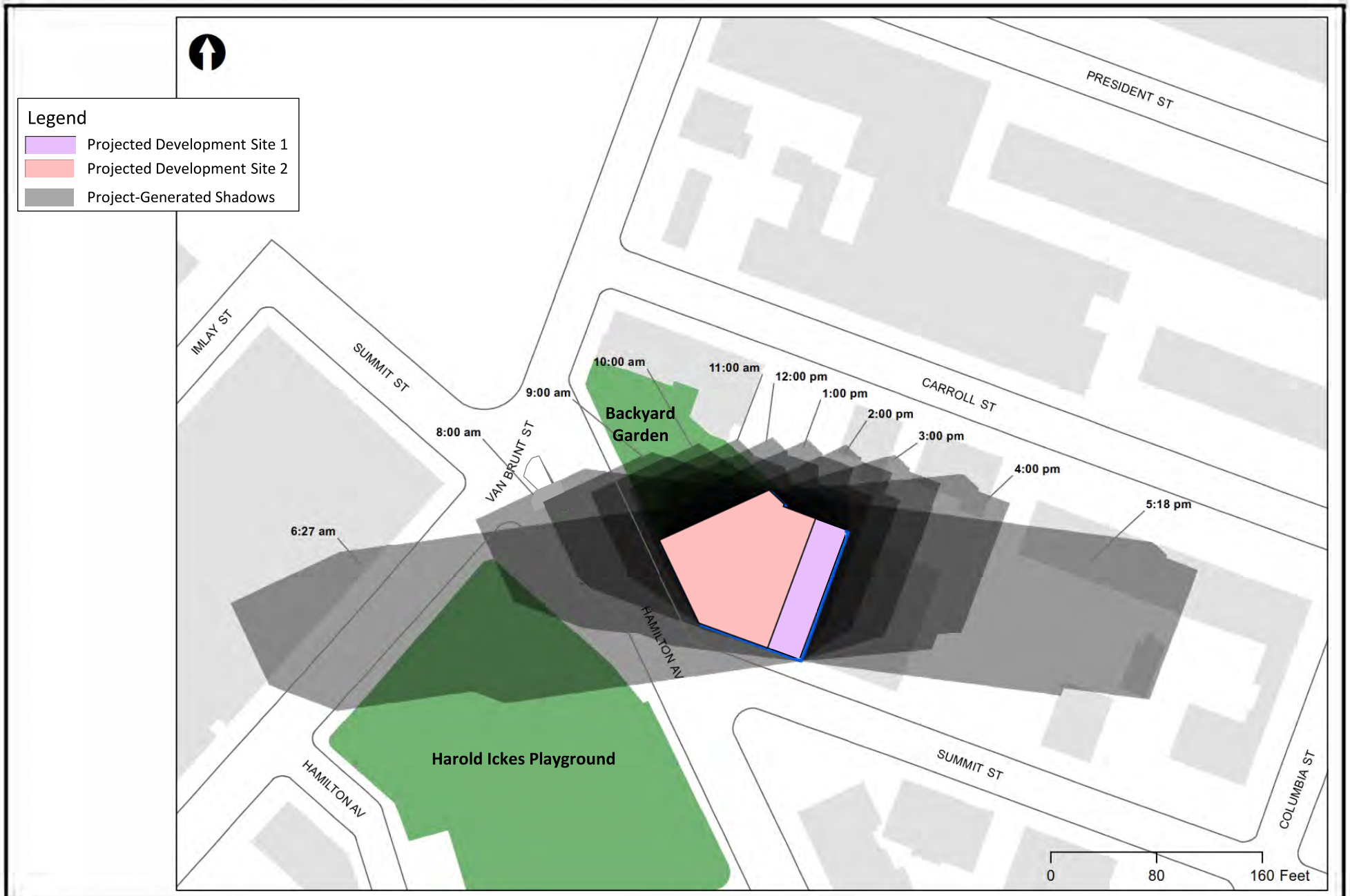
Tier 3 Shadow Screening
March 21/ September 21
Figure 2.2-2A



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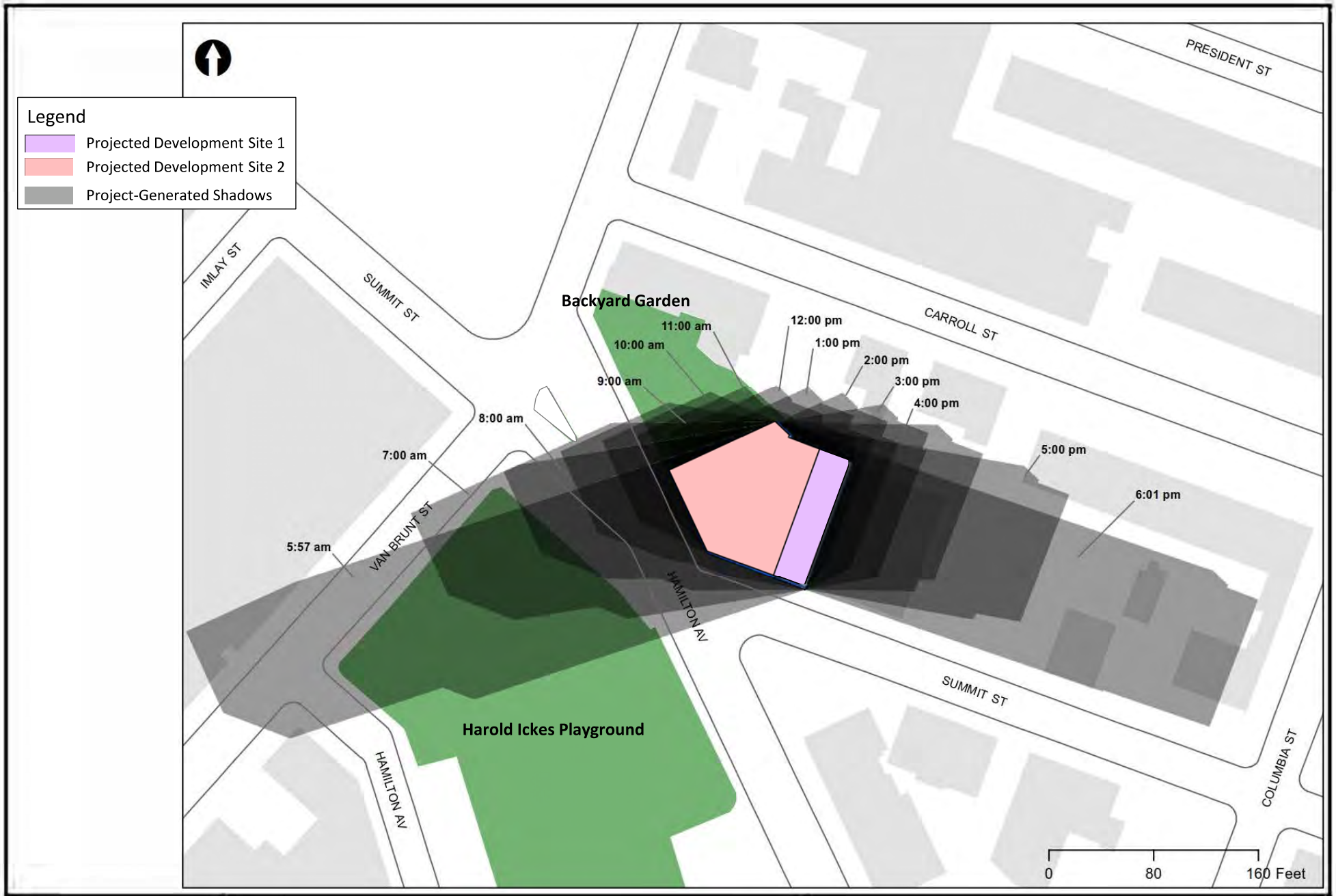
Tier 3 Shadow Screening
May 6/ August 6

Figure 2.2-2B



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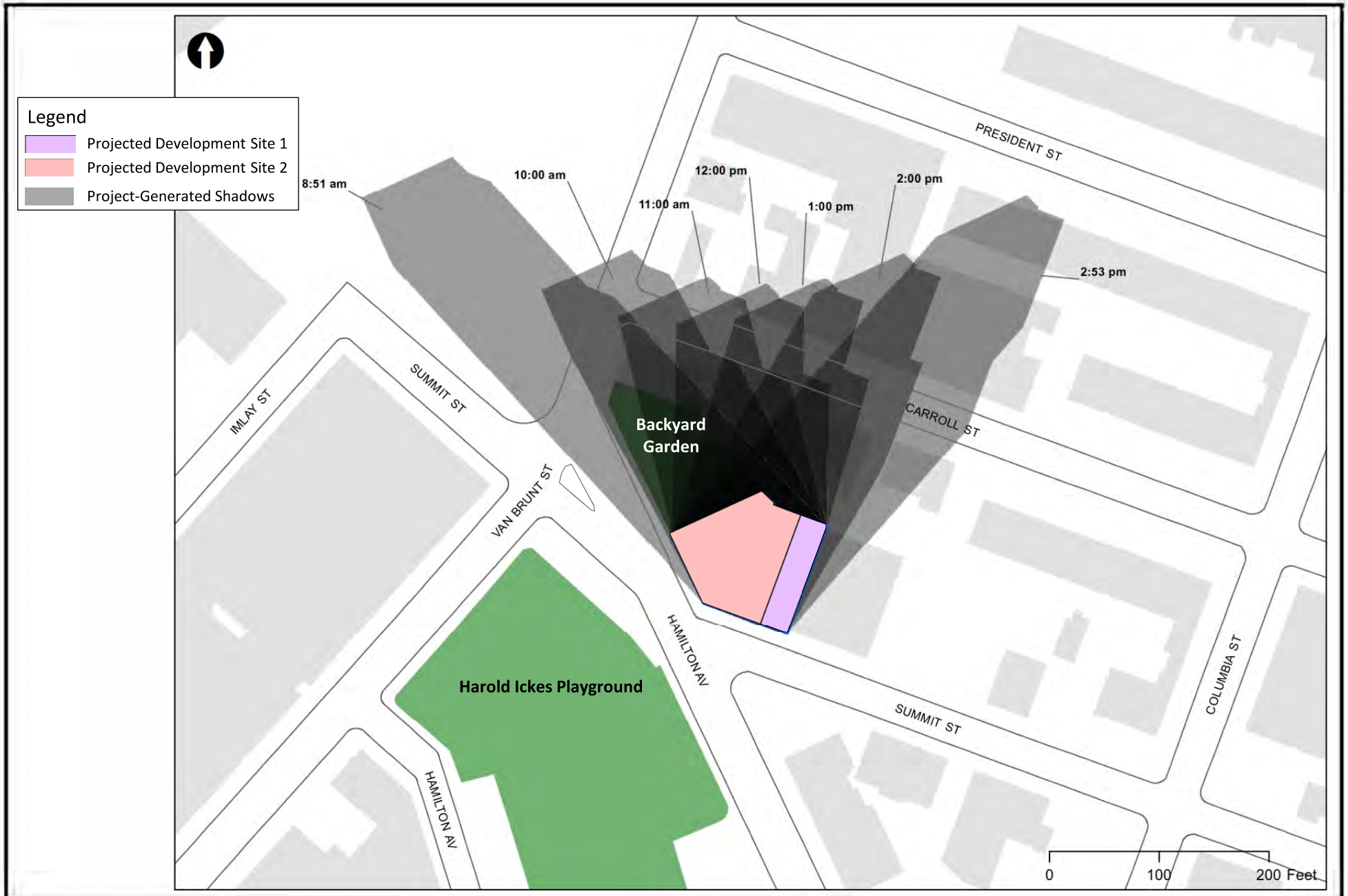
Tier 3 Shadow Screening
June 21

Figure 2.2-2C



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Tier 3 Shadow Screening
December 21

Figure 2.2-2D

2.2.2 Detailed Shadow Analyses

The *CEQR Technical Manual* states that a detailed shadow analysis is warranted when the screening analysis does not rule out the possibility that project-generated shadows would reach any sunlight-sensitive resources. The purpose of the detailed analysis is to determine the extent and duration of new incremental shadows that fall on a sunlight-sensitive resource as a result of the proposed action.

To evaluate the extent and duration of a new shadow that would be added to a sunlight-sensitive resource as a result of the proposed action, shadows from the site that would exist under the Future No-Action Condition were defined. In the future without the proposed action, the existing building, vacant areas and surface parking lot would remain on the site and shadow conditions would not change, as no new structures would be built on the site. As such, existing shadow conditions would remain the same under the Future No-Action Condition.

The results of the detailed shadow analyses are noted in **Table 2.2-1.** The table presents the times when net new incremental shadows enter and exit each open space resource, as well as the duration of the shadow during each analysis date. Results are further described below. The analysis results are graphically illustrated in **Figures 2.3-3A through 2.3-3X**, showing net incremental shadow durations and enter and exit times at the.

Table 2.2-1 Detailed Shadow Analysis Summary

Analysis Period **Time Frame Window**	**December 21** **8:51 a.m. - 2:53 p.m.**	**March 21/ September 21** **7:36 a.m. - 4:29 p.m.**	**May 6/ August 6** **6:27a.m. - 5:18 p.m.**	**June 21** **5:57 a.m. - 6:01pm**
The Backyard Garden				
Net Shadows Enter/ Exit Times	8:51 a.m. - 2:53 p.m.	7:36 a.m. - 4:29 p.m.	6:27 a.m. - 2:15 p.m.	5:57 a.m. -1:50 p.m.
Net Incremental Shadow Duration	6 hours, 2 minutes	8 hours, 53 minutes	7 hours, 48 minutes	7 hours, 53 minutes
Harold Ickes Playground				
Net Shadows Enter/ Exit Times	No impact	7:36 a.m. - 7:55 a.m.	6:27 a.m. - 8:15 a.m.	5:57 a.m. - 8:25 a.m.
Net Incremental Shadow Duration	N/A	19 minutes	1 hour, 48 minutes	2 hours, 28 minutes

<u>The Backyard Garden</u>
On March 21, the project-generated shadow would enter the garden at 7:36 a.m. and exit at 4:29 p.m., for a total duration of approximately 8 hours and 53 minutes. The shadow cast on this resource at 9:49 a.m. represents the maximum extent of the project-generated shadow on the site. After this point, the shadow recedes off the site and ultimately exits the resource at 4:29 p.m.

On May 6, the project-generated shadow would enter the Backyard Garden at 6:27 a.m. and exit at 2:15 p.m., for a total duration of approximately 7 hours and 48 minutes. The shadow cast on this resource at 10:40 a.m. represents the maximum extent of the project-generated shadow on the site. After this point, the shadow recedes off the site and ultimately exits the resource at 2:15 p.m.

On June 21, the project-generated shadow would enter the site at 5:57 a.m. and exit at 1:50 p.m., for a total duration of approximately 7 hours and 53 minutes. The shadow cast on this resource at 11:10 a.m. represents the maximum extent of the project-generated shadow on the site. After this point, the shadow recedes off the site and ultimately exits the resource at 1:50 p.m.

On December 21, the project-generated shadow would enter the Backyard Garden at 8:51 a.m. and exit at 2:53 p.m., for a total duration of approximately 6 hours and 2 minutes. The shadow cast on this resource at 8:51 a.m. represents the maximum extent of the project-generated shadow on the site. After

this point, the shadow begins to recede off the site and ultimately exits the resource at 2:53 p.m.

Harold Ickes Playground
On December 21, there would be no project-generated shadow cast onto the Harold Ickes Playground.

On March 21, the project-generated shadow would enter the site at 7:36 a.m. and exit at 7:55 a.m., for a total duration of approximately 19 minutes. The shadow cast on this resource at 7:36 a.m. represents the maximum extent of the project-generated shadow on the site. After this point, the shadow recedes off the site and ultimately exits the resource at 7:55 a.m.

On May 6, the project-generated shadow would enter the Backyard Garden at 6:27 a.m. and exit at 8:15 a.m., for a total duration of approximately 1 hour and 48 minutes. The shadow cast on this resource at 6:27 a.m. represents the maximum extent of the project-generated shadow on the site. After this point, the shadow recedes off the site and ultimately exits the resource at 8:15 a.m.

On June 21, project-generated shadows would enter the site at 5:57 a.m. and exit at 8:25 a.m., for a total duration of approximately 2 hours and 28 minutes. The shadow cast on this resource at 5:57 a.m. represents the maximum extent of the project-generated shadow on the site. After this point, the shadow stars to recede off the site, ultimately exiting the resource at 8:25 a.m.

Conclusions

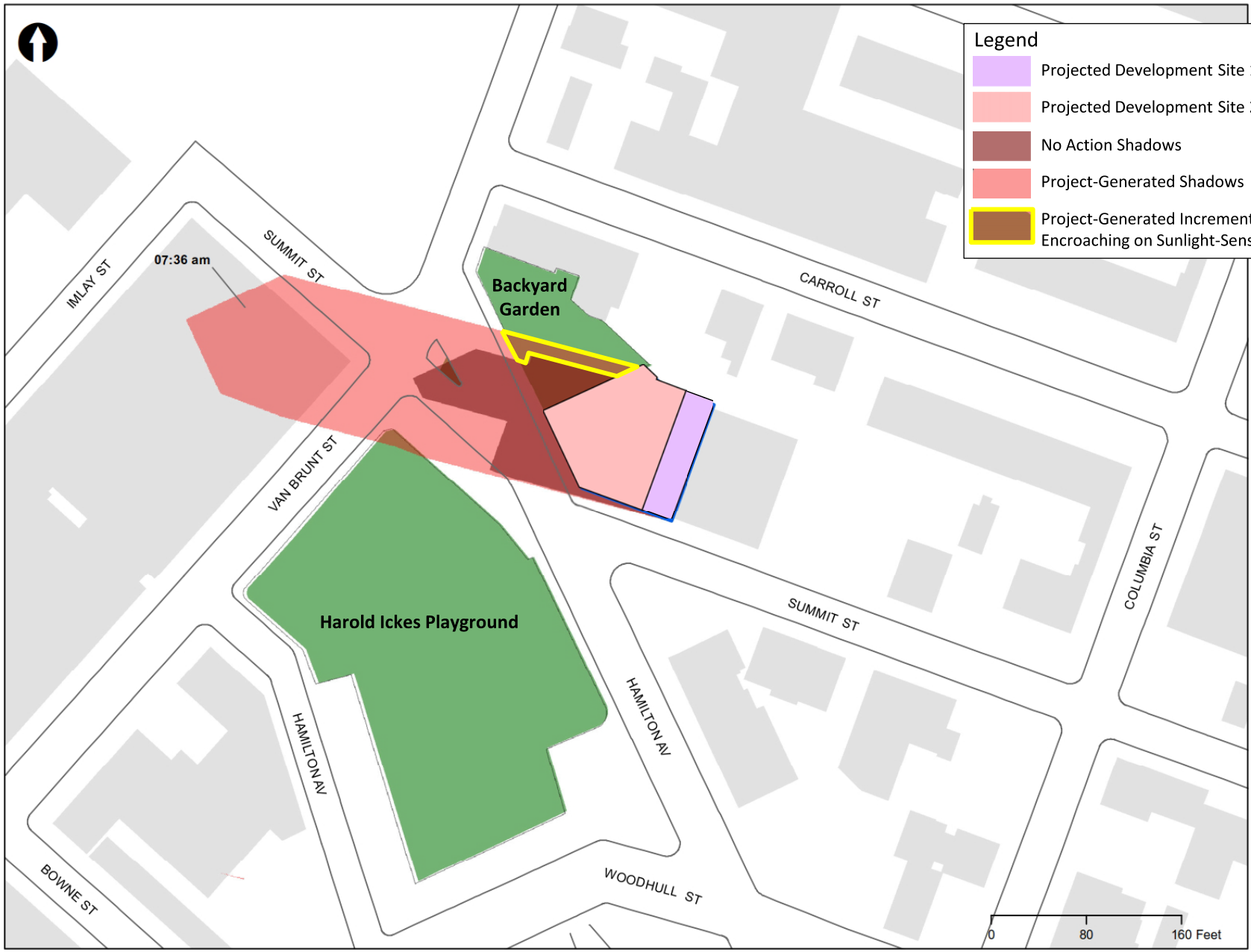
The *CEQR Technical Manual* states that the determination of significance of shadow on a sunlight-sensitive resource is based on: (1) the information resulting from the detailed shadow analysis describing the extent and duration of incremental shadows; and (2) an analysis of the resource's sensitivity to reduced sunlight. The goal of the assessment is to determine whether the effects of incremental shadows on a sunlight-sensitive resource are significant under CEQR. A shadow 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 open space and natural resources, the uses and features of a resource is an indicator of its sensitivity to shadows. Shadows occurring during the cold-weather months of interest generally do not affect the growing season of outdoor vegetation; however, effects on other uses and activities should be assessed. This sensitivity is assessed for warm-weather-dependent features (such as wading pools and sand boxes) or vegetation that could be affected by a loss of sunlight during the growing season, and for features (such as benches) that could be affected by a loss of winter sunlight. 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 often a minimum requirement. Where the incremental shadows from the project fall on sunlight-sensitive features or uses, the analysis assesses the loss of sunlight relative to sunlight that would be available without the project.

As discussed above, the proposed action would cast incremental shadows on the Backyard Garden on all four analysis dates, with durations ranging from 6 hours and 2 minutes on December 21, to 8 hours and 53 minutes on March 21. However, no part of the garden would be in constant shadow, as the shadow would sweep across the garden during the course of the day. As a result, the garden would receive sufficient sunlight during the growing season, and the impact to the garden from project-generated shadows is not considered to be significant.

The proposed action would also cast an incremental shadow on a portion of the Harold Ickes Playground during the March, May and June analysis periods, with durations ranging from 19 minutes on March 21 to 2 hours and 28 minutes on June 21. No new shadow would be cast on the playground during the December analysis date. These shadows would sweep across the playground between the hours of 5:57 a.m. and 8:25 a.m., which is typically prior to the time of substantial use.

As a result, a substantial reduction in the usability of the Harold Ickes Playground would not occur in the future with the proposed action and significant adverse shadow impacts are not expected.



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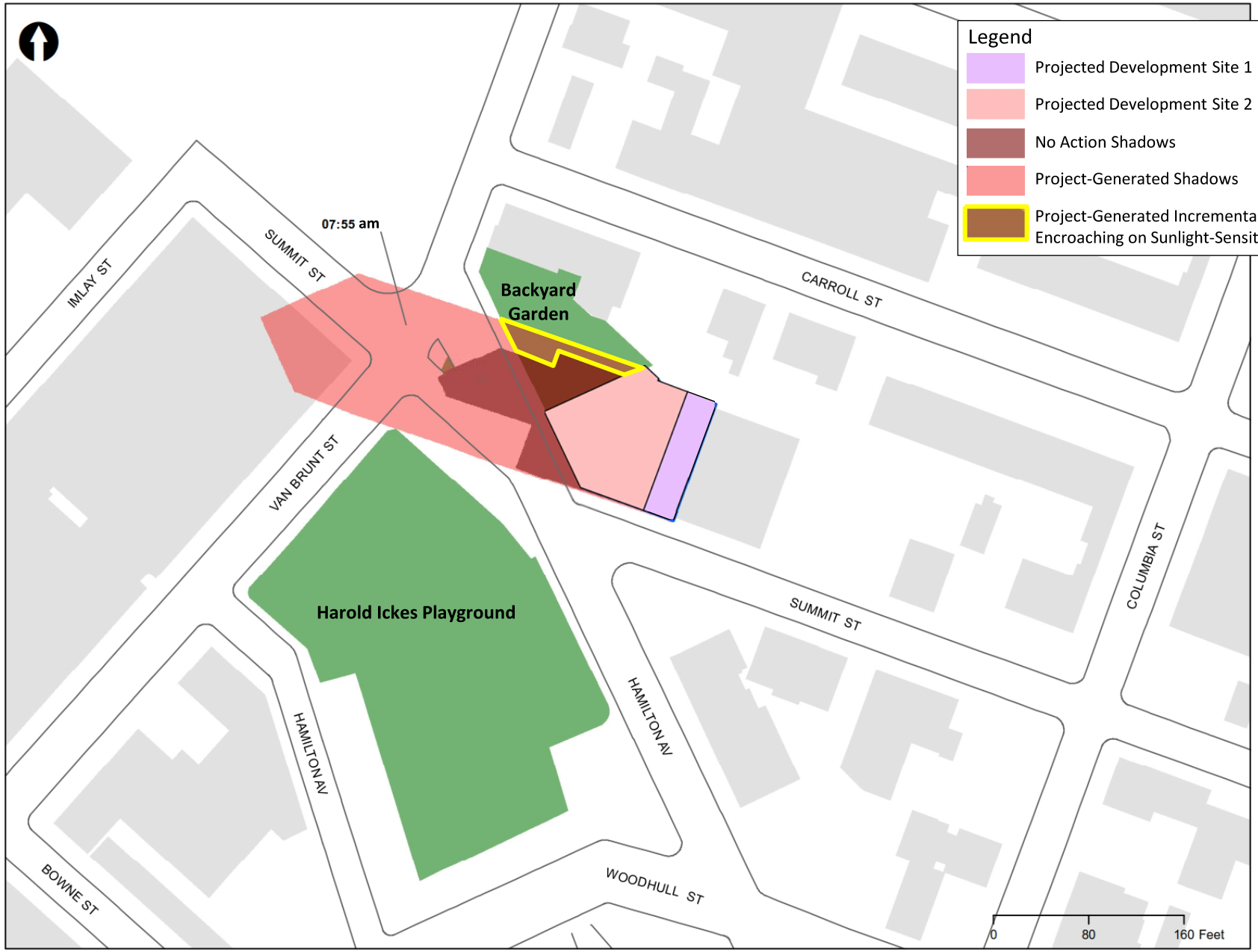
Detailed Shadows Analysis: March 21, 7:36 a.m.

Figure 2.2-3A



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41 Summit Street Rezoning
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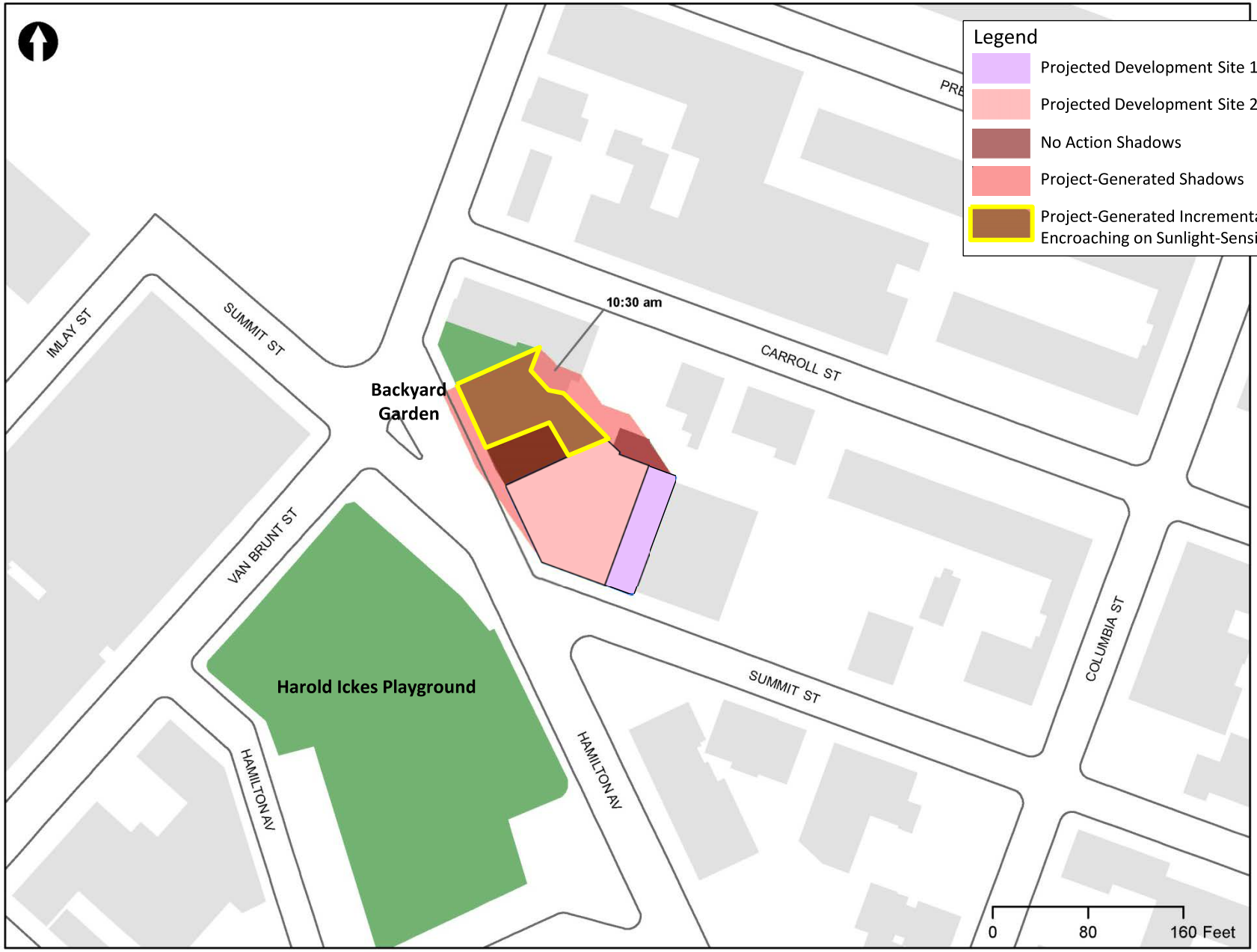
Detailed Shadows Analysis: March 21, 7:55 a.m.

Figure 2.2-3B



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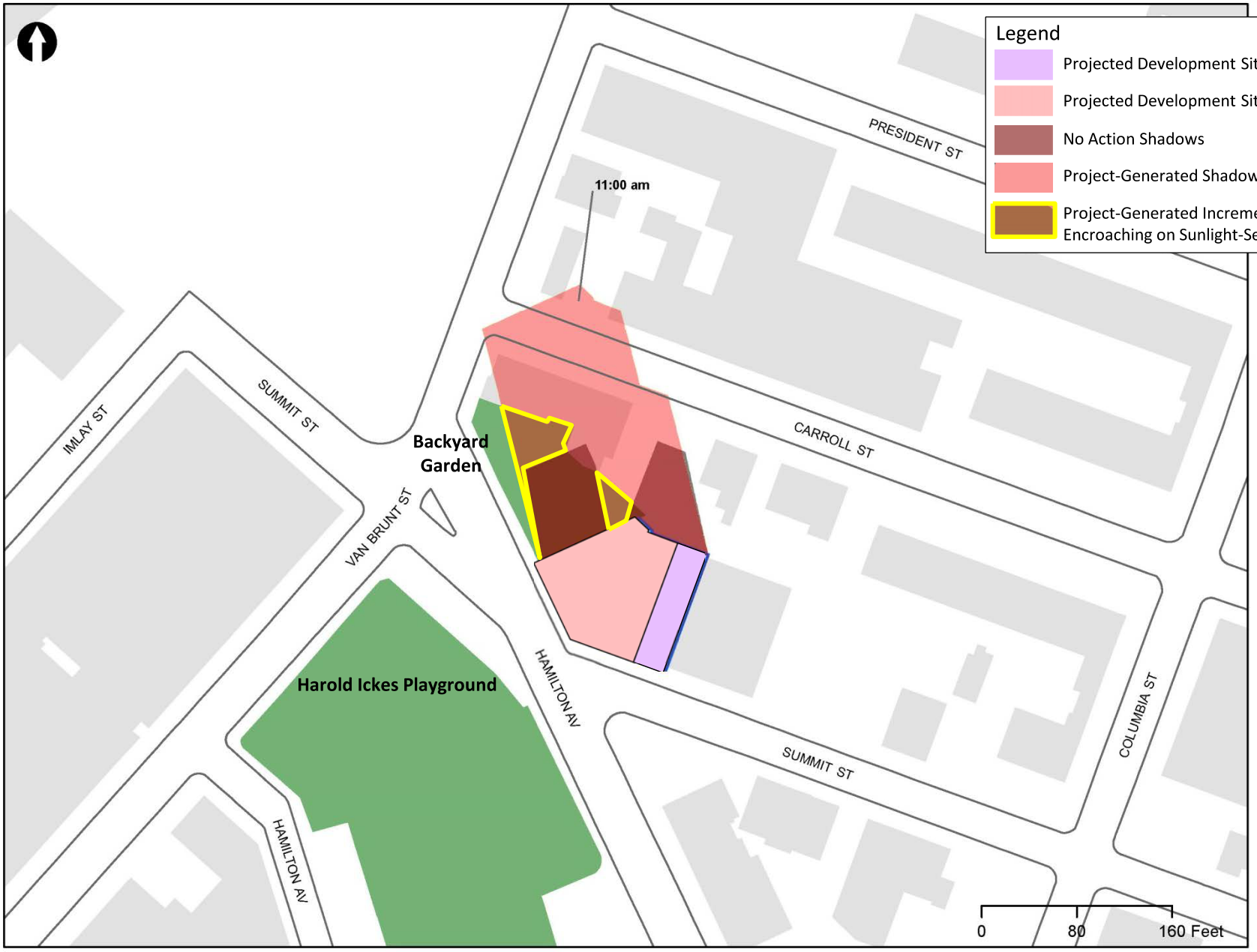
Detailed Shadows Analysis: March 21, 10:30 a.m.

Figure 2.2-3C



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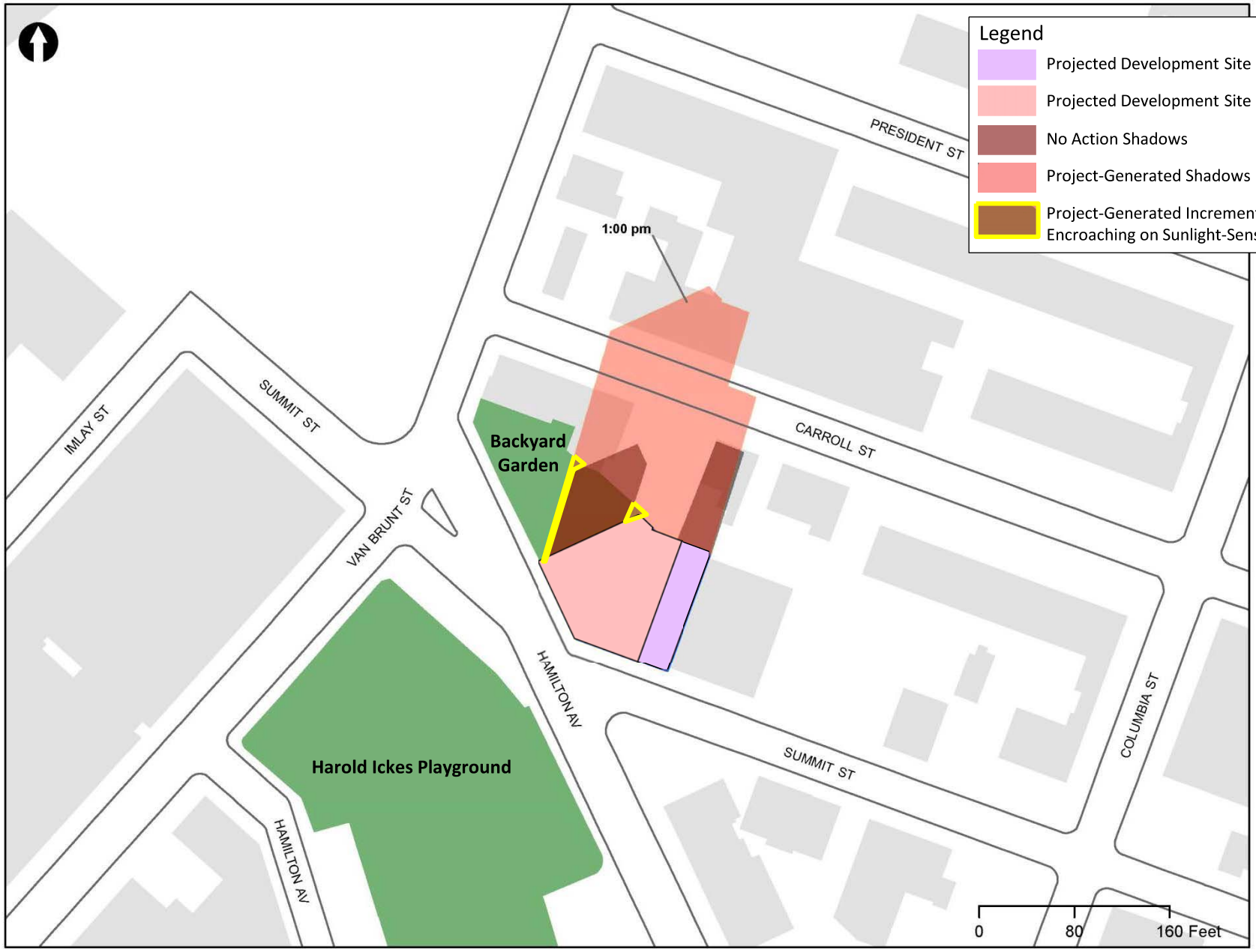
Detailed Shadows Analysis: March 21, 11:00 a.m.

Figure 2.2-3D



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41 Summit Street Rezoning
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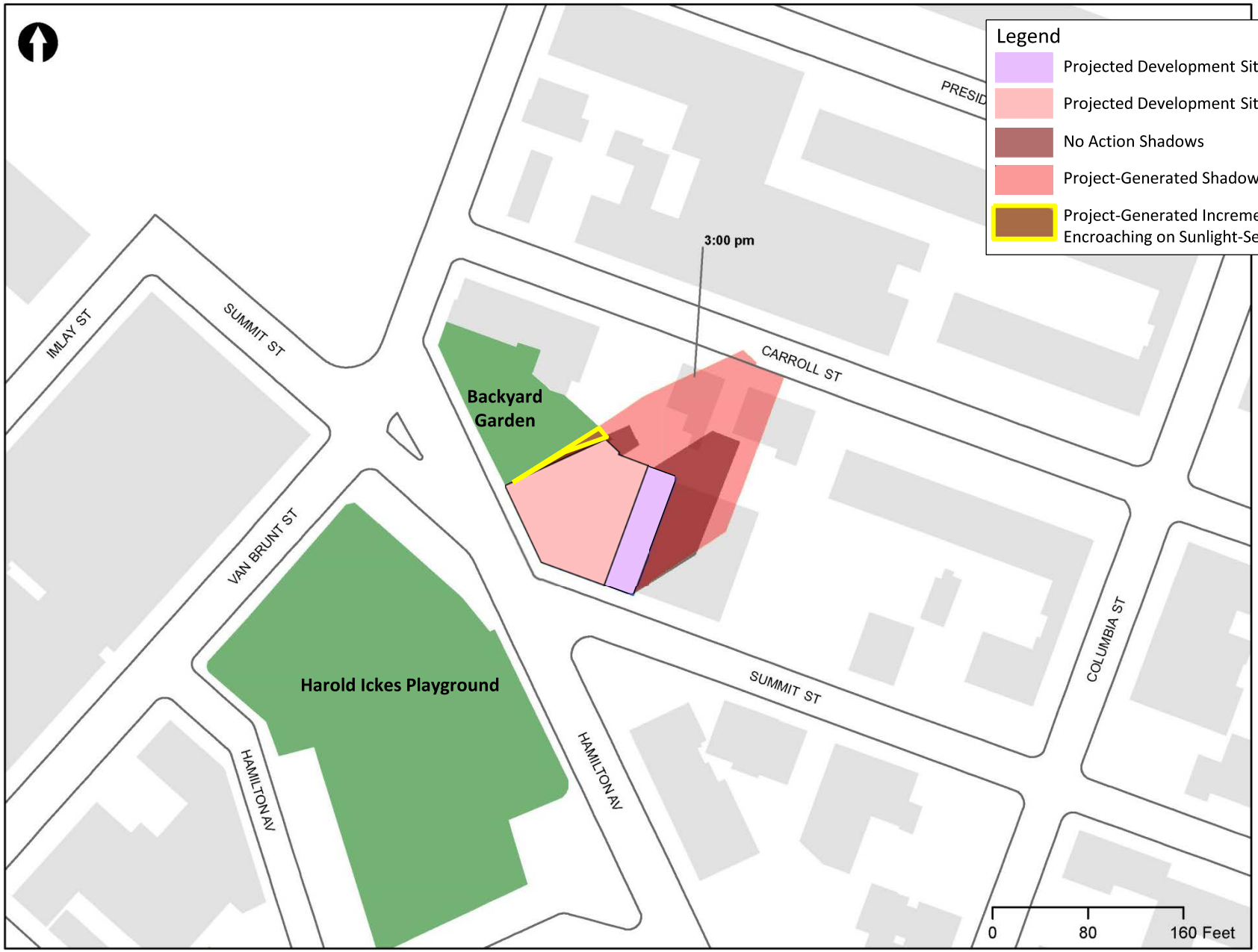
Detailed Shadows Analysis:
March 21, 1:00 p.m.

Figure 2.2-3E



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41 Summit Street Rezoning
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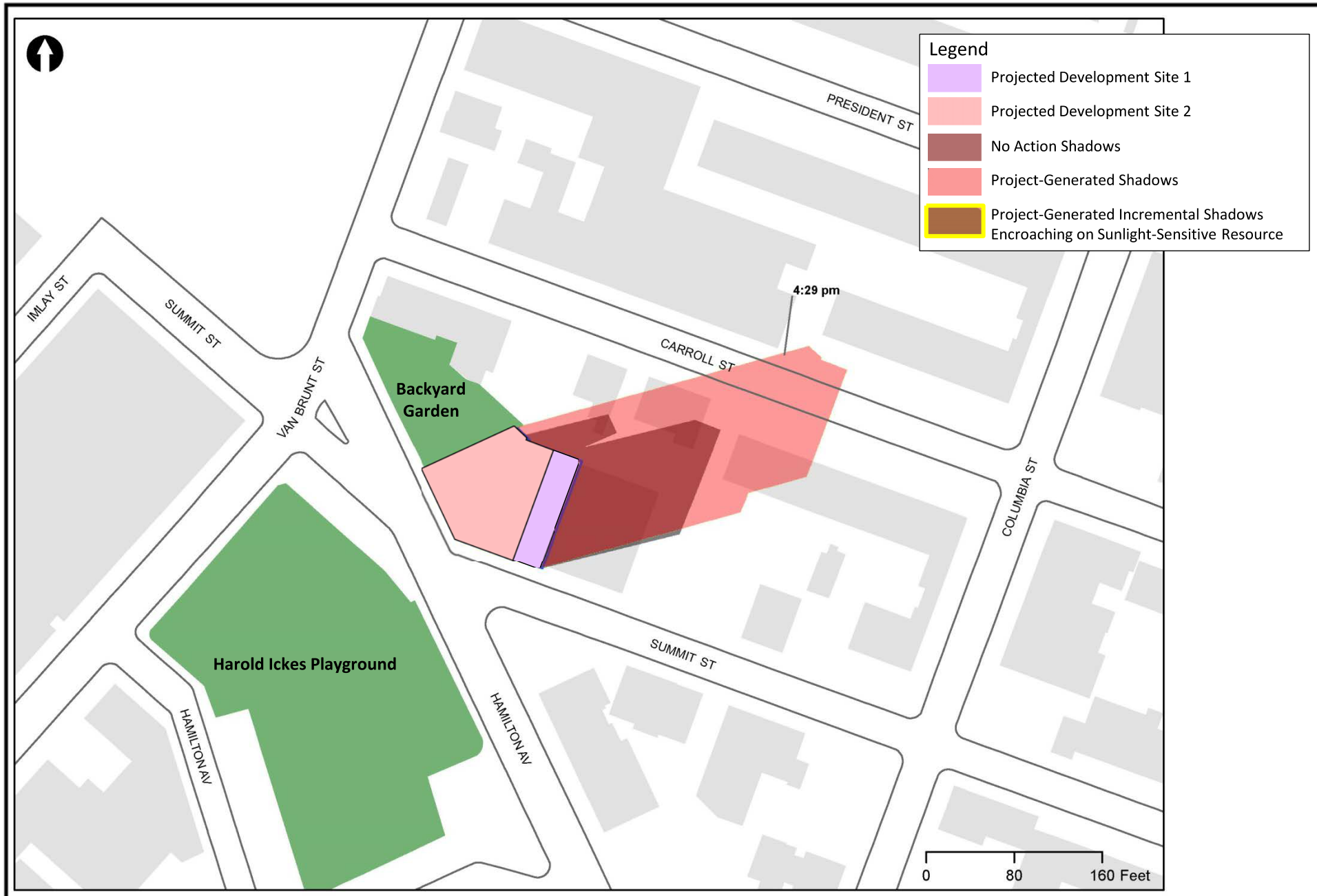
Detailed Shadows Analysis: March 21, 3:00 p.m.

Figure 2.2-3F



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41 Summit Street Rezoning
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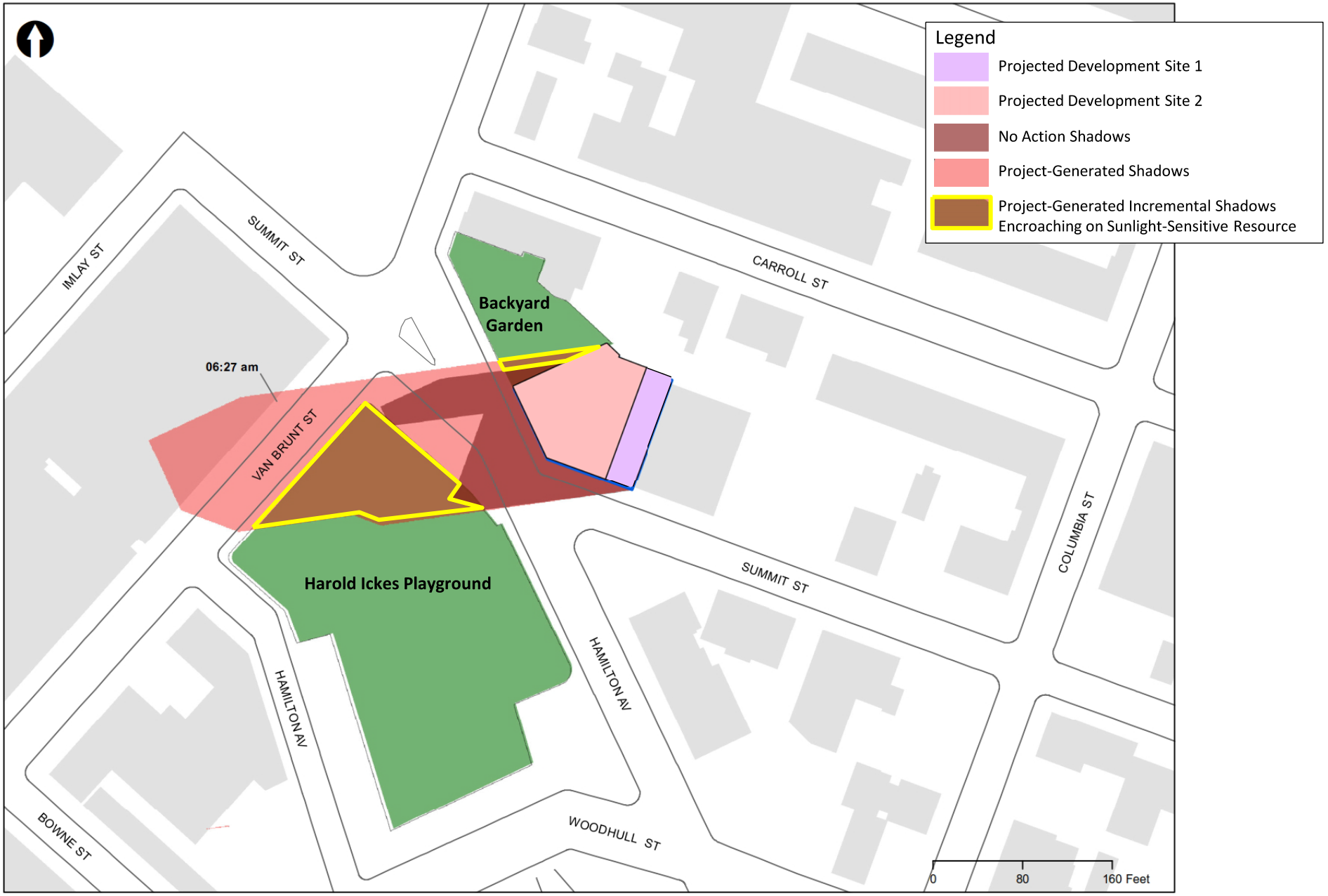
Detailed Shadows Analysis:
March 21, 4:29 p.m.

Figure 2.2-3G



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41 Summit Street Rezoning
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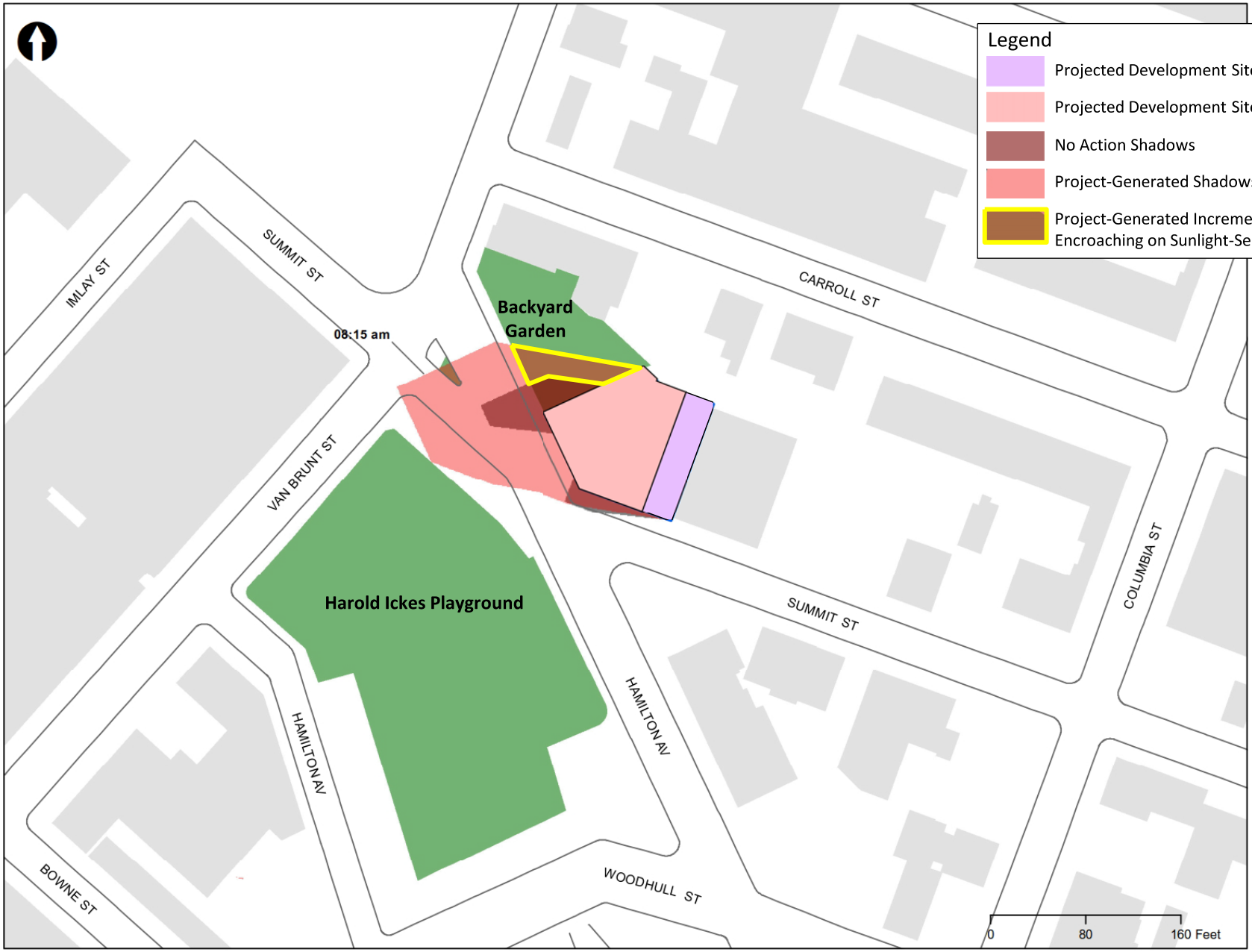
Detailed Shadows Analysis: May 6, 6:27 a.m.

Figure 2.2-3H



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41 Summit Street Rezoning
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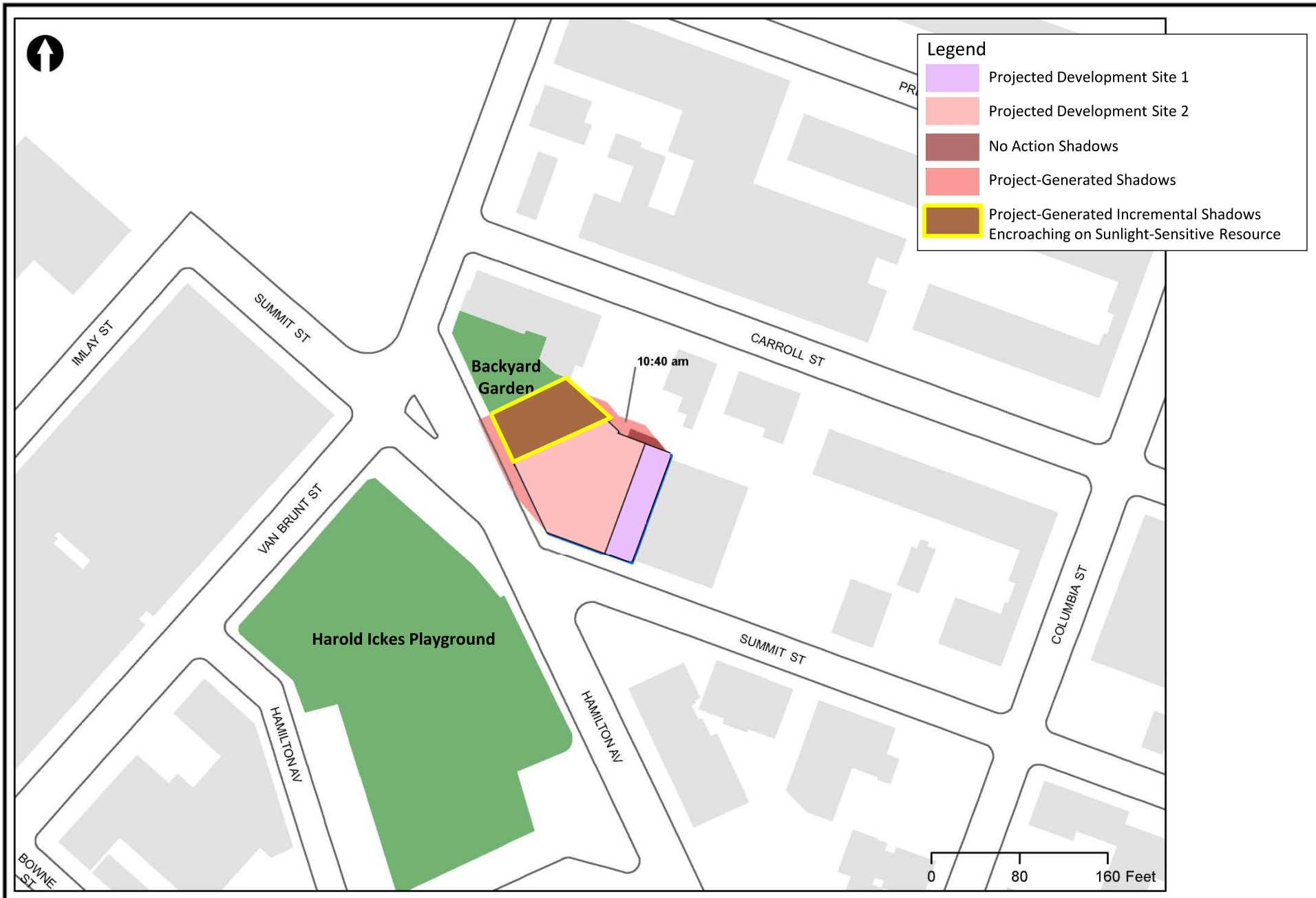
Detailed Shadows Analysis: May 6, 8:15 a.m.

Figure 2.2-3I



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41 Summit Street Rezoning
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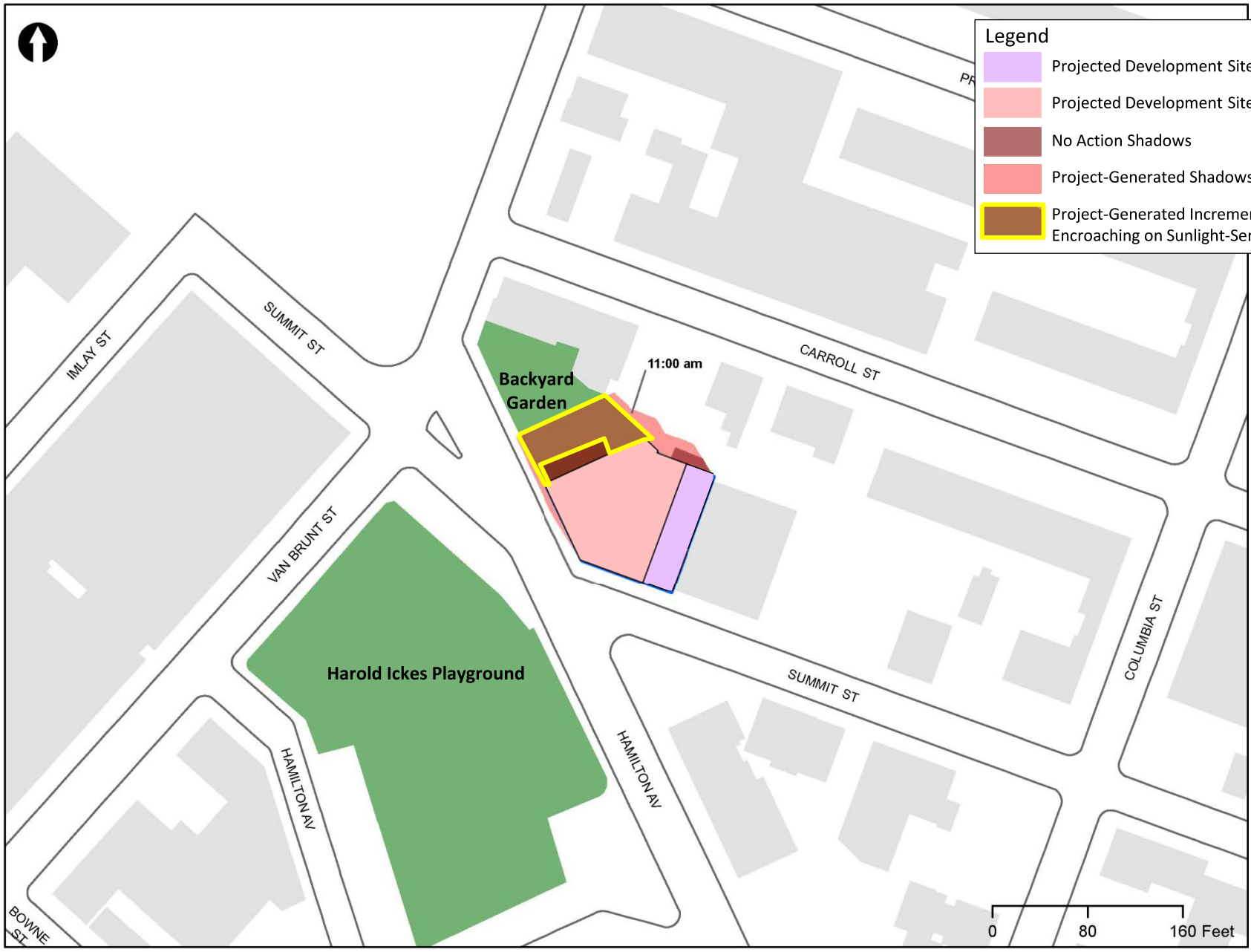
Detailed Shadows Analysis: May 6, 10:40 a.m.

Figure 2.2-3J



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41 Summit Street Rezoning
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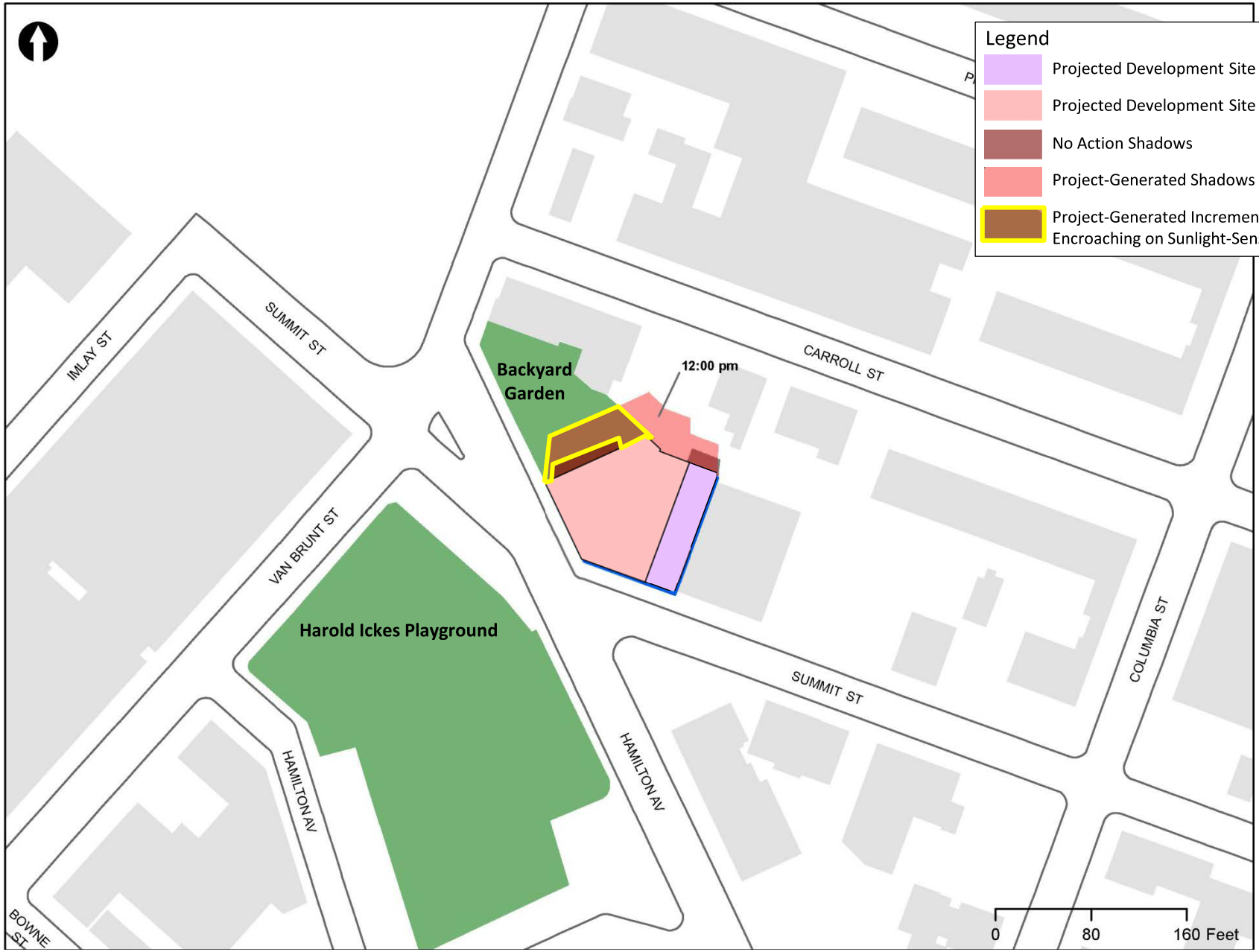
Detailed Shadows Analysis: May 6, 11:00 a.m.

Figure 2.2-3K



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41 Summit Street Rezoning
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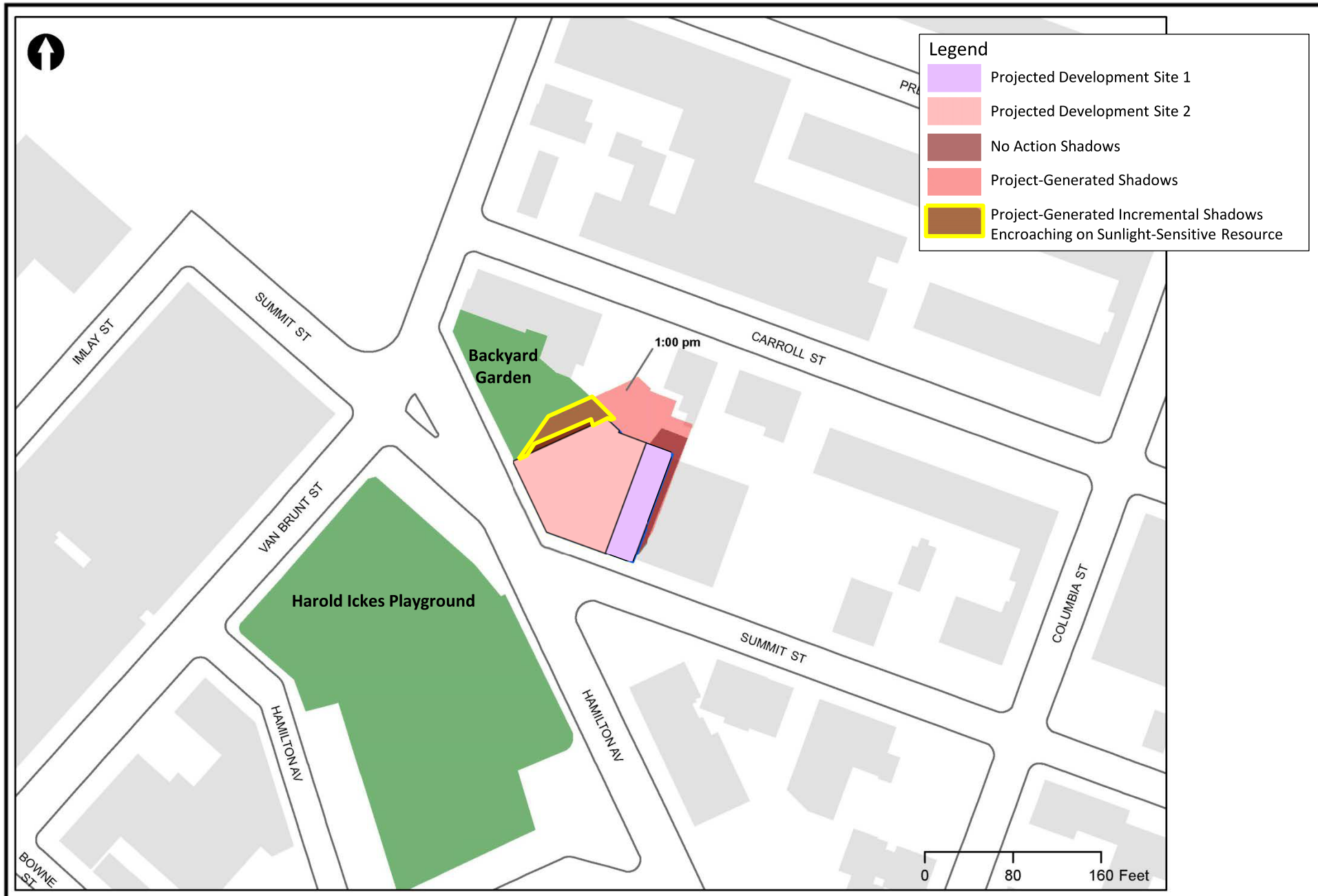
Detailed Shadows Analysis: May 6, 12:00 p.m.

Figure 2.2-3L



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41 Summit Street Rezoning
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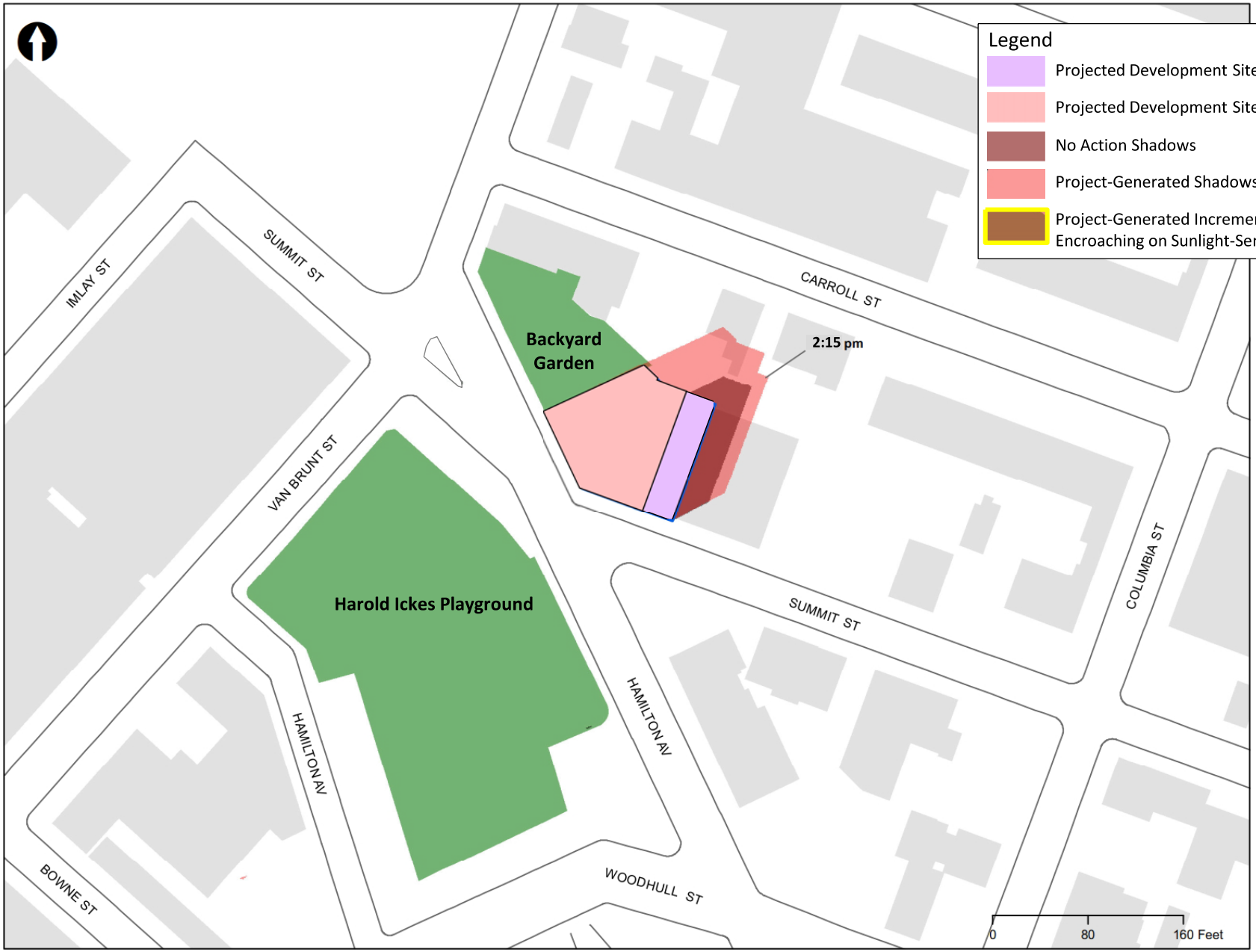
Detailed Shadows Analysis: May 6, 1:00 p.m.

Figure 2.2-3M



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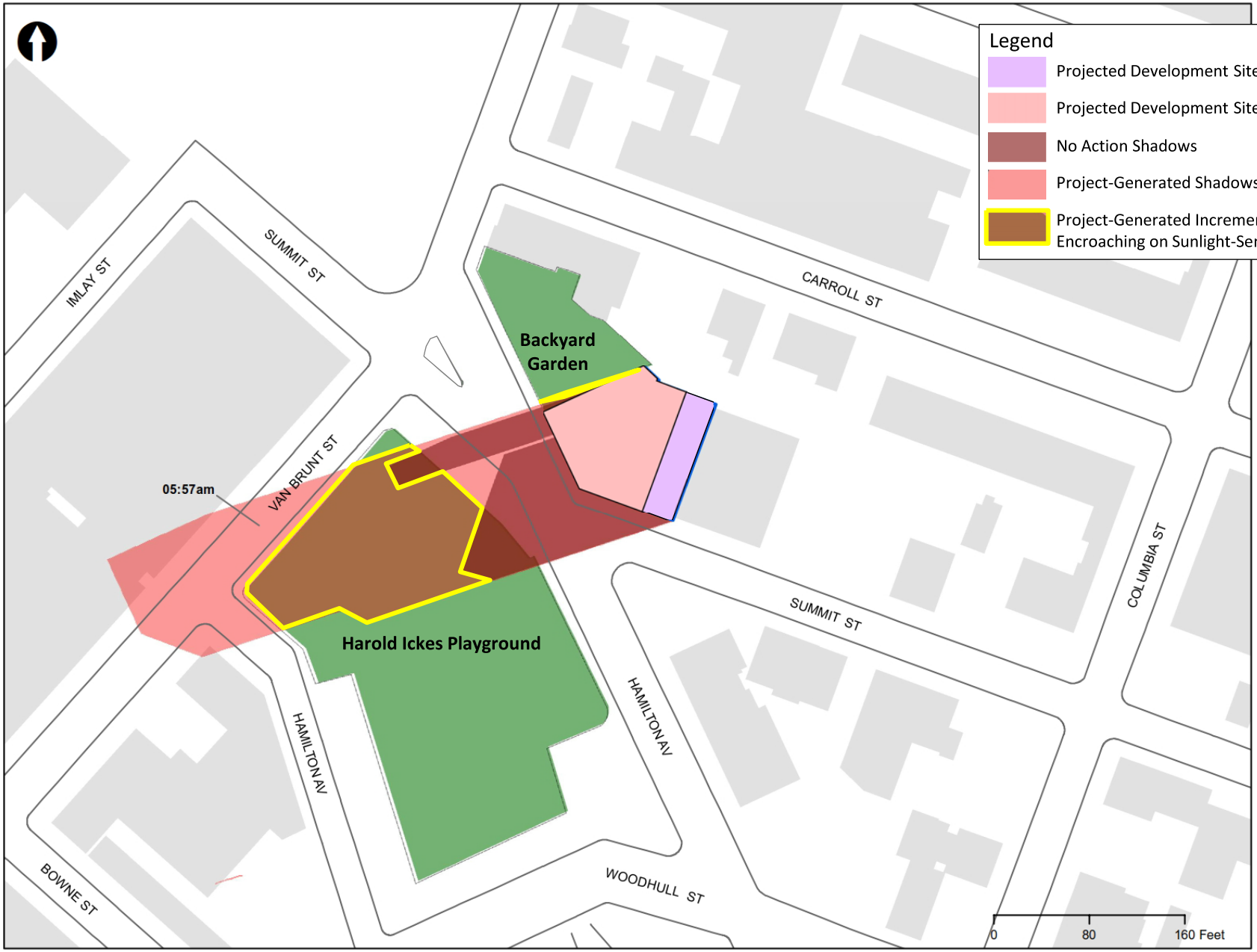
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Detailed Shadows Analysis: May 6, 2:15 p.m.

Figure 2.2-3N



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41 Summit Street Rezoning
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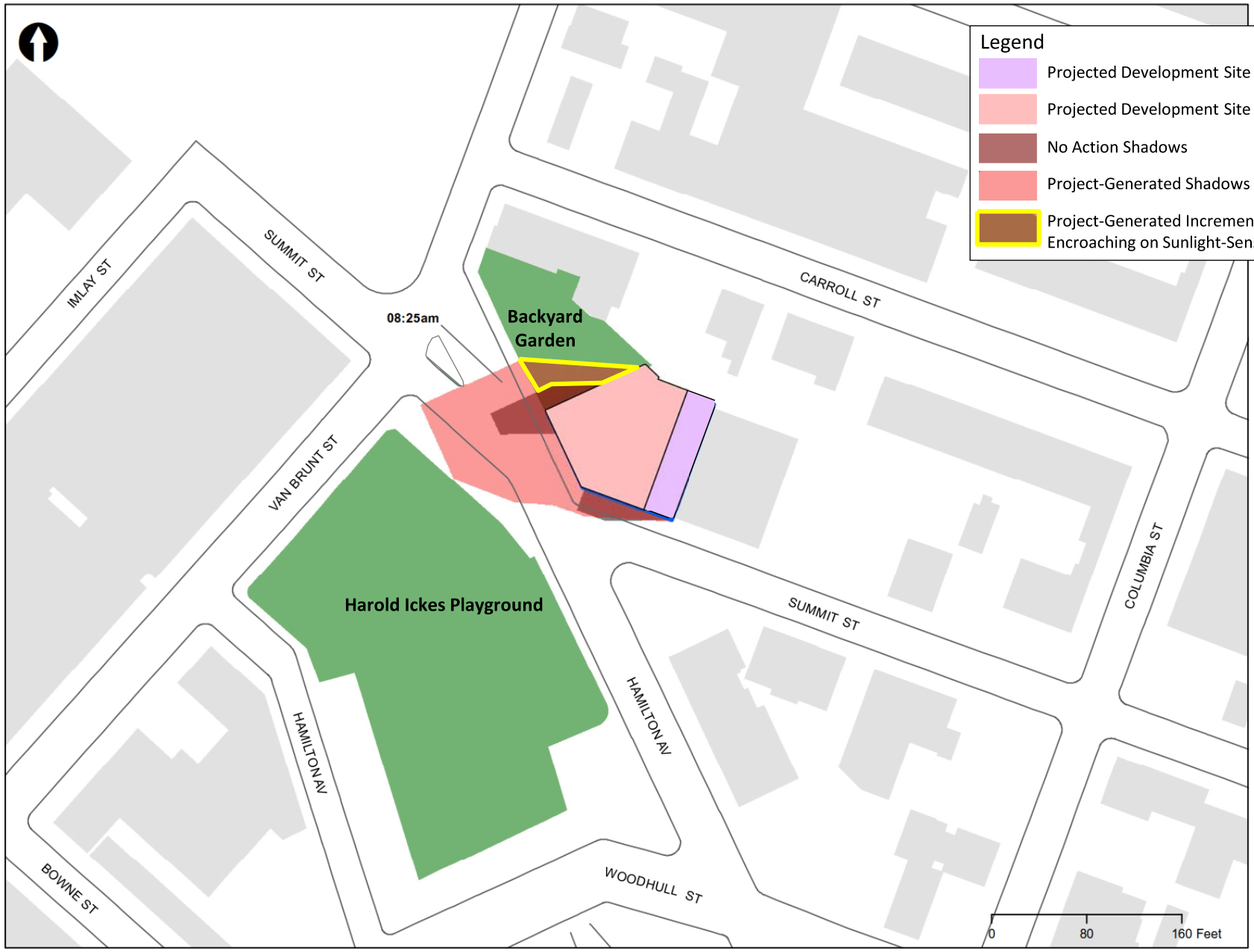
Detailed Shadows Analysis: June 21, 5:57 a.m.

Figure 2.2-3O



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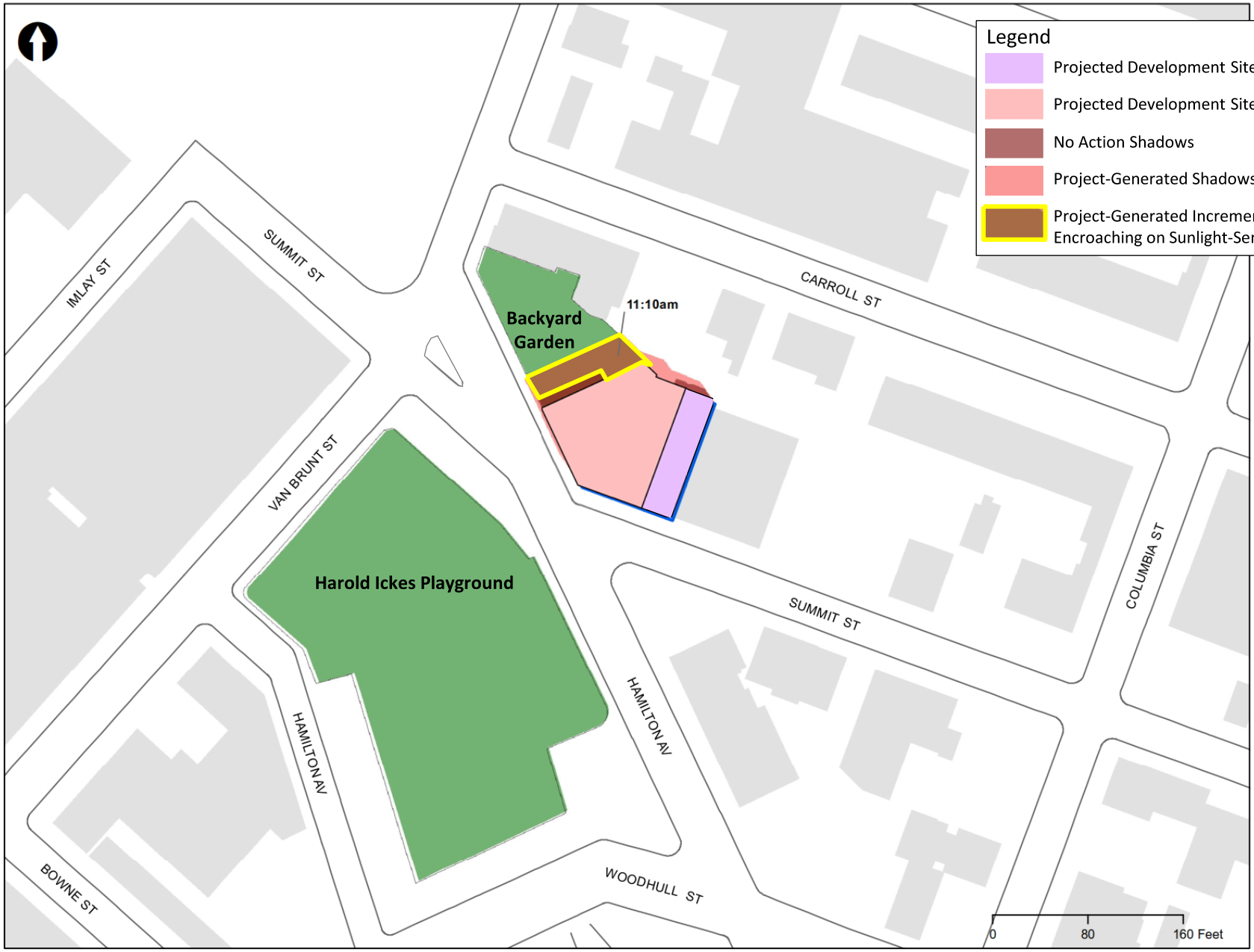
Detailed Shadows Analysis: June 21, 8:25 a.m.

Figure 2.2-3P



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Environmental Assessment Statement
41 Summit Street Rezoning
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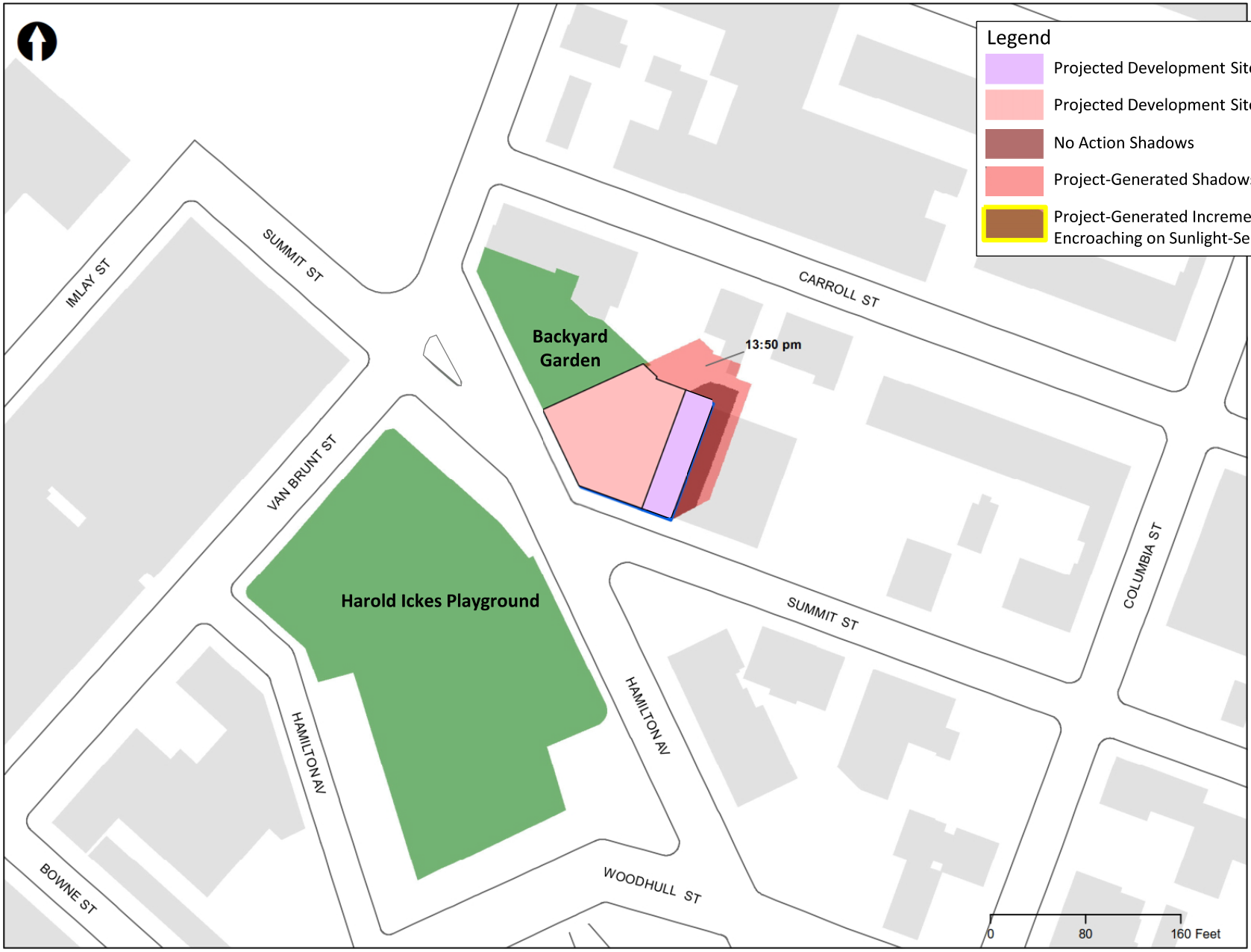
Detailed Shadows Analysis: June 21, 11:10 a.m.

Figure 2.2-3Q



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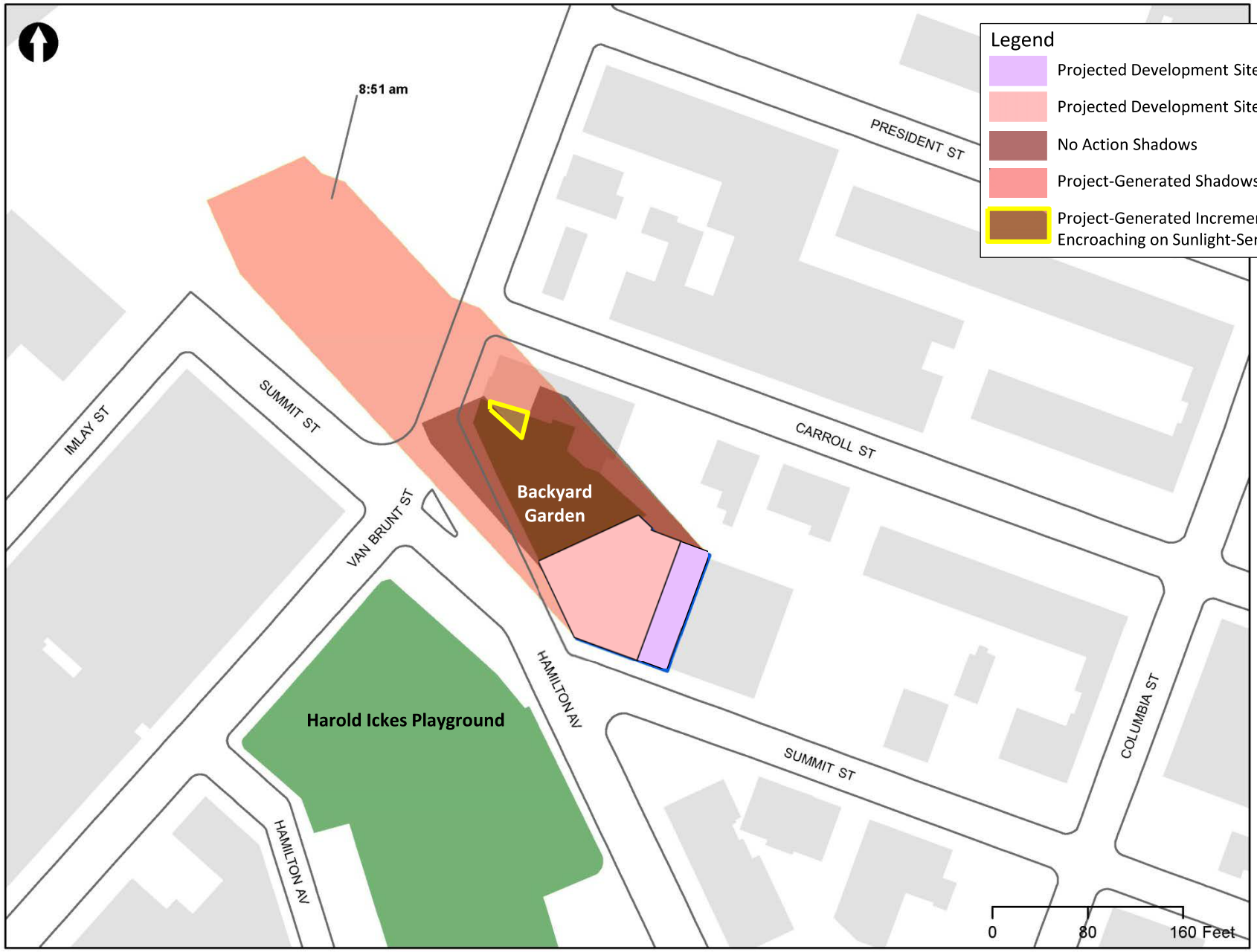
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Detailed Shadows Analysis: June 21, 1:50 p.m.

Figure 2.2-3R



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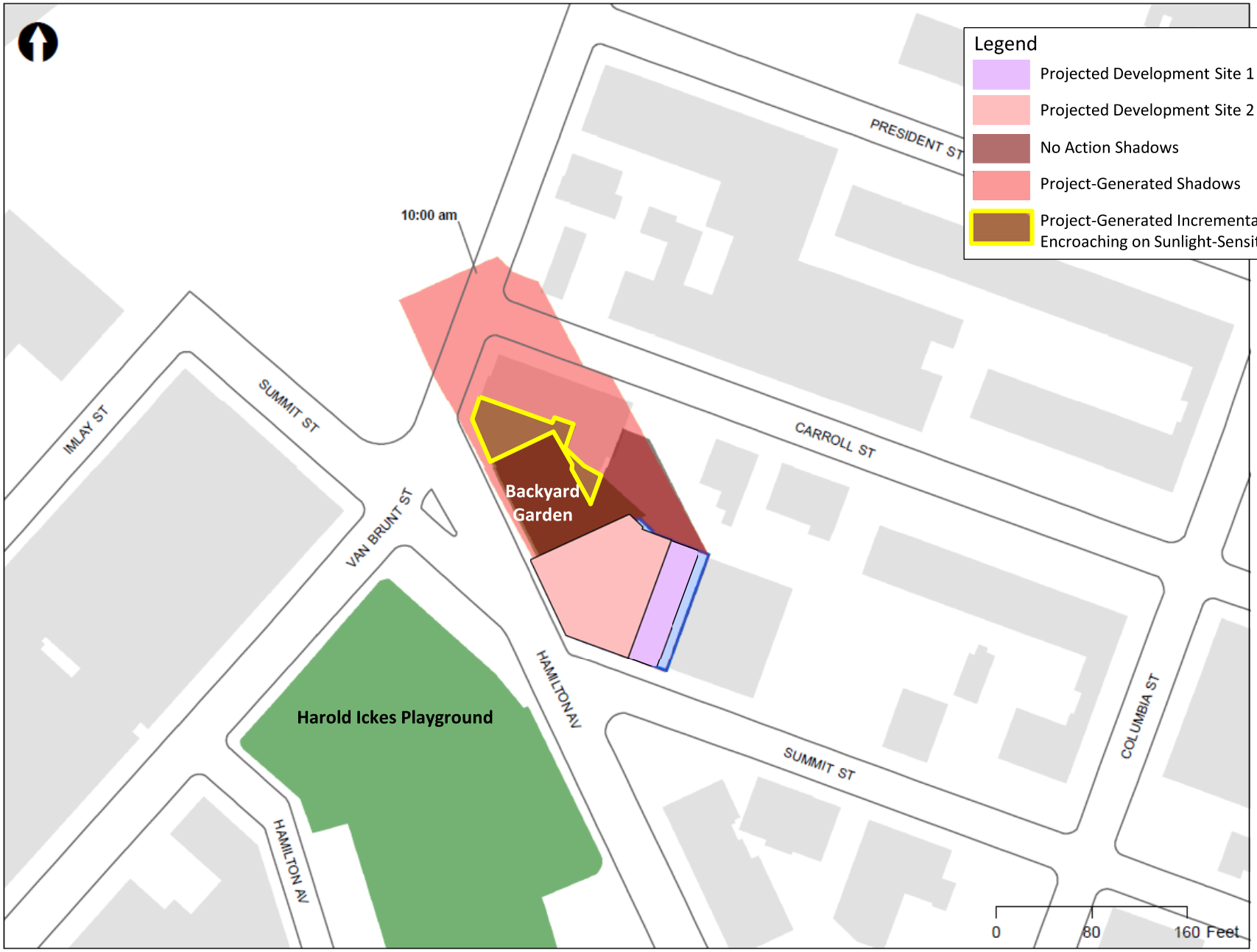
Environmental Assessment Statement
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Detailed Shadows Analysis: December 21, 8:51 a.m.

Figure 2.2-3S



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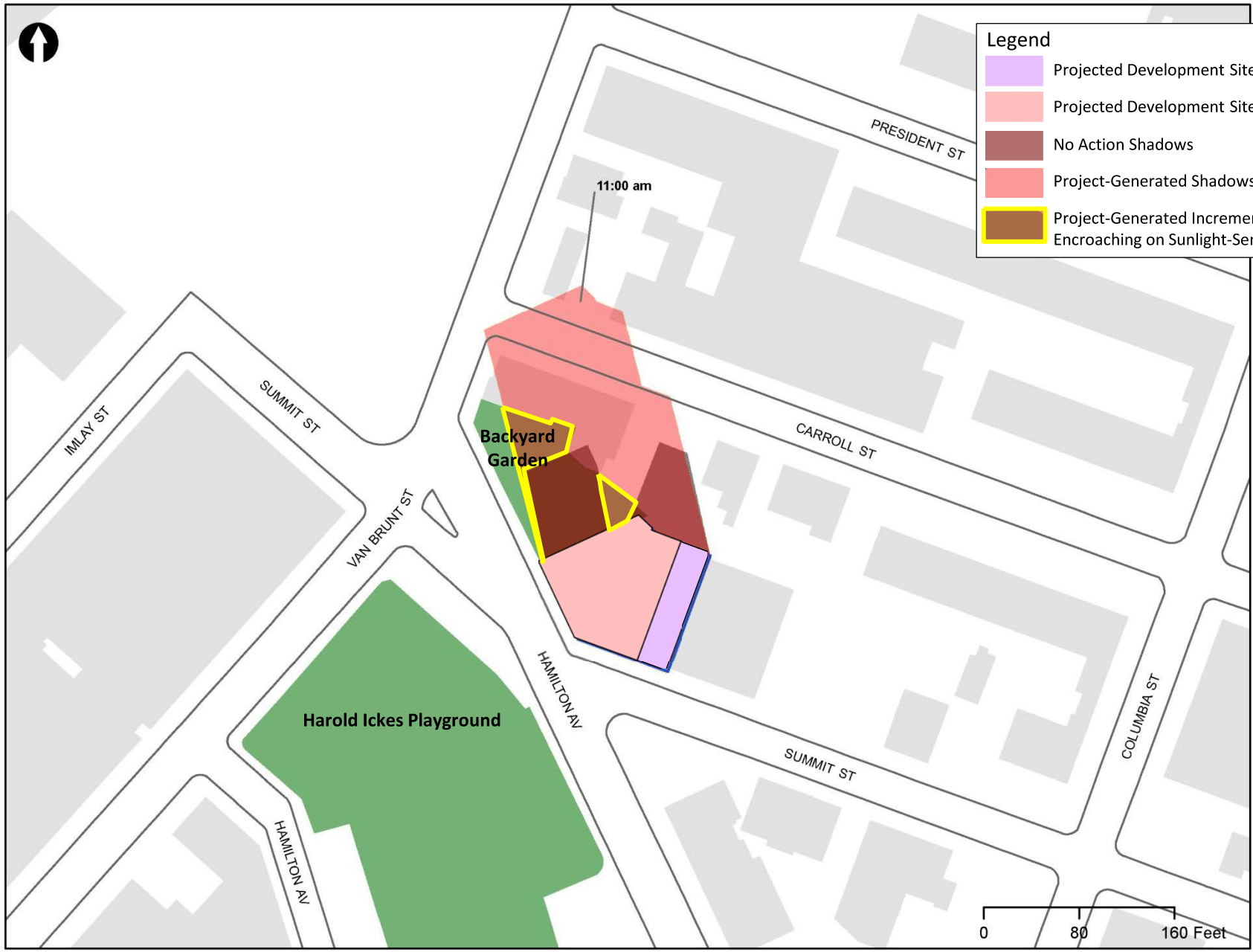
Environmental Assessment Statement
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Detailed Shadows Analysis: December 21, 10:00 a.m.

Figure 2.2-3T



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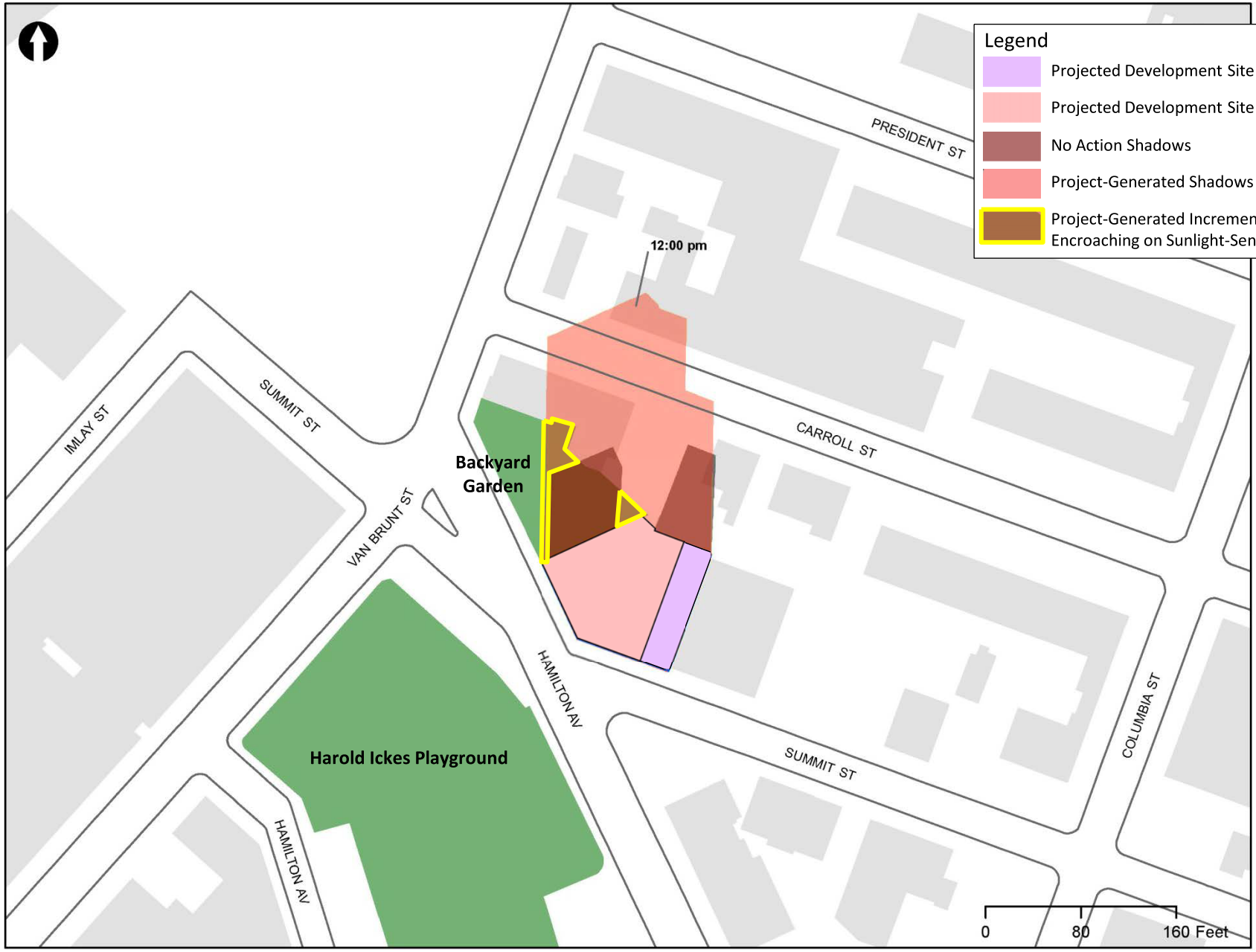
Environmental Assessment Statement
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Detailed Shadows Analysis: December 21, 11:00 a.m.

Figure 2.2-3U



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Environmental Assessment Statement
41 Summit Street Rezoning
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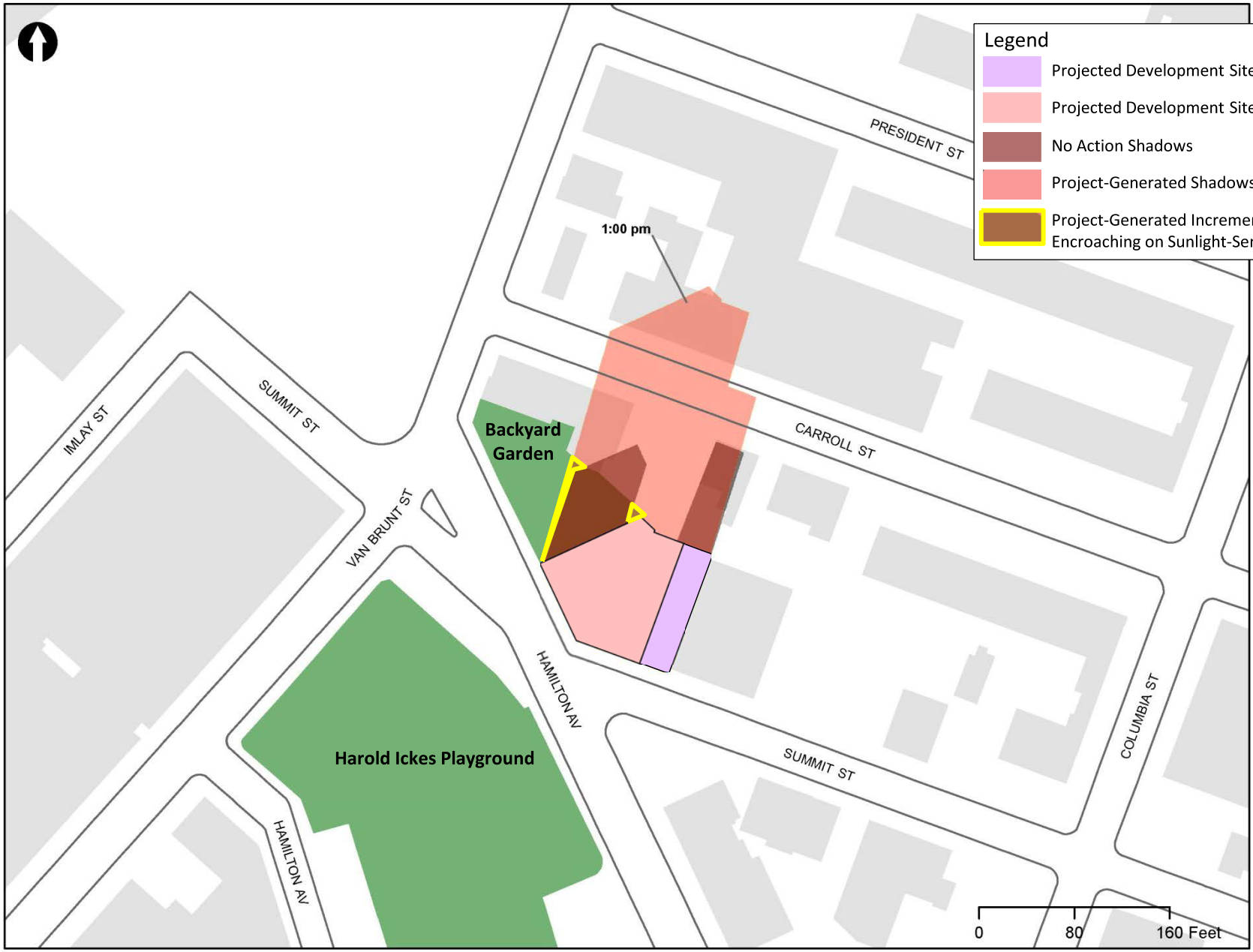
Detailed Shadows Analysis: December 21, 12:00 p.m.

Figure 2.2-3V



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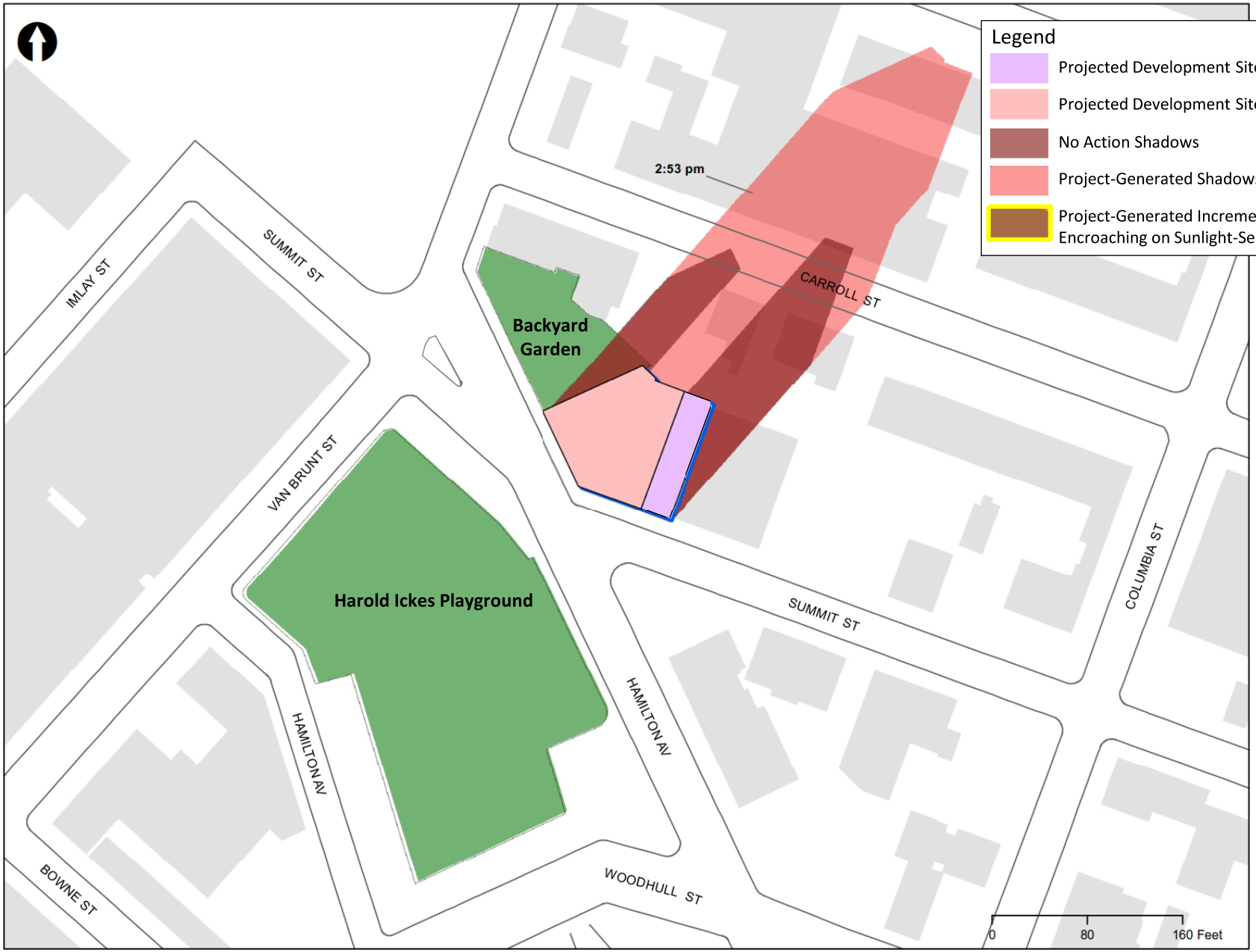
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Detailed Shadows Analysis: December 21, 1:00 p.m.

Figure 2.2-3W



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Detailed Shadows Analysis: December 21, 2:53 p.m.

Figure 2.2-3X

2.3 HISTORIC AND CULTURAL RESOURCES

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

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

Architectural Resources

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

The projected development site is not a designated local or S/NR historic resource or property, nor is the site part of any designated historic district. The LPC was contacted for their initial review of the project’s potential to impact nearby historic and cultural resources, and a response was received on February 29, 2016, indicating that the projected development site has no architectural significance (see **Appendix B**).

In order to determine whether the projected development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. No historic or architectural resources were identified within the 400-foot study area. Therefore, no significant adverse impacts on historic or architectural resources are expected as a result of the proposed action, and further assessment is not warranted.

Cultural and Archaeological Resources

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

The existing rezoning area has not been recently disturbed and no recent or distant cultural or archaeological significance have been attached to this area. Further, utilizing the New York State Office of Parks, Recreation and Historic Preservation’s “Cultural Resource Information System” (CRIS) mapper, the rezoning area does not fall within an archaeologically sensitive area. Based on both current and historic photoreconnaissance of the rezoning area, there is little potential for impact to any known or unknown resource due to development. The LPC was contacted for their initial review of the project’s potential to impact nearby historic and cultural resources, and a response was received on February 29, 2016, indicating that the projected development sites have no architectural significance (see **Appendix B**). Therefore, significant adverse impacts to archaeological resources are not expected as a result of the proposed action, and further analysis is not warranted.

2.4 URBAN DESIGN AND VISUAL RESOURCES

According to the *CEQR Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements that play an important role in the pedestrian's experience include streets, buildings, visual resources, open space, and natural features, as well as wind as it relates to channelization and downwash pressure from tall buildings. Furthermore, according to the *CEQR Technical Manual*, if a preliminary assessment determines that changes to the pedestrian environment are sufficiently significant to require greater explanation and further study, then a detailed urban design and visual resources analysis is appropriate. Detailed analyses are generally appropriate for all area-wide rezoning applications that include an increase in permitted floor area or changes in height and setback requirements, general large scale developments, or projects that would result in substantial changes to the built environment of a historic district, or components of an historic building that contribute to the resource's historic significance. Conditions that merit consideration for further analysis of visual resources include when the project partially or totally blocks a view corridor or a natural or built rare or defining visual resource. Further conditions that merit consideration are when the project changes urban design features so that the context of a natural or built visual resource is altered, such as if a project alters the street grid so that the approach to the resource changes, or if a project changes the scale of surrounding buildings so that the context changes.

The *CEQR Technical Manual* notes an urban design assessment considers whether and how a project may change the experience of a pedestrian in the rezoning area. The assessment focuses on the components of a project that may have the potential to alter the arrangement, appearance, and functionality of the built environment. In general, an assessment of urban design is needed when the project may have effects on one or more of the elements that contribute to the pedestrian experience (e.g., streets, buildings, visual resources, open space, natural features, wind, etc.). An urban design analysis is not warranted if a project would be constructed within existing zoning envelopes, and would not result in physical changes beyond the bulk and form permitted "as-of-right" with the zoning district.

As the proposed action would result in the construction of a new building that is not allowed "as-of-right" under the existing zoning, a preliminary analysis was conducted.

2.4.1 Preliminary Analysis

As stated in the *CEQR Technical Manual*, the study area for urban design is the area where the project may influence land use patterns and the built environment, and is generally consistent with the study area used for the land use analysis (i.e., 400 feet around the project site). The purpose of the preliminary assessment is to determine whether any physical changes proposed by a project may raise the potential to significantly and adversely affect elements of urban design, which would warrant the need for a detailed urban design and visual resources assessment.

Existing Conditions

The 400-foot study area is located in the Columbia Street Waterfront District of Brooklyn. Refer to **Figure 2.4-1** for an aerial view of the urban design study area. Ground-level photographs of the projected development sites and the study area, and a photo key map, are provided in Section 1, **Figures 3** and **4**.

The proposed rezoning area includes Block 352, Lots 1 (79 Hamilton Avenue), 3 (75 Hamilton Avenue) and 60 (41 Summit Street). Projected Development Site 1 (Lot 60) is presently improved with a vacant two-story, 3,500 sf warehouse building with a built FAR of approximately 1.4. Projected Development Site 2 currently contains a two-story 4,300 sf commercial bank with a built FAR of approximately 0.7 (Lot 1); and a three-story, 2,400 sf mixed residential and commercial building with a built FAR of approximately 1.3 (Lot 3). Projected Development Site 2 (Lot 2) also includes an accessory commercial parking lot. As previously noted, the building on Projected Development Site 1 has been vacant for roughly three years, while the ground-floor commercial space on Projected Development Site 2 (Lot 3) has been vacant for approximately two years.

The architecture throughout the study area is eclectic. As noted in Section 2.1.1, the area is characterized by a mix of warehouse/distribution, open space, mixed-used residential and commercial, and residential uses (conforming as well as non-conforming). The commercial uses include restaurant supply outlets and some local retail. The prevailing built form of the area is a mix of low- to mid-rise non-residential buildings and two-to four-story residential buildings. To the south of Summit Street and north of Carroll Street, within the M1-1 zoning district, there are businesses with active industrial uses, as well as clusters of residential uses. There are also a few properties owned and operated by the NYCDPR, including Mother Cabrini Park, Harold Ickes Playground and the Backyard Garden, a community garden located to the west of the project area on Block 352. One block to the west is the Red Hook Container Terminal, an intermodal freight terminal operated by the Port Authority of New York and New Jersey. Approximately one and a half blocks to the east of the project area is the Brooklyn-Queens Expressway, which is part of I-278. Approximately one block south of the project area is the Brooklyn portal of the Hugh L. Carey Tunnel. Most buildings within the study area are arranged regular (parallel) with respect to their lot placement and many of the residential and mixed-use buildings are often attached to one another, as opposed to free-standing detached buildings.

There are few streetscape elements present within the study area. Most of the streets contain street trees, which are generally located at irregular intervals; however no other notable streetscape elements (e.g. benches) are located outside of public parks within the study area.

The street hierarchy of the study area includes several different functional classifications. The Hugh L. Carey Tunnel and the Brooklyn-Queens Expressway are classified as Principal Arterial Interstate Roadways; and Columbia and Van Brunt Streets are classified as Principal Arterial Roadways. To the west of the rezoning area, Hamilton Avenue is classified as a Minor Arterial Roadway. All other roadways in the study area are classified as local roads.

Future No-Action Scenario

Figures 2.4-2 through **2.4-4** highlight the Future No-Action Scenario for the two projected development sites. Under the Future No-Action Condition, aside from the No-Action project, significant changes to the study area are not expected by the analysis year of 2022. While tenants within the study area's industrial, office, retail and other buildings may change, it is expected that the overall use of these buildings would remain the same, and that any physical changes would comply with applicable zoning regulations. The No-Action project will result in the development of four separate four-story residential buildings at 55-63 Summit Street (northern side of Summit Street between Columbia and Van Brunt Streets). With the exception of the No-Action project, significant changes to the area's urban character are not anticipated. Further, changes to the viewsheds associated with adjacent parks and open spaces are not expected.

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Aerial Map

Figure 2.4-1

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Urban Design

No-Action – View 1

Figure 2.4-2

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Urban Design

No-Action – View 2

Figure 2.4-3

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Urban Design

No-Action – View 3

Figure 2.4-4

Future With-Action Scenario

According to the *CEQR Technical Manual*, if a preliminary assessment determines that changes to the pedestrian environment are sufficiently significant to require greater explanation and further study, then a detailed urban design and visual resources analysis is appropriate. Detailed analyses are generally appropriate for all area-wide rezoning applications that include an increase in permitted floor area or changes in height and setback requirements, or projects that would result in substantial changes to the built environment of a historic district. Conditions that merit consideration for further analysis of visual resources include when the project partially or totally blocks a view corridor or a natural or defining visual resource. Further conditions that merit consideration are when the project changes urban design features so that the context of a natural or built visual resource is altered, or if a project changes the scale of surrounding buildings so that the context changes.

Figures 2.4-5 through **Figure 2.5-7** highlight the Future With-Action Scenario for the two projected development sites. These figures use the same vantage point as **Figures 2.4-2** through **2.4-4**, allowing for a comparison between the No-Action and With-Action Scenarios. Under the Future With-Action scenario, the proposed rezoning would amend the zoning map to change the existing M1-1 district to an R7A district with a C2-4 commercial overlay.

Under the Future With-Action Scenario, it is assumed that Projected Development Site 1 would be developed by a mixed residential and commercial building with a FAR of 4.0 and a height of 65 feet. On the 2,500 sf lot, it is assumed that the mixed-use building would include approximately 7,500 sf of residential floor area divided into nine dwelling units and 2,500 sf of commercial floor area. Approximately 60.75 percent of the lot would be covered by the building footprint. No parking spaces would be required or provided. Per the RWCDS, Projected Development Site 2 would be developed to the maximum FAR of 4.6 by a mixed-use building with a height of up to 95 feet. On the 7,997 sf zoning lot, it is assumed that the mixed-use building would contain approximately 23,931 sf of residential floor area divided into 34 residential units (approximately ten of which would be affordable) and 7,977 sf of commercial floor area. Parking would not be provided or required.

The neighborhood surrounding the proposed development site has become increasingly residential in nature, with residential use located directly adjacent to the proposed rezoning area to the east, and residential and mixed-use (residential and commercial) buildings as the primary built form to the north and east. The proposed mixed-use buildings would also be consistent with the neighborhood built character, as a five-story, approximately 20,000 square foot building (3.97 FAR) is located to the north on Carroll Street, and a seven-story residential building with approximately 17,000 square feet of floor area (2.57 FAR) is located to the northeast on Columbia Street.

While the proposed buildings would alter views of the projected development sites as witnessed from pedestrians on Summit Street and Hamilton Avenue, significant adverse impacts to urban design and visual resources would not occur. The proposed action would not result in any conditions that would merit further detailed assessment of urban design and visual resources. Several other mid-rise buildings are found in the surrounding area. The proposed action would also not block any view corridors or views to/from any natural areas with rare or defining features, as the proposed building is contained to the subject site, and would not intrude or impose into the Backyard Garden or the Harold Ickes Playground. Therefore, the proposed action is not expected to result in any significant adverse urban design or visual resource related impacts.

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Urban Design
With-Action – View 1

Figure 2.4-5

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Urban Design
With-Action – View 2
Figure 2.4-6

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Environmental Assessment Statement
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Urban Design
With-Action – View 3

Figure 2.4-7

2.5 HAZARDOUS MATERIALS

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

Projected Development Site 1 (Applicant-controlled) is presently improved with a two-story, approximately 3,500 sf vacant industrial-use building, which would be demolished under the proposed action. Due to the industrial history of the site and surrounding area, and because the adjacent building at 45 Summit Street (Block 352, Lot 53) has received an (E) designation for hazardous materials contamination, a Phase I Environmental Site Assessment (ESA) was undertaken .

2.5.1 Summary of Phase I ESA

The Phase I ESA, dated June 6, 2016, concluded that there were no Recognized Environmental Conditions (RECs), as defined by ASTM Practice E1527-13, associated with the site. However, due to the age of the on-site building, the potential for the presence of asbestos-containing materials and lead-based paint is considered likely. Thus the Phase ESA recommended additional survey work to confirm the presence or absence of these materials prior to any building demolition or disturbance. The Phase I ESA is included as **Appendix C**.

The New York City Department of Environmental Protection (NYCDEP) reviewed the Phase I ESA and, based on the historical on-site and/or surrounding area land uses, has determined that a Phase II Environmental Site Assessment (Phase II) is necessary to adequately identify/characterize the surface and subsurface soils of Projected Development Site 1 (Applicant-controlled). Phase II Investigative Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities should be developed in accordance with the *CEQR Technical Manual* and submitted to DEP for review and approval. The Work Plan should include blueprints and/or site plans displaying the current surface grade and sub-grade elevations and a site map depicting the proposed soil, groundwater, and soil vapor sampling locations. Soil and groundwater samples should be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for the presence of volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls by EPA Method 8082, and Target Analyte List metals (filtered and unfiltered for groundwater samples). The soil vapor sampling should be conducted in accordance with NYSDOH's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The soil vapor samples should be collected and analyzed by a NYSDOH ELAP certified laboratory for the presence of VOCs by EPA Method TO-15. An Investigative Health and Safety Plan (HASP) should also be submitted to DEP for review and approval. The Phase II Work Plan and HASP should be submitted to NYCDEP for review and approval prior to the start of any fieldwork.

In addition, based on prior on-site and/or surrounding area land uses which could result in environmental contamination, NYCDEP recommends that an (E) designation for hazardous materials be placed on the two parcels that comprise Projected Development Site 2 (and are not under the control of the Applicant).

E # 504 was assigned to this project. The (E) designation text related to hazardous materials is as follows:

Task 1 – Sampling Protocol

The applicant submits to OER, for review and approval, a Phase 1 of the site along with a soil and groundwater 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 sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2 – Remediation Determination and Protocol

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

If remediation is indicated from the 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.

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

With these (E) designations in place and assuming that a Phase II will be performed for Projected Development Site 1, significant adverse impacts related to hazardous materials are not expected, and no further analysis is warranted. Therefore, the proposed actions would not result in significant adverse impacts related to hazardous materials.

2.6 AIR QUALITY

When assessing the potential for air quality significant impacts, the *CEQR Technical Manual* seeks to determine a proposed action's effect on ambient air quality, or the quality of the surrounding air. Ambient air can be affected by motor vehicles, referred to as "mobile sources," or by fixed facilities, referred to as "stationary sources." This can occur during operation and/or construction of a project being proposed. The pollutants of most concern are carbon monoxide, lead, nitrogen dioxide, ozone, relatively coarse inhalable particulates (PM_{10}), fine particulate matter ($PM_{2.5}$), and sulfur dioxide.

The *CEQR Technical Manual* generally recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., roadways, parking lots, garages). The *CEQR Technical Manual* generally recommends assessments when new stationary sources of pollutants are created, when a new use might be affected by existing stationary sources, or when stationary sources are added near existing sources and the combined dispersion of emissions would impact surrounding areas.

2.6.1 Mobile Sources

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

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

The proposed action would not result in any of the above thresholds being crossed and therefore would not require further mobile source assessment. The proposed action would not result in the placement of new operable windows within 200 feet of any atypical vehicular source of pollutants, nor would it result in the creation of a fully or partially covered roadway, generate over 170 or more net new increment auto trips or notable heavy-duty diesel vehicle traffic, place new sensitive uses adjacent to a large parking facility, result in other mobile sources of pollution, or substantially increase vehicle miles traveled.

2.6.2 Stationary Sources

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

- New stationary sources of pollutants are created (e.g., emission stacks for industrial plants, hospitals, other large institutional uses).
- Certain new uses near existing (or planned future) emissions stacks are introduced that may affect the use.
- Structures near such stacks are introduced so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected.
- Fossil fuels (fuel oil or natural gas) for heating/hot water, ventilation, and air conditioning (HVAC) systems are used.
- Large emission sources are created (e.g., solid waste or medical-waste incinerators, cogeneration facilities, asphalt/concrete plants, or power-generating plants, etc.).
- New sensitive uses are located near a large emission source.

- Medical, chemical, or research labs are created or result in new uses being located near them.
- Operation of manufacturing or processing facilities is created.
- New sensitive uses created within 400 feet of manufacturing or processing facilities.
- New uses created within 400 feet of a stack associated with commercial, institutional, or residential developments (and the height of the new structures would be similar to or greater than the height of the emission stack).
- Potentially significant odors are created.
- New uses near an odor-producing facility are created.
- "Non-point" sources that could result in fugitive dust are created.
- New uses near non-point sources are created.
- A generic or programmatic action is introduced that would change or create a stationary source or that would expose new populations to such a stationary source.

Screening analyses for air toxics and large emission sources were completed. In addition, the projected development sites' HVAC systems would utilize fossil fuel, thus an HVAC screening analysis was performed. Furthermore, as shown in **Figure 2.6-1**, the projected development sites are located less than 30 feet from one another; and within 200 feet of the 90-foot high emissions stacks associated with the Brooklyn Ventilation Building of the Hugh L. Carey Tunnel (the Tunnel). Therefore detailed stationary source air quality analyses were completed to assess the potential impact from Projected Development Site 1's HVAC system on Projected Development Site 2; and the potential impact from the Tunnel emission stacks on the projected development sites. The following analyses are based on the RWCDS that has been developed for the proposed rezoning, as shown in **Table 2.6-1**.

Table 2.6-1 Reasonable Worst Case Development Scenario (RWCDS)

	Block	Lot	Lot Area (Sq. ft)	Proposed Zoning	Max Allowable (Sq. ft)	Max Allowable Height (ft)
Projected Development Site 1	352	60	2,500	R7A/C2-4	10,000	65
Projected Development Site 2	352	1	6,135	R7A/C2-4	36,694	95
		3	1,842			

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Hugh L. Carey Tunnel
Brooklyn Ventilation Building

Figure 2.6-1

Air Toxics and Major Emission Sources

Air Toxics Screening

Field surveys and a review of MapPluto parcel-based land use GIS data were undertaken in order to identify potential manufacturing or processing facilities located in the 400-foot air toxics study area. **Figure 2.6-2** depicts the 400-foot study area and the 21 parcels that were flagged as containing potential air toxic sources.[8]

Searches of the NYCDEP CATS online permitting database were completed to determine whether the properties contain any active manufacturing or processing facilities. The CATS search results are presented below in **Table 2.6-2**. One current permit for industrials was found for the property located at 171 Van Brunt Street on Block 504, Lot 1.

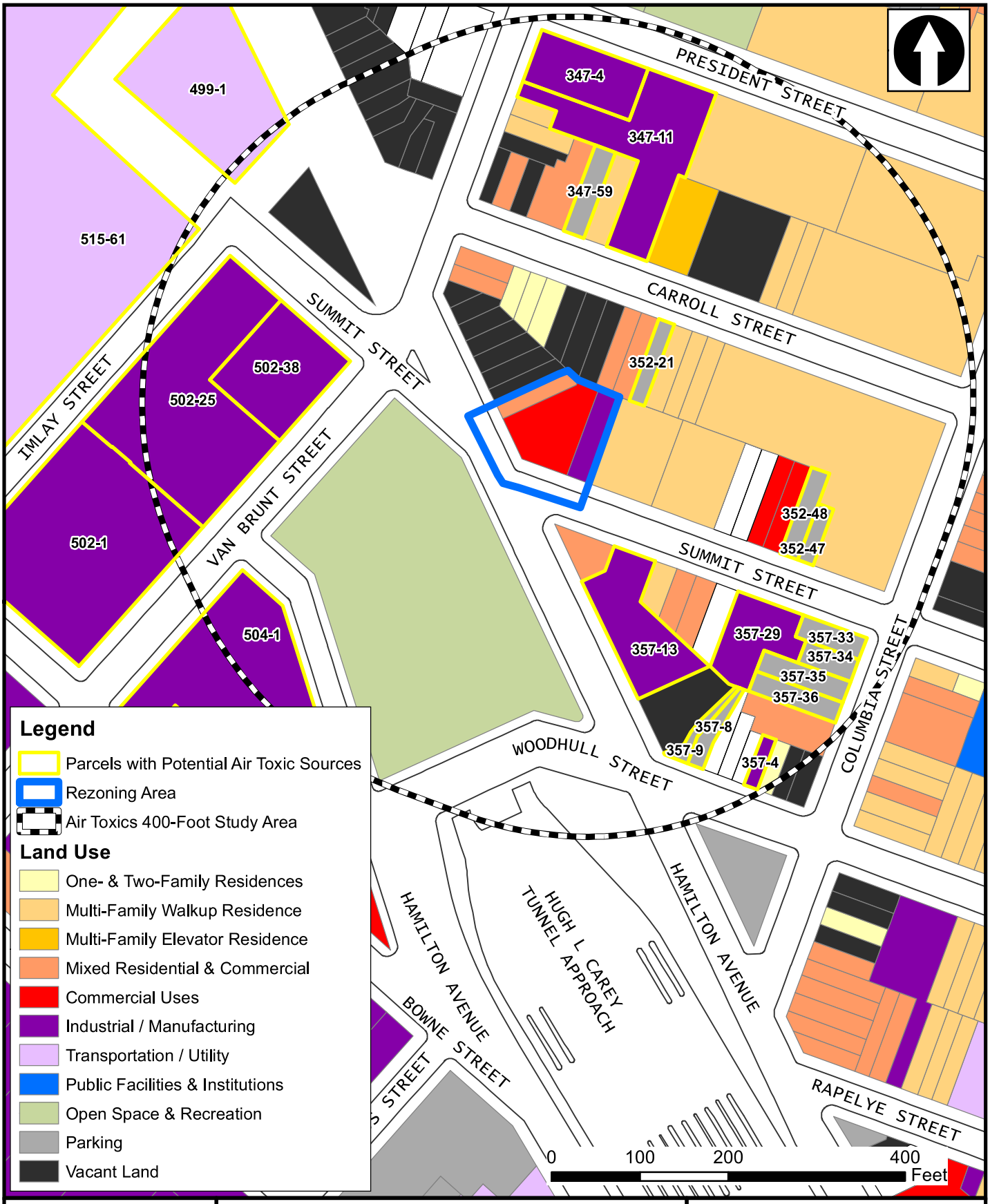
Table 2.6-2 NYCDEP CATS Database Search Results

Parcel (Block-Lot)	Address	CATS Permit Search Results
347-4	129 Van Brunt Street	No record found
347-11	42 President Street	No record found
347-59	17 Carroll Street	No record found
352-21	Carroll Street	No record found
352-47	Summit Street	No record found
352-48	63 Summit Street	No record found
357-4	13 Woodhull Street	No record found
357-8	Woodhull Street	No record found
357-9	Woodhull Street	No record found
357-13	101 Hamilton Avenue	No record found
357-29	68 Summit Street	No record found
357-33	288 Columbia Street	No record found
357-34	290 Columbia Street	No record found
357-35	Columbia Street	No record found
357-36	294 Columbia Street	No record found
499-1	17 Summit Street	No record found
502-1	170 Van Brunt Street	1 cancelled industrial permit
502-25	128 Van Brunt Street	2 expired industrial permits; 1 cancelled industrial permit
502-38	130 Van Brunt Street	No record found
504-1	171 Van Brunt Street	1 current industrial permit
515-61	118 Conover Street	No record found

Source: NYCDEP CATS online permitting database

Further investigation and review of the active DEP permit (PR030117) at 171 Van Brunt Street (Block 504, Lot 1) indicates that the permit is for an emergency generator. Emergency generators generally do not warrant a detailed air toxics assessment. In addition, regarding the expired industrial permits for Block 502, Lot 25 (PA016894 and PA278173), the permits appear to be associated with a historic use of this property. The property is currently used as an automotive showroom (Telsa), for which there are no associated industrial permits. As such, the proposed actions do not warrant an air toxics assessment and would not result in significant adverse impacts with respect to air toxics.

[8] Note that Projected Development Site 1 was not flagged as a potential source of air toxics because it is assumed that the property would be redeveloped with a mixed commercial/residential building in the Future With-Action Condition.



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Air Toxics Study Area

Figure 2.6-2

Major Emission Sources Screening

The 1,000-foot study area for the major emission sources screening is exhibited in **Figure 2.6-3**. A desktop review of a variety of data sources was completed in order to determine whether any major large emission sources are located within 1,000 feet of the rezoning area. Lists of all New York State Department of Environmental Conservation (NYSDEC) Title V Facility Permits and NYSDEC State Facility Air permits, including facility addresses, were obtained from New York State Open Data (https://data.ny.gov/). The facility addresses were then geocoded in GIS too see if any permitted facilities are within the 1,000-foot study area. In addition, Google Earth imagery and MapPluto land use data were reviewed. No major large emission sources were identified within 1,000 feet of the project site. Accordingly, the proposed action does not require further evaluation with respect to major large stationary sources.

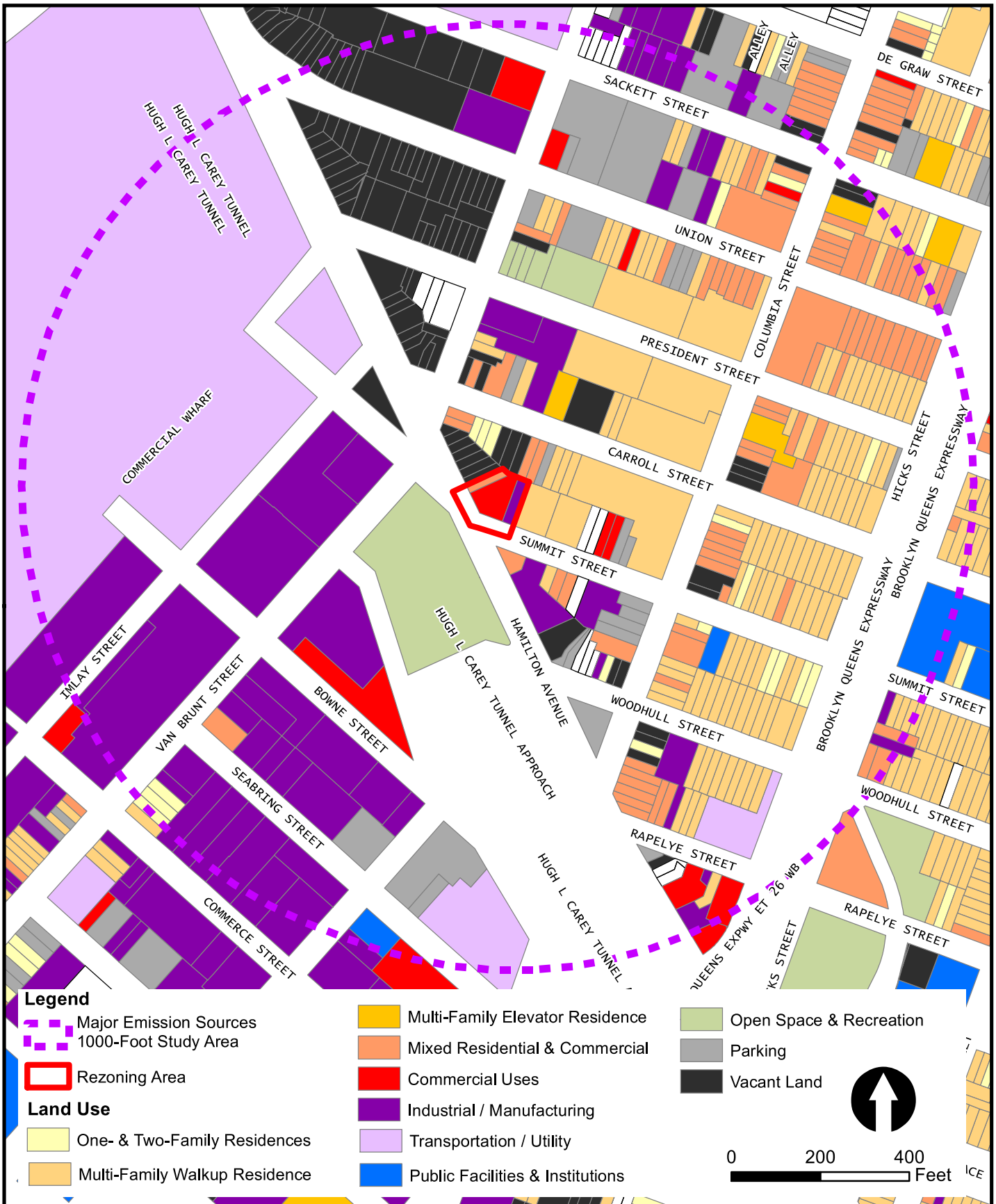
HVAC Screening

Impacts from boiler emissions are a function of fuel type, stack height, distance from the source to the nearest receptor (building), and floor area (square footage) of development resulting from the project. Floor area is considered an indicator of boiler fuel usage rate. The preliminary screening analysis for heat and hot water systems performed used *New York City Environmental Quality Review (CEQR) Technical Manuel* Figure 17-3, which defines the screening size of proposed development that is correlated to the distance to the nearest building of a height similar to or greater than the stack height of the proposed building(s). Figure 17-3 predicts the threshold of development size below which a project is unlikely to have a significant impact. The figure is only appropriate for sources at least 30 feet from the nearest building of similar or greater height.

As shown in **Figure 2.6-4**, Projected Site 1 is unlikely to have a significant impact on any existing building higher than 65 feet located 30 feet away. Based on the DOB (Department of Building) Building Information System (BIS) and field observation, there are existing buildings have the height of 65 feet or above within 30 feet.

As shown in **Figure 2.6-5**, Projected Site 2 is unlikely to have a significant in impact on any existing building higher than 95 feet located 62 feet away. Based on the DOB BIS database and field observation, there are no existing buildings have the height of 95 feet or above located within 62 feet to the Projected Site 2.

Therefore, there would be no significant adverse air quality impact from Projected Site 1 or Projected Site 2 on existing buildings around.



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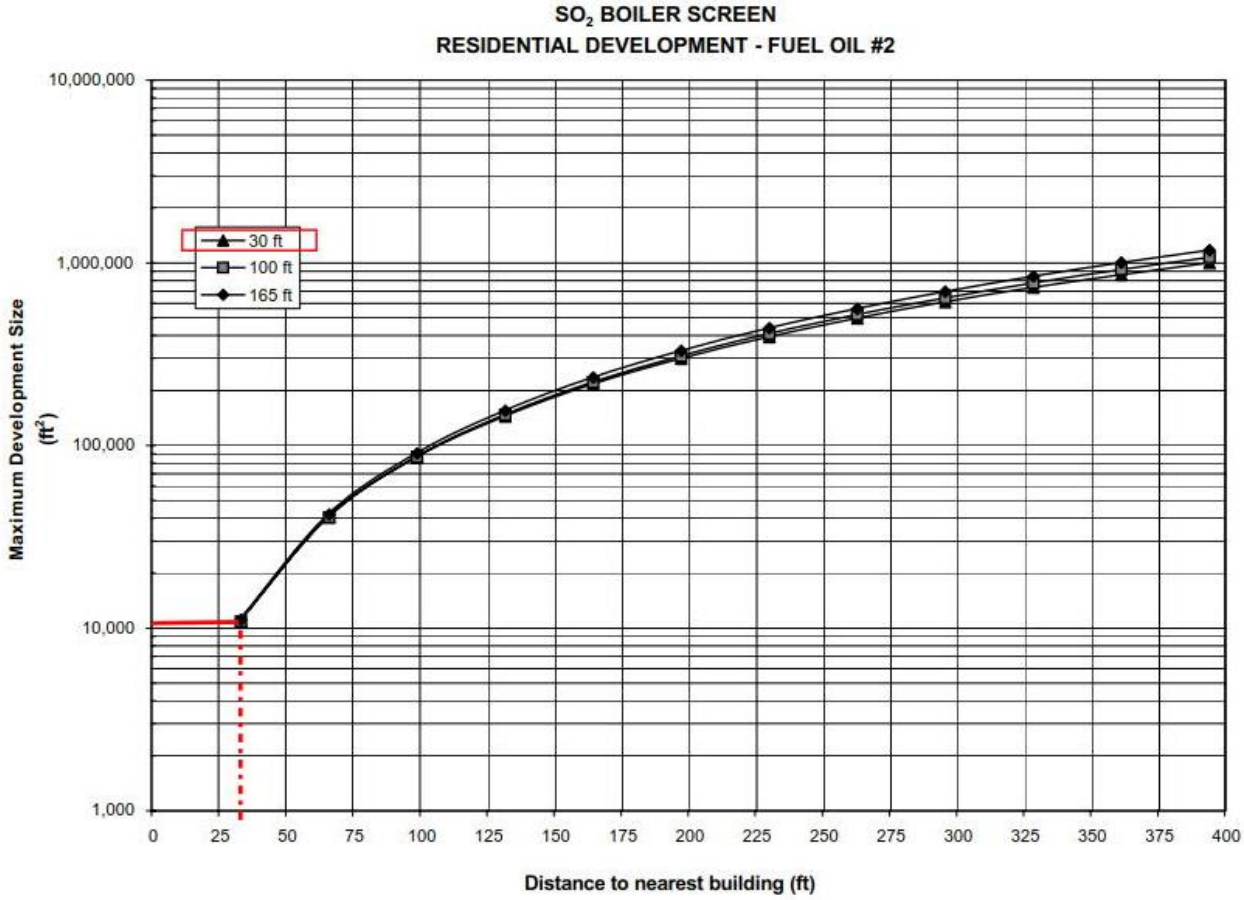
Major Emission Sources Study Area

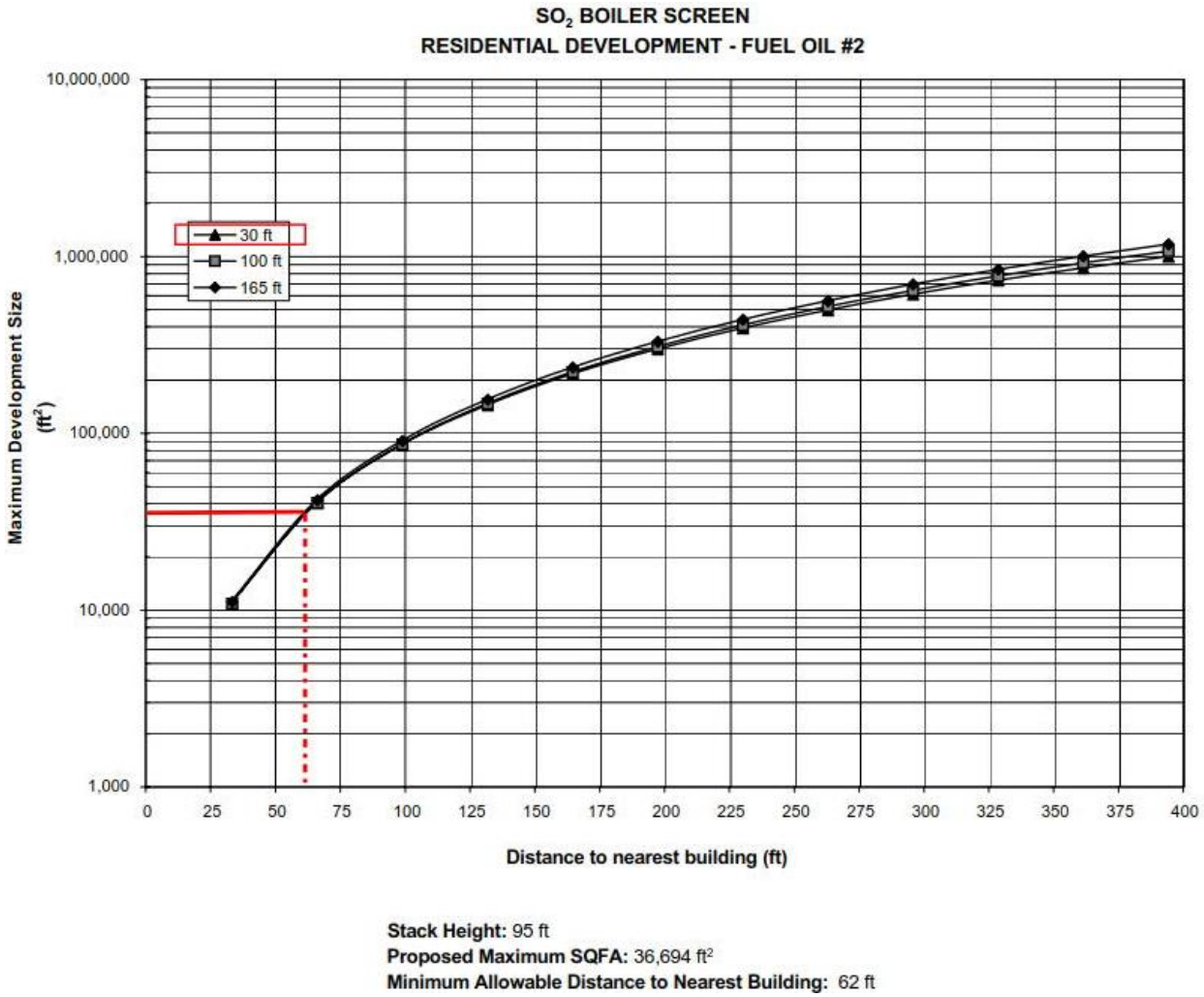
Figure 2.6-3

Figure 2.6-4 Air Quality Screening Graph, Projected Development Site 1



Stack Height: 65 ft
Proposed Maximum SQFA: 10,000 ft²
Minimum Allowable Distance to Nearest Building: 30 ft

Figure 2.6-5 Air Quality Screening Graph, Projected Development Site 2



Impact from Proposed HVAC system of Projected Site 1 on Projected Site 2

Since the screening is not applicable to determine the significance of the impact from Projected Site 1 on Projected Site 2, which is attached to each other. A refined dispersion modeling analysis approach was implemented using USEPA's AERMOD model in association with most recent five years of metrological data to predict applicable pollutant concentrations from the proposed HVAC systems within the rezoning area.

AERMOD is a state-of-the-art dispersion model, applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD is a steady-state plume model that incorporates current concepts about flow and dispersion in complex terrain, including updated treatments of the boundary layer theory, understanding of turbulence and dispersion, and includes handling of terrain interactions.

The AERMOD model calculates pollutant concentrations from one or more points (e.g., exhaust stacks from the building on project sites) based on hourly meteorological data, and has the capability to calculate pollutant concentrations at locations where the plume from the exhaust stack is affected by the aerodynamic wakes and eddies (downwash) produced by nearby structures. The analyses of potential impacts from exhaust stacks were made assuming stack tip downwash, urban dispersion and surface roughness length, and elimination of calms. AERMOD can be run with and without building downwash (the

downwash option accounts for the effects on plume dispersion created by the structure the stack is located on, and other nearby structures).

For the refined analysis, the exhaust stacks for HVAC systems were assumed to be located at the edge of the development massing closest to the receptor, unless the source and receptor were immediately adjacent to each other. Since the two projected site were immediately adjacent to each other, the stack was assumed to be located at an initial distance of 10 feet from the nearest receptor.

The refined dispersion modeling analysis was performed for criteria pollutants of particulate matters ($PM_{2.5}$, PM_{10}), Nitrogen Dioxide (NO_2) and Sulfur Dioxide (SO_2) for which the National Ambient Air Quality Standards (NAAQS) have been established, with emission rates for both #2 fuel oil and natural gas. If a source could not be in compliance with the NAAQS or $PM_{2.5}$ *de minimis* criteria established in the *CEQR Technical Manuel*, the stack would then be set back in 5 foot increments until the source met the respective criteria.

The meteorological data set used with AERMOD consists of the latest available five consecutive years (2012-2016) of meteorological data: surface data collected at LaGuardia Airport and concurrent upper air data collected at Brookhaven, Suffolk County, New York. The meteorological data set includes wind speeds, wind directions, ambient temperatures, and mixing height data for every hour of a year over five years.

An estimate of the emissions from the HVAC systems was made based on the proposed development size, type of fuel used and type of construction with below fuel consumptions rates applicable for residential developments: 60.3 ft^3/ft^2-year and 0.43 gal/ft^2-year for natural gas and fuel oil, respectively. Short-term fuel consumption rates were based on peak hourly fuel consumption estimates for each HVAC system relevant to individual projected site.

However, it may not be reasonable to assume the stack(s) to be at the edge of the building roof. The Building Code of the City of New York regulates the placement of chimneys and vents and of buildings relative to nearby chimneys and vents and the implication of the Building Code should be considered when determining the reasonable worst-case location(s) for modeling, when the exact locations of the proposed stack(s) are not available.

HVAC emission factors for each fuel type were obtained from the EPA *Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources*.

The AERMOD model was used to predict impacts of SO_2, NO_2, PM_{10}, and $PM_{2.5}$ emissions over the averaging time corresponding to the NAAQS (**Table 2.6-3**). In addition to the NAAQS, the d*e minimis* thresholds for $PM_{2.5}$ applicable to the NYC development projects (**Table 2.6-3**) were also used to determine potential $PM_{2.5}$ impact significance as below:

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

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

Based on the NAAQS and $PM_{2.5}$ *de minimis* thresholds, the Not-to-Exceed criteria, as shown in Table 2, were further established by subtracting background concentrations collected at Queens College 2 Station from the NAAQS for relevant pollutants. When exceedances of the Not-to-Exceed criteria were predicted, a further analysis or mitigation measures would be warranted to ensure the project compliance of both NAAQS and $PM_{2.5}$ *de minimis* thresholds.

Impacts concentrations were first predicted using AERMOD assuming that all HVAC systems are powered by the #2 fuel oil. Exceedances of Not-to-Exceed criteria were predicted under the #2 fuel oil option, a further modeling analysis under the natural gas option was warranted.

Table 2.6-3 Pollutant Emission Rate Summary Table

Pollutant	Period	Emission Rate using Fuel Oil #2(g/s)	
		Project Site 1	Project Site 2
PM2.5	24-hr	7.46E-04	2.74E-03
	annual	2.04E-04	7.50E-04
SO2	1-hour	4.82E-05	1.77E-04
NO2	1-hour	4.52E-03	1.66E-02
	annual	1.24E-03	4.55E-03
Stack Parameters			
Stack Height (ft)		68	98
Stack Diameter (ft)		1	1
Exit Velocity (m/s)		0.42	1.55

Pollutant	Period	Emission Rate using Natural Gas (g/s)	
		Project Site 1	Project Site 2
PM2.5	24-hr	2.36E-04	8.66E-04
	annual	6.46E-05	2.37E-04
SO2	1-hour	1.86E-05	6.83E-05
NO2	1-hour	3.10E-03	1.14E-02
	annual	8.50E-04	3.12E-03
Stack Parameters			
Stack Height (ft)		68	98
Stack Diameter (ft)		1	1
Exit Velocity (m/s)		0.40	1.47

The AERMOD model was used to predict impacts of SO_2, NO_2, PM_{10}, and $PM_{2.5}$ emissions over the averaging time corresponding to the NAAQS. In addition to the NAAQS, the *de minimis* thresholds for $PM_{2.5}$ applicable to NYC development projects were also used to determine potential $PM_{2.5}$ impact significance as below:

- Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average $PM_{2.5}$ concentration increase greater than 0.3 $\mu g/m^3$ at any receptor location.

Based on the NAAQS and $PM_{2.5}$ *de minimis* thresholds, as shown in **Table 2.6-4**, the Not-to-Exceed criteria were further established by subtracting background concentrations collected at Queens College Station 2 from the NAAQS for relevant pollutants. When exceedances of the Not-to-Exceed criteria were predicted, a further analysis or mitigation measures would be warranted to ensure the proposed action's compliance with both the NAAQS and $PM_{2.5}$ *de minimis* thresholds.

Impact concentrations were first predicted using AERMOD assuming that all HVAC systems consume No. 2 fuel oil. If exceedances of Not-to-Exceed criteria were predicted under the No. 2 fuel oil option, a further modeling analysis under the natural gas option would be warranted.

Table 2.6-4 Impact Significance Thresholds

Pollutant	Averaging Time	NAAQS	Monitored Background Concentration	Unit	Monitoring Station	*De Minimis*	Not-to-Exceed Criteria (ug/m3)
NO_2	1 year	**53**	--	ppb	Queens College 2		100
	1 hour	**100**	--	ppb	Queens College 2		188
SO_2	1 hour	**75**	9.5	ppb	Queens College 2		196
PM_{10}	24 hours	**150**	48	ug/m^3	Division Street		150
$PM_{2.5}$	1 year	**15**	--	ug/m^3	P.S. 314	**0.3**	0.3
	24 hours	**35**	16.7	ug/m^3	P.S. 314	**9.1**	9.1

***** Including background concentration.
Source: New York State Department of Environmental Conservation Ambient Air Monitoring Networks Region 2 (http://www.dec.ny.gov/docs/air_pdf/2016airqualrpt.pdf)

Impact from Existing Ventilation Tower of Hugh L. Carey Tunnel on Projected Sites 1 and 2

According to CEQR Technical Manuel Table 17-2, the primary pollutants from automobiles (mobile sources) are CO (Carbon Monoxide) and particulate matters (PM).

Emission Rate Prediction

Total CO and PM emissions within Hugh L. Carey Tunnel (the tunnel) can be calculated as following:

Total Emission Rate = Emission Factor * Miles Travelled * Number of Vehicles

Hourly vehicular volumes and classifications of both directions for the tunnel traffic were obtained from New York City Department of Transportation (NYCDOT) *New York City Bridge Traffic Volumes 2016* (See **Table 2.6-5**). The 10-year volume projection trend was also used to calculate the expected traffic volume for the build year of 2020.

The vehicular exhaust emissions with the tunnel were predicted using USEPA's Motor Vehicle Emission Simulator (MOVES) (Version MOVES 2014a). New York State Department of Environmental Conservation (NYSDEC) provided MOVES input data for Manhattan County and Kings County were used in estimating southbound and northbound direction vehicle emissions. The travel speed of 20 miles per hour was conservatively used. **Table 2.6-6** presents the emission factors predicted for the year of 2020 for each vehicle class applicable for the tunnel traffic.

It should be noted that the tunnel consists of two ventilation towers, separated in a distance of 4,200 feet and located in Governors Island and Brooklyn, respectively. It is assumed that the total emissions from the tunnel traffic are evenly emitted from these two ventilation towers. Therefore the impacts from the emissions released from the ventilation tower on the Brooklyn side were considered in the analysis given its close proximity to the projected sites.

Assuming most buses going through the tunnel are MTA transit buses, running exhaust and crankcase running exhaust particulate matter (PM) emission rate would be obtained from the MTA document: *Comparison of Clean Diesel Buses to CHG Buses Appendix B Test Data Used for Comparison, Regulated Emissions*. Since it is not specified, to be conservative, assuming all the PMs mentioned in this document are PM_{10}, the ratio of $PM_{2.5}/PM_{10}$ from MOVES output running exhaust and crankcase exhaust

would be used as a multiplier to calculate $PM_{2.5}$ running exhaust and crankcase emission rate. $PM_{2.5}$ and PM_{10} emissions from brakewear and tirewear would be estimated using MOVES2014a and added onto running exhaust and crankcase emission rate as the total buses emission rate.

In addition to MOVES2014a predicted exhaust and tire and brakewear PM emissions from resuspension of loose material on the road surface due to vehicle travel on a dry paved road within the tunnel were also estimated per *CEQR Technical Manuel using* U.S. Environmental Protection Agent published AP-42 handbook with below equation:

$$E=k\ (sL)^{0.91} *(W)^{1.02}$$

where: E = particulate emission factor (having units matching the units of k),
k = particle size multiplier for particle size range and units of interest,
sL = road surface silt loading (grams per square meter) (g/m2), and
W = average weight (tons) of the vehicles traveling the road.

According to the CEQR Technical Manual, a silt loading factor of 0.015 g/m^2 applicable for expressways and a standard fleet average vehicle weight of 6,000 pounds were used to estimate fugitive road dust emissions within the tunnel as summarized in **Table 2.6-7**.

Since the ventilation tower has six (6) exhaust stacks, the predicted total emissions were evenly divided to determine emission rates for each stack, as presented in **Tables 2.6-8 to 2.6-10**, for CO, $PM_{2.5}$, and PM_{10}, respectively.

Stack Parameters

The physical parameters for each of six ventilation stacks considered in the analysis include:

Elevation: 90 feet above ground;
Diameter: 12.4 feet;
Exit velocity: 1.27 m/s.

Dispersion Modeling

The same AERMOD dispersion model used for the HVAC impact analysis was used to predict applicable pollutant concentrations from the existing tunnel ventilation tower on the proposed buildings. These predicted concentration levels would be compared with NAAQS and/or applicable de minimis threshold (**Table 2.6-11**) to determine potential impact significance.

Table 2.6-5 2016 Traffic Volume and Classification

Direction	Northbound to Manhattan						Southbound to Brooklyn						
FHWA Classes►	1&2	3	4	5-7	8-13	Total Vehicles	1&2	3	4	5-7	8-13	Total Vehicles	2-way Grand Totals
12-1am	190	7	12	12	0	221	553	12	36	6	0	607	828
1-2am	74	4	6	1	0	85	275	0	12	1	0	288	373
2-3am	46	0	3	2	0	51	173	2	4	2	0	181	232
3-4am	66	1	8	3	0	78	132	0	0	3	0	135	213
4-5am	161	9	61	18	0	249	147	0	9	3	0	159	408
5-6am	749	8	67	8	0	832	164	2	13	6	0	185	1,017
6-7am	2,127	15	214	27	0	2,383	289	6	81	12	0	388	2,771
7-8am	2,608	16	308	40	0	2,972	456	7	153	17	0	633	3,605
8-9am	2,370	14	295	32	0	2,711	585	6	190	19	0	800	3,511
9-10am	2,032	16	145	33	0	2,226	629	8	161	23	0	821	3,047
10-11am	1,645	22	92	48	1	1,808	772	10	83	18	1	884	2,692
11-12am	1,552	15	69	38	1	1,675	877	9	66	20	0	972	2,647
12-1pm	1,422	16	75	33	1	1,547	1007	12	55	20	0	1,094	2,641
1-2pm	1,338	13	91	38	0	1,480	1,088	13	78	27	0	1,206	2,686
2-3pm	1,253	10	106	25	0	1,394	1,282	14	80	25	0	1,401	2,795
3-4pm	1,266	5	134	12	0	1,417	1,800	13	137	24	0	1,974	3,391
4-5pm	1,143	4	154	9	1	1,311	2,063	7	186	19	0	2,275	3,586
5-6pm	1,063	2	120	6	2	1,193	2,399	7	276	15	1	2,698	3,891
6-7pm	1,023	3	69	6	1	1,102	2,329	6	188	11	1	2,535	3,637
7-8pm	909	1	44	3	0	957	1,938	5	105	8	0	2,056	3,013
8-9pm	655	4	26	5	0	690	1,343	7	80	8	0	1,438	2,128
9-10pm	573	1	27	2	0	603	1,289	4	57	14	0	1,364	1,967
10-11pm	448	1	21	3	0	473	1084	5	31	9	0	1,129	1,602
11-12pm	389	0	37	14	0	440	902	7	37	9	0	955	1,395
Totals	25,102	187	2,184	418	7	27,898	23,576	162	2,118	319	3	26,178	54,076

Table 2.6-6 MOVES-predicted Emission Factor for Year 2015

FHWA Classes	Vehicle Types	MOVES Vehicle Classifications	Kings County Emission Factor (gram/veh-mile)			New York County Emission Factor (gram/veh-mile)		
			CO	$PM_{2.5}$	PM_{10}	CO	$PM_{2.5}$	PM_{10}
1 & 2	Auto & Motorcycles	Gasoline Car	2.073	0.017	0.085	2.299	0.017	0.086
3	Commuter Vans /Commercial Vans / Pickup/ SUV	Gasoline Light Truck	2.966	0.016	0.089	2.909	0.016	0.089
4	Buses	Diesel Transit Bus	10.600	0.073	0.449	10.600	0.072	0.440
5 - 13	Single Unit Trucks	Diesel Single Unit Truck	2.577	0.446	0.757	2.477	0.522	0.845

Table 2.6-7 Emission Rate from Road Dust Emission

Pollutants	k (g/VMT)[1]	sl (g/m^2)[2]	W(ton)[3]	E (g/VMT)
$PM_{2.5}$	0.25	0.015	3	0.016782117
PM_{10}	1	0.015	3	0.067128466

Table 2.6-8 CO Emission Rate the Hugh L. Carey Tunnel Ventilation Tower

Pollutant	Averaging Time	Total Emission Rate (g/s)	Individual Ventilation Stack Emission Rate (g/s)
CO	1-hr	1.294757776	0.215792963
	8-hr	0.980555946	0.163425991

Table 2.6-9 $PM_{2.5}$ Emission Rate from **Hugh L, Carey** Tunnel Ventilation **Tower**

Time Period	2-way Grand Total Emission Rate (g/s)	Fugitive Dust Emission Rate (g/s)	Total $PM_{2.5}$ Emission Rate (g/s)	Emission Rate for each stack (g/s)
12-1am	0.002734618	0.001535182	0.004168962	0.000694827
1-2am	0.000907245	0.000691574	0.00156106	0.000260177
2-3am	0.000681181	0.000430148	0.001085083	0.000180847
3-4am	0.000754883	0.00039492	0.001122648	0.000187108
4-5am	0.00220772	0.000756467	0.002894183	0.000482364
5-6am	0.003077036	0.001885604	0.004845439	0.000807573
6-7am	0.008854499	0.005137669	0.01366172	0.002276953
7-8am	0.012305314	0.006683976	0.018540827	0.003090138
8-9am	0.012014816	0.006509692	0.018087021	0.003014503
9-10am	0.010330475	0.005649397	0.015602481	0.002600413
10-11am	0.009419451	0.004991196	0.014070316	0.002345053
11-12am	0.008677072	0.004907763	0.013264006	0.002210668
12-1pm	0.008403978	0.004896638	0.0129865	0.002164417
1-2pm	0.009309781	0.004980072	0.013952374	0.002325396
2-3pm	0.008893705	0.005182167	0.013743447	0.002290575
3-4pm	0.009853665	0.006287202	0.015759673	0.002626612
4-5pm	0.010270088	0.006648748	0.01651927	0.002753212
5-6pm	0.010915932	0.007214244	0.017702002	0.002950334
6-7pm	0.009325966	0.006743307	0.01568977	0.002614962
7-8pm	0.007095013	0.005586358	0.012381879	0.002063647
8-9pm	0.005281244	0.003945493	0.009008832	0.001501472
9-10pm	0.005043894	0.003646985	0.00848563	0.001414272
10-11pm	0.003940281	0.002970244	0.006747321	0.001124554
11-12pm	0.004211925	0.002586448	0.006637819	0.001106303

Table 2.6-10 PM_{10} Emission Rate from Ventilation Tower of Hugh L. Carey Tunnel

Time Period	2-way Grand Total Emission Rate (g/s)	Fugitive Dust Emission Rate (g/s)	Total PM_{10} Emission Rate (g/s)	Emission Rate for each stack (g/s)
12-1am	0.011132661	0.006140729	0.01686545	0.002810908
1-2am	0.004403091	0.002766295	0.007000069	0.001166678
2-3am	0.002791266	0.001720591	0.004405301	0.000734217
3-4am	0.002811771	0.00157968	0.00428774	0.000714623
4-5am	0.008249199	0.003025866	0.011008786	0.001834798
5-6am	0.013903477	0.007542417	0.020939414	0.003489902
6-7am	0.04094203	0.020550676	0.060040454	0.010006742
7-8am	0.056798756	0.026735904	0.08156185	0.013593642
8-9am	0.056419082	0.026038768	0.08051047	0.013418412
9-10am	0.045296862	0.022597586	0.066291008	0.011048501
10-11am	0.037624778	0.019964786	0.056229491	0.009371582
11-12am	0.034953967	0.01963105	0.053295902	0.00888265
12-1pm	0.034344021	0.019586552	0.052656913	0.008776152
1-2pm	0.037199504	0.019920288	0.055770814	0.009295136
2-3pm	0.037784209	0.020728669	0.057130999	0.009521833
3-4pm	0.045738274	0.025148807	0.069212965	0.011535494
4-5pm	0.049742498	0.026594993	0.074534655	0.012422442
5-6pm	0.054396866	0.028856977	0.081287665	0.013547944
6-7pm	0.046091138	0.026973226	0.071338828	0.011889805
7-8pm	0.035295345	0.022345431	0.056279493	0.009379916
8-9pm	0.025366056	0.01578197	0.040176247	0.006696041
9-10pm	0.023261718	0.01458794	0.036955775	0.006159296
10-11pm	0.018203621	0.011880976	0.029374099	0.004895683
11-12pm	0.017936172	0.010345793	0.02761404	0.00460234

Table 2.6-11 Impact Significance Thresholds for the Tunnel Ventilation Building

Pollutant	Averaging Time	NAAQS	Background Concentration	unit	*De Minimis*	Not-to-Exceed Criteria (ug/m3)
CO	1 hour	2.1	35	ppb	16.45	18,835
	8 hours	1.4	9	ppb	3.8	4,351
PM_{10}	24 hours	150	60	ug/m3	-	150
$PM_{2.5}$	1 year	12	7.1	ug/m3	0.3	0.3
	24 hours	35	16.7	ug/m3	9.1	9.1

AERMOD Modeling Results

Impact from Proposed HVAC system of Projected Site 1 on Projected Site 2 under #2 Fuel Oil and Natural Gas Options

Potential impacts were first predicted using AERMOD assuming that the HVAC system is powered by the #2 fuel oil. As summarized in **Table 2.6-12**, the HVAC system of Projected Site 1 failed analysis while firing #2 fuel oil.

Table 2.6-12 Predicted HVAC Impact Concentrations Firing #2 Fuel Oil

Pollutants	Averaging Time	Not-to-Exceed Criteria (ug/m3)	Setback 10 ft Modeling Result (ug/m3)	Setback 15 ft Modeling Result (ug/m3)
NO_2	1 year	100.0	76.3	76.3
	1 hour	188.0	**265.4**	**193.7**
SO_2	1 hour	196.0	30.3	28.2
PM_{10}	24 hours	150	53.2	51.9
$PM_{2.5}$	1 year	0.3	0.16	0.15
	24 hours	9.1	5.19	3.85

Note: **Red boldface** text denotes exceedance of impact criteria

Potential impacts were then predicted using AERMOD assuming the HVAC system is powered by natural gas. **Table 2.6-13** summarized the AERMOD-predicted potential air quality impacts from Projected Site 1 on Projected Site 2. No exceedances of the Not-to-Exceed criteria were predicted from the operation of Projected Site 1 while the stack has been set back 15 feet away from the west lot line, resulting in no significant adverse air quality impacts.

Table 2.6-13 Predicted HVAC Impact Concentrations Firing Natural Gas

Pollutants	Averaging Time	Not-to-Exceed Criteria (ug/m^3)	Setback 10 ft Modeling Result (ug/m^3)	Setback 15 ft Modeling Result (ug/m^3)
NOx	1 year	100.0	76.2	76.2
	1 hour	188.0	**200.4**	166.9
SO_2	1 hour	196	50.1	49.3
PM_{10}	24 hours	150	49.6	49.2
$PM_{2.5}$	1 year	0.3	0.05	0.05
	24 hours	9.1	1.64	1.22

Note: **Red boldface** text denotes exceedance of impact criteria

Impact from Existing Ventilation Tower of Hugh L. Carey Tunnel on Projected Sites 1 and 2

Table 2.6-14 presents the AERMOD-predicted air quality impacts from the existing ventilation tower on Projected Sites 1 and 2. No exceedance was predicted from the ventilation system of Hugh L. Carey Tunnel on Projected Site 1.

However, exceedance of annual average $PM_{2.5}$ threshold was predicted to occur on the top floor (9th floor) of Projected Site 2 from the tunnel ventilated $PM_{2.5}$ emissions. AERMOD was further used to predict the $PM_{2.5}$ annual average impact on the 9th floor receptors setback from Summit Street with 5-foot setback intervals and the modeling results are shown in **Table 2.6-15** indicating that no exceedances of the $PM_{2.5}$ impact threshold would occur if the 9th floor façade facing Summit Street were set back 20 feet away from the tunnel ventilation tower.

Table2.6-14 Predicted Existing Tunnel Impact Concentrations

Pollutants	Averaging Time	Not-to-Exceed Criteria (ug/m^3)	Projected Site 1 Modeling Result (ug/m^3)	Projected Site 2 Modeling Result (ug/m^3)
CO	1 hour	18,835	1,378	1,546
	8 hours	4,351	698	807
PM_{10}	24 hours	150	77.3	80.1
$PM_{2.5}$	1 year	0.3	0.10	0.34
	24 hours	9.1	2.9	3.4

Table 2.6-15 Predicted Impact Concentrations from Ventilation Tower on Projected Site 2

Pollutants	Averaging Time	Not-to-Exceed Criteria (ug/m^3)	15 feet Setback Modeling Result (ug/m^3)	20 feet Setback Modeling Result (ug/m^3)
$PM_{2.5}$	1 year	0.3	**0.303**	0.293

Proposed (E) Designation

To ensure that there are no significant adverse air quality impacts related to emissions from the proposed HVAC systems or existing tunnel ventilation system associated with the With-Action development onto existing or other projected buildings of similar or greater height, below restrictions would be required regarding fuel type and/or exhaust stack location. The text of the (E) designation (E-504) would be as follows:

- **Projected Site 1 (Block 352, Lot 60)** - Any new residential/commercial development or enlargement on the above-referenced property must use natural gas exclusively as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and ensure that the HVAC stack(s) is located at the highest tier, at least 68 feet above grade, and is at least 15 feet from the lot line facing Van Brunt Street.

- **Projected Site 2 (Block 352, Lots 1 and 3)** - To preclude the potential for significant adverse air quality impacts from the Hugh L. Carey Tunnel ventilation building, for any new residential/commercial development or enlargement on the above-referenced property, no operable windows or air intakes would be permitted at the height of 90 feet or more above grade within 20 feet setback from the lot line facing Summit Street.

Conclusion

With the adoption of (E) Designation (E-504) for two projected buildings associated with the With-Action development, the Project would not result in potential significant adverse air quality impacts and no further analysis or mitigation measures are warranted.

2.7 NOISE

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

In terms of hearing, humans are less sensitive to low frequencies (<250 Hz) than mid-frequencies (500-1,000 Hz). Humans are most sensitive to frequencies in the 1,000 to 5,000 Hz range. Since ambient noise contains many different frequencies all mixed together, measures of human response to noise assign more weight to frequencies in this range. This is known as the A-weighted sound level.

Noise is measured in 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 "dB(A)." The A-weighted scale is used for evaluating the effects of noise in the environment because it most closely approximates the response of the human ear. On this scale, the threshold of discomfort is 120 dB(A), and the threshold of pain is about 140 dB(A). **Table 2.7-1** shows the range of noise levels for a variety of indoor and outdoor noise levels.

Because the scale is logarithmic, a relative increase of ten decibels represents a sound pressure level that is ten times higher. However, humans do not perceive a ten dB(A) increase as ten times louder; they perceive it as twice as loud. The following are typical human perceptions of dB(A) relative to changes in noise level:

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

As a change in land use may result in a change in type and intensity of noise perceived by residents, patrons and employees of a neighborhood, the *CEQR Technical Manual* recommends an analysis of the two principal types of noise sources: mobile sources and stationary sources. Both types of noise sources are examined in the following sections.

2.7.1 Mobile Sources

Mobile noise sources are those which move in relation to receptors. The mobile source screening analysis addresses potential noise impacts associated with vehicular traffic generated by the proposed action. According to the *CEQR Technical Manual*, if existing passenger car equivalent (PCE) values are increased by 100 percent or more due to a proposed action, a detailed analysis is generally performed. Vehicular traffic studies are not warranted, as the proposed action is not expected to generate over 50 vehicle trips through any local intersection during peak periods. Therefore, as the proposed action would not be expected to result in a 100 percent increase in PCE values, a detailed mobile source analysis is not warranted.

As discussed in the *CEQR Technical Manual*, if the proposed project is located in an area with high ambient noise levels, which typically include those near heavily-traveled thoroughfares or other loud activities, further noise analysis may be warranted to determine the attenuation measures for the project. The proposed development sites are located at the corner of Summit Street and Hamilton Avenue, in an area with high ambient noise levels. Although the project is unlikely to generate sufficient traffic volumes to warrant a mobile source analysis, the ambient noise levels were measured to provide an assessment of the potential for traffic noise to have a significant adverse effect on future residents.

Table 2.7-1 Sound Pressure Level of Typical Noises in Indoor & Outdoor Environments

Noise Level dB(A)	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 Wood chipper 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 dB(A))
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 times 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 the US Department of Housing and Urban Development, Office of Research and Technology, Washington, D.C., undated; Sandstone Environmental Associates, Inc.; Highway Noise Fundamentals, prepared by the Federal Highway Administration, US Department of Transportation, September 1980; Handbook of Environmental Acoustics, by James P. Cowan, Van Nostrand Reinhold, 1994.

The *CEQR Technical Manual* provides noise exposure guidelines in terms of L_{eq} and L_{10} for the maximum amount of allowable noise under existing regulations. L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating sound pressure levels (SPLs) is averaged over time to create a single number to describe the mean energy or intensity level. High noise levels during a measurement period will have 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. In comparison, L_{10} is the SPL exceeded 10 percent of the time. Similar descriptors include the L_{50}, L_{01}, and L_{90} values.

Noise measurements were conducted on March 16, 2016, along Hamilton Avenue in front of projected Development Site 2 (see **Figure 2.7-1**). A Type 2 Larson Davis LxT sound meter with wind shield was used to conduct the noise monitoring. The meter was placed on a tripod at a height of approximately five feet above the ground, away from any other surfaces and was calibrated prior to and following each monitoring session. Levels at the site were measured during the weekday peak hours of 8:00 a.m. to 10:00 a.m.; 12:00 p.m. to 1:00 p.m. and 4:00 p.m. to 6:00 p.m. An off-peak measurement was also taken between 2:00 p.m. and 4:00 p.m. The results of the noise measurements are summarized in **Table 2.7-2**.

Noise Measurement Assessment

In 1983, the NYCDEP adopted the *City Environmental Protection Order-City Environmental Quality Review* (CEPO-CEQR) noise standards at the exterior façade to achieve interior noise levels of 45 dB(A) or below. *CEPO-CEQR Noise Standards* classify general external noise exposure into four categories: "generally acceptable," "marginally acceptable," "marginally unacceptable" and "clearly unacceptable." In accordance with *CEQR Technical Manual* methodology, these standards are the basis for classifying noise exposure into the following categories based on the L_{10} noise measurements that were conducted as the project site.[9]

If the ambient noise levels at the site exceed the marginally acceptable level of 70.0 dB(A), a significant impact could occur unless the building design provides a composite building attenuation that would be sufficient to reduce these levels to an acceptable interior noise level, as indicated in **Table 2.7-3**

Table 2.7-2 Measured Noise Levels

Time Period	8:32-8:54 am (dBA)	12:02-12:24 pm (dBA)	3:36-3:58 pm (dBA)	5:23-5:45 pm (dBA)
L_{eq}	66.7	66.6	66.5	67.8
L_{max}	90.0	87.5	87.4	86.2
L_{10}	**68.7**	**68.5**	**68.9**	**69.9**
L_{50}	63.8	63.3	63.6	63.6
L_{90}	59.4	59.1	60.1	60.1
L_{min}	55.5	55.5	57.5	57.1

Table 2.7-3 Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise Level with Proposed Action	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation[A]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)$[B] dB(A)

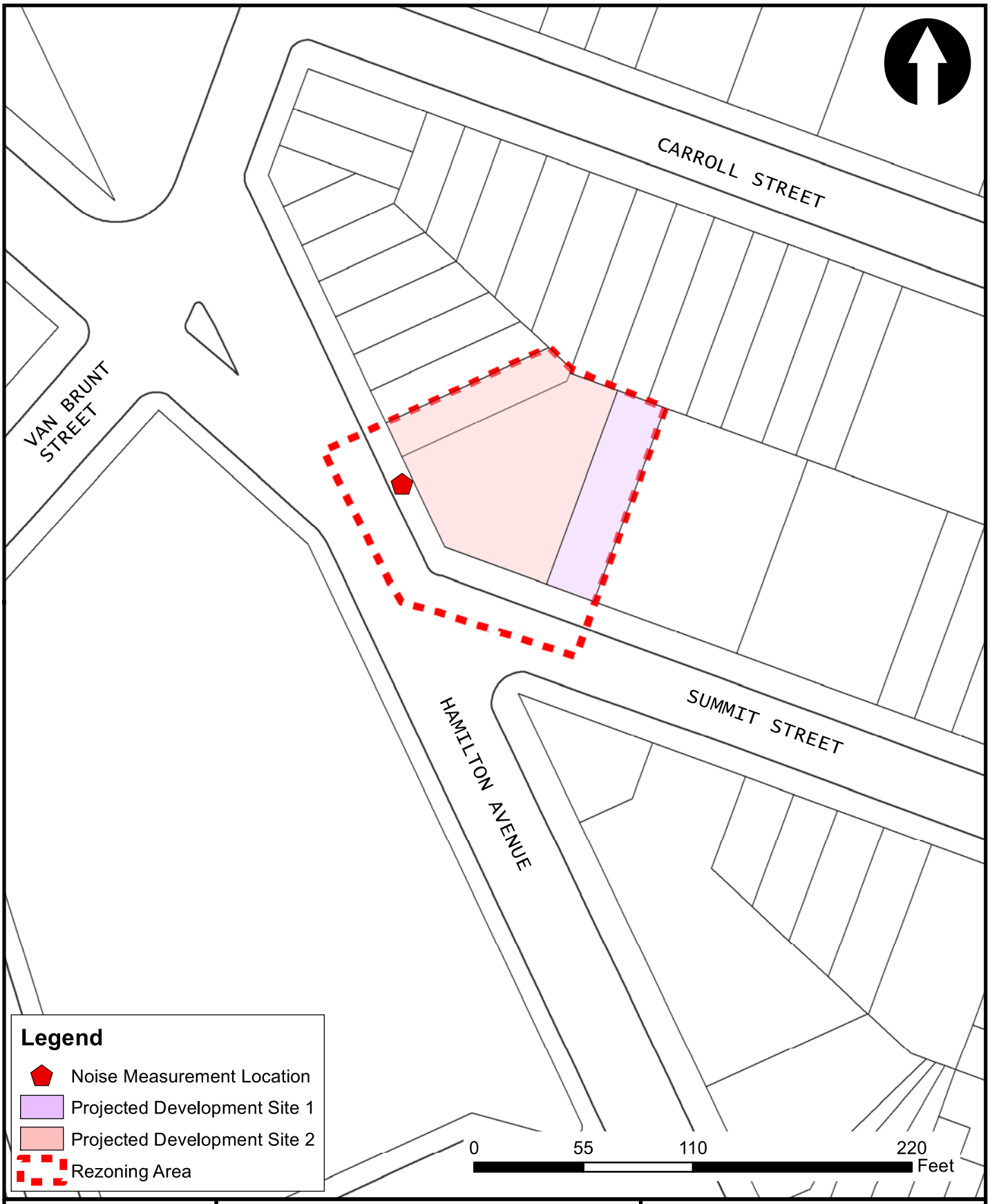
Source: *New York City Department of Environmental Protection*

Notes:

[A] The above composite window-wall attenuation values are for residences and other noise-sensitive uses (e.g., schools, museums, libraries, courts, houses of worship, hotels, motels, etc). Commercial and office spaces/meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.

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

[9] Refer to the *CEQR Technical Manual,* Table 19-2, "Noise Exposure Guidelines for Use in City Environmental Impact Review".



AECOM

Environmental Assessment Statement
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Noise Measurement Location

Figure 2.7-1

The highest recorded L_{10} reading was 69.9 db(A) during the 5:22 to 5:45 pm peak hour period. As such, no window-wall attenuation would be required. However, the L_{10} noise level would increase to 70.0 db(A) by the 2020 build year due to additional (background) traffic growth. Thus, in accordance with NYCDEP requirements, a 28 dB(A) window-wall noise attenuation would be required to achieve an acceptable interior noise level. This level of attenuation could be achieved with a closed-window situation and alternate means of ventilation, such as indoor air conditioning, heat pumps or split systems.

It is assumed that an (E) designation for noise would be placed on Projected Development Sites 1 and 2, which specifies that the above window-wall attenuation must be provided with a closed-window condition and alternate means of ventilation.

The E-Designation (E-504) should be placed on both Projected Development Sites 1 and 2. Therefore, the text of the E-Designation would be as follows:

Block 352, Lot 60 (Projected Development Site 1): In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all building's facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

Block 352, Lots 1 and 3 (Projected Development Site 2): In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all building's facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

With the implementation of these (E) designations, no significant adverse impacts related to noise would occur. Therefore, the proposed action would not result in significant adverse noise impacts, and further assessment is not warranted.

2.7.2 Stationary Sources

The *CEQR Technical Manual* states that based upon previous studies, unless existing ambient noise levels are very low and/or stationary source levels are very high (and there are no structures that provide shielding), it is unusual for stationary sources to have significant impacts at distances beyond 1,500 feet. A detailed analysis may be appropriate if the proposed project would cause a substantial stationary source (i.e., unenclosed mechanical equipment for manufacturing or building ventilation purposes, playground, etc.) to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses. Machinery, mechanical equipment, heating, ventilating and air-conditioning units, loudspeakers, new loading docks, and other noise associated with building structures may also be considered in a stationary source noise analysis. Impacts may occur when a stationary noise source is near a sensitive receptor, and is unenclosed.

However, although the rezoning area is located in an existing manufacturing district, the greater project area includes residential uses with a mix of enclosed commercial, storage and/or light manufacturing uses and no unenclosed stationary noise sources of concern were observed during field inspection. As the proposed development sites are not subject to high ambient noise levels from any nearby stationary source, no stationary source noise impacts from surrounding uses are anticipated. Additionally, as the proposed action would not introduce a new stationary noise source, no significant adverse stationary source impacts are anticipated as a result of the proposed action, and no further analysis is warranted.

2.8 NEIGHBORHOOD CHARACTER

As defined by the *CEQR Technical Manual*, neighborhood character is considered to be an amalgam of the various elements that give a neighborhood its distinct personality. The elements, when applicable, typically include land use, socioeconomic conditions, open space and shadows, historic and cultural resources, urban design and visual resources, transportation, and noise, as well as any other physical or social characteristics that help to define a community. Not all of these elements affect neighborhood character in all cases; a neighborhood usually draws its distinctive character from a few defining features.

If a project has the potential to result in any significant adverse impacts on any of the above technical areas, a preliminary assessment of neighborhood character may be appropriate. A significant impact identified in one of these technical areas is not automatically equivalent to a significant impact on neighborhood character; rather, it serves as an indication that neighborhood character should be examined.

In addition, depending on the project, a combination of moderate changes in several of these technical areas may potentially have a significant effect on neighborhood character. As stated in the *CEQR Technical Manual*, a "moderate" effect is generally defined as an effect considered reasonably close to the significant adverse impact threshold for a particular technical analysis area. When considered together, there are elements that may have the potential to significantly affect neighborhood character. Moderate effects on several elements may affect defining features of a neighborhood and, in turn, a pedestrian's overall experience. If it is determined that two or more categories may have potential "moderate effects" on the environment, CEQR states that an assessment should be conducted to determine if the proposed project result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. If a project would result in only slight effects in several analysis categories, then further analysis is generally not needed.

This chapter reviews the defining features of the neighborhood and examines the proposed action's potential to affect the neighborhood character of the surrounding study area. The study area is generally coterminous with the study area used for the land use and zoning analysis in Chapter 2.1. The impact analysis of neighborhood character that follows below focuses on changes to the technical areas listed above that exceeded CEQR preliminary screening thresholds that were assessed in this EAS Short Form.

The assessment begins with a review of existing conditions and the neighborhood of the study area. The information is drawn from the preceding sections of this EAS, but is presented in a more integrated way. While the other sections present all relevant details about particular aspects of the environmental setting, the discussion for neighborhood character focuses on a limited number of important features that gives the neighborhood its own sense of place and that distinguish them from other parts of the city. A concise discussion of the changes anticipated by the 2022 analysis year under the Future No-Action Condition is then included. A brief overview of the Proposed Action is then presented, along with an analysis of whether any anticipated significant adverse impacts and moderate adverse effects, regarding the relevant technical CEQR assessment categories for neighborhood character, would adversely affect any of the defining features.

2.8.1 Existing Conditions

Land Use, Zoning and Public Policy

Land uses throughout the study area include a mix of residential, commercial, and manufacturing uses consisting of two- to four-story rowhouses and walk-up apartment buildings along Carroll Street and President Street; a local retail corridor with ground-floor commercial uses and residences above along Columbia Street; active industrial businesses along Hamilton Avenue and Van Brunt Street; and mixed residential, commercial and industrial uses along Summit Street.

The rezoning area is located at the northeast corner of Summit Street and Hamilton Avenue, which generally consist of residential and mixed- residential and commercial buildings. Directly west of the project site is a metal fabricator and the Red Hook Container Terminal, an intermodal freight terminal operated by the Port Authority of New York and New Jersey. South of the project site is the Brooklyn portal of the Hugh L. Carey Tunnel, which connects the boroughs of Brooklyn and Manhattan. Occupying the lot directly above the tunnel portal is the Harold Ickes Playground.

The northern and southern portions of the study area contain development patterns consistent with the project site and adjacent buildings. This section of President Street, Carroll Street and Summit Street consists of predominately commercial and industrial uses. The Backyard Garden, a community garden, is located at the junction of Hamilton Avenue and Van Brunt Street north of the project site. The Gowanus Nursery is located on the corner of Carroll Street and Van Brunt Street.

The eastern portion of the study area contains buildings that are primarily mixed-use residential and commercial. Buildings in this section of President Street, Carroll Street and Summit Street are generally two to four stories in height with some containing ground-floor retail uses with residences occupying the remaining floors. This development continues on Columbia Street, which is the local retail corridor and is in the eastern limit of the study area. Despite active development in the area, there are numerous vacant lots along Hamilton Avenue and Columbia Street.

The rezoning area is located within an M1-1 District. The predominant zoning districts within 400 feet are M1-1, M2-1 and R6 with a C2-4 commercial overlay. R6 zoning districts are widely mapped in built-up, medium-density residential areas. Commercial uses are not allowed in R6 districts. The character of R6 districts can range from neighborhoods with a diverse mix of building types and heights to large-scale “tower in the park” developments. As in commercial overlays districts, typical retail uses include grocery stores, dry cleaners, drug stores, restaurants and local clothing stores that cater to the daily needs of the immediate neighborhood. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use. C2-4 districts have a maximum commercial FAR of 2.0.

Transportation

Approximately one and a half blocks to the east of the project area is the Brooklyn-Queens Expressway (BQE), which is part of the I-278 interstate highway route. Approximately one block south of the project area is an entrance to the Hugh L. Carey Tunnel, formerly known as the Brooklyn Battery Tunnel, which connects the boroughs of Brooklyn and Manhattan.

The street hierarchy of the study area includes several different functional classifications. The Hugh L. Carey Tunnel and the Brooklyn-Queens Expressway are classified as Principal Arterial Interstate Roadways; and Columbia and Van Brunt Streets are classified as Principal Arterial Roadways. To the west of the rezoning area, Hamilton Avenue is classified as a Minor Arterial Roadway. All other roadways in the study area are classified as local roads.

With respect to public transit, the area is served by the B61 bus, which stops one block from the project area, and the “F” and “G” subway lines, which are located more than one half mile from the project area.

Urban Design and Visual Resources

The architecture throughout the study area is eclectic, with no unity of form to tie the built form together visually. As noted in Section 2.1.1, the area is characterized by a mix of warehouse/distribution, open space, mixed-used residential and commercial, and residential uses. The commercial uses are comprised of restaurant supplies outlets and some local retail. The prevailing built form of the area is a mix of low- to mid-rise non-residential buildings and two-to four-story residential buildings. To the south of Summit Street and north of Carroll Street, within the M1-1 zoning district, there are businesses with active industrial uses, as well as clusters of esidential uses. There are also a few properties owned and operated by the NYCDPR, including Mother Cabrini Park, Harold Ickes Playground and the Backyard Garden. One block to the west

is the Red Hook Container Terminal, an intermodal freight terminal operated by the Port Authority of New York and New Jersey. Approximately one and a half blocks to the east of the project area is the Brooklyn-Queens Expressway, which is part of Route I-278. Approximately one block south of the project area is the Brooklyn portal of the Hugh L. Carey Tunnel. Most buildings within the study area are arranged regular (parallel) with respect to their lot placement and many of the residential and mixed-use buildings are often attached to one another, as opposed to free-standing detached buildings.

There are few streetscape elements present within the study area and little in the way of visual interest. Most of the streets contain street trees, which are generally located at irregular intervals; however no other notable streetscape elements (e.g. benches) are located outside of public parks within the study area.

2.8.2 Future No-Action Scenario

In the Future No-Action Scenario, the proposed action would not be undertaken. Existing uses within the rezoning area are expected to remain in their current form.

Significant changes to the study area are not expected by the analysis year of 2022. In the Future No-Action Scenario, it is expected that while tenants within surrounding area buildings may change, the overall use of these buildings would remain the same, and any physical changes would comply with designated zoning regulations and other surrounding districts.

2.8.3 Future With-Action Scenario

The elements that comprise neighborhood character are reviewed individually below, with a following supporting and cumulative conclusion.

Land Use, Zoning and Public Policy

According to the *CEQR Technical Manual*, development resulting from a proposed action could alter neighborhood character if it introduces new land uses, conflicts with land use policy or other public plans for the area, changes land use character, or generates significant land use impacts.

In the Future With-Action scenario, the proposed rezoning would amend the zoning map to change the existing M1-1 district to an R7A district with a C2-4 commercial overlay. On Projected Development Site 1, this action would facilitate a mixed residentail/commercial buidling with a maximum height of 65 feet and a maximum developable floor area of 10,000 square feet due to rear yard constraints. The RWCDS assumes that this maximum developable floor area would be split between 7,500 square feet of residential use with nine units, and 2,500 square feet of retail use on the ground floor. It is assumed that Projected Devlopment Site 2 would be developed with a mixed residentail/commerical building with 7,977 square feet of ground floor retail and 28,717 square feet of residential floor area divided into 34 units, approximately ten of which would be affordable. A maximum building height of 95 feet is assumed.

In the Future With-Action Scenario, the existing mixed-use (residential/commercial) buildings would be demolished to accommodate new construction. The Future With-Action Scenario would result in the loss of 3,500 square feet of existing industrial space and 7,977 square feet of commercial/office space currently on lots 1 and 3. The Future With-Action Scenario would also introduce an additional 43 residential units to the project area, of which approximately ten units would be classified as affordable.

Recent years have seen some commercial, residential and community facility development in the general area. The proposed action would reinforce this trend toward a more active residential mixed-use neighborhood, which is common in the residential areas east of the rezoning area. The proposed action is therefore not expected to have any adverse impact on surrounding land use.

Historic and Cultural Resources

According to CEQR, when an action results in substantial direct changes to a historic or cultural resource or substantial changes to public views of a resource, or when a historic or cultural resource analysis identifies a significant impact in this category, there is a potential to affect neighborhood character.

The project site is not a designated local LPC or S/NR historic resource or property, nor is the site part of any designated historic district. The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received on February 29, 2016, indicating that the projected development sites have no architectural or archaeological significance. Therefore, significant adverse impacts to these resources are not expected as a result of the proposed action and further analysis is not warranted.

Urban Design and Visual Resources

According to the *CEQR Technical Manual*, in developed areas, urban design changes have the potential to affect neighborhood character by introducing substantially different building bulk, form, size, scale, or arrangement. Urban design changes may also affect block forms, street patterns, or street hierarchies, as well as streetscape elements such as street walls, landscaping, curb cuts, and loading docks. Visual resource changes could affect neighborhood character if they directly alter key visual features such as unique and important public view corridors and vistas, or block public visual access to such features.

The proposed action would not diminish or disturb the existing aesthetic continuity, pedestrian features of the community or neighborhood, and as the proposed action would not block any view corridors or views to/from any natural areas with rare or defining features, nor would the proposed action impact an historical or culturally sensitive community features, the proposed action is not expected to result in any significant adverse urban design. Visual resource changes would also not occur, as the proposed action would not directly alter any key visual features, such as unique and important public view corridors and vistas, or block public visual access to such features.

Shadows

According to CEQR, when shadows from a proposed project fall on a sunlight-sensitive resource and substantially reduce or completely eliminate direct sunlight exposure such that the public's use of the resource is significantly altered or the viability of vegetation or other resources is threatened, there is a potential to affect neighborhood character.

As noted in Section 2.2, a shadow analysis was undertaken based on the maximum building heights that would be permitted under the proposed rezoning (i.e., 65 feet for Projected Development Site 1 and 95 feet for Projected Development Site 2). The proposed action would cast incremental shadows on the Backyard Garden on all four analysis dates, with durations ranging from 6 hours and 2 minutes on December 21, to 8 hours and 53 minutes on March 21. However, no part of the garden would be in constant shadow, as the shadow would sweep across the resource during the course of the day. As a result, the garden would receive sufficient sunlight during the growing season, and project-generated shadows would not be considered a significant, adverse impact.

The proposed action would also cast an incremental shadow on a portion of the Harold Ickes Playground during the March, May and June analysis periods, with durations ranging from 19 minutes on March 21 to 2 hours and 28 minutes on June 21. No new shadow would be cast on the playground during the December analysis date. These shadows would sweep across the playground between the hours of 5:57 a.m. and 8:25 a.m., which is typically prior to the time of substantial use. No other open space or cultural and historic resources are located within the potential shadow radius.

Transportation

According to CEQR, changes in traffic and pedestrian conditions can affect neighborhood character in a number of ways. For traffic to have an effect on neighborhood character, it must be a contributing element to the character of the neighborhood (either by its absence or its presence), and it must change substantially as a result of the action. According to the *CEQR Technical Manual*, such substantial traffic changes can include: changes in level of service (LOS) to C or below; change in traffic patterns; change in roadway classifications; change in vehicle mixes, substantial increase in traffic volumes on residential streets; or significant traffic impacts, as identified in the technical traffic analysis. Regarding pedestrians, when a proposed project would result in substantially different pedestrian activity and circulation, it has the potential to affect neighborhood character.

The proposed action would not lead to an increase of 50 or more vehicle trips at any one intersection in the vicinity of the proposed development sites. Therefore, the proposed action would not lead to any significant adverse traffic impacts. Additionally, the proposed action would not lead to an increase of 200 or more transit trips. Therefore, the proposed action would not lead to any significant adverse subway or bus impacts.

Noise

According to the *CEQR Technical Manual*, for an action to affect neighborhood character with respect to noise, it would need to result in a significant adverse noise impact and a change in acceptability categories.

As demonstrated in Section 2.7, the maximum L_{10} measured within the rezoning area was 69.9 dB(A) during the PM peak period. Therefore, the noise at the project site falls within the “Marginally Acceptable” range. The proposed action would not result in a change of acceptability categories, as it would not introduce any notable mobile or stationary sources or noise, and as such, the proposed action would not affect neighborhood character with respect to noise.

Conclusions

Of the relevant technical areas specified in the *CEQR Technical Manual* that comprise neighborhood character, the proposed action would not cause significant adverse impacts with regard to any of them. Moderate adverse effects that would potentially impact such a defining feature, either singly or in combination, have also not been identified for more than one technical area. Therefore, as the proposed action would not have a significant adverse neighborhood character impact and would not result in a significant adverse impact to a defining feature of the neighborhood, further analysis is not necessary.

2.9 CONSTRUCTION

Construction, although temporary, can result in disruptive and noticeable effects on a proposed action area. A determination of the significance of construction and the need for mitigation is based on the duration and magnitude of these effects. Construction is typically of greatest importance when it could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns and air quality conditions. All analyses were undertaken in accordance with the guidelines contained in the *CEQR Technical Manual*.

The proposed action involves a rezoning in the Columbia Street Waterfront District of Brooklyn. In addition to the site controlled by the Applicant, the rezoning area includes one projected development site. While the duration of construction on the Applicant’s site is expected to last 16 to 20 months, a build of year of 2022 is assumed in order to allow additional time for the redevelopment of the Projected Development Site 2.

Construction induced by the proposed action would be gradual and each site would be constructed in less than two years. Thus potential construction impacts would be minimal and, as discussed below, not expected to have any significant adverse impacts. The following is a brief discussion of the effects associated with

construction related activities on traffic, air quality, noise, historical resources and hazardous materials resulting from the construction of the projected development sites.

Effect of Construction on Traffic

The proposed action would result in new development, over a four-year period, on up to two development sites. These developments would replace existing uses on the each site. During construction, the sites would generate trips from workers traveling to and from the construction sites, and from the movement of materials and equipment.

Given typical construction hours of 7:00 AM to 4:00 PM, worker trips would be concentrated in off-peak hours typically before both the AM and PM peak commuter periods. Truck movements typically would be spread throughout the day on weekdays, and would generally occur between the hours of 7:00 AM and 4:30 PM. Traffic generated by construction workers and construction truck traffic would not represent a substantial increment during the area's peak travel periods.

Construction activities may result in short-term disruption of both traffic and pedestrian movements at the development sites. This would occur primarily due to the temporary loss of curbside lanes from the staging of equipment and the movement of materials to and from the site. Additionally, construction would result in the temporary closing of sidewalks adjacent to the site at times. These conditions would not lead to significant adverse effects on traffic and transportation conditions.

Effect of Construction on Air Quality

Possible impacts on local air quality during construction induced by the proposed action include fugitive dust (particulate) emission from land clearing operation and demolition as well as mobile source emissions (hydrocarbons, nitrogen oxide, and carbon monoxide) generated by construction equipment and vehicles.

Fugitive dust emissions from land clearing operations can occur from excavation, hauling, dumping, spreading, grading, compaction, wind erosion, and traffic over unpaved areas. Actual quantities of emissions depend on the extent and nature of the clearing operations, the type of equipment employed, the physical characteristics of the underlying soil, the speed at which construction vehicles are operated, and the type of fugitive dust control methods employed. Much of the fugitive dust generated by construction activities would be of a short-term duration and relatively contained within a proposed site, not significantly impacting nearby buildings or residents. All appropriate fugitive dust control measures – including watering of exposed areas and dust covers for trucks – would be employed during construction of the development sites. Therefore, the fugitive source emissions generated by the proposed action would not be significant.

Mobile source emissions may result from the operation of construction equipment, trucks delivering materials and removing debris, workers' private vehicles, or occasional disruptions in traffic near the construction site. As the number of construction-related vehicle trips generated by the proposed action would be relatively small and the emissions from such vehicles as well as construction equipment would occur over a four-year period and be dispersed throughout the proposed rezoning area, the mobile source emissions generated by the proposed action would not be significant. Overall, the proposed action would not have the potential to result in significant adverse air quality impacts.

Effect of Construction on Noise

Noise and vibration from construction equipment operation and noise from construction workers' vehicles and delivery vehicles traveling to and from the construction sites can affect community noise levels. The level of impact of these noise sources depends on the noise characteristics of the equipment and activities involved the construction schedule, and the location of potentially sensitive noise receptors.

Noise and vibration levels at a given location are dependent on the kind and number of pieces of construction equipment being operated, as well as the distance of the location from the construction site and the types of structures, if any, between the location and the noise source. Noise levels caused by construction activities can vary widely, depending on the phase of construction (e.g. demolition, land clearing and excavation, foundation, erection of structure, construction of exterior walls) and the specific task being undertaken.

Construction noise associated with the proposed action is expected to be similar to noise generated by other residential construction projects in the city. Increased noise level caused by construction activities can be expected to be more significant during early excavation phases of construction and would be of relatively short duration. Increases in noise levels caused by delivery trucks and other construction vehicles would not be significant.

Construction noise is regulated by the *New York City Noise Control Code* and by the Environmental Protection Agency noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards; that, except under exceptional circumstances, construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction material be handled and transported in such a manner as not to create unnecessary noise. In addition, whenever possible, appropriate low noise emission level equipment and operational procedures can be utilized to minimize noise and its effect on adjacent uses.

Thus, while there may be short periods of time when noise is greater than the Noise Control Code, these regulations would be followed in such a matter that no significant adverse noise impacts would be expected to result from the proposed action.

Effect of Construction on Historic Resources

In order to determine whether the projected development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. No historic or architectural resources were identified within the 400-foot study area. Therefore, adverse construction-related impacts are not expected to any historic resource in the vicinity of the rezoning area.

Effect of Construction on Hazardous Materials

The proposed action would result in new development in the rezoning area. As such, a hazardous materials assessment was undertaken, as presented in Section 2.5 above. As discussed in the section, all contaminants and contaminated materials are expected to be removed in accordance with environmental regulations and no significant adverse impacts are expected.

Conclusion

Construction-related activities are not expected to have any significant adverse impacts on traffic, air quality, noise, historic resources, or hazardous materials conditions as a result of the proposed action.

APPENDICES

Appendix A – New York City Waterfront Revitalization Program Technical Appendix

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: 41 Summit Street LLC

Name of Applicant Representative: Stacey Barron, AICP

Address: AECOM 125 Broad Street, New York, NY 10004

Telephone: 212-377-8729 Email: stacey.barron@aecom.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 seeks a zoning map amendment to rezone Block 352, Lots 1, 3 and 60 from an M1-1 zoning district to an R7A zoning district with a C2-4 commercial overlay, in order to facilitate the development of a residential building on Lot 60 (41 Summit Street).

2. Purpose of activity

The purpose of the proposed action is to facilitate the Applicant's proposed development of a new seven-story plus cellar residential building on Lot 60. The proposed development would have a maximum residential floor area of 10,000 zoning square feet (zsf) (4.0 FAR) and a maximum building height of 65 feet.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 352/ Lots 1, 3 and 60

Street Address: 41 Summit Street (Lot 60); 75-79 Hamilton Street (Lots 3 and 1)

Name of water body (if located on the waterfront): _____

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

☐ City Map Amendment	☐ Zoning Certification	☐ Concession
☑ Zoning Map Amendment	☐ Zoning Authorizations	☐ 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: _____

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	☐ Funding for Construction, specify: _____
☐ Rulemaking	☐ Policy or Plan, specify: _____
☐ Construction of Public Facilities	☐ Funding of Program, specify: _____
☐ 384 (b) (4) Approval	☐ Permits, specify: _____
☐ Other, explain: _____	

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 Martine 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: Stacey Barron, AICP / AECOM

Address: AECOM 125 Broad Street, New York, NY 10004

Telephone: 212-377-8729 Email: stacey.barron@aecom.com

Applicant/Agent's Signature: 

Date: 2/15/2018

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
212-720-3525
wrp@planning.nyc.gov
www.nyc.gov/wrp

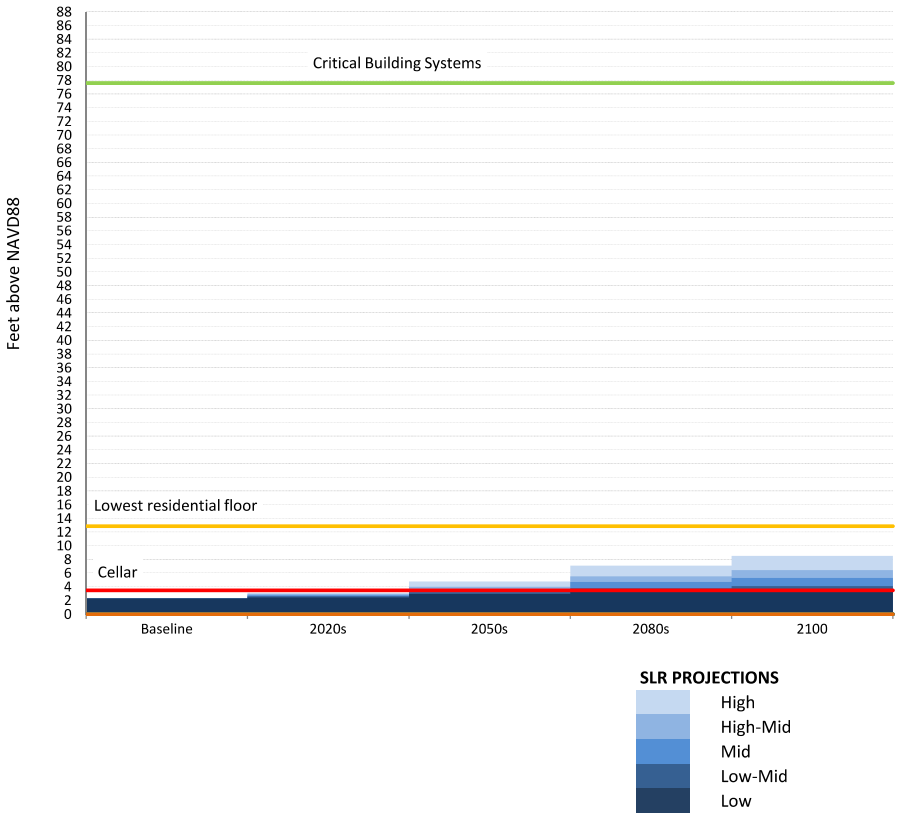
New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
(518) 474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

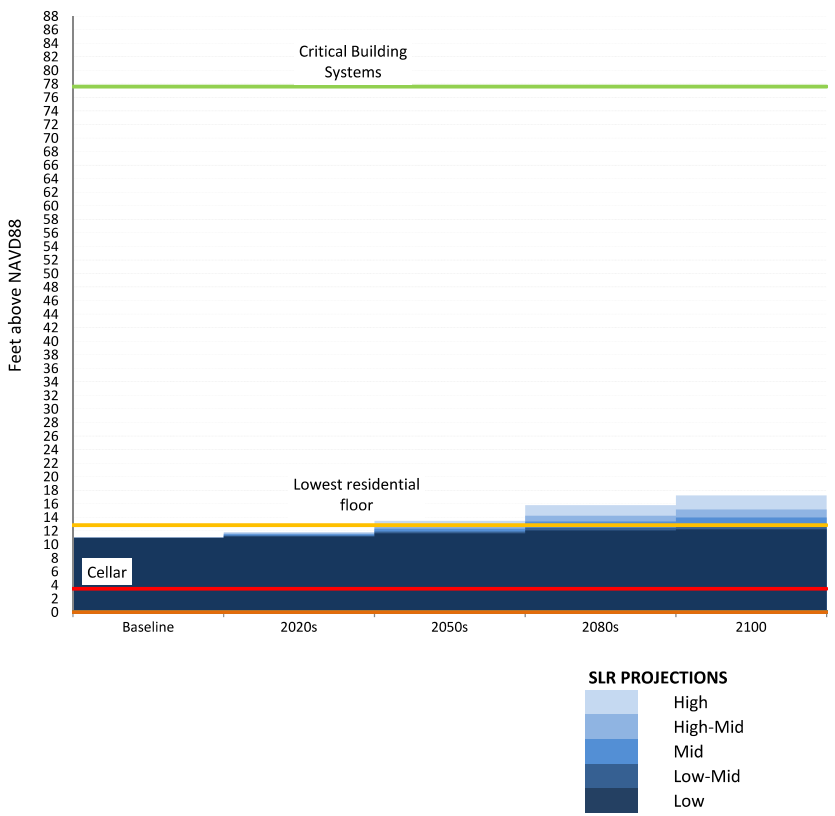
- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), 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.

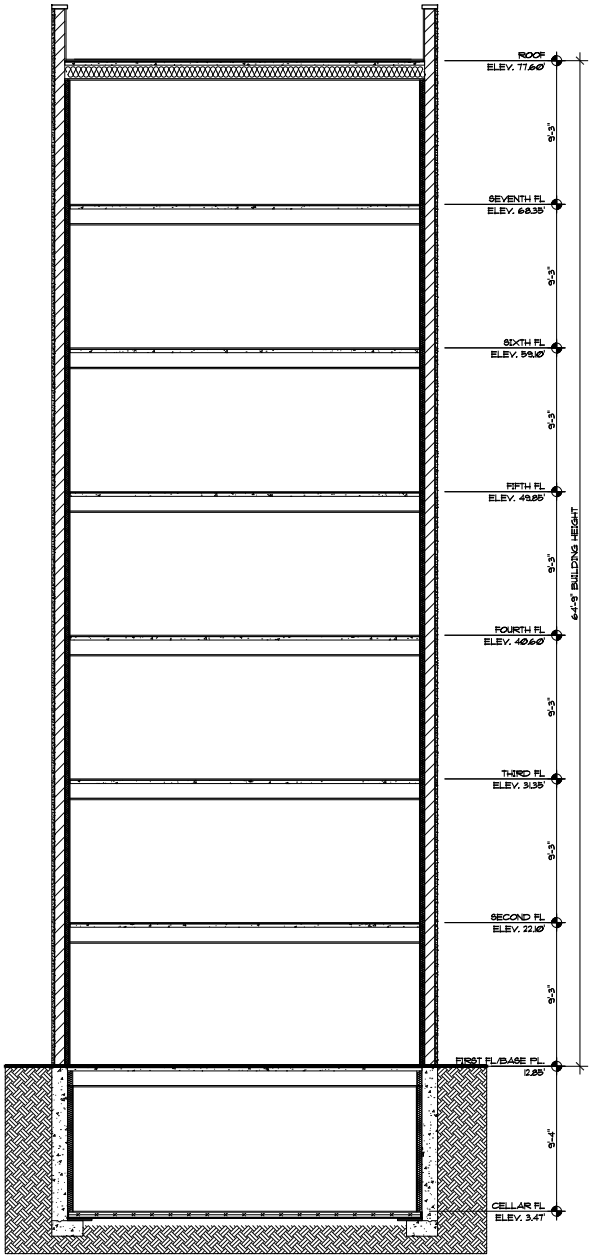
Assess project vulnerability over a range of sea level rise projections.

Mean Higher High Water + Sea Level Rise



1% Flood Elevation + Sea Level Rise





41 SUMMIT ST PROPOSED BUILDING SECTION

SCALE:AS NOTED DATE: -		RA / PE OF RECORD :	DESIGNED BY :	10
Department of City Planning			info@dsany.com ph:718.569.2112 fax:718.360-4571	
41 Summit St Brooklyn, NY			Design Studio Associates Design | Zoning | Code Consultants	OF

Appendix B – Agency Correspondence

Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: 41 SUMMIT ST. REZONING
Date received: 2/23/2016

Properties with no Architectural or Archaeological significance:

1) ADDRESS: 79 HAMILTON AVENUE, BBL: 3003520001
2) ADDRESS: 41 SUMMIT STREET, BBL: 3003520060
3) ADDRESS: 75 HAMILTON AVENUE, BBL: 3003520003

2/29/2016

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 31245_FSO_DNP_02292016.doc

NYC Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

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

April 24, 2018

Robert Dobruskin
Director, Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 41 Summit Street Rezoning
Block 352, Lots 1, 3 and 60
CEQR # 18DCP123K

Dear Mr. Dobruskin:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the February 2018 Environmental Assessment Statement prepared by AECOM and the June 2016 Phase I Environmental Site Assessment (Phase I) prepared by Environmental Business Consultants, on behalf of 41 Summit Street, LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning (DCP) to rezone Block 352, Lots 1, 3 and 60 from an M1-1 zoning district to an R7A/C2-4 zoning district in the Carroll Gardens neighborhood of Brooklyn Community District 6, in order to facilitate the applicant's proposed development of a residential building on Lot 60 (Projected Development Site 1) with a seven-story (plus cellar) residential building containing seven dwelling units. The applicant also seeks a zoning text amendment to Appendix F of the New York City Zoning Resolution to establish a Mandatory Inclusionary Housing Area coterminous with the rezoning area. Under the Reasonable Worst Case Development Scenario, the rezoning proposal is expected to induce development on Lots 1 and 3 (Projected Development Site 2).

The June 2016 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial and industrial uses including a horse shoer, a paint, pigment and lead manufacturer, laundry washing facilities, tire repair shop, manufacturing facilities, etc. Regulatory databases identified 23 spills, 9 historical auto body shops and 2 historical dry cleaners within 1/8 mile; 1 dry cleaner, 12 underground storage tank sites and 11 aboveground storage tank sites within 1/4 mile; 17 leaking storage tank sites and 1 brownfield site within 1/2 mile; and 3 manufactured gas plant sites within 1 mile of the project site.

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

Projected Development Site 1: Block 352, Lot 60 (Site under the control or ownership of the applicant)

- DCP should inform the applicant that based on the historical on-site and/or surrounding area land uses, a Phase II Environmental Site Assessment (Phase II) is necessary to adequately identify/characterize the surface and subsurface soils of the subject property. A Phase II Investigative Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities should be developed in accordance with the *City Environmental Quality Review Technical Manual* and submitted to DEP for review and approval. The Work Plan should include blueprints and/or site plans displaying the current surface grade and sub-grade elevations and a site map depicting the proposed soil, groundwater, and soil vapor sampling locations. Soil and groundwater samples should be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for the presence of volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls by EPA Method 8082, and Target Analyte List metals (filtered and unfiltered for groundwater samples). The soil vapor sampling should be conducted in accordance with NYSDOH's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The soil vapor samples should be collected and analyzed by a NYSDOH ELAP certified laboratory for the presence of VOCs by EPA Method TO-15. An Investigative Health and Safety Plan (HASP) should also be submitted to DEP for review and approval.

- DCP should instruct the applicant that the Phase II Work Plan and HASP should be submitted to DEP for review and approval prior to the start of any fieldwork.

Projected Development Site 2: Block 352, Lots 1 and 3 (Sites not under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP recommends that an "E" designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for subject properties. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Future correspondence and submittals related to this project should include the following CEQR # **18DCP123K**. If you have any questions, you may contact Scott Davidow at (718) 595-7716.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
S. Davidow
T. Estesen
M. Wimbish
K. Corté – DCP
O. Abinader – DCP
M. Bertini – OER

Appendix C – Phase I Environmental Site Assessment

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT

JUNE 6, 2016

41 Summit Street, Brooklyn, NY 11231

Block 352, Lot No. 60

EBC Project No: JFR1601

Prepared for:

Joel Friedman
41 Summit Street, LLC.
1556 59th Street
Brooklyn, New York, 11219

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road. Ridge, New York 11961
Phone: 631.504.6000 Fax: 631.924.2870

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TABLES

FIGURES

APPENDICES

EXECUTIVE SUMMARY

Environmental Business Consultants (EBC) prepared this Phase I Environmental Site Assessment (ESA) for the following property on behalf of 41 Summit Street, LLC: 41 Summit Street, Brooklyn, NY 11231. The purpose of the Phase I ESA is to identify and evaluate the presence of recognized environmental conditions at the Site. Recognized environmental conditions (RECs) are the presence or likely presence of any hazardous substance or petroleum product under conditions that indicate an existing release, a past release or material threat of a release of any hazardous substance or petroleum product into structures on the property or into the ground, groundwater or surface water of the property.

The work was conducted in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527-13 (Standard Practices for Environmental Site Assessment: Phase I Environmental Site Assessment Process), 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiry; Final Rule), and EBC's proposal for services.

The Site consists of a single tax lot on the north side of Summit Street and to the east side of Hamilton Avenue in the Cobble Hill neighborhood of the Borough of Brooklyn, City of New York, Kings County, New York. The street address associated with the Site is 41 Summit Street, Brooklyn, New York 11231 and is identified as Block 352 and Lot 60 on the New York City (NYC) Tax Map. The lot is rectangle-shaped and approximately 2,500 square feet (s.f.) in total with approximately 25 feet of frontage along the Summit Street and extends approximately 100 feet back away from the street. The Site is currently occupied by a vacant two-story building which covers the entire footprint of the Site. The Site was most recently occupied by the offices of Harold Goldberg & Co. and Viola Realty circa 2000s. Prior to that the Site was occupied by Caffe Nadia and Viola Realty circa 1990s, Blue Chip Coffee Co. circa 1970s-1980s and was occupied by a laundry washing facility from the 1920s through 1940s. According to New York City Department of Planning records, the Site is designated manufacturing use which reflects the most recent operations at the Site.

Site history was based on the review of Sanborn Maps, aerial photos, city directory listings, historic topographic maps and environmental reports. According to the review these historic documents, it is known that the Site has been developed since at least 1886. In 1886 there was a two-story building on

the south side of the Site occupied by a horse shoer and two smaller shed buildings on the northern side of the Site. The eastern adjacent property was occupied by C.M Childs & Co. which manufactured paint and white lead. Such operations at the eastern neighboring property are considered a concern with respect to the Site. The western and northern adjacent properties were primarily occupied by storefronts with a few residences present. The surrounding vicinity was primarily occupied by storefronts and a few residential dwellings along a grid of city streets in 1886. By 1904 a four-story building was present on the south side of the Site and was occupied by a horse shoer. A single-story portion of the building extended to the northern property boundary and this portion of the Site was occupied by a wagon shed at this time. The surrounding vicinity remained generally unchanged with storefronts and a bank adjacent to the west and C.M Childs & Co. present adjacent to the east. The Site and surrounding vicinity remained unchanged through at least 1915. By 1938 the one to four-story building was occupied by a laundry facility. The eastern adjacent property was occupied by Childs Pulp Color Inc. at this time. This property specialized in paints, pigments and white lead and is considered a concern with respect to the Site. The surrounding vicinity remained primarily occupied by storefronts and residences; however, several large manufacturing facilities were now present. By 1950 the Site was vacant/undeveloped. Additionally, the terminal portion of the Brooklyn Battery Tunnel Platform and Ventilating Building was present to the south-southwest of the Site at this time. By 1969 a single-story storage building was present on the south side of the Site and the northern side was undeveloped. The adjacent and surrounding properties remained generally unchanged with Childs Pulp Color Inc. still present adjacent to the east and a bank and parking lot adjacent to the west at this time. By 1974 the Site was developed with the current existing one to two-story building with a two-story portion on the south side of the Site along Summit Street. The eastern adjacent property was entirely undeveloped at this time. The eastern adjacent property was developed with a large warehouse building by 1979 and the surrounding vicinity remained the same. Through the 1980s and 1990s several structures in the surrounding vicinity became vacant with no structures present (specifically to the north and west). The Site and adjacent properties have remained generally unchanged. The surrounding vicinity currently consists of large manufacturing use facilities, apartment complexes and a few storefronts and private residences.

The Site is currently occupied by a vacant two-story building; however, was most recently occupied by the offices of Harold Goldberg & Co. and Viola Realty circa 2000s. Prior to that the Site was occupied by Caffe Nadia and Viola Realty circa 1990s, Blue Chip Coffee Co. circa 1970s-1980s and was occupied by laundry washing facilities (Well-Done Laundry Inc. and New Gowanus Laundry Inc.) from the 1920s through 1940s. Chlorinated solvents were not used at this time and all evidence

indicates that the laundry facility was for regular water clothes washing. As such, the historic presence of a laundry facility on the Site is not considered a REC.

RECOGNIZED ENVIROMENTAL CONDITIONS

Based upon reconnaissance of the subject site and surrounding properties, and review of historical records and regulatory agency databases, no Recognized Environmental Conditions (RECs) were identified for the Site. However, three (3) other environmental concerns (non-RECs) were identified and are summarizes as follows:

Environmental Concerns

- Due to the age of the onsite building, the potential for the presence of asbestos-containing materials (ACMs) is considered likely. Specifically, asphaltic roofing materials, adhesives, plasters and exterior use caulks commonly contain asbestos in older and newer buildings alike. EBC recommends conducting an ACM survey to identify building materials and components with asbestos content prior to demolition or disturbance.
- Due to the age of the onsite buildings, the potential for the presence of lead-based paint (LBP) is also considered likely. No significantly damaged or peeling paints were identified; however, LBP may be present in hidden or inaccessible portions of the Site. Additionally, no children currently reside at the Site which greatly reduces the risks associated with the potential presence of LBP. EBC recommends conducting a lead survey to evaluate the presence of LBP at the Site prior to demolition or disturbance.
- The Site is located within a flood zone.

1.0 INTRODUCTION

1.1 Purpose

Environmental Business Consultants (EBC) prepared this Phase I Environmental Site Assessment (ESA) for the following property on behalf of 41 Summit Street, LLC: 41 Summit Street, Brooklyn, NY 11231. The purpose of the Phase I ESA was to identify and evaluate the presence of recognized environmental conditions at the Site. Recognized environmental conditions are the presence or likely presence of any hazardous substance or petroleum product under conditions that indicate an existing release, a past release or material threat of a release of any hazardous substance or petroleum product into structures on the property or into the ground, groundwater or surface water of the property.

1.2 Scope of Services

The assessment consisted of a visual inspection of the site and surrounding areas, interviews, a review of historical information and maps, and a review of pertinent local, state, federal and facility records. Environmental Data Resources (EDR) of Southport, Connecticut, provided the following information: a computerized database search of environmental compliance records of sites within an ASTM standard radius of the property, a Sanborn fire insurance map search, and a historical telephone directory search.

EBC reviewed the environmental database report compiled by EDR as a part of the assessment. The purpose of the review was to identify reported listings for the Site or other properties in the site vicinity. Databases reviewed included federal and state lists of known or suspected contaminated sites, lists of known handlers or generators of hazardous waste, lists of known waste disposal facilities, and lists of aboveground and underground storage tanks (ASTs and USTs). EBC's review of the database has been incorporated into this report along with a copy of the EDR report.

The work was conducted in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527-13 (Standard Practices for Environmental Site Assessment: Phase I Environmental Site Assessment Process), 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiry; Final Rule), and EBC's proposal for services.

1.3 Significant Assumptions

EBC has made the following assumptions in the preparation of this report:

1. Groundwater – Based upon an average surface elevation of 12 feet above mean sea level (amsl), the depth to groundwater at the Site is approximately 8 feet below grade surface (bgs). The surface topography of the Site gently slopes to the northwest towards the East River. Similarly, groundwater is expected to flow in a general northwesterly direction, consistent with the regional trend.
2. Regulatory Records Information – EBC assumes that all information provided by EDR regarding the regulatory status of facilities within the ASTM Standard approximate minimum search distance is complete, accurate and current.
3. Other - EBC assumes that all information provided through interviews is complete and unbiased.

1.4 Limitations and Exceptions

The conclusions presented in this report are professional opinions based on the data described in this report. These opinions have been arrived at in accordance with currently accepted engineering and hydrogeologic standards and practices applicable to this location, and are subject to the following inherent limitations:

1. The data presented in this report are from visual inspections, examination of records in the public domain, and interviews with individuals having information about the site. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration of the site, analysis of data, and re-evaluation of the findings, observations, and conclusions presented in this report.
2. The data reported and the findings, observations, and conclusions expressed are limited by the scope of work. The scope of work was defined by the request of the client.
3. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported, findings, observations, or conclusions. These are based solely upon site conditions in existence at the time of the investigation, and other information obtained and reviewed by EBC.
4. EBC's Phase I ESA report presents professional opinions and findings of a scientific and technical nature. While attempts were made to relate the data and findings to applicable environmental laws and regulations, the report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, or regulations, or policies of federal, state, or local government agencies. EBC does not assume

liability for financial or other losses or subsequent damage caused by or related to any use of this document.

5. The conclusions presented in this report are professional opinions based on data described in this report. They are intended only for the purpose, site location, and project indicated. This report is not a definitive study of contamination at the site and should not be interpreted as such.
6. This report is based, in part, on information supplied to EBC by third-party sources. While efforts have been made to substantiate this third-party information, EBC cannot attest to the completeness or accuracy of information provided by others.

1.5 Special Terms and Conditions

Authorization to perform this assessment was given by a proposal for services between 41 Summit Street, LLC and EBC.

1.6 User Reliance

This report was prepared for the exclusive use of 41 Summit Street, LLC. No other party may use the report without the written authority of 41 Summit Street, LLC and EBC.

2.0 PROPERTY DESCRIPTION AND PHYSICAL SETTING

2.1 Location and Legal Description

The Site consists of a single tax lot on the north side of Summit Street and to the east side of Hamilton Avenue in the Cobble Hill neighborhood of the Borough of Brooklyn, City of New York, Kings County, New York. The Street address associated with the Site is 41 Summit Street, Brooklyn, New York 11231 and is identified as Block 352 and Lot 60 on the New York City (NYC) Tax Map. The lot is rectangle-shaped and approximately 2,500 square feet (s.f.) in total with approximately 25 feet of frontage along the Summit Street and extends approximately 100 feet back away from the street. The Site is currently occupied by a vacant two-story building which covers the entire footprint of the Site. The Site was most recently occupied by the offices of Harold Goldberg & Co. and Viola Realty circa 2000s. Prior to that the Site was occupied by Caffe Nadia and Viola Realty circa 1990s, Blue Chip Coffee Co. circa 1970s-1980s and was occupied by a laundry washing facility from the 1920s through 1940s. According to New York City Department of Planning records, the Site is designated manufacturing use which reflects the most recent operations at the Site.

Records were obtained from the New York City Registrar on May 25, 2016, including copies of the tax map and deeds for the Site dating back to 1973. A copy of all of the information obtained is attached in **Appendix B**.

The deed transfer information for the Site is listed below:

- April 11, 1973 – Deed between Santo Sgarlato and Herbert Goldstein;
- October 25, 1973 – Deed between Herbert Goldstein and Anthony Viola;
- January 31, 1979 – Sundry Agreement for Anthony Viola;
- January 16, 1996 – Power of Attorney from Anthony Viola to Anna Viola;
- March 3, 1998 – Court Order from USA/Plaintiff and Cinbali Expresso/Defendent;
- December 9, 1998 – Tax Lien Sale Certificate between the City of New York and the Bank of New York;
- January 5, 2000 – Assignment Mortgage between the Bank of New York and the City of New York;
- July 11, 2013 – Court Order between Blue Chip Coffee Inc. and the USA; and,

- June 27, 2014 - Deed between USA and 41 Summit Street LLC.

2.2 Site Characteristics

The Site is currently occupied by a vacant two-story building. The building is constructed atop a slab-on-grade foundation, brick and mortar exterior walls and a flat asphaltic rooftop. A single-story building occupied by a Chase Bank with an associated parking lot is located adjacent to the Site to the west along Summit Street. Two three-story mixed residential and commercial buildings are located adjacent to the Site to the north along Carroll Street. A redevelopment project has taken place adjacent to the Site to the East along Summit Street. A mixed residential and commercial building is located beyond Summit Street to the south and an outdoor recreation space is located beyond Hamilton Avenue to the south as well.

Photographs taken during of the Site during the site inspection are attached in **Appendix A**.

2.2.1 Utilities

The Site is currently vacant and utilities are not in use; however, the Site is equipped with electric service provided by Con Edison of New York, natural gas provided by National Grid, telephone, cable and internet service. Additionally, the Site is connected to the NYC municipal sewer system.

2.3 Physical Setting

The topography of the Site and surrounding area was reviewed from the United States Geological Survey (USGS) 7.5-minute series topographic map for the Brooklyn, New York (NY) Quadrangle (**Figure 3**), which indicates that the Site has a topographic elevation of approximately 12 feet above mean sea level (amsl). The Site is relatively flat with the general topographic gradient sloping to the west.

2.3.1 Surface Water

The East River is located approximately 1,600 feet to the west of the Site.

2.3.2 Soils

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. Soil maps, based on the State

Soil Geographic (STATSGO) Database, are compiled by generalizing more detailed Soil Survey Geographic (SSURGO) database maps.

According to the STATSGO data, the soil component in the vicinity of the Site is identified as Urban Land and is described as having a variable surface texture. The STATSGO database states that additional subordinant soil types may be present in the general vicinity of the Site. These soil types are described as mainly loamy sand and silt loam. Deeper soil types consist of very gravelly, loamy sand, unweathered bedrock and stratified sandy loam.

Additional information regarding the soil classification is also included in on Page A-4 of the Environmental Data Resources, Inc. (EDR) database report (**Appendix E**).

2.3.3 Groundwater

Estimated groundwater levels and flow directions may vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or de-watering operations. Generally, groundwater flow typically mimics surface topography and will also tend to flow towards nearby bodies of water. Information contained in the EDR database report, the USGS Water-Table and Potentiometric-Surface Altitudes in the Upper Glacial, Magothy and Lloyd Aquifers Beneath Long Island, March-April 2006 (**Figure 6**), the USGS web site and topographic map were used to estimate groundwater depth and flow direction.

Based upon a surface elevation of 12 feet amsl, the depth to groundwater in the vicinity of the Site is approximately 8 feet below grade surface (bgs). Groundwater is expected to flow to the west consistent with the regional trend.

2.3.4 Radon Risk

Radon is a colorless, radioactive, inert gas formed by the decay of radium and may be present in soils and rocks containing granite, shale, phosphate and pitchblende. The radon levels for September 2014 obtained from the website of New York State Department of Health indicates that the Kings County area is not a radon risk area. Test results from the New York State Department of Health (NYSDOH) radon survey indicate average radon concentrations of 1.94 pCi/L for nearly 440 homes screened. Out of the 440 homes screened, 398 homes had radon concentrations of less than 4 pCi/L. Based on this data, radon does not likely represent an environmental concern.

3.0 PROPERTY USAGE

3.1 Current Property Usage

The Site consists of a single tax lot on the north side of Summit Street and to the east side of Hamilton Avenue in the Cobble Hill neighborhood of the Borough of Brooklyn, City of New York, Kings County, New York. The Street address associated with the Site is 41 Summit Street, Brooklyn, New York 11231 and is identified as Block 352 and Lot 60 on the New York City (NYC) Tax Map. The lot is rectangle-shaped and approximately 2,500 square feet (s.f.) in total with approximately 25 feet of frontage along the Summit Street and extends approximately 100 feet back away from the street. The Site is currently occupied by a vacant two-story building which covers the entire footprint of the Site. The Site was most recently occupied by the offices of Harold Goldberg & Co. and Viola Realty circa 2000s. Prior to that the Site was occupied by Caffe Nadia and Viola Realty circa 1990s, Blue Chip Coffee Co. circa 1970s-1980s and was occupied by a laundry washing facility from the 1920s through 1940s. According to New York City Department of Planning records, the Site is designated manufacturing use which reflects the most recent operations at the Site.

A review of New York City Department of Buildings (NYCDOB) records and the NYC Department of City Planning Zoning map indicates that the Site is zoned manufacturing M1-1 with no commercial overlay (**Figure 5A & 5B**).

3.2 Current Usage of Adjoining/Surrounding Properties

A summary of the uses of the surrounding/adjacent properties is described below. Photos of the exterior of adjacent properties are attached in **Appendix A**.

Surrounding Property Usage

Direction	Property Description
North	Two (2) three to four-story residential apartment buildings (20-22 Carroll Street) followed by Carroll Street.
South	Summit Street followed by a secured parking area (83 Hamilton Avenue - enclosed within chainlink and metal framed security fence) which is currently used to store out of commission passenger vehicles at the intersection of Summit Street and Hamilton Avenue.
East	43-45 Summit Street is a 7,500 sf property which was recently redeveloped (circa 2014-2015) with a two-story mixed use building which covers approximately the entire footprint of the property. This adjacent building is currently occupied by permanent residents, renting tenants and administrative space.
West	A two-story commercial building (79 Hamilton Avenue) currently occupied by Chase Bank.

3.3 Historical Usage of Site and Surrounding Properties

Historical sources researched to determine past usage of the Site and surrounding properties are as follows:

Sanborn Fire Insurance Maps - Sanborn fire insurance maps for the Site and surrounding area were reviewed for the years 1886, 1904, 1915, 1928, 1938, 1950, 1969, 1977, 1979, 1980, 1981, 1982, 1986, 1987, 1988, 1991, 1992, 1993, 1995, 1996, 2001, 2002, 2003, 2004, 2005, 2006 and 2007. The review is summarized in Section 3.3.1. Copies of Sanborn maps are included as **Appendix C**.

City Directory Abstract - A directory of historical telephone listings at the Site and surrounding properties were reviewed from approximately five year intervals for the years 1928 through 2013. The review is summarized in Sections 3.3.2 below. A copy of the City Directory is included in **Appendix D**.

Aerial Photographs - Historic aerial photographs of the Site and surrounding properties were reviewed from approximately five year intervals for the years 1924 through 2011. The review is summarized in Sections 3.3.3 below. A copy of the Aerial Photos is included in **Appendix E**.

3.3.1 Sanborn Fire Insurance Maps - Site and Adjacent Properties

The historical usage of the Site and adjacent properties, identified through Sanborn map review, is summarized below:

1886

Subject Site: In 1886, the Site was developed with a single-story shed along the eastern property line, a two-story building occupied by a horse shoer and a portion of the a single-story shed located on at the northern property line.

Adjacent Properties: The eastern adjacent property was developed with a large paint and lead works facility occupied by C.M. Childs & Co. in 1886. The northern adjacent properties were occupied by a few three-story commercial and residential use buildings along Carroll Street. The western adjacent property was occupied by a large shed which appears to be a part of similar operations related to the Site at this time. Beyond the large shed adjacent to the west are several three-story commercial buildings along Hamilton Avenue.

1904 - 1915

Subject Site: By 1904 a four-story building was present on the south side of the Site and was occupied by a horse shoer. A single-story portion of the building extended to the northern property boundary and this portion of the Site was occupied by a wagon shed at this time. The Site remained unchanged through 1915.

Adjacent Properties: The surrounding vicinity remained generally unchanged with storefronts adjacent to the north, a storefront and bank adjacent to the west and C.M Childs & Co's paint and white lead manufacturing facility adjacent to the east. The surrounding vicinity remained unchanged through 1915.

1938

Subject Site: By 1938 the four-story building on the south side of the Site along Summit Street and the one-story building on the northern portion of the Site were occupied by a laundry facility.

Adjacent Properties: The eastern adjacent property was occupied by Childs Pulp Color Inc. at this time. This property specialized in paints, pigments and white lead and is considered a concern with respect to the Site. The surrounding vicinity remained primarily occupied by storefronts and residences; however, several large manufacturing facilities were now present.

1950

Subject Site: By 1950 the Site was vacant/undeveloped.

Adjacent Properties: The adjacent properties and surrounding vicinity remained generally unchanged in 1950 except the terminal portion of the Brooklyn Battery Tunnel Platform and Ventilating Building was present to the south-southwest of the Site at this time. Childs Pulp Color Inc. remained to the east, two storefronts and a bank to the west and storefronts were still present to the north.

1969

Subject Site: By 1969 a single-story storage building was present on the south side of the Site and the northern portion remained undeveloped.

Adjacent Properties: The adjacent and surrounding properties remained generally unchanged with Childs Pulp Color Inc. still present adjacent to the east, storefronts to the north and two storefronts and a bank and parking lot adjacent to the west at this time.

1974 - 2007

Subject Site: By 1974 the Site was developed with the current existing building with a two-story portion on the south side of the Site along Summit Street and a one-story portion on the north side of the Site. The same building is shown on the Site in Sanborns through 2007.

Adjacent Properties: The eastern adjacent property was entirely undeveloped through 1979; however, by 1980 a large warehouse was present. Through the 1980s and 1990s several structures in the surrounding vicinity became vacant with no structures present (specifically to the north and west). The adjacent properties remained generally unchanged through 2007. By 2007 the surrounding vicinity consisted of large manufacturing use facilities, apartment complexes and a few storefronts and private residences.

3.3.2 City Directory Listings

EDR conducted a search and provided copies of available historical city directory listings for the subject and adjacent properties. The historical city directory listings (**Appendix D**) were reviewed, to identify information regarding past uses of the subject and surrounding properties to determine if historical usage represented a REC to the subject property.

Historical city directory information is summarized as follows:

Date	Property Information
1928	**Subject Property:** Wel-Done Laundry Inc. **Adjacent Properties:** Residential Listings
1934	**Subject Property:** Wel-Done Laundry Inc., Residential Listings **Adjacent Properties:** Residential Listings
1940	**Subject Property:** Wel-Done Laundry Inc., New Gowanus Laundry Co. **Adjacent Properties:** Carb Manufacturing Co. Furniture
1945	**Subject Property:** Not Listed **Adjacent Properties:** White Star Restaurant
1949	**Subject Property:** Not Listed **Adjacent Properties:** P&C Restaurant, Seaway Marine Electric, Carb Manufacturing Co. Furniture
1960	**Subject Property:** Not Listed **Adjacent Properties:** Campos Jos Restaurant, Residential Listings, L&S Restaurant, Wholesale Fruits & Vegetables, Beer Distributor, Carb Manufacturing Co. Furniture, Santo Wholesale Bananas

1965	**Subject Property:** Not Listed **Adjacent Properties:** Residential Listings
1970	**Subject Property:** Not Listed **Adjacent Properties:** Residential Listings
1973	**Subject Property:** Not Listed **Adjacent Properties:** Residential Listings
1976	**Subject Property:** Blue Chip Coffee Co. **Adjacent Properties:** Angelo S Tire Repair Shop, Beer Distributor, Santo Wholesale Bananas
1980	**Subject Property:** Blue Chip Coffee Co. **Adjacent Properties:** Angelo S Tire Repair Shop, Santo Wholesale Bananas
1985	**Subject Property:** Blue Chip Coffee Co. **Adjacent Properties:** Angelo S Tire Repair Shop, Santo Wholesale Bananas
1992	**Subject Property:** Not Listed **Adjacent Properties:** Angelo S Tire Repair Shop, Santo Wholesale Bananas
1997	**Subject Property:** Caffe Nadia Inc., Viola Realty, Residential Listings **Adjacent Properties:** Residential Listings
2000	**Subject Property:** Harold H. Goldberg & Co., Viola Realty **Adjacent Properties:** Residential Listings
2005	**Subject Property:** Harold H. Goldberg & Co. **Adjacent Properties:** Residential Listings
2008	**Subject Property:** Not Listed **Adjacent Properties:** Residential Listings
2013	**Subject Property:** Not Listed **Adjacent Properties:** Residential Listings

Information regarding additional surrounding properties identified on the City Directory search is included with the search in **Appendix D**. The review of City Directory listings indicates the Site was occupied by a commercial laundry facility from at least 1928 through 1940, a cafe from at least 1976 through 1997, a realty office circa 1997 through 2000 and the offices of Harold H Goldberg & Co. circa 2000 through 2005.

3.3.3 Aerial Photographs

EBC reviewed aerial photographs for the following years; 1924, 1940, 1943, 1951, 1954, 1961, 1966, 1971, 1974, 1981, 1985, 1991, 1994, 2006, 2008, 2009 and 2011 from EDR. In the 1924 historical aerial, the Site appears to be entirely developed with a two-story portion on the south side of the Site along Summit Street and a one-story portion on the north side of the Site. The Site remained generally unchanged through 1943 and by 1951 the entire Site was developed with a single-story building. By 1974 the current existing building was present and the eastern adjacent property was undeveloped. The Site remained unchanged through the current day and a warehouse has been present on the eastern adjacent property since circa 1981. A copy of the aerial photograph images is provided in **Appendix E**.

3.3.4 Historical Topographic Maps

1898 - 1947 (15-Minute)

Subject Site:

Due to the scale of these maps, detailed information regarding the Site cannot be determined.

Adjacent properties:

The surrounding vicinity appears developed with several structures along a grid of city streets and several docks to the west along the East River.

1955 - 1981 (7.5-Minute)

Subject Site:

The Site is incorporated into an area which is shaded pink indicating an area of increased urban development. No detailed information regarding the Site can be determined.

Adjacent properties:

The surrounding vicinity is also shaded pink indicating an area of increased urban development. Additionally, several large roadways and large manufacturing facilities are present at this time.

2013 & 2014 (7.5-Minute)

Subject Site:

No detailed information, not even structures or shading at the Site is shown.

Adjacent properties:

A grid of city streets and major arteries are shown in the surrounding vicinity. No structures except for schools and other related institutions are shown.

The review of historic topographic maps indicated the presence of the Brooklyn Union Gas Co. MGP. The occupancy of the Site by an MGP is considered a REC. A copy of topographic maps is provided in **Appendix F**.

3.4 Site History Summary

Site history was based on the review of Sanborn Maps, aerial photos, city directory listings, historic topographic maps and environmental reports. According to the review these historic documents, it is known that the Site has been developed since at least 1886. In 1886 there was a two-story building on the south side of the Site occupied by a horse shoer and two smaller shed buildings on the northern side of the Site. The eastern adjacent property was occupied by C.M Childs & Co. which manufactured paint and white lead. Such operations at the eastern neighboring property are considered a concern with respect to the Site. The western and northern adjacent properties were primarily occupied by storefronts with a few residences present. The surrounding vicinity was primarily occupied by storefronts and a few residential dwellings along a grid of city streets in 1886. By 1904 a four-story building was present on the south side of the Site and was occupied by a horse shoer. A single-story portion of the building extended to the northern property boundary and this portion of the Site was occupied by a wagon shed at this time. The surrounding vicinity remained generally unchanged with storefronts and a bank adjacent to the west and C.M Childs & Co. present adjacent to the east. The Site and surrounding vicinity remained unchanged through at least 1915. By 1938 the one to four-story building was occupied by a laundry facility. The eastern adjacent property was occupied by Childs Pulp Color Inc. at this time. This property specialized in paints, pigments and white lead and is considered a concern with respect to the Site. The surrounding vicinity remained primarily occupied by storefronts and residences; however, several large manufacturing facilities were now present. By 1950 the Site was vacant/undeveloped. Additionally, the terminal portion of the Brooklyn Battery Tunnel Platform and Ventilating Building was present to the south-southwest of the Site at this time. By 1969 a single-story storage building was present on the south side of the Site and the northern side was undeveloped. The adjacent and surrounding properties remained generally unchanged with Childs Pulp Color Inc. still present adjacent to the east and a bank and parking lot adjacent to the west at this time. By 1974 the Site was developed with the current existing one to two-story building with a two-story portion on the south side of the Site along Summit Street. The eastern adjacent property was entirely undeveloped at this time. The eastern adjacent property was developed with a large warehouse building by 1979 and the surrounding vicinity remained the same. Through the 1980s and 1990s several structures in the surrounding vicinity became vacant with no structures present (specifically to the north and west). The Site and adjacent properties have remained generally unchanged. The surrounding vicinity currently consists of large manufacturing use facilities, apartment complexes and a few storefronts and private residences.

4.0 USER PROVIDED INFORMATION

4.1 Title Records

A record of the deeds for the Site is discussed in Section 2.1.

4.2 Environmental Liens

An environmental lien is a charge, security or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup or other remediation of hazardous substances or petroleum products upon a property, including, but not limited to, liens imposed pursuant to CERCLA 42 USC § 9607 (1) & 9607(r) and similar state and local laws.

No environmental liens were noted.

4.3 Specialized Knowledge

The user did not provide EBC with any specialized knowledge regarding the Site.

4.4 Commonly Known or Reasonably Ascertainable Information

EBC was not provided with any commonly known or reasonably ascertainable information.

4.5 Valuation Reduction for Environmental Issues

The user has not made EBC aware of any valuation reduction regarding the sale price of the property.

4.6 Owner, Property Manager and Occupant Information

According to New York City Department of Finance records, the current owner of the Site is identified as 41 Summit Street, LLC.

4.7 Reason for Performing Phase I ESA

The Phase I ESA was performed to identify recognized environmental conditions at the Site as part of the due diligence to support the acquisition of the property involving 41 Summit Street, LLC.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

Environmental Data Resources (EDR) of Southport, Connecticut was retained to provide a computerized database search of the project area within an ASTM-standard radius of the Site. A list of the databases searched and the search radius is shown on the summary table below. EBC reviewed the database output to determine if the property appears on any of the regulatory agency lists. Detailed information concerning each database list is provided in the EDR report (**Appendix E**). A summary of standard environmental record sources researched is as follows:

5.1.1 Federal Databases

The table below summarizes the Federal databases that were searched.

Federal Databases Searched

Agency	Listing Name or Database Searched	Abbreviation	Search Distance
USEPA	National Priority List	NPL	1.0 mile
USEPA	National Priority List Deletions	Delisted NPL	1.0 mile
USEPA	Comprehensive Environmental Response Compensation and Liability Act Registry	CERCLIS	0.5 mile
USEPA	CERCLIS No Further Remedial Action Planned	CERCLIS-NFRAP	0.5 mile
USEPA	Resource Conservation and Recovery Act Corrective Action Activity	CORRACTS	1.0 mile
USEPA	Resource Conservation and Recovery Act Treatment/Storage/Disposal Facilities	RCRA TSD	0.5 mile
USEPA	Resource Conservation and Recovery Act Small/Large Quantity Hazardous Waste Generators	RCRA SQG/LQG	Site and Adjoining
USEPA	Federal Institutional/Engineering Control registries	US INST/ENG Controls	Site
USEPA	Emergency Response Notification System	ERNS	Site
USEPA	Superfund (CERCLA) Consent Decrees	CONSENT	1.0 mile
USEPA	Records of Decision	ROD	1.0 mile
USEPA	Mines Master Index	MINES	0.25 mile

Federal NPL List - The National Priority List (NPL) is the United States Environmental Protection Agency (USEPA) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the federal Superfund Program.

Findings: The Site is not listed as an NPL facility. One (1) NPL site was identified within $^{1}/_{2}$ to 1-mile radius of the Site. However, due to the location and distance from the Site is not considered a REC.

Federal Delisted NPL List – NPL Delisted Sites are former NPL sites that have been remediated and removed from the USEPA's priority list. Sites are deleted where the USEPA has determined that no further response is appropriate.

Findings: The Site is not identified as a Delisted NPL facility. There were no Delisted NPL sites identified within a one-mile radius of the Site.

Federal CERCLIS List - The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list is a compilation of sites that the USEPA has investigated or is currently investigating for a release or threatened release of hazardous substances.

Findings: The Site is not listed as a CERCLIS facility. No CERCLIS sites were listed within a half-mile radius of the Site.

Federal CERCLIS-NFRAP List – No Further Remedial Action Planned (NFRAP) sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of USEPA's knowledge, assessment at a site has been completed and that USEPA has determined no further steps will be taken to list this site on the National Priorities List (NPL).

Findings: The Site is not listed as a CERCLIS-NFRAP facility. No CERCLIS-NFRAP sites were identified within a half mile radius of the Site.

Federal RCRA CORRACTS List - The RCRA Corrective Actions (CORRACTS) database is the USEPA's list of hazardous waste treatment, storage or disposal facilities subject to corrective action under RCRA.

Findings: The Site is not listed as a RCRA CORRACTS facility. One (1) RCRA CORRACTS site was identified within a 1/2 to 1 mile radius of the Site. However, due to their location and distance from the Site are not considered a concern with respect to the Site.

Federal RCRA Treatment, Storage and Disposal Facilities - The USEPA Resource Conservation and Recovery Act (RCRA) program identifies reporting facilities that treat, store or dispose of hazardous waste.

Findings: The Site is not listed as a RCRA TSDF and no TSDFs were identified within a ½ mile radius of the Site.

Federal RCRA Generators - The RCRA Generators database is a compilation of reporting facilities that generate hazardous waste. A LQG is a site which generates more than 1,000 kilograms (kg) of hazardous waste during any one calendar month and can store waste on-site for up to 90 days. A SQG is a site which generates more than 100 and less than 1,000 kg of hazardous waste during any one calendar month and accumulates less than 6,000 kg of hazardous waste at any time; or a site which generates less than 100 kg of hazardous waste during any one calendar month and accumulates less than 1,000 kg of hazardous waste at any time. A CESQG is a site which generates less than 100 kg of hazardous waste or less than one kg of acutely hazardous waste during any one calendar month. A NonGen site is a former registered/regulated generator which does not presently generate hazardous waste.

Findings: The address associated with the Site was listed as a RCRA Large Quantity Generator (LQG); however, this is in regard to an adjacent Con Edison Manhole. There are no spills, violations or other environmental impacts to this property which would make is a REC.

Additionally, two (2) RCRA-LQGs and five (5) RCRA-CESQG facilities were identified within a 1/4 mile radius of the Site. No adjacent sites were identified. According to the EDR database, no violations are listed or corrective action has been taken for all these sites. Based on this information, these sites are not expected to represent a significant environmental concern.

Federal Institutional/Engineering Controls – Federal Institutional/Engineering Controls databases list sites with institutional/engineering controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Engineering controls include various forms of caps, building foundations, liners, and treatment

methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Findings: No Federal Institutional/Engineering Controls were listed for the Site and no sites were identified within a ½ mile radius of the Site.

Federal Emergency Response Notification System - The Emergency Response Notification System (ERNS) is national database used collect information on reported releases of oil or hazardous substances.

Findings: Neither Site nor the adjacent properties were identified in the ERNS databases.

Federal Superfund Consent Decrees - The Superfund Consent Decrees (CONSENT) list identifies major legal settlements that establish responsibility and standards for cleanup at NPL sites.

Findings: The Site was not identified in the CONSENT database. No sites within a one mile of the Site were identified in the CONSENT database.

Federal Records of Decision - Record of Decision (ROD) documents mandate a permanent remedy at an NPL site containing technical and health information to aid in the cleanup.

Findings: The Site was not identified as a ROD site. The closest ROD site is present 1/2 to 1 mile away from the Site. Due to the distance from the Site, this offsite property is not considered a concern.

Federal Master Mines Index - The Master Mines Index (MINES) file contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Findings: Neither the Site nor any property within ¼ mile of the Site is listed in the MINES database.

5.1.2 New York State Databases

The table below summarizes the State databases that were searched.

New York State Databases Searched

Agency	Listing Name or Database Searched	Abbreviation	Search Distance

Agency	Listing Name or Database Searched	Abbreviation	Search Distance
NYSDEC	Inactive Hazardous Waste Disposal Sites in New York State	SHWS	1.0 mile
NYSDEC	Solid Waste Facility Register	SWF	0.5 mile
NYSDEC	Registered Recycling Facilities	SWRCY	0.5 mile
NYSDEC	Registered Waste Tire Storage Facilities	SWTIRE	0.5 mile
NYSDEC	Leaking Underground Storage Tank Sites	LTANKS	0.5 mile
NYSDEC	Petroleum Bulk Storage (PBS)	UST/AST	Site and Adjoining
NYSDEC	Chemical Bulk Storage (CBS)	CBS AST/UST	Site and Adjoining
NYSDEC	Institutional/Engineering Control registries	INST/ENG Controls	Site
NYSDEC	Voluntary Cleanup Agreements	VCP	0.5 mile
NYSDEC	Brownfield sites	Brownfields	0.5 mile
NYSDEC	Major Oil Storage Facilities	MOSF	0.5 mile
NYSDEC	New York State Spills	NYSPILLS	0.125 mile
NYSDEC	Dry Cleaner Site	Drycleaners	0.25 mile

NYS Inactive Hazardous Waste Disposal Sites - The New York State Department of Environmental Conservation (NYSDEC) maintains a state priority list of Inactive Hazardous Waste Disposal Sites (SHWS) considered to be actually or potentially contaminated and presenting a possible threat to human health and the environment. Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance/waste sites.

Findings: The Site is not listed as a SHWS facility. Eight (8) SHWS facilities were identified within a one mile radius of the Site. All of these sites are located greater than $^1/_2$ mile radius of the Site and based on the relative distance are not expected to represent a significant environmental concern.

NY Vapor Reopened – This is a database listing of previously dismissed/closed sites that are being re-evaluated with current knowledge of the potential for soil vapor intrusion.

Findings: The Site is not listed as a NY VAPOR REOPENED site. No NY VAPOR REOPENED facilities were identified within a one mile radius of the Site.

Hazardous Substance Waste Disposal Sites - The Hazardous Substance Waste Disposal Sites (HSWDS) list includes any known or suspected hazardous substance waste disposal sites. Also included are sites de-listed from the Registry of Inactive Hazardous Waste Disposal Sites list and non-Registry sites that USEPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared.

Findings: Neither the Site nor vicinity were listed in the HSWDS database.

ICIS – Integrated Compliance Information System. ICIS supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System

Findings: The Site is not listed as an ICIS site. No ICIS sites were identified in the surrounding vicinity.

NYS Landfill - The NYSDEC Solid Waste Facility Register records contain an inventory of solid waste disposal facilities or landfills in New York State.

Findings: The Site is not listed as a landfill. No NYS Landfill sites were identified within a half mile radius of the Site.

NYS Registered Recycling Facilities - The Registered Recycling Facilities List (SWRCY) is a NYSDEC list of recycling facilities.

Findings: The Site was not listed as a SWRCY site. One (1) SWRCY site was identified within a $^{1}/_{2}$ mile radius of the Site. However, due to the distance from the Site is not considered a REC.

NYS Registered Waste Tire Storage Facilities - The Registered Recycling Facilities List (SWTIRE) is a NYSDEC list of Registered Waste Tire Storage & Facility List.

Findings: The Site is not listed as a SWTIRE site. There were no SWTIRE sites identified within a ½ mile radius of the Site.

NYS Leaking Underground Storage Tank Sites - The Leaking Underground Storage Tank Sites (LTANKS) database contains a NYSDEC inventory of reported leaking storage tank incidents. They

can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Findings: The Site was not identified as a LTANKS site. Seventeen (17) LTANK sites were identified within ½ mile of the Site. No adjacent sites were identified and most of the LTANK sites have received closure from the NYSDEC. Based on this information, these LTANK sites are not expected to present a significant environmental concern to the Site.

NYS Petroleum Bulk Storage - The NYSDEC Petroleum Bulk Storage - Underground Tanks (UST) database lists facilities with a petroleum storage capacity of more than 1,100 gallons and less than 400,000 gallons. The NYSDEC Petroleum Bulk Storage - Aboveground Tanks (AST) database lists facilities with registered above ground storage tanks.

Findings: The Site is not listed as an PBS site. Twelve (12) UST sites and eleven (11) AST sites are registered within a ¼ mile radius of the Site. Properties with registered ASTs or USTs do not necessarily pose a hazard unless the tanks are leaking or a spill occurs. Most tanks in the area hold heating oil for on-site boilers and furnaces. Sites with leaking tanks or spills are addressed in the appropriate section.

NYS Chemical Bulk Storage - The Chemical Bulk Storage (CBS) database is a NYSDEC list of facilities that store regulated hazardous substances in aboveground tanks (AST) with capacities of 185 gallons or greater or underground tanks (UST) of any size.

Findings: The Site is not identified as a CBS facility. Additionally, no CBS facilities were identified in the surrounding vicinity.

NYS Institutional/Engineering Controls – NYSDEC list of Environmental Remediation sites with Institutional or Engineering Controls in place.

Findings: Neither the Site nor surrounding vicinity were identified in the NYSDEC Institutional/Engineering Controls databases.

NYS Voluntary Cleanup Agreements - The NYSDEC Voluntary Cleanup Program (VCP) database identifies hazardous waste sites undergoing private sector cleanup as part of redevelopment.

Findings: The Site was not identified as a VCP site. No VCP sites were identified within a $^{1}/_{2}$ mile radius of the Site.

NYS Brownfields - A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Findings: The Site is not listed in the NY Brownfields database. One (1) other Brownfield site is located within ½ mile radius of the Site. This site is located in a hydrologically cross-gradient location. Based on either distance and/or the assumed direction of groundwater flow, this property is not expected to represent a significant environmental concern with respect to the Site.

NYS Major Oil Storage Facilities - The NYSDEC Major Oil Storage Facilities (MOSF) database lists facilities or vessels with a petroleum storage capacity of more than 400,000 gallons.

Findings: Neither the Site nor surrounding vicinity were not identified as MOSF sites.

NYS Spills - The New York State Spills Information Database (NY SPILLS) contains data collected on chemical and petroleum spill incidents reported to NYSDEC since April 1, 1986.

Findings: The Site is not listed as a NY SPILLS site. Twenty-three (23) spill sites were identified within $^{1}/_{8}$ mile of the Site. Adjacent sites were not identified. Most of the spill listings located closest to the Site have received closure from the NYSDEC. Therefore, these offsite properties do not represent RECs in connection with the Site.

FUDS: The listing includes locations of formerly used defense sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Findings: The Site is not listed as a FUDS site. Two (2) FUDS sites were identified within a 1/2 to 1 mile radius of the Site.

MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSDF.

Findings: The address associated with the Site is listed as a NY Manifest site; however, this listing is in regard to an adjacent Con Edison Manhole. There are no violations or spills associated with the adjacent manhole and is not considered a REC. Thirty-eight (38) NY MANIFEST and four (4) NJ MANIFEST sites were identified within a ¼ mile radius of the Site. No adjacent sites were identified. Information provided within the EDR report indicates that there are no listed violations or that corrective action has been taken to address the violations listed for the remaining sites. Therefore, it is unlikely that these facilities present a significant environmental risk to the Site, and they are not considered RECs.

Drycleaner Sites - The NYSDEC maintains a listing of all registered drycleaners. Drycleaner sites do not necessarily pose a hazard unless a spill occurs. Sites at which spills have been identified are addressed in the appropriate section.

Findings: The Site is not identified as a drycleaner. One (1) Drycleaner site was identified within ¼ mile of the site. This site is not adjacent and is located hydrologically cross-gradient of the Site. Based on the assumed direction of groundwater flow, these sites are not expected to represent a significant environmental concern.

NYS Manufactured Gas Plants - Manufactured gas plants (MGP) were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar, sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Findings: The Site is not listed as a MGP site. Three (3) MGP sites were identified within a one-mile radius of the Site. These sites are located greater than 1/2 mile from the Site. Due to the distance from the Site these are not considered RECs.

E Designation - The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designation also includes a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Findings: The Site was not identified as an E Designation site. Nine (9) E-Designation sites are present in the surrounding vicinity. However, these sites are under the jurisdiction of the NYCDEP's Office of Environmental Remediation and will be properly handled during redevelopment activities to reduce exposures to environmental hazards.

EDR Historical Auto Stations - EDR has searched selected national collections of business directories and has collected listings of potential gas station/ filling station/ service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/ filling station/ service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station etc.

Findings: The Site is not listed as a Historical Auto Station. Nine (9) Historical Auto Station sites were identified within 1/8 mile of the Site. These sites are not located adjacent to the Site and information provided within the EDR report indicates that there are no listed violations or that corrective action has been taken to address the violations listed for this site. Therefore, it is unlikely that these facilities present a significant environmental risk to the Site, and are not considered a REC.

EDR Historical Cleaners - EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash and dry etc.

Findings: The Site was not identified as an EDR Historical Cleaners site. Two (2) sites in the surrounding vicinity were identified. However, none of these sites are adjacent and no violations or open spills are associated. As such, these sites are not considered RECs.

5.1.3 EDR Vapor Encroachment Screen

A Vapor Encroachment Screen was conducted using the EDR VEC App™. A copy of the EDR Vapor Encroachment Screen report is included in **Appendix G**. Numerous waste oil, fuel oil, and transfer oil spills were reported within the surrounding vicinity, but no significant spills of chlorinated volatile organic compounds were reported within a radius of 1/3 mile. No significant spills of fuel oil or gasoline with an active status were reported within a radius of 1/3 mile. In summary, no significant vapor intrusion sources exist in the immediate vicinity of the Site that supersede the degree of contamination that exists at the Site as it is a former MGP with known coal tar and MGP-impacts. Due to the known contamination at the Site, there is a potential for vapor encroachment at the Site; however, such sources of contamination will be greatly reduced during remedial actions prior to future redevelopment.

5.2 Additional Environmental Record Sources

5.2.1 Local Agency Review

Freedom of Information Act (FOIA) requests were sent to the New York City Department of Environmental Protection (NYCDEP), New York City Fire Department, New York City Department of Health (NYCDOH) and the New York City Fire Department (FDNY) for information regarding hazardous operations and or other environmental reports/investigations for the Site, including the registration of fuel storage tanks, past spills, or violations. As of the date of this report, a response had not been received for the FOIA request. Regulatory agencies usually take six to eight weeks to process FOIA requests. Any pertinent information received will be reviewed and forwarded upon receipt. Copies of FOIA requests and regulatory agency responses are included in **Appendix B**.

5.2.2 New York City Department of Finance

The following is a summary of pertinent information obtained from the New York City Department of Finance website:

Tax Lot: Block 352 – Lot No. 60

Address:	41 Summit Street
Owner:	41 Summit Street, LLC
Lot Size:	2,500 s.f. - rectangle-shaped
Building Class:	F1 - Factory/Industrial
Zoning:	Manufacturing M1-1

5.2.3 New York City Department of Buildings

The Department of Buildings (DOB) computerized Property Profile Overviews (PPOs) were reviewed. Several Certificates of Occupancy (COO) forms for the Site were available that provided historical information. A 1977 COO indicates that the Site was occupied by a food produce establishment on the first floor and an office on the mezzanine level. There are nine (9) actions associated with the Site. These include a building alteration from 1941, two building dockets from 1904 and 1941, a new building action from 1912, a plumbing repair slip from 1941 and two unknown actions from 1919.

5.2.4 Previous Environmental Reports

No previous Environmental Reports were provided in preparation of this ESA Report.

5.2.5 Historic Zoning Map

A review of the NYC Department of City Planning Zoning Maps for the years 1961 through 2015 indicates that the Site has been zoned manufacturing (M1-1) the entire fifty year period. A copy of the 2015 zoning map is included in **Figure 5A** and the zoning map from 1961 is included as **Figure 5B**.

5.2.6 Activity and Use Limitations

A search was conducted for Activity and Use Limitations (AULs) associated with the subject properties, more specifically Institutional Controls (ICs) and/or Engineering Controls (ECs), which have been placed upon the property as a result of environmental issue identified at the property. In the City of New York, information on such AULs is maintained by the City of New York Department of City Planning (NYCDCP) and is commonly depicted on zoning maps with an "E" designation, as well as maintained within Chain of Title Records. For a site to be designated with an "E" restriction, several criteria must be met. First, a property must be included within a designated re-zoning area, then the property must be identified as a "Potential" or "Projected" re-development property, and finally, the site must be listed on one or more environmental regulatory databases as listed in the ASTM standard, be adjacent to such a site, and/or have historical usage associated with hazardous

materials with the potential to impact human health and/or the environment should a release have occurred. Sites with an "E" designation require additional investigation and/or remediation be performed in order to determine if the historical use of a property, typically manufacturing or chemical usage, have impacted the Site. No change of use or development requiring a building permit will be issued for an "E" designated site without approval from the NYCOER.

The search for environmental liens and AULs also included a review of information available from the New York City Department of Finance, New York City DOB, the EDR database report, City of New York Environmental Quality Review Requirement Declarations, City of New York Zoning maps, and the NYCDCP and NYCOER websites. The Site is located within an industrial business zone (IBZ); however, it does not currently have an E-Designation or any known environmental restrictions as the result of rezoning.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

Ms. Eleni Kavvadias of EBC performed the site inspection on Friday, May 27, 2016; beginning at approximately 10:00am. She was accompanied by an escort, Mr. Jack Locicero whom provided access to the Site but was unable to provide detailed information regarding the environmental condition and historical usage of the Site.

Photographs taken during the inspection are attached (**Appendix A)**.

6.2 Observations

Ms. Kavvadias documented the presence of a one to two-story building which covered the entire footprint of the Site. The current building has a two-story portion on the south side of the Site along Summit Street and a one-story portion on the north side. The building is constructed atop a slab-on-grade foundation and has brick and mortar exterior walls. The building is currently vacant and used to store a passenger vehicle, construction and building materials including several 5-gallon containers of paint and primer. A two-story commercial building occupied by Chase Bank was observed to the west and a three-story mixed use building is present to the east.

6.3 Aboveground and Underground Storage Tanks (ASTs/USTs)

No indications of USTs or ASTs were observed at the Site. Additionally, no records indicating the potential for the presence of tanks was observed. Information may be available in files maintained by the FDNY; however, no responses to EBC's FOIL requests have been received to date. Copies of tank records are provided in **Appendix B**.

6.4 Hazardous and Non-Hazardous Chemical Storage and Disposal

Numerous small quantity containers of surface cleaners, soaps and other common materials were present throughout the onsite building. Storage and housekeeping of these materials was noted as good with no signs of spillage. In addition there were no indications of improperly stored chemicals or spillage noted around the exterior of the buildings or grounds.

6.5 Underground Injection Control (UIC) Structures

Underground injection wells are regulated by the Underground Injection Control (UIC) Program under the authority of Part C of the Safe Drinking Water Act (SDWA) (42 U.S.C. 300h et seq.). The SDWA is designed to protect the quality of drinking water in the United States, and Part C specifically mandates the regulation of underground injection fluids through wells. The USEPA has promulgated a series of UIC regulations under this authority. Recent applicable revisions to UIC regulations were published in the State Implementation Guide - Revisions to the Underground Injection Control Regulations for Class V Injection Wells, September 2000. This document specifically addresses Class V injection wells, which include on-site wastewater disposal features such as drywells, cesspools and in-situ drains. The USEPA issued a Notice of Final Determination for Class V wells; Final Rule on June 7, 2002. With the exception of motor vehicle waste disposal wells and large-capacity cesspools, Class V wells are "authorized by rule" (40 CFR 144.24) and may inject non-hazardous waste as long as the following criteria are met:

- The injection does not endanger underground sources of drinking water (40 CFR 144.12); and
- The well owners or operators submit basic inventory information (40 CFR 144.26).

The USEPA may, at its discretion, require the owner or operator of any well authorized by rule to submit information for review to determine if a well may be endangering an underground source of drinking water. In regard to motor vehicle waste disposal wells and large capacity cesspools (those that serve more than 20 persons per day), owners and/or operators of such wells in regulated areas must close the wells or obtain a permit. These requirements are being phased-in through 2008. Owners and operators of large-capacity cesspools must close the structures by April 5, 2005.

There are no drywell/stormwater structures present at the Site. Additionally, the Site is attached to the municipal NYC sewer system. Therefore, any discharges to a drain at the Site would be mobilized away from the Site with the sewer system.

6.6 Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) were used until 1978 and are a group of compounds formed by the chlorination of biphenyl. PCBs have extremely high physical and chemical stabilities which led to

their being used in many applications, including heat transfer fluids, hydraulic fluids, and dielectrics. PCBs are often found in transformers, capacitors and hydraulic systems.

Electrical equipment containing PCBs are still in use and can pose a serious health hazard if fluids come in direct contact with humans, soil or groundwater. Fires involving electrical equipment containing PCBs can cause the material to be dispersed over a large area and potentially expose many people to a health risk. Because of the health hazard associated with PCBs, they are regulated under the Toxic Substances Control Act (TSCA).

Because of the age of the onsite building, the potential for the presence of PCB-containing materials is considered likely to some degree. EBC recommends that any electric transformers and light ballasts be properly decommissioned (if present) prior to demolition or disturbance.

6.7 Asbestos

Asbestos is the name given to a group of fibrous silicate minerals, typically those of the serpentine group. The tensile strength, flexibility, and non-flammability of asbestos have led to many uses including structural materials, brake linings, insulation, and pipe manufacture. Asbestos is of concern as an air pollutant because when inhaled it may cause asbestosis, mesothelioma, and bronchogenic carcinoma. In 1989, the USEPA announced regulations that would phase out most uses of asbestos by 1996.

Due to the age of the onsite building, the potential for the presence of asbestos-containing materials (ACMs) is considered likely. EBC recommends conducting an ACM survey to identify building materials and components with asbestos content prior to demolition or disturbance.

6.8 Lead-Based Paint (LBP)

In 1978, the U.S. Product Safety Commission issued a ban on paints or surface coatings that contain greater than 0.06 percent lead. Due to the age of the onsite building, the potential for lead-based paint (LBP) is considered likely.

6.9 Mold

Concern about indoor exposure to mold has been increasing as the public becomes aware that exposure to mold can cause a variety of health effects and symptoms, including allergic reactions. Molds can be found almost anywhere; they can grow on virtually any organic substance, as long as moisture and a food source is present. Molds can grow on wood, paper, carpet, foods, sheetrock, plaster and insulation and use bio aerosols as a food source. As such, water is the key limiting agent in preventing mold growth. Without water, mold growth cannot occur. When excessive moisture accumulates in buildings or on building materials, mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed.

No visible signs of mold or water damage were observed at the Site; however, there is a potential for the presence of mold within hidden or inaccessible portions of the onsite buildings.

6.10 Wetlands

A review of the NYSDEC Freshwater Wetland Map, Brooklyn Quadrangle, indicates that the nearest nationally and state-designated wetlands are located approximately 0.25 miles to the west along the East River. ECB also reviewed NYSDEC Tidal Wetlands Maps available online at http://twi.ligis.org. Those maps indicate that the Site is located within 500-year flood zone. Additionally, 100-year flood zone is located approximately 1/16th of a mile to the west of the Site.

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) were also reviewed to confirm that the Site is located within a flood zone. The FIRM showing the property (No. 3604970192G) indicates that the entire property is located within a 100-year and 500-year flood zone. This indicates that there is a significant risk of flooding at the Site. A copy of the FEMA FIRM is included in **Appendix B**.

7.0 INTERVIEWS

7.1 Site Owner

EBC did not interview the owner regarding the environmental condition or historical usage of the Site. Mr. Jack Locicero acted as an escort to EBC during our site inspection but he was unable to provide detailed information regarding the historic usage of the Site.

7.2 Occupants

No occupants were interviewed as part of EBC's site inspection.

7.3 Local Government Officials

Freedom of Information Act (FOIA) requests were sent to the NYCDEP, NYSDEC and FDNY for information regarding hazardous operations and or other environmental reports/investigations for the Site, including the registration of fuel storage tanks, past spills, or violations. As of the date of this report, a response had not been received for the FOIA request. Regulatory agencies usually take six to eight weeks to process FOIA requests. Any pertinent information received will be reviewed and forwarded upon receipt. Copies of FOIA requests and regulatory agency responses are included in **Appendix B**.

8.0 FINDINGS AND OPINIONS

Based upon reconnaissance of the Site and surrounding properties, interviews and review of historical records and regulatory agency databases, *this assessment has not revealed evidence of any recognized environmental condition in connection with the Site.*

1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

9.0 CONCLUSIONS AND RECOMMENDATIONS

EBC performed a Phase I Environmental Site Assessment in conformance with the scope and limitations as described under ASTM Practice E1527-13 for the commercial property identified by the street addresses of 41 Summit Street, Brooklyn, New York 11231. The Site is identified as Block 352 Lot No. 60 in New York City property records. Any exceptions to, or deletions from, this practice are described in **Section 1.4** of this report. Based upon reconnaissance of the subject site and surrounding properties, and review of historical records and regulatory agency databases, no Recognized Environmental Conditions (RECs) were identified for the Site. However, the following environmental concerns should be noted:

<u>The following environmental concerns were considered and determined not to be RECs but should be noted:</u>

- Due to the age of the onsite building, the potential for the presence of asbestos-containing materials (ACMs) is considered likely. Specifically, asphaltic roofing materials, adhesives, plasters and exterior use caulks commonly contain asbestos in older and newer buildings alike. EBC recommends conducting an ACM survey to identify building materials and components with asbestos content prior to demolition or disturbance.
- Due to the age of the onsite building, the potential for the presence of lead-based paint (LBP) is also considered likely. No significantly damaged or peeling paints were identified; however, LBP may be present in hidden or inaccessible portions of the Site. Additionally, no children currently reside at the Site which greatly reduces the risks associated with the potential presence of LBP. EBC recommends conducting a lead survey to evaluate the presence of LBP at the Site prior to demolition or disturbance.
- Because of the age of the onsite buildings, the potential for the presence of poly-chlorinated biphenyl (PCB) containing materials is considered likely to some degree. EBC recommends that any electric transformers, elevator equipment or light ballasts be properly decommissioned (if present) prior to demolition or disturbance.
- The Site is located within a flood zone.

10.0 DEVIATIONS

This Phase I ESA was conducted in accordance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard E 1527-13 (Standard Practices for Environmental Site Assessment: Phase I Environmental Site Assessment Process) an 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiry; Final Rule). Excluding additional services outlined in Section 11.0, there were no deviations or deletions from this practice.

11.0 ADDITIONAL SERVICES

EBC has included, in addition to those items outlined by ASTM E 1527-13, a general evaluation of the following is a list of non-scope considerations, which may be addressed, in a limited capacity within this Phase I Environmental Site Assessment:

- Radon;
- Lead-based Paint;
- Asbestos-containing Materials; and,
- Wetlands.

12.0 REFERENCES

Standard practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Standard E 1527-13

All Appropriate Inquiry, Final Rule, 40 CFR Part 312

Environmental Data Resources, Inc. regulatory database report (No. 4628516.2s), May 25, 2016.

EDR Sanborn, Inc., Sanborn Map Report (No. 4628516.3), May 25, 2016.

Environmental Data Resources, Inc. City Directory Search (No. 4628516.5), May 25, 2016.

Environmental Data Resources, Inc. Historic Aerials (No. 4628516.9), May 25, 2016.

Environmental Data Resources, Inc. Historic Topographic Maps (No. 4628516.4), May 25, 2016.

New York City Tax Assessor, records review - May 2016.

New York City Department of Health, Freedom of Information request forwarded May 2016.

New York City Fire Department, Freedom of Information request forwarded May 2016.

New York City Department of Environmental Protection, Freedom of Information request forwarded May 2016.

New York City Building Department, records on-line review May 2016.

U.S.G.S. Topographic Map, Brooklyn, NY Quadrangle - 2013.

U.S. Department of the Interior, Fish and Wildlife Service. National Wetlands Inventory Maps.

New York State Department of Environmental Conservation. Tidal Wetlands Maps, Kings County, New York.

Federal Emergency Management Agency (FEMA) Flood Zone Map Panel Number 3604970196G

13.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the Site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

Prepared By:

Robert Bennett
Project Manager

1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

QUALIFICATIONS OF
ENVIRONMENTAL PROFESSIONAL

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Robert Bennett, Project Manager

Professional Experience

EBC: February 2015 - Present
Prior: 7 years

Education

Bachelor of Science, Environmental Science, State University of New York College at Oneonta, Oneonta, NY

Associates in Applied Sciences, Field Biology, State University of New York College at Delhi, Delhi, NY

Areas of Expertise

- Phase I / Phase II Property Assessments
- Waste Characterization / Soil Management
- Brownfield Closure and Planning Board
- Remedial Investigations
- Groundwater, Soil and Soil Vapor Remediation
- Indoor Air Quality (IAQ) Investigations
- Lead-Based Pain Risk Assessor
- Asbestos-Containing Materials Investigator/Inspector
- Landfill Closure and Monitoring
- Dredging Monitoring and Management
- Hazardous Materials Assessments
- Title V & NY Air Permitting and Registrations
- NYS / Nassau & Suffolk County Sanitary Code Compliance

Professional Certification

- OSHA 40-hr HAZWOPER
- OSHA 10-hr Construction Safety
- NYSDOH Asbestos Inspector
- NYCDEP Asbestos Investigator
- EPA Lead-Based Paint Inspector & Risk Assessor

PROFILE

Mr. Bennett has 8 years experience as an environmental consultant and is responsible for assessment and investigative services for a wide variety of projects, including industrial and commercial properties, mass transit facilities, parking structures, and sanitary and wastewater treatment facilities. Mr. Bennett has conducted Phase I, II and III Environmental Site Assessments for commercial, industrial, and residential properties in New York, New Jersey, and Massachusetts.

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Robert Bennett, Project Manager

Mr. Bennett conducts research and provides support for various projects on a daily basis and coordinates with clients, regulatory agencies, attorneys and sub-contractors to provide cost-effective business solutions for a plethora of environmental concerns. Mr. Bennett's field experience includes tank removal and installations, dredging oversight and monitoring, asbestos and lead inspections, compliance audits, spill management and closure, soil and groundwater sampling, and both the oversight and operation of soil boring and well installation equipment. In addition, Mr. Bennett has performed project research, data reduction and evaluation, and has prepared reports for both regulatory and client use.

PREVIOUS EXPERIENCE

Dvirka & Bartilucci Engineers and Architects, P.C., Woodbury, NY
Environmental Scientist II, 2014-2015

Gannett Fleming Engineers and Architects, P.C., Woodbury, NY
Environmental Scientist, 2012-2014

Apex Companies L.L.C., Bohemia, NY
Environmental Scientist / Project Manager, 2008-2012

SELECT PROJECT EXPERIENCE

Project:	Fulton Street Redevelopment Project - 1134 Fulton Street, Brooklyn NY
Description:	NYC E-Designation. Soil contaminated with chlorinated solvents and heavy metals requiring excavation, soil management and disposal as well as a Soil Vapor Extraction System under a Remedial Action Work Plan, Soil / Materials Management Plan, Construction Health and Safety Plan and Community Air Monitoring Plan
Client:	Porter Avenue Holdings
Authority:	NYSDEC, NYSDOH & NYCOER
Role:	Mr. Bennett served as the Project Manager for the project.
Project:	Redevelopment Project - 391 Meeker Avenue, Brooklyn NY
Description:	NYC E-Designation. Historic Fill Material requiring excavation, soil management and disposal under a Remedial Action Work Plan, Soil / Materials Management Plan, Construction Health and Safety Plan and Community Air Monitoring Plan
Client:	Draftex Architectural Drafting & As Built Services
Authority:	NYCOER
Role:	Mr. Bennett serves as the Project Manager for the project.
Project:	Redevelopment Project - 1555-1557 Fulton Street, Brooklyn NY

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Description:	NYC E-Designation. Historic Fill Material requiring excavation, soil management and disposal under a Remedial Action Work Plan, Soil / Materials Management Plan, Construction Health and Safety Plan and Community Air Monitoring Plan
Client:	Waterfront Property Management, LLC.
Authority:	NYCOER
Role:	Mr. Bennett serves as the Project Manager for the project.

Project:	Governor's Office of Storm Recovery (GOSR) New York Rising Buyout and Acquisition Program / Superstorm Sandy Relief Program
Location:	Long Island and New York City
Type:	Phase I Environmental Site Assessments (ESAs) and Property Evaluation
Contamination:	Asbestos, Lead, Mold and PCBs
Role:	Environmental Scientist II responsible for the creation and review of a high volume of Phase I ESAs

Project:	WMATA Metrorail System Assessment Program
Location:	Washington D.C. Area
Type:	Hazardous materials inspection and evaluation for planning and engineering design purposes.
Contamination:	Asbestos, Lead and PCBs
Role:	Environmental Scientist and Inspection Team Leader

Project:	Armonk Square Redevelopment Plan
Location:	Armonk Square, Armonk, NY
Type:	Monitoring well and recovery well installation. Sub-slab depressurization system (SSDS) installation and operational modifications.
Contamination:	Chlorinated Solvents
Role:	Environmental Scientist responsible for the planning and oversight of monitoring well and recovery well installation. Planning, oversight, and modifications to SSDS.

Project:	Newtown Creek Dredging Project for NYCDEP
Location:	NYCDEP Newtown Creek Wastewater Treatment Facility, Brooklyn, NY
Type:	Navigational waterway dredging
Contamination:	Hazardous and biological pollutants in bottom sediment.
Role:	Environmental Scientist responsible for the implementation and operation of engineering controls and turbidity monitoring.

Project:	Boring / Coring Program, Northeast U.S. Region
Location:	New Bedford Harbor, New Bedford, MA. Long Island and Massachusetts.

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Robert Bennett, Project Manager

Type:	Bathymetric surveys. Borings and Corings advanced through deep sediment and bedrock to determine the proper allocation dredge areas and confined aquatic disposal zones. Additionally, Vibracore drilling was conducted in shallow and easily accessible areas.
Contamination:	PCBs
Role:	Environmental Scientist / Project Manager serving as an on-site geologist to interpret and record geological investigations.
Project:	New York State Air Permit Facilities
Location:	Westchester, Orange and Rockland County, NY
Type:	Title V Air Permits, state registration and permitting for multiple industrial laundering facilities.
Contamination:	Hazardous Air Pollutants
Role:	Environmental Scientist / Project Manager responsible for all air permitting work for a NY-branch office.
Project:	Dredging Oversight and Water Quality Monitoring
Location:	New Bedford Harbor, New Bedford, MA
Type:	Bathymetric surveys. Supervised maintenance dredging and confined aquatic disposal zone excavation operations. Turbidity and sediment flocculation monitoring.
Contamination:	PCBs
Role:	Environmental Scientist providing project oversight, coordinating daily with Mass DEP and sub-contractors. Documenting geological data.
Project:	Stormwater Abatement System Inspections, Repairs and Reporting
Location:	Multiple retailer locations throughout New York State
Type:	Stormwater drainage system and stormwater control structure inspections and repairs
Contamination:	PCBs
Role:	Environmental Scientist / Project Manager assigned to coordinate and perform routine inspections of drainage systems and stormwater control structures. Made repairs to stormwater appurtenances where neccesary.
Project:	ConEdison Truck-flush facility, effluent discharge monitoring.
Location:	Multiple ConEdison truck-flush facilities located throughout New York City, NY.
Type:	Compliance sampling and evaluation with regard to New York City Sewer Effluent Limitations.
Contamination:	Oil & Grease, Metals, Pesticides/PCBs , VOCs, SVOCs
Role:	Effluent sampling. Coordinating with client and laboratory to conduct quarterly sampling events.
Project:	RCRA Closure Support

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Location:	Pall Corporation Former Headquarters, East Hills, NY
Type:	Environmental closure of a medical equipment manufacturing facility
Contamination:	Formic Acid, Dimethylacetamide (DMAC)
Role:	Environmental Scientist / Project Manager responsible for the supervision of the removal of all process tanks, piping and associated appurtenances. Accomplished final decommissioning activities. RCRA Closure Report.
Project:	Brownfield Closure Support
Location:	Multiple locations throughout New York City
Type:	Remedial investigations. Interim remedial measures. Soil vapor intrusion studies. RCRA Closure.
Contamination:	VOCs, SVOCs, Oil & Grease, Pesticides/PCBs , Metals
Role:	Environmental Scientist / Project Manager responsible for preparing and conducting remedial investigations, interim remedial measures, soil vapor intrusion studies and RCRA closure.
Project:	Mirant Bowline Power Plant Asbestos Survey
Location:	West Haverstraw, NY
Type:	Asbestos inspection. Personal exposure monitoring. Asbestos labeling Program. Reporting.
Contamination:	Asbestos
Role:	Environmental Scientist / Project Manager serving as a team leader to conduct large scale asbestos inspection, labeling program and reporting.
Project:	Estee Lauder SPCC Facilities
Location:	Multiple manufacturing facilities throughout Long Island
Type:	Spill Prevention Control & Countermeasures (SPCC) inspections, evaluation and reporting.
Contamination:	N/A
Role:	Environmental Scientist / Project Manager responsible for conducting inspections, facility engineering review, and reporting.
Project:	Nassau and Suffolk County Sanitary Code Facility Compliance Audits
Location:	Multiple medical equipment manufacturing facilities throughout Long Island.
Type:	Article XI and XII Sanitary Code Compliance Audits and multiple medical equipment manufacturing facilities.
Contamination:	N/A
Role:	Environmental Scientist / Project Manager responsible for conducting inspections, facility engineering review, and reporting.

PUBLICATIONS

Dredging and Beach Nourishment Public Notices
(Cape Cod Times, 2008-2010)

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EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Robert Bennett, Project Manager

Dredging and Beach Nourishment Public Notices
(Yarmouth Weekly, 2008-2010)

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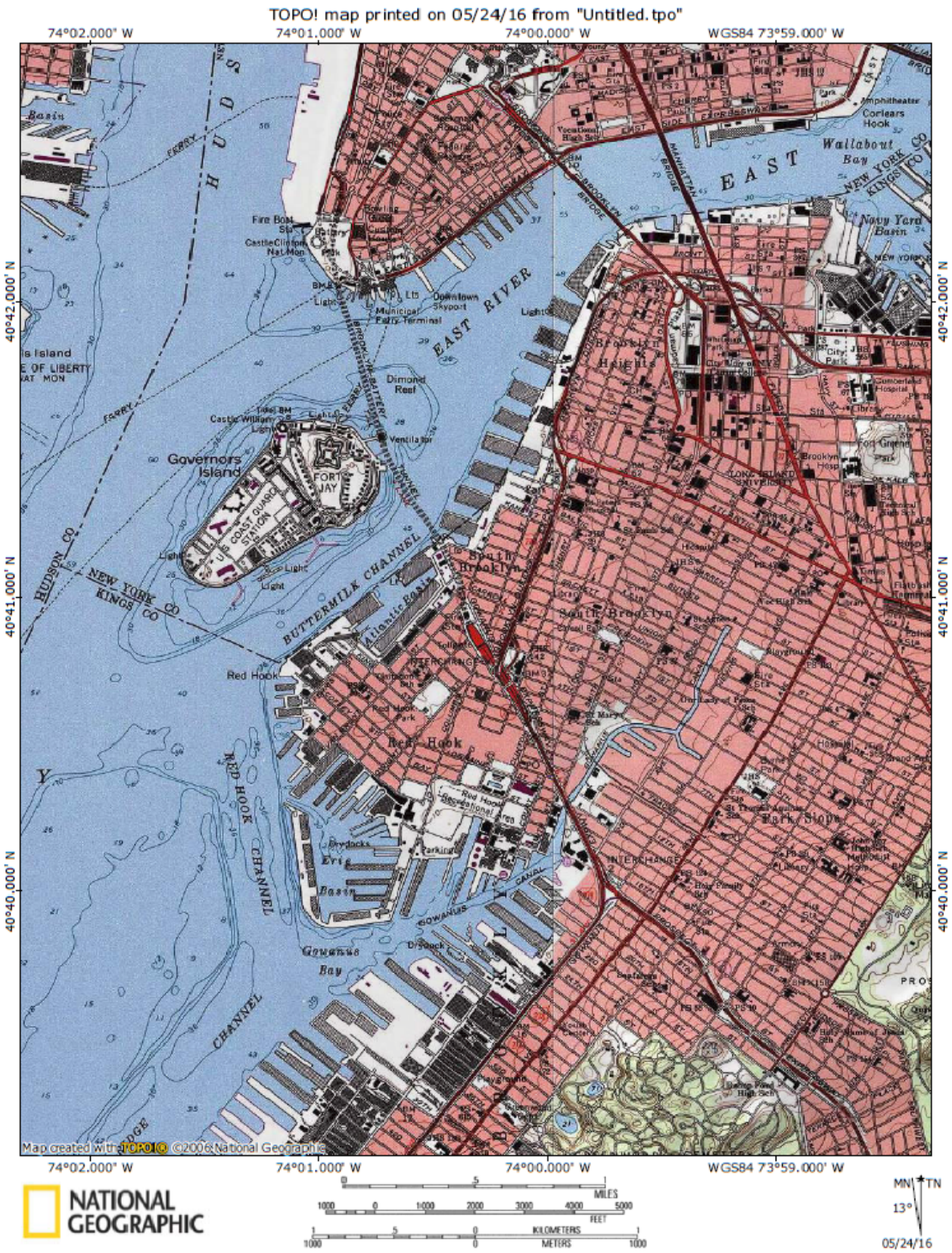
FIGURES



USGS Brooklyn Quadrangle 1995, Contour Interval = 10 feet

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41 SUMMIT STREET
BROOKLYN, NY

FIGURE 1 SITE LOCATION MAP

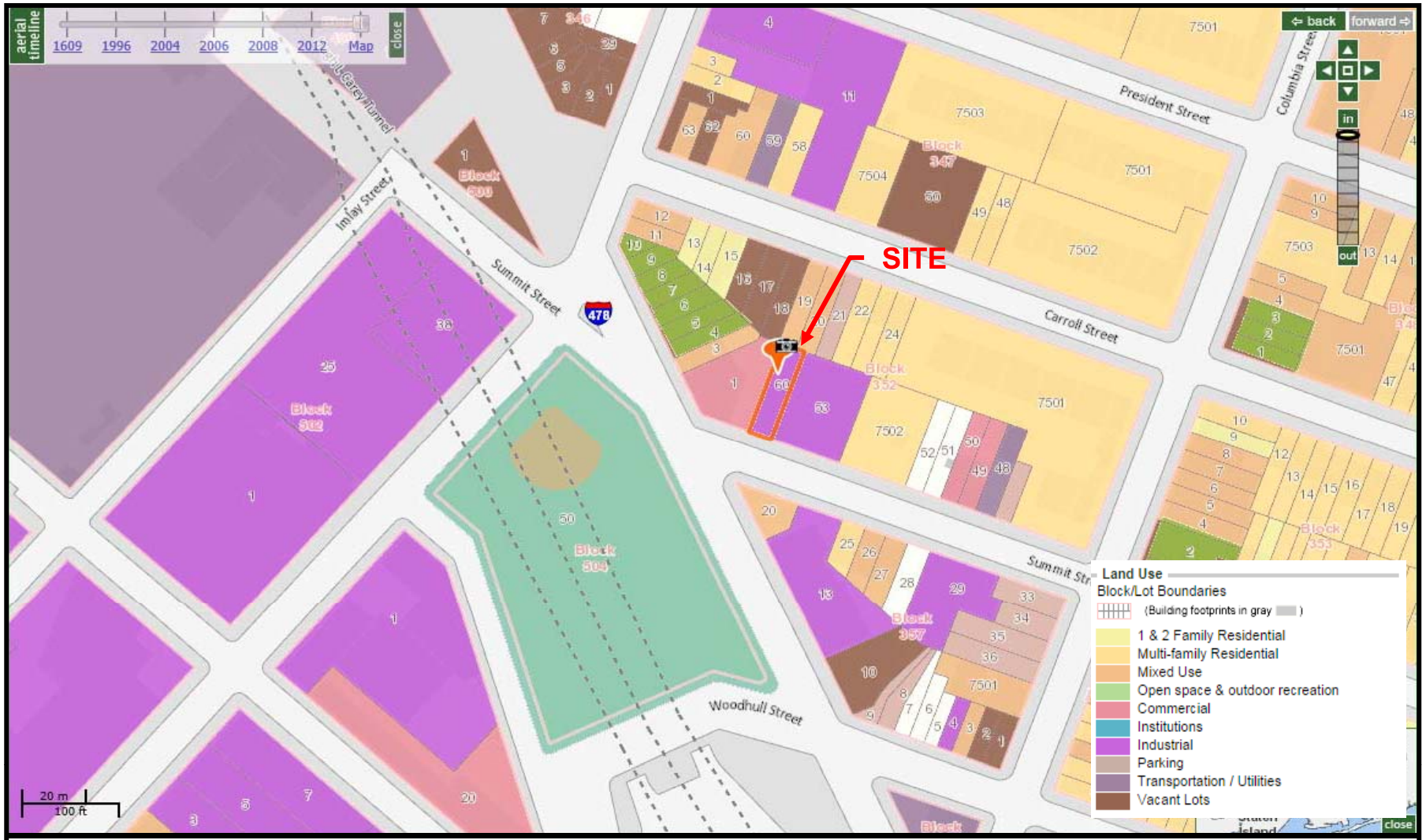

FIGURE 2 – LOT DIAGRAM

N

SITE NAME: 41 Summit Street
STREET ADDRESS: 41 Summit Street
MUNICIPALITY, STATE, ZIP: Brooklyn, NY 11231

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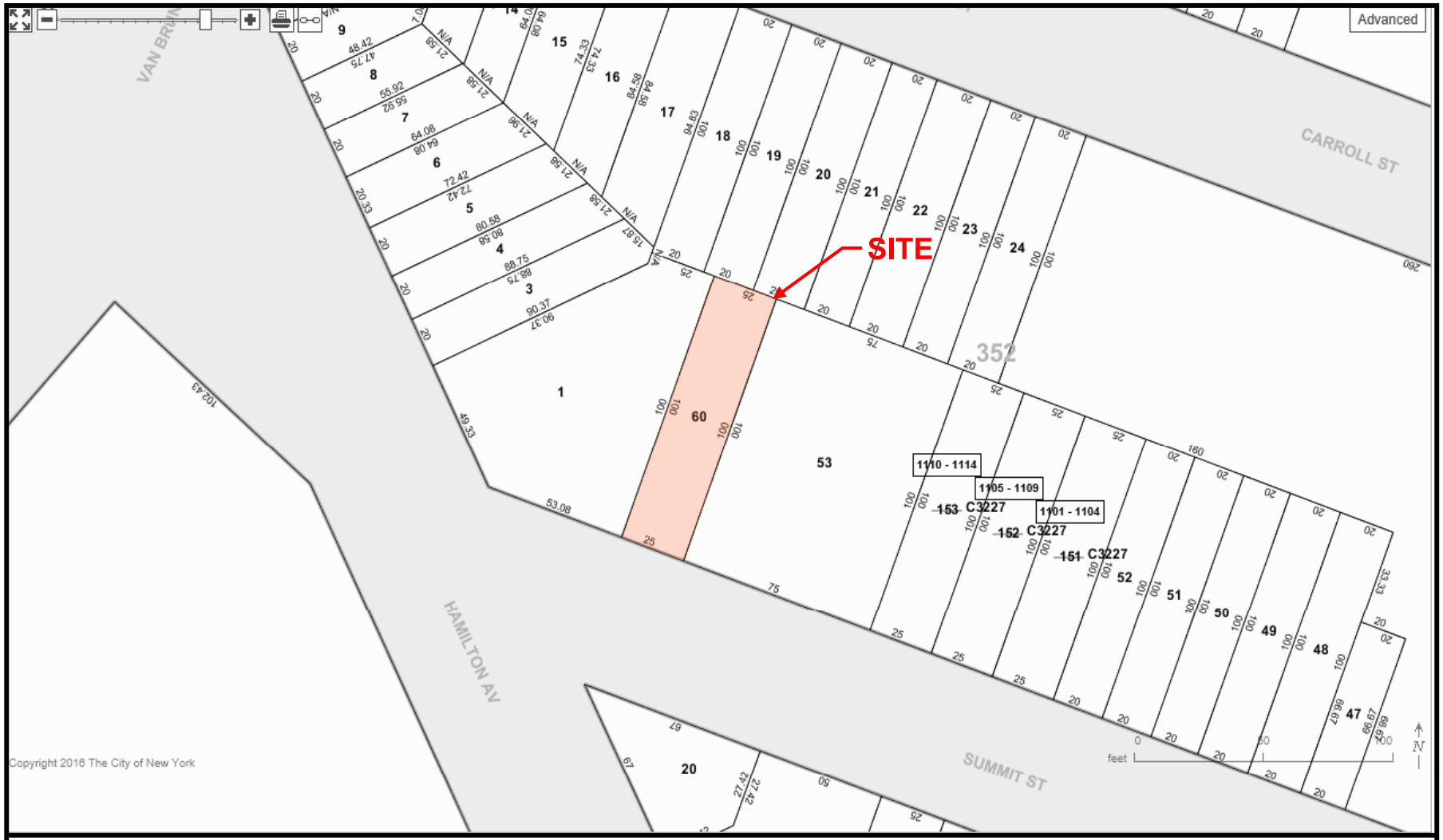

FIGURE 3 – TAX MAP

N

SITE NAME: 41 Summit Street
STREET ADDRESS: 41 Summit Street
MUNICIPALITY, STATE, ZIP: Brooklyn, NY 11231

Source: New York City Department of Finance

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Fax *631.924.2870*

FIGURE 4 – SITE AERIAL

N

SITE NAME: 41 Summit Street
STREET ADDRESS: 41 Summit Street
MUNICIPALITY, STATE, ZIP: Brooklyn, NY 11231

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Fax 631.924.2870

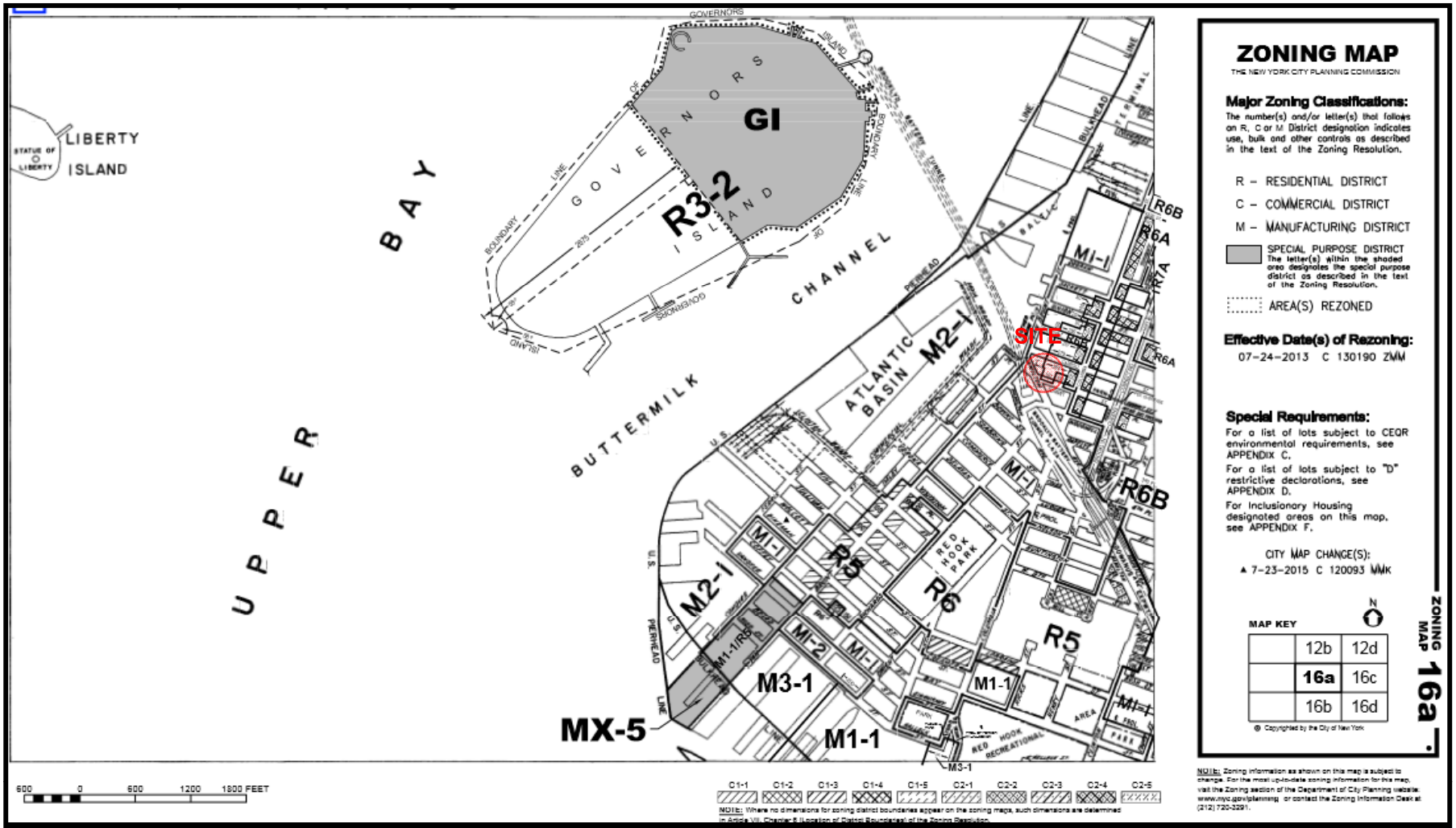

FIGURE 5A – ZONING MAP

N

SITE NAME: 41 Summit Street
STREET ADDRESS: 41 Summit Street
MUNICIPALITY, STATE, ZIP: Brooklyn, NY 11231

Source: New York City Department of City Planning

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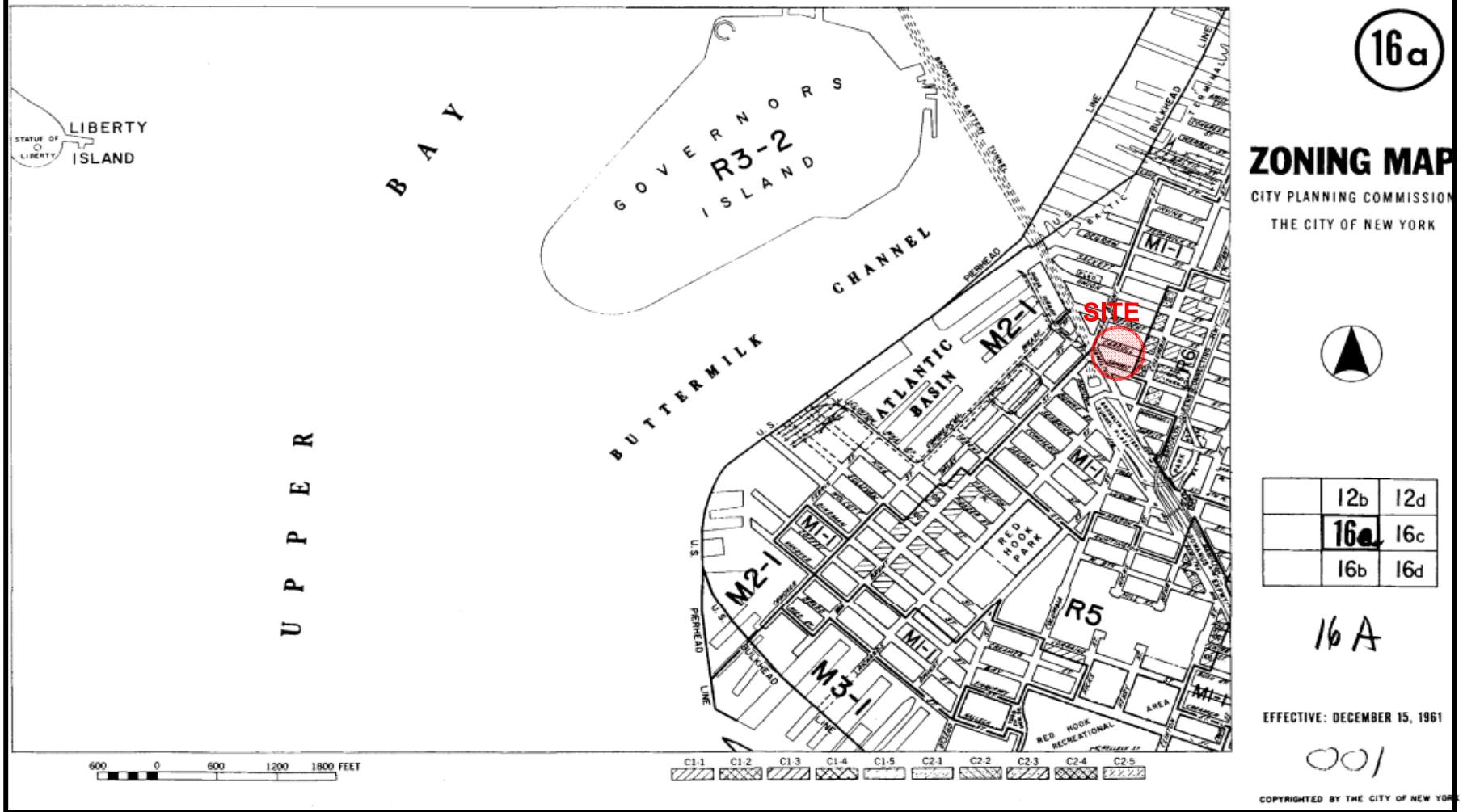

FIGURE 5B – HISTORIC ZONING MAP

N

SITE NAME: 41 Summit Street
STREET ADDRESS: 41 Summit Street
MUNICIPALITY, STATE, ZIP: Brooklyn, NY 11231

Source: New York City Department of City Planning - 1961

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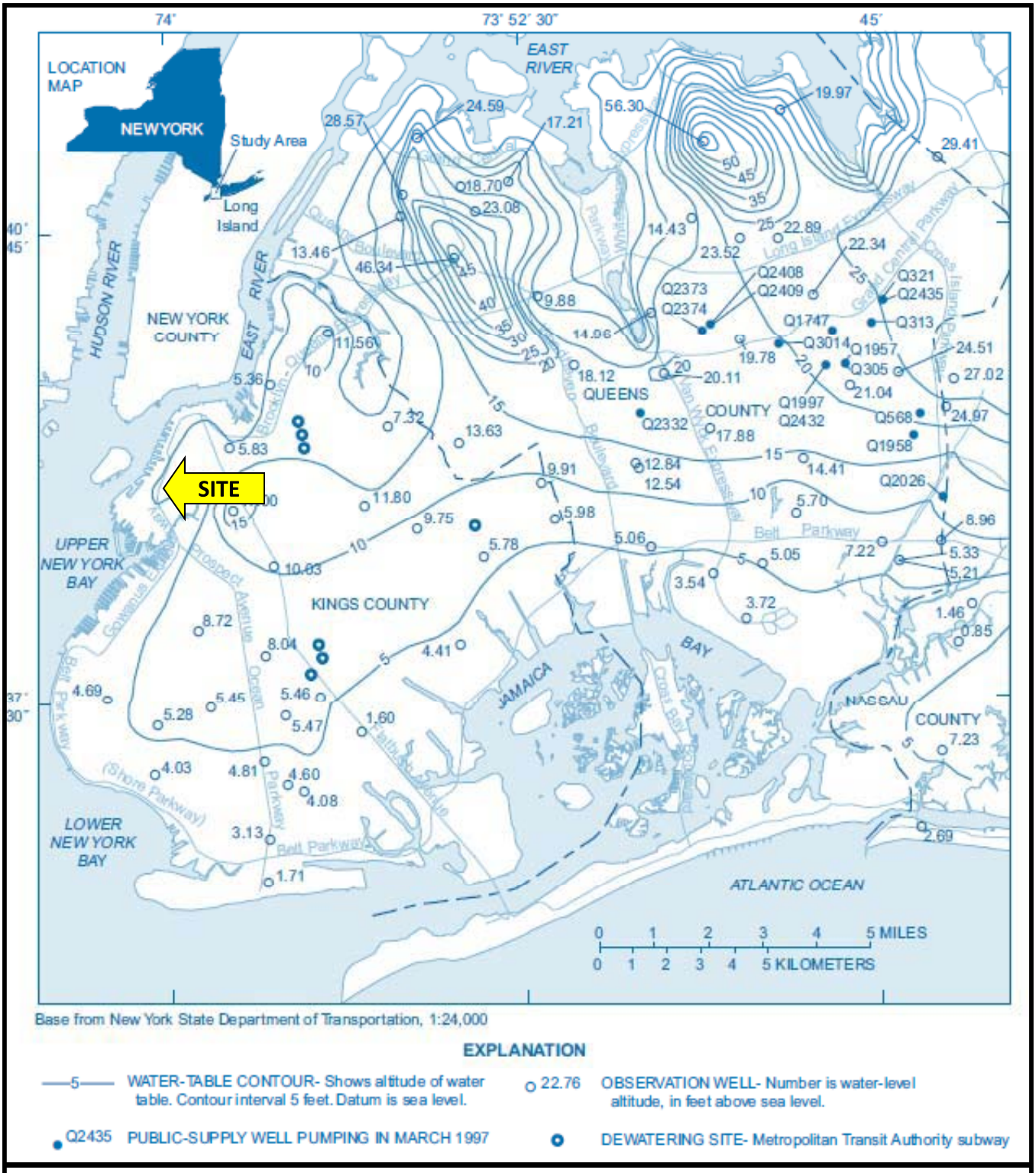

FIGURE 6 – WATER TABLE MAP

***Source:** USGS - 2009

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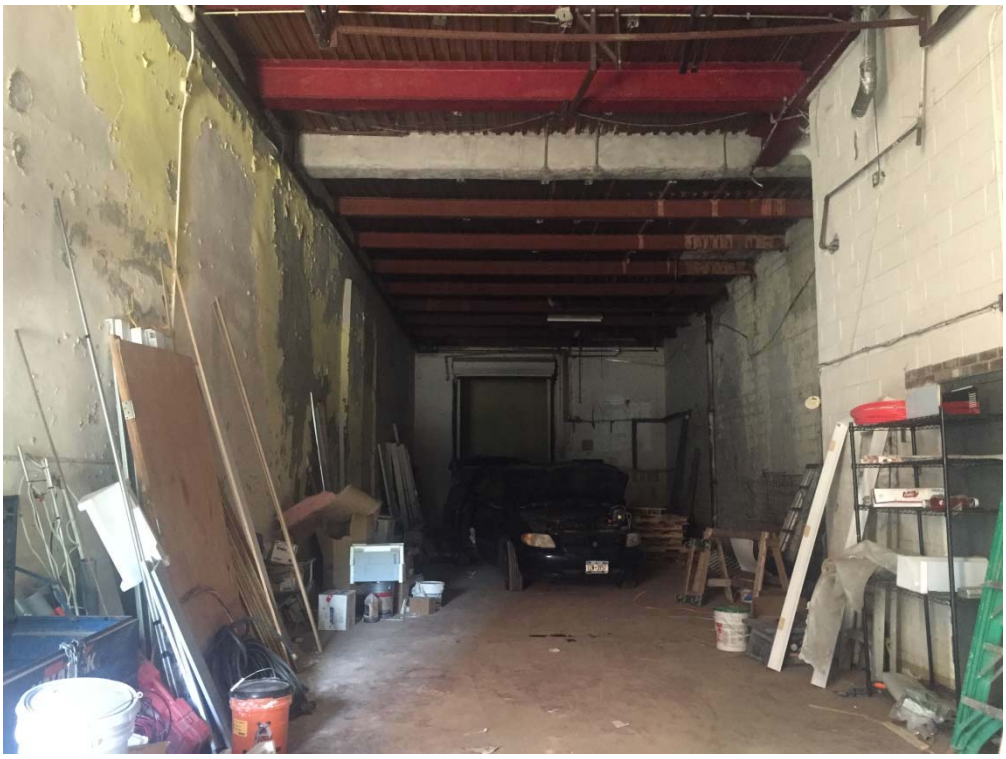
SITE NAME: 41 Summit Street
STREET ADDRESS: 41 Summit Street
MUNICIPALITY, STATE, ZIP: Brooklyn, NY 11231

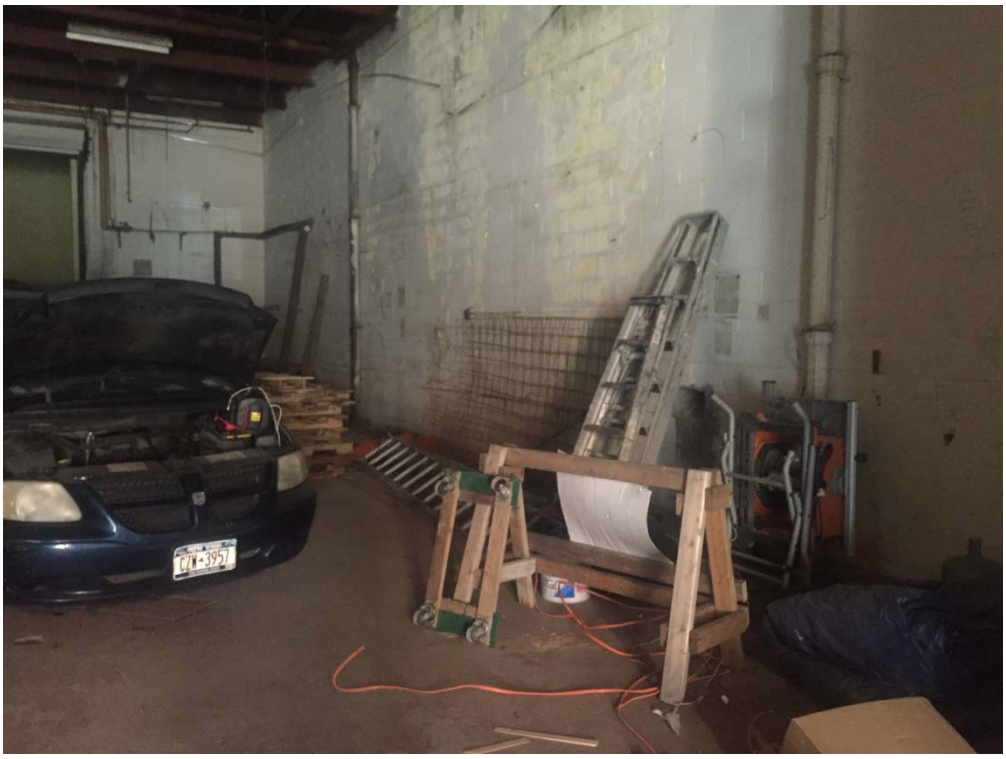
N

APPENDIX A

SITE PHOTOGRAPHS



North facing view of the interior of the Site as seen from Summit Street.



Close up view of the interior of the Site.

View of several 5-gallon containers of paint and primer observed in the approximate center of the building.

View of the eastern adjacent property.

View of the western adjacent property.

North-facing view of the Site and eastern adjacent property.

North facing view of the Site as seen from Summit Street.

View of a nearby ventilation building associated with the Brooklyn Battery Tunnel at the intersection of Summit Street and Hamilton Avenue.

Appendix D - Revised CEQR EAS Short Form and Negative Declaration

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* 41 Summit Street Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
18DCP123K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
1802994 ZMK, N180295 ZRK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning			41 Summit Street LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Olha Abinader			Amanda Iannotti		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 18 East 41st Street, 5th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10016
TELEPHONE (212) 720-3493	EMAIL oabinad@planning.nyc.gov		TELEPHONE (212) 725-2727	EMAIL aiannotti@sheldonlobelpc.com	

5. *Project Description*

The Applicant, 41 Summit Street LLC, seeks a zoning map amendment to rezone three tax lots (Block 352, Lots 1, 3 and 60) from an M1-1 zoning district to an R6A/C2-4 zoning district in the Carroll Gardens neighborhood of Brooklyn, Community District 6. The Applicant controls Block 352, Lot 60 and seeks to redevelop the site ("Proposed Development Site") with a new residential building that will contain seven dwelling units.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 6	STREET ADDRESS 41 Summit Street
TAX BLOCK(S) AND LOT(S) Block 352, Lots 1, 3 and 60		ZIP CODE 11231

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The rezoning area is a portion of the block bound by Summit Street to the south, Van Brunt Street to the west, Carroll Street to the north and Columbia Street to the east.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1 | ZONING SECTIONAL MAP NUMBER 16a

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

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

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.): Approx. 10,477 (rezoning area)
Waterbody area (sq. ft) and type: N/A
Roads, buildings, and other paved surfaces (sq. ft.): Approx. 10,477
Other, describe (sq. ft.): N/A

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): 39,839 gsf
8,250 gsf (Lot 60), 31,589 gsf (Lots 1 & 3)
NUMBER OF BUILDINGS: 2
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 18,250 gsf (Lot 60), 31,589 gsf (Lots 1 & 3)
HEIGHT OF EACH BUILDING (ft.): 55' (Lot 60) 85' (Lots 1 &3)
NUMBER OF STORIES OF EACH BUILDING: 5 (Lot 60) 8 (Lots 1 & 3)

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: 2,500 (Proposed Development Site)
The total square feet non-applicant owned area: 7,977

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: 10,477 sq. ft. (width x length)
VOLUME OF DISTURBANCE: TBD cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 10,477 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.)	29,362	10,477	0	0
Type (*e.g.,* retail, office, school)	34 units	Retail		

Does the proposed project increase the population of residents and/or on-side workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 70 NUMBER OF ADDITIONAL WORKERS: +/-33
Provide a brief explanation of how these numbers were determined: Average household size for CD 6 (2.19); approximately 0.04 employees per dwelling unit plus 3 employees per 1,000 sf retail floor area

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): 2022
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 22-24
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: Environmental Review, ULURP, Financing, Design, Construction, Occupation

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

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☒	☐
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **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)	☐	☒
○ **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)	☐	☒
○ **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 proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒
5. *SHADOWS*: CEQR Technical Manual Chapter 8		

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

	YES	NO
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 3,381 pounds per week		
○ 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): 3,995,710 Million BTUs per year		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
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 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality;	☐	☒

	YES	NO
Hazardous Materials; Noise?		
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
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. Although no detailed analysis not required, a brief description of neighborhood character is included in the Supplemental Studies to the EAS report.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.		

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
Max Meltzer	February 22nd, 2019

SIGNATURE

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
Acting Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME	DATE
Olga Abinader	February, 22nd, 2019

SIGNATURE

REVISED NEGATIVE DECLARATION - supersedes the Negative Declaration issued September 24, 2017 *

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 project. Based on a review of information about the project contained in this environmental assessment statement and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed project would not have a significant adverse impact on the environment.

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed action sought before the City Planning Commission would have no significant effect on the quality of the environment. Reasons supporting this determination are noted below.

Hazardous Materials, Air Quality & Noise: An (E) designation for Hazardous Materials, Air Quality & Noise (E-504) has been incorporated into the proposed action. Refer to "Appendix I: (E) Designation" for a list of the sites affected by the proposed (E) designation and applicable (E) designation requirements. With these measures in place, the proposed action would not result in significant adverse hazardous materials, air quality or noise impacts.

Shadows: A detailed analysis of shadows is included in this EAS. The analysis concludes that incremental shadows would be cast on two sunlight sensitive resources: The Harold Ickes Playground and The Backyard Garden. New incremental shadows would be cast on portions the Backyard Garden on all four analysis days. New shadows will cover between 5% and 50% of the garden for periods ranging from 6 hours and 2 minutes on December 21, to 8 hours and 53 minutes on March 21. No part of the garden would be in constant shadow, as the shadow would sweep across the garden during the course of the day. As a result, the garden would receive sufficient sunlight during the growing season. New incremental shadows would also be cast on the Harold Ickes Playground on the March, May and June analysis days with durations ranging from 19 minutes on March 21 to 2 hours and 28 minutes on June 21. These shadows would also sweep across the playground between the hours of 5:57a.m. and 8:25 a.m., which is typically prior to the time of substantial use. No other open space, historic, or other resources would be affected by shadows generated by the proposed actions. The proposed actions would not result in any significant adverse shadows impacts.

Urban Design and Visual Resources: The EAS contains a detailed analysis of urban design and visual resources. It concludes that the proposed actions would not result in any significant impacts to the visual resources, or any change to the arrangement or orientation of surrounding streets or sidewalks in the vicinity of the affected area. The proposed actions would not result in significant adverse impacts to urban design or visual resources.

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

TITLE	LEAD AGENCY
Acting Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME	DATE
Olga Abinader	02/22/2019

Olga Abinader

Appendix 1: (E) Designations

To ensure that there would be no significant adverse **hazardous materials** impacts associated with the proposed project, an E designation (E-**504**) will be placed on the project sites as follows:

Potential Development Site 2 (non-applicant owned): **Block 352, Lots 1, 3**

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

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To ensure that there would be no significant adverse **air quality** impacts associated with the proposed project, an E designation (E-**504**) will be placed on the project sites as follows:

Projected Development Site 1 (applicant owned): **Block 352, Lot 60**

Any new residential/commercial development or enlargement on the above-referenced property must use natural gas exclusively as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and ensure that the HVAC stack(s) is located at the highest tier, at least 68 feet above grade, and is at least 15 feet from the lot line facing Van Brunt Street.

To ensure that there would be no significant adverse **noise** impacts associated with the proposed project, an E designation (E-**504**) will be placed on the project sites as follows:

Projected Development Site 1 (applicant owned): **Block 352, Lot 60**

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all building's facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

Projected Development Site 2 (non- applicant owned): **Block 352, Lot 1, 3**

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all building's facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE 02/25/2019
SIGNATURE	

*Following certification of the related land use application (ULURP Nos. C180294ZMK and N180295ZRK) on September 24, 2018, the City Planning Commission is anticipated to modify the proposed rezoning from R7A/C2-4 to R6A/C2-4. This Revised Negative Declaration supersedes the Negative Declaration issued September 21, 2018 and reflects the Revised EAS dated February 22, 2019 which assesses the potential CPC Modification to the application. As described in the Revised EAS, the change would not alter the conclusions of the previous EAS. The proposed (E) designation (E-504) related to Hazardous Materials, Air Quality and Noise would continue to apply. The (E) designation related to air quality affecting Projected Development Site 1 would be modified. These changes would not alter the conclusions of the EAS or Negative Declaration.

Appendix E - Technical Memorandum- Revised CEQR EAS with Revised Zoning Map Amendment Proposal

Technical Memorandum

41 Summit Street Rezoning

CEQR No. 18DCP123K

ULURP No. 1802994ZMK, N180295ZRK

1- Introduction

On September 21st, 2018, the New York City Department of City Planning (DCP), as lead agency, issued a Negative Declaration for the 41 Summit Street Rezoning Environmental Assessment Statement (EAS). The EAS considered discretionary actions proposed by 41 Summit Street LLC, (the "Applicant") that included a zoning map amendment that would rezone a portion of Brooklyn Block 352 in the Columbia Waterfront District of Brooklyn Community District 6, and a related zoning text amendment to Appendix F of the New York City Zoning Resolution ("ZR") to establish the proposed R7A/C2-4 zoning district as a Mandatory Inclusionary Housing (MIH) Area subject to affordability requirements of the MIH program. The Proposed Zoning Map Amendment would change the zoning on Brooklyn Block 352, Lots 1, 3, and 60 from M1-1 to R7A/C2-4.

The Proposed Actions would facilitate the development of a new seven-story (plus cellar) residential building at 41 Summit Street containing seven dwelling units.

The below text describes the Future With-Action Scenario for the Rezoning Area.

<u>Block 352, Lot 60-Projected Development Site No.1</u>

Under the Future With-Action Scenario, it is assumed that Block 352, Lot 60 would be developed to the maximum FAR of 4.0. Additionally, the mapping of a C2-4 commercial overlay over the rezoning area is assumed to induce a ground-floor commercial use on the proposed development site. The C2-4 overlay allows a FAR of 2.0 when mapped with the R7A district and allows typical retail uses, including neighborhood grocery stores, restaurants and beauty parlors. On the 2,500 sf lot, it is assumed that the proposed action would result in approximately 7,500 sf of residential floor area and 2,500 sf of commercial floor area. Estimating approximately 850 sf per dwelling unit, it is assumed that 9 residential units would be constructed on-site. As Projected Development Site 1 consists of a single development of not more than ten dwelling units and not more than 12,500 square feet of residential floor area, it is exempt from providing affordable units under the MIH program. It is assumed that parking requirements would be waived pursuant to ZR § 25-261 as the proposed development would require less than 15 spaces.

The maximum allowable height for an MIH development in an R7A district (95 feet) cannot be achieved at Projected Development Site 1 as the projected development would not include affordable units. A

building height of 65 feet is assumed for Projected Development Site 1 due to the transition rule contained in ZR § 23-693, which limits the height of a building within 25 feet of an R6B zoning district to 65 feet.

Block 352, Lots 1 and 3 -Projected Development Site No.2

Under the Future With-Action Scenario, it is assumed that Block 352, Lots 1 and 3 would be combined and developed to the maximum FAR of 4.6. Additionally, the mapping of a C2-4 commercial overlay over the rezoning area is assumed to induce a ground-floor commercial use on the site. On a 7,997 sf lot, it is assumed that the proposed action would result in approximately 28,717 sf of residential floor area and 7,977 sf of commercial floor area. Estimating approximately 850 sf per dwelling unit, it is assumed approximately 34 residential units would be constructed on-site. Under the 30 percent MIH option, the proposed rezoning would result in the creation of approximately 10 units affordable to families with incomes averaging 80 percent of the AMI. It is assumed that parking requirements would be waived pursuant to ZR § 25-261 as the proposed development would require less than 15 spaces. A building height of 95 feet, the maximum allowable height for an MIH development with qualifying ground floor use, is assumed for Projected Development Site 2.

The September 2018 EAS was subsequently revised in February of 2019 to reflect an update to the Applicant's requested Zoning Map Amendment. The Zoning Map Amendment has been revised. The Applicant is now proposing an R6A/C2-4 zoning district over the Rezoning Area (Block 532, Lots 1, 3, and 60). The September 2018 EAS was analyzed assuming that an R7A/C2-4 zoning district would be mapped over the Rezoning Area.

The Reasonable Worst Case Development Scenario (RWCDS) in the September 2018 EAS assumed that Projected Site 1 would be constructed to an FAR of 4.0 and a height of 65 feet. It was assumed that the building would have 2,500 gsf of commercial floor area and 7,500 gsf of residential floor area with 9 residential dwelling units.

The RWCDS in the September 2018 EAS assumed that Projected Site 1 would be constructed to an FAR of 4.6 and a height of 95 feet. It was assumed that the building would have 7,977 gsf of commercial floor area and 28,717 gsf of residential floor area with 34 dwelling units.

Since the issuance of the Negative Declaration, the New York City Planning Commission is considering a modification to the Zoning Map Amendment from an R7A/C2-4 to R6A/C2-4. This would lower the amount of FAR that would be permitted on the Projected Development Sites within the Rezoning Area. The change in the Zoning Map Amendment would impact the Projected Development on both Projected Development Sites 1 and 2. The maximum FAR on Projected Site 1 would be 3.0 with a maximum height of 55 feet and the maximum FAR on Projected Site 2 would be 3.6 with a maximum height of 85 feet. The

Technical Memorandum describes the Proposed Actions under the City Planning Commissions' potential modification and examines whether it would result in any new or different significant adverse environmental impacts not already identified in the September 2018 EAS and Negative Declaration.

2- *Description of the Previous Proposed Actions and Reasonable Worst Case Development Scenario*

Zoning Map Amendment

The previous Zoning Map Amendment would rezone Brooklyn Block 352, Lots 1, 3, and 60 from M1-1 to R7A/C2-4.

Zoning Text Amendment

In addition to the Zoning Map Amendment, the Applicant is also requesting a Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designated Areas to establish the Rezoning Area as a Mandatory Inclusionary Housing ('MIH") Area.

As described in the September 2018 RWCDS, it is expected that the Proposed Action would result in development slightly larger than what the applicant is proposing on Lot 60 (Projected Development Site 1) and would also result in development on Lots 1 and 3, which would be merged as one development site (Projected Development Site 2). The RWCDS for each Projected Site is below.

<u>Block 352, Lot 60-Projected Development Site No.1</u>

Under the Future With-Action Scenario, it is assumed that Block 352, Lot 60 would be developed to the maximum FAR of 4.0. Additionally, the mapping of a C2-4 commercial overlay over the rezoning area is assumed to induce a ground-floor commercial use on the proposed development site. The C2-4 overlay allows a FAR of 2.0 when mapped with the R7A district and allows typical retail uses, including neighborhood grocery stores, restaurants and beauty parlors. On the 2,500 sf lot, it is assumed that the proposed action would result in approximately 7,500 sf of residential floor area and 2,500 sf of commercial floor area. Estimating approximately 850 sf per dwelling unit, it is assumed that 9 residential units would be constructed on-site. As Projected Development Site 1 consists of a single development of not more than ten dwelling units and not more than 12,500 square feet of residential floor area, it is exempt from providing affordable units under the MIH program. It is assumed that parking requirements would be waived pursuant to ZR § 25-261 as the proposed development would require less than 15 spaces.

The maximum allowable height for an MIH development in an R7A district (95 feet) cannot be achieved at Projected Development Site 1 as the projected development would not include affordable units. A building height of 65 feet is assumed for Projected Development Site 1 due to the transition rule

contained in ZR § 23-693, which limits the height of a building within 25 feet of an R6B zoning district to 65 feet.

Block 352, Lots 1 and 3 -Projected Development Site No.2

Under the Future With-Action Scenario, it is assumed that Block 352, Lots 1 and 3 would be combined and developed to the maximum FAR of 4.6. Additionally, the mapping of a C2-4 commercial overlay over the rezoning area is assumed to induce a ground-floor commercial use on the site. On a 7,997 sf lot, it is assumed that the proposed action would result in approximately 28,717 sf of residential floor area and 7,977 sf of commercial floor area. Estimating approximately 850 sf per dwelling unit, it is assumed approximately 34 residential units would be constructed on-site. Under the 30 percent MIH option, the proposed rezoning would result in the creation of approximately 10 units affordable to families with incomes averaging 80 percent of the AMI. It is assumed that parking requirements would be waived pursuant to ZR § 25-261 as the proposed development would require less than 15 spaces. A building height of 95 feet, the maximum allowable height for an MIH development with qualifying ground floor use, is assumed for Projected Development Site 2.

3- Description of the Current Proposed Actions and RWCDS

Since the issuance of the September 2018 EAS, the City Planning Commission is considering modifications to the Proposed Actions as follows:

- Revising the Proposed Zoning Map Amendment to R6A/C2-4 (down from R7A/C2-4)

As a result of the proposed potential modification to the Rezoning Area, the above referenced lots and Projected Sites would be mapped with an R6A/C2-4 zoning district as opposed to an R7A/C2-4 zoning district. Therefore, the projected development on both Projected Development Sites 1 and 2 would be effected by the revision to the Proposed Actions. The modifications to the EAS analyzed in September of 2018 and revised in February of 2019 would result in a smaller RWCDS. See Table 1 below.

Table 1- Comparison of Previous and Current RWCDS

Use	Previous RWCDS	Current RWCDS	Difference
Residential	36,217 gsf UG 2 residential floor area (43 dwelling units)	29,362 gsf UG 2 residential floor area (34 dwelling units)	-6,855 gsf of UG 2 residential floor area (-7 dwelling units)
Commercial	10,477 gsf UG 6 commercial floor area	10,477 gsf UG 6 commercial floor area	0

The RWCDS that would result from the potential modifications to the Proposed Actions would include only 34 dwelling units occupying 29,362 gsf of residential floor area (7 fewer dwelling units) and the same amount of commercial floor area when compared to what was originally analyzed in the September 2018 EAS. The build year remains unchanged. The potential modifications to the Proposed Actions and RWCDS would not result in any additional discretionary actions.

4- Likely Effects of the Proposed Modifications

The September 2018 EAS and Negative Declaration concluded that the Proposed Actions would not have the potential for significant adverse impacts related to the environment. As discussed above, the September 2018 EAS was revised in February of 2019 to reflect an update to the Zoning Map Amendment. The Zoning Map Amendment was modified from a proposed R7A/C2-4 zoning district to an R6A/C2-4 zoning district. This change would lower the amount of available FAR on Projected Development Sites 1 and 2 and would result in a smaller overall Projected Development program under the Proposed Actions. The screening and detailed analyses prepared for the original Proposed Actions in the September 2018 EAS and the February 2019 revised EAS concluded that the current Proposed Actions would not have the potential for significant adverse impacts in the following area: Land Use, Zoning, and Public Policy, Shadows, Historic and Cultural Resources, Urban Design and Visual Resources, Hazardous Material, Air Quality, Noise, Neighborhood Character, Construction.

Since the potential modifications resulted in a smaller RWCDS, and is resulting in fewer dwelling units, in the Future With-Action Scenario, the revised EAS based on the current Proposed Actions did not meet or exceed CEQR Technical Manual thresholds for any new impact categories.

As discussed above, the RWCDS resulting from the potential modifications to the Proposed Actions would result in less projected development within the proposed Rezoning Area than what was originally analyzed in the September 2018 EAS. That is because the proposed zoning district (R6A/C2-4) allows for less FAR than the originally analyzed zoning district (R7A/C2-4).

The following paragraphs provide technical explanations for each analysis category that was analyzed in the August 2018 EAS and why the current proposed Actions would not result in significant environmental impacts. Appropriate maps are also included.

Land Use, Zoning, and Public Policy

Land Use

Under the With-Action Scenario, the Proposed Rezoning would amend the existing M1-1 district to an R6A/C2-4 zoning district. In order to present a conservative assessment, the With-Action Scenario assumed that Projected Development Site 1 would be constructed to an FAR of 3.0 with a height of 55 feet due to the transition rule contained in ZR § 23-693, which limits the height of a building in an R6A

zoning district within 25 feet of an R6B zoning district to 55 feet. The building would have approximately 8,250 gsf of floor area (2,500 gsf commercial floor area and approximately 7 dwelling units).

Additionally, Projected Development Site 2 would be a building constructed to an FAR of 3.6 and a height of 85 feet. The building would have approximately 31,589 gsf (7,977 gsf of commercial floor area and 27 dwelling units).

Recent years have seen residential, commercial and community facility development in close proximity to the rezoning area, with several non-conforming residential uses within 400 feet of the rezoning area. The character of the neighborhood has been changing from industrial to residential over the course of the past decade or so. The proposed action would reinforce this trend towards more active residential and ground floor retail uses, which are common in the residentially zoned areas to the east. The proposed mixed residential and commercial development would be compatible with the surrounding uses. The Proposed Actions would not introduce any new or non-conforming land uses or Use Groups that are not already located within the study area. The With-Action Scenario would see denser development of three under-utilized lots, which would create a more vibrant, mixed use stretch Summit Street. As such, no significant adverse impacts with respect to land use are expected and no further analysis is required.

Zoning

The Proposed Actions would change the existing M1-1 zoning district to an R6A/C2-4 zoning district over Brooklyn Block 352, Lots 1, 3, and 60. Doing so would increase the residential floor area in the Rezoning Area and Projected Development Sites, which does not currently permit housing under existing M1-1 zoning regulations. The Proposed Action would increase the allowable FAR on the sites to 3.6.

Within the surrounding study area, several rezonings and BSA variances have been approved to reflect the changing conditions of the neighborhood from industrial to residential use. The proposed rezoning would be consistent with the development of the neighborhood. The proposed R6A/C2-4 zoning district is appropriate in terms of density and permitted bulk as rezoning area is uniquely located at a node between the neighborhoods of Red Hook and Carroll Gardens, is located near the Gowanus Expressway and the entrance to the Hugh L. Carey Tunnel, and is located across from a park, allowing for greater light and air and distinguishing it from the more uniform mid-block character within other portions of the study area. In addition, the proposed rezoning will bring the existing non-conforming and non-complying building on Lot 3 into conformance and compliance in terms of its existing residential use and its existing floor area and FAR. Moreover, the proposed C2-4 overlay is consistent with the existing commercial uses on Lots 1 (bank) and 3 (former restaurant, available commercial space), and would ensure the continued conformance of these existing buildings in terms of their existing commercial uses

The proposed action would change the existing M1-1 district to an R6A/C2-4 district over Block 352, Lots

1, 3, and 60. The proposed action would not have a significant impact on the extent of conformity with the current zoning in the surrounding area, and it would not adversely affect the viability of conforming uses on nearby properties. Significant adverse impacts to zoning are not anticipated and further zoning analysis is not warranted.

Public Policy

The Rezoning Area is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The proposed action is also not a large publically sponsored project, and as such, consistency with the City's *PlaNYC 2030* for sustainability is not warranted. However, as the Rezoning is located in the Coastal Management Zone, a consistency review with the New York City Waterfront Revitalization Program was warranted.

The Rezoning Area is located within New York City's designated coastal zone and, as such, is subject to review for its consistency with the City's Waterfront Revitalization Program (WRP). In accordance with the guidelines of the 2014 *CEQR Technical Manual*, a preliminary evaluation of the proposed action's potential for inconsistency with the new WRP policies was undertaken. Actions located within the City's Coastal Zone generally require submission of the WRP Consistency Assessment Form (CAF). This form is intended to assist an applicant in certifying that a proposed action is consistent with the WRP. The completed CAF and accompanying information is used by City and State agencies to review the applicant's certification of consistency.

The City's WRP is comprised of ten principal policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. A proposed action may be deemed consistent with the WRP when it would not substantially hinder and, where possible, would promote one or more of the ten WRP policies dealing with: (1) residential and commercial development; (2) water-dependent and industrial uses; (3) commercial and recreation boating; (4) coastal ecological systems; (5) water quality; (6) flooding and erosion; (7) solid waste and hazardous substances; (8) public access; (9) scenic resources; and (10) historical and cultural resources.

The CAF requires a proposed action to be characterized according to a list of 45 sub-policies that fall under the ten major policy objectives. For each sub-policy the action is to be characterized as to whether it will "promote," "hinder," or have no relevance to the policy. A "Promote" or "Hinder" response to any of the CAF questions indicates that a particular policy of the WRP may be relevant, thus warranting further examination. An "N/A" response indicates the particular policy is not applicable to the proposed action. Per the CAF, the following policies warranted further assessment: 1.1, 1.3, 1.5 and 6.2. An assessment

of the proposed action's consistency with each of these policies was conducted in the September 2018 EAS and it was determined that no adverse impacts expected as a result of the Proposed Actions and that the Proposed Actions would not hinder any WRP policy.

Shadows

A shadows radius of 4.3 times the maximum allowable height of Projected Sites 1 and 2 (55 feet and 85 feet respectively) was calculated, resulting in a shadow radius of 236 feet and 365 feet respectively under the proposed R6A/C2-4 zoing district.

The rezoning area is located on the same block as the community garden known as "The Backyard Garden" and is located northeast of the City's Harold Ickes Playground.

Consequently, further shadow screening assessments were undertaken. In the September 2018 EAS, a detailed shadows study was undertaken to determine the potential impacts from the shadows resulting from Projected Sites 1 and 2 under R7A/C2-4 zoning district regulations. The September 2018 EAS analyzed Projected Sites 1 and 2 assuming maximum building heights of 65 and 95 feet respectively with shadow radii of 280 feet for Projected Development Site and 409 feet for Projected Development Site 2. The detailed shadow study concluded the following:

- The Proposed Action would cast incremental shadows on the Backyard Garden on all four analysis dates, with durations ranging from 6 hours and 2 minutes on December 21, to 8 hours and 53 minutes on March 21. However, no part of the garden would be in constant shadow, as the shadow would sweep across the garden during the course of the day. As a result, the garden would receive sufficient sunlight during the growing season, and the impact to the garden from project generated shadows is not considered to be significant.
- The Proposed Action would also cast an incremental shadow on a portion of the Harold Ickes Playground during the March, May and June analysis periods, with durations ranging from 19 minutes on March 21 to 2 hours and 28 minutes on June 21. No new shadow would be cast on the playground during the December analysis date. These shadows would sweep across the playground between the hours of 5:57 a.m. and 8:25 a.m., which is typically prior to the time of substantial use. As a result, a substantial reduction in the usability of the Harold Ickes Playground would not occur in the future with the proposed action and significant adverse shadow impacts are not expected.

Since it was determined that no significant adverse impacts with regards to shadows would occur under the R7A/C2-4 zoning, which allowed for building heights of 65 and 95 feet on Projected Sites 1 and 2 respectively, it is fair to say that no significant adverse impacts with regards to shadows would occur

under R6A/C2-4 zoning, which allows for less density than the previously proposed zoning district and allows for building heights of only 55 and 85 feet on Projected Sites 1 and 2.
Additional shadows figures, showing the tier three and detailed shadow studies for Projected Sites 1 and 2 under R6A/C2-4 zoning regulations are attached at the end of this technical memorandum.

Historic and Cultural Resources

According to *CEQR Technical Manual* guidelines, impacts on historic resources are considered on those sites affected by the Proposed Actions and in the area surrounding identified development sites. The historic resources study area is therefore defined as the Project Site plus an approximately 400-foot radius around the Proposed Action area.

The Rezoning Area is not a designated local or S/NR historic resource or property, nor is the site part of any designated historic district. The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources and a response was received on February 29th, 2016, indicating that the projected development site has no architectural significance.

In order to determine whether the projected development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. No historic or architectural resources were identified within the 400-foot study area. Therefore, no significant adverse impacts on historic or architectural resources are expected as a result of the Proposed Actions, and further assessment is not warranted.

Unlike the architectural evaluation of a study area that extends beyond the footprint of a project's block and lot lines, the analysis of potential and/or projected impacts to archaeological resources is controlled by the actual footprint of the limits of soil disturbance. Archeological resources are physical remains, usually subsurface, of the prehistoric and historic periods such as burials, foundations, artifacts, wells and privies. The *CEQR Technical Manual* requires a detailed evaluation of a project's potential effect on the archeological resources if it would potentially result in an in-ground disturbance to an area not previously excavated. The existing rezoning area has not been recently disturbed and no recent or distant cultural or archaeological significance have been attached to this area. Further, utilizing the NYS Office of Parks, Recreation and Historic Preservation's "Cultural Resource Information System" (CRIS) mapper, the Rezoning Area does not fall within an archaeologically sensitive area. Based on both current and historic photoreconnaissance of the Rezoning Area, there is little potential for impact to any known or unknown resource due to development. The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received on February 29th, 2016, indicating that the projected development site has no architectural significance. Therefore, significant adverse impacts to archaeological resources are not expected as a result of the Proposed Actions, and further analysis is not warranted.

As the size of the Rezoning Area did not change, and the proposed Zoning Map Amendment would allow for less FAR than the September 2018 EAS, no significant adverse impacts with regards to historic and cultural resources are expected and no further analysis is required.

Urban Design and Visual Resources

As the Projected Development Sites would be built within the existing lot footprint on the Project Sites, the development in the With-Action Scenario would not alter or disrupt the existing street grid or change the arrangement and orientation of streets in the area. Additionally, the Proposed Action would not permanently alter the existing sidewalks that border the Project Sites to the east and west. Furthermore, there would not be any changes to the existing sidewalk layout. Overall, the development in the Future With-Action would not alter with the existing streets, street grid, streetscape, and sidewalks.

The neighborhood surrounding the Rezoning Area has become increasingly residential in nature, with residential use located directly adjacent to the proposed Rezoning Area to the east, and residential and mixed-use (residential and commercial) buildings as the primary built form to the north and east. The proposed mixed-use buildings would also be consistent with the neighborhood built character, as a five-story, approximately 20,000 square foot building (3.97 FAR) is located to the north on Carroll Street, and a seven-story residential building with approximately 17,000 square feet of floor area (2.57 FAR) is located to the northeast on Columbia Street.

While the proposed buildings would alter views of the projected development sites as witnessed from pedestrians on Summit Street and Hamilton Avenue, significant adverse impacts to urban design and visual resources would not occur. The proposed action would not result in any conditions that would merit further detailed assessment of urban design and visual resources. Several other mid-rise buildings are found in the surrounding area. The proposed action would also not block any view corridors or views to/from any natural areas with rare or defining features, as the proposed building is contained to the subject site, and would not intrude or impose into the Backyard Garden or the Harold Ickes Playground. Therefore, the Proposed Action is not expected to result in any significant adverse urban design or visual resource related impacts.

A No-Action and With-Action view of the Projected Sites under the proposed R6A/C2-4 zoning are attached after the technical memorandum. As the September 2018 EAS demonstrated that there would be no significant adverse impacts with regards to urban Design under the R7A/C2-4 zoning, there will not be any significant adverse impacts regards to urban design under the R6A/C2-4 zoning district currently being proposed, which allows for less FAR and less height than the R7A/C2-4 zoning district.

Hazardous Materials

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

Projected Development Site 1 (Applicant-controlled) is presently improved with a two-story, approximately 3,500 sf vacant industrial-use building, which would be demolished under the proposed action. Due to the industrial history of the site and surrounding area, and because the adjacent building at 45 Summit Street (Block 352, Lot 53) has received an (E) designation for hazardous materials contamination, a Phase I Environmental Site Assessment (ESA) was undertaken .

The Phase I ESA, dated June 6, 2016, concluded that there were no Recognized Environmental Conditions (RECs), as defined by ASTM Practice E1527-13, associated with the site. However, due to the age of the on-site building, the potential for the presence of asbestos-containing materials and lead-based paint is considered likely. Thus the Phase ESA recommended additional survey work to confirm the presence or absence of these materials prior to any building demolition or disturbance.

The New York City Department of Environmental Protection (NYCDEP) reviewed the Phase I ESA and, based on the historical on-site and/or surrounding area land uses, has determined that a Phase II Environmental Site Assessment (Phase II) is necessary to adequately identify/characterize the surface and subsurface soils of Projected Development Site 1 (Applicant-controlled). Phase II Investigative Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities should be developed in accordance with the *CEQR Technical Manual* and submitted to DEP for review and approval. The Work Plan should include blueprints and/or site plans displaying the current surface grade and sub-grade elevations and a site map depicting the proposed soil, groundwater, and soil vapor sampling locations. Soil and groundwater samples should be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for the presence of volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls by EPA Method 8082, and Target Analyte List metals (filtered and unfiltered for groundwater samples). The soil vapor sampling should be conducted in accordance with NYSDOH's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The soil vapor samples should be collected and analyzed by a NYSDOH ELAP

certified laboratory for the presence of VOCs by EPA Method TO-15. An Investigative Health and Safety Plan (HASP) should also be submitted to DEP for review and approval. The Phase II Work Plan and HASP should be submitted to NYCDEP for review and approval prior to the start of any fieldwork.

In addition, based on prior on-site and/or surrounding area land uses which could result in environmental contamination, NYCDEP recommends that an (E) designation for hazardous materials be placed on the two parcels that comprise Projected Development Site 2 (and are not under the control of the Applicant). E # 504 was assigned to this project. The (E) designation text related to hazardous materials is as follows:

Task 1 – Sampling Protocol

The applicant submits to OER, for review and approval, a Phase 1 of the site along with a soil and groundwater 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 sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2 – Remediation Determination and Protocol

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

If remediation is indicated from the 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. An OER-approved construction-related health and safety plan would be implemented during evacuation and construction and activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.

With these (E) designations in place and assuming that a Phase II will be performed for Projected Development Site 1, significant adverse impacts related to hazardous materials are not expected, and no further analysis is warranted. Therefore, the proposed actions would not result in significant adverse impacts related to hazardous materials. These (E) designations are applicable to the modified Zoning Map Amendment as well.

Air Quality

As discussed above, the Applicant's Zoning Map Amendment is now proposing to map an R6A/C2-4 zoning district over Lots 1, 3, and 60, as opposed to an R7A/C2-4 zoning district. The revised (E) designation text would remain unchanged for HVAC.

Impact from Proposed HVAC system of Projected Site 1 on Projected Site 2 under #2 Fuel Oil and Natural Gas Options

Since the new rezoning proposalreduces the available FAR in the Rezoning Area (R7A/C2-4 to R6A/C2-4), the max gross square footage of Projected Site 1 reduced from 10,000 sqft to 8,250 sqft. It is likely that fewer pollutants would be emitted from the HVAC stack of Projected Site 1. Therefore, with the adoption of the same (E) Designation from the September 2018 EAS Projected Site 1 would not result in any potential significant adverse air quality impacts on Projected Site 2.

- **Projected Site 1 (Block 352, Lot 60)** - Any new residential/commercial development or enlargement on the above-referenced property must use natural gas exclusively as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and ensure that the HVAC stack(s) is located at the highest tier, at least 68 feet above grade, and is at least 15 feet from the lot line facing Van Brunt Street.

Impact from Existing Ventilation Tower of Hugh L. Carey Tunnel on Projected Sites 1 and 2

Because of the new R6A/C2-4 zoning proposal, the maximum height of Projected Development Site 2 is now 85 feet. According to the September 2018 EAS analysis, no exceedance was predicted over a height of 85 feet. Therefore, under the new proposed Zoning Map Amendment, there would be no adverse air quality impact from the existing ventilation tower from the Hugh L Carey Tunnel on Projected Sites 1 or 2. Therefore, the previous (E) Designation has been revised to remove any height restrictions on Projected Sites 1 and 2.

Noise

A noise measurement was conducted in front of Projected Sites 1 and 2 for the September 2018 EAS, assuming an R7A/C2-4 zoning district would be mapped over the Rezoning Area. Below, the noise measurement and subsequent analysis demonstrate that no significant impacts with regards to noise are expected as the result of the Proposed Actions.

Noise measurements were conducted on Hamilton Avenue in front of the Rezoning Area. A Type 2 Larson Davis LxT sound meter with wind shield was used to conduct the noise monitoring. The meter was placed on a tripod at a height of approximately five feet above the ground, away from any other surfaces and was calibrated prior to and following each monitoring session. Levels at the site were measured during the weekday peak hours of 8:00 a.m. to 10:00 a.m.; 12:00 p.m. to 1:00 p.m. and 4:00 p.m. to 6:00 p.m. An off-peak measurement was also taken between 2:00 p.m. and 4:00 p.m.

The highest recorded L_{10} reading was 69.9 db(A) during the 5:22 to 5:45 pm peak hour period. As such, no window-wall attenuation would be required. However, the L_{10} noise level would increase to 70.0 db(A) by the 2020 build year due to additional (background) traffic growth. Thus, in accordance with NYCDEP requirements, a 28 dB(A) window-wall noise attenuation would be required to achieve an acceptable interior noise level. This level of attenuation could be achieved with a closed-window situation and alternate means of ventilation, such as indoor air conditioning, heat pumps or split systems.

It is assumed that an (E) designation for noise would be placed on Projected Development Sites 1 and 2, which specifies that the above window-wall attenuation must be provided with a closed-window condition and alternate means of ventilation.

The E-Designation (E-504) should be placed on both Projected Development Sites 1 and 2. Therefore, the text of the E-Designation would be as follows:

Block 352, Lot 60 (Projected Development Site 1): In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all building's facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

Block 352, Lots 1 and 3 (Projected Development Site 2): In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dB(A) window/wall attenuation on all building's facades in order to maintain an interior noise level of 45 dB(A). In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

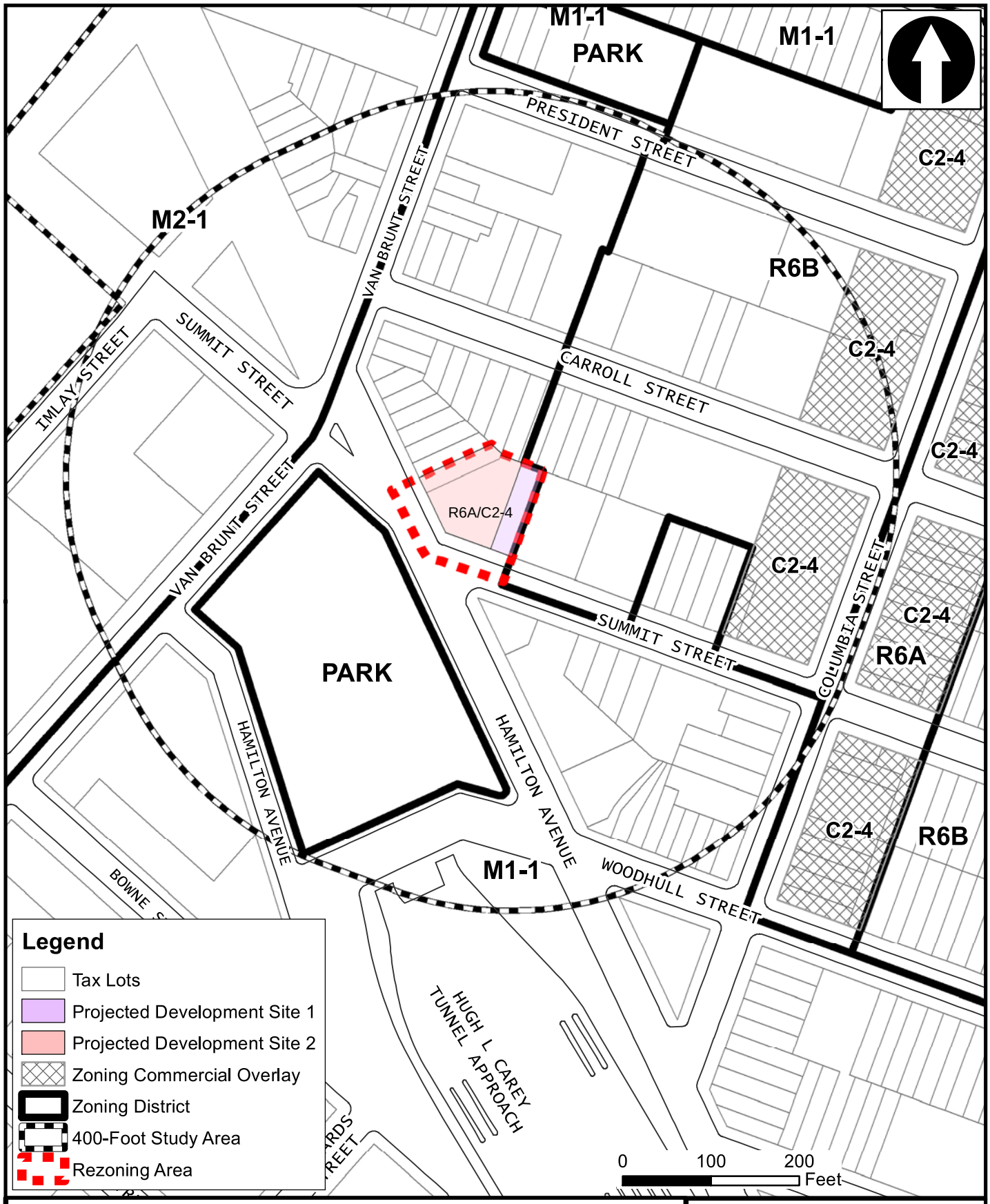
These (E) designations would remain in place under the newly proposed R6A/C2-4 Zoning Map Amendment. With the implementation of these (E) designations, no significant adverse impacts related to noise would occur. Therefore, the proposed action would not result in significant adverse noise impacts, and further assessment is not warranted.

Neighborhood Character

As this EAS has established, of the relevant technical areas specified in the *CEQR Technical Manual* that comprise neighborhood character, the Proposed Actions would not cause significant adverse impacts with regard to any of them. Moderate adverse effects that would potentially impact such a defining feature, either singly or in combination, have also not been identified for more than one technical area. Therefore, as the proposed actions would not have a significant adverse neighborhood character impact and would not result in a significant adverse impact to a defining feature of the neighborhood, further analysis is not necessary.

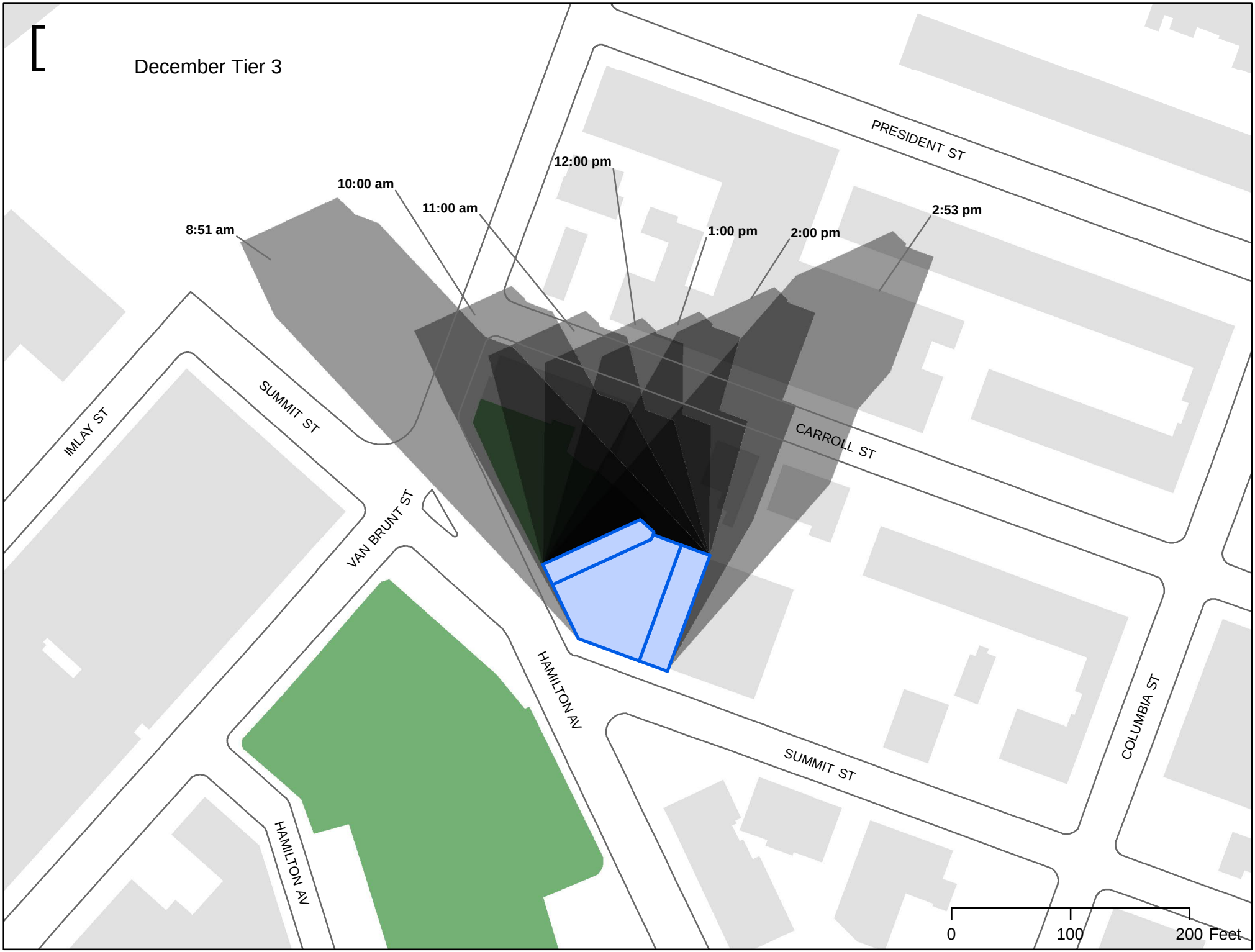
Construction

The September 2018 EAS submission found that construction-related activities are not expected to have any significant adverse impacts on traffic, air quality, noise, historic resources, or hazardous materials conditions as a result of the Proposed Actions. The February 2019 EAS looks at an RWCDS with a smaller increment than the September 2018 RWCDS. Under the potential CPC modification to the Proposed Actions, the Zoning Map Amendment would rezone Block 352, Lots 1, 3, and 60 from M1-1 to R6A/C2-4, which allows for less FAR and less height than the previously proposed R7A/C2-4 zoning district. Given the smaller development scenario, and smaller rezoning area, no significant adverse impacts with regards to construction are expected as a result of the Proposed Actions and no further analysis is required.



Environmental Assessment Statement
41 Summit Street Rezoning
Red Hook, Brooklyn, NY

Zoning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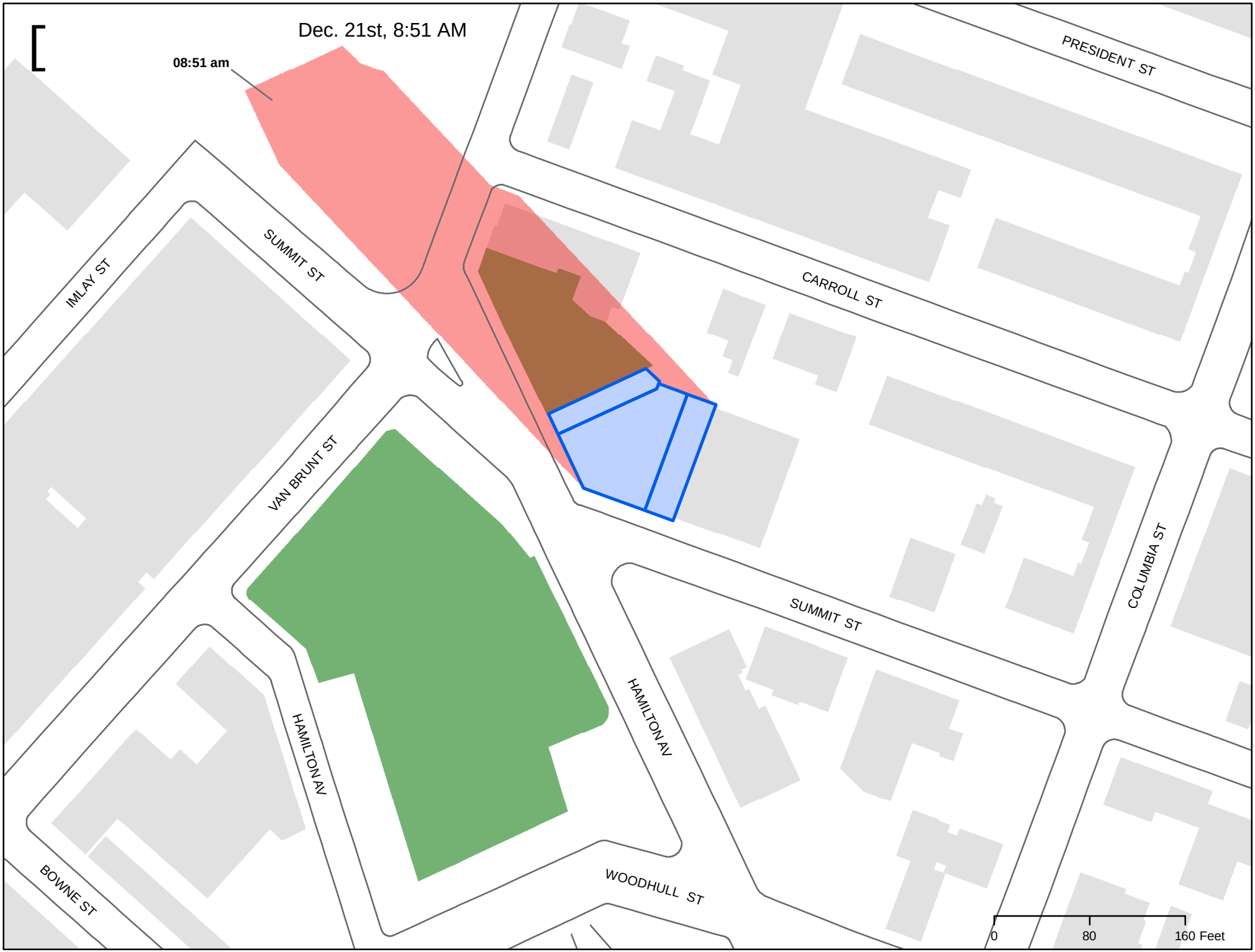
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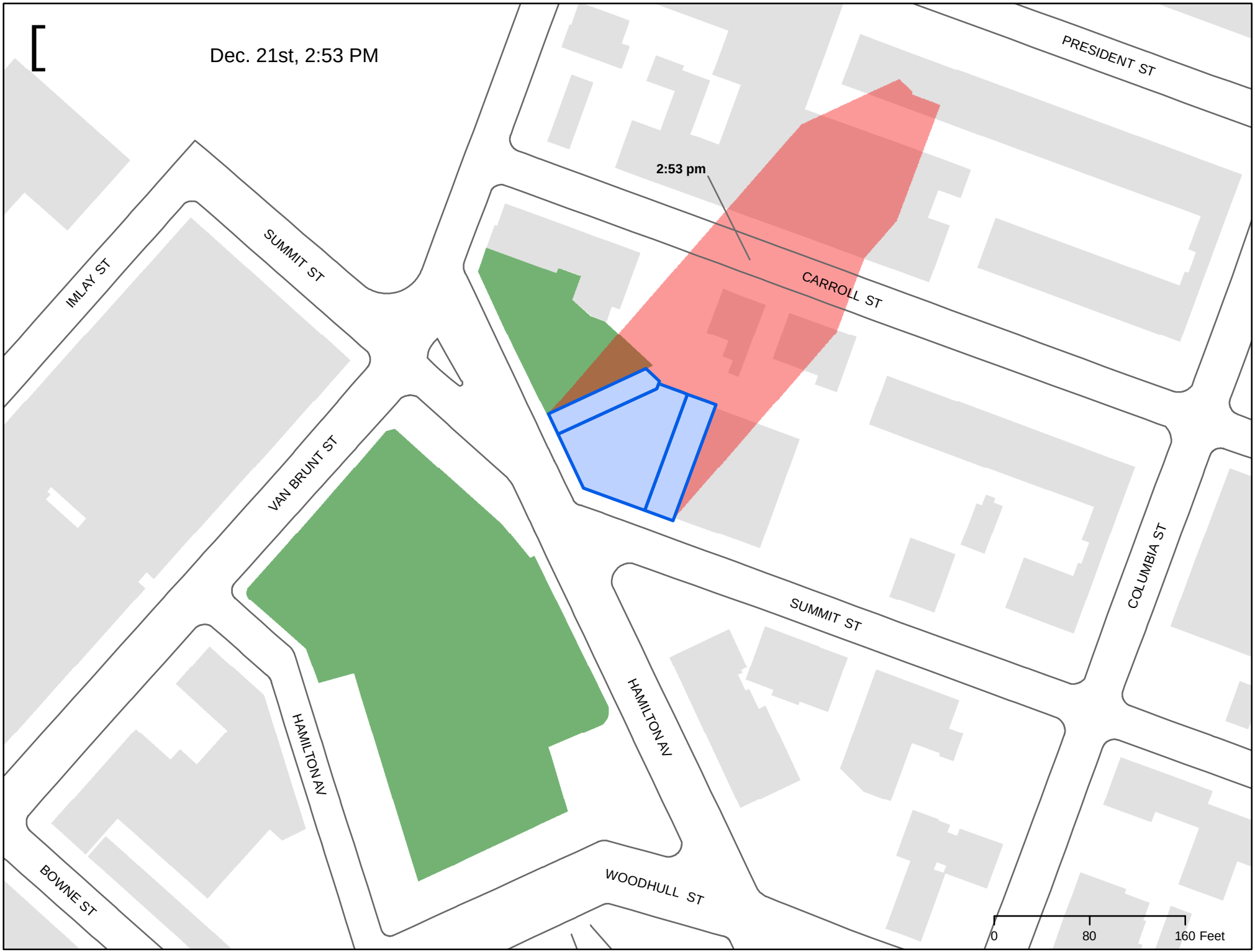
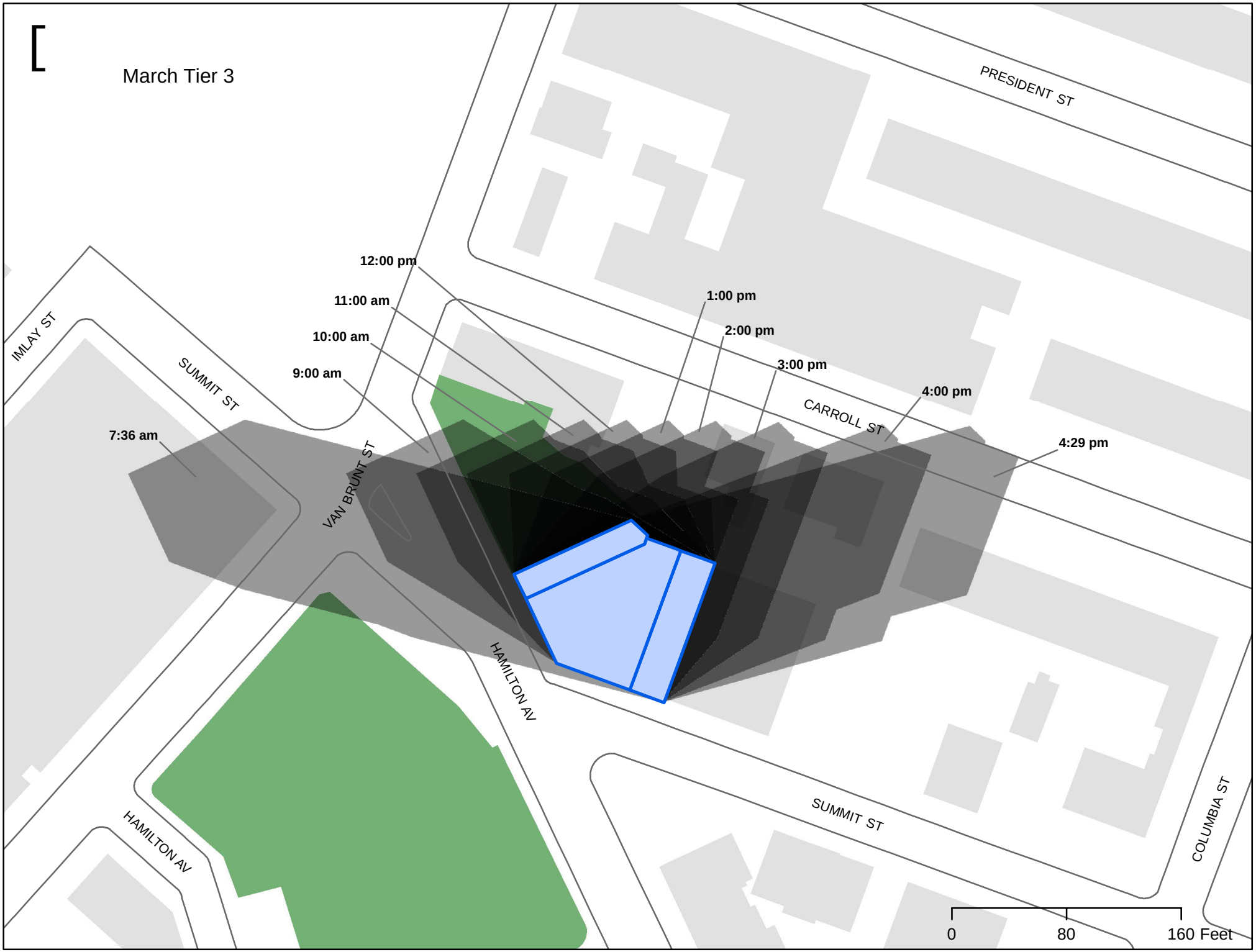
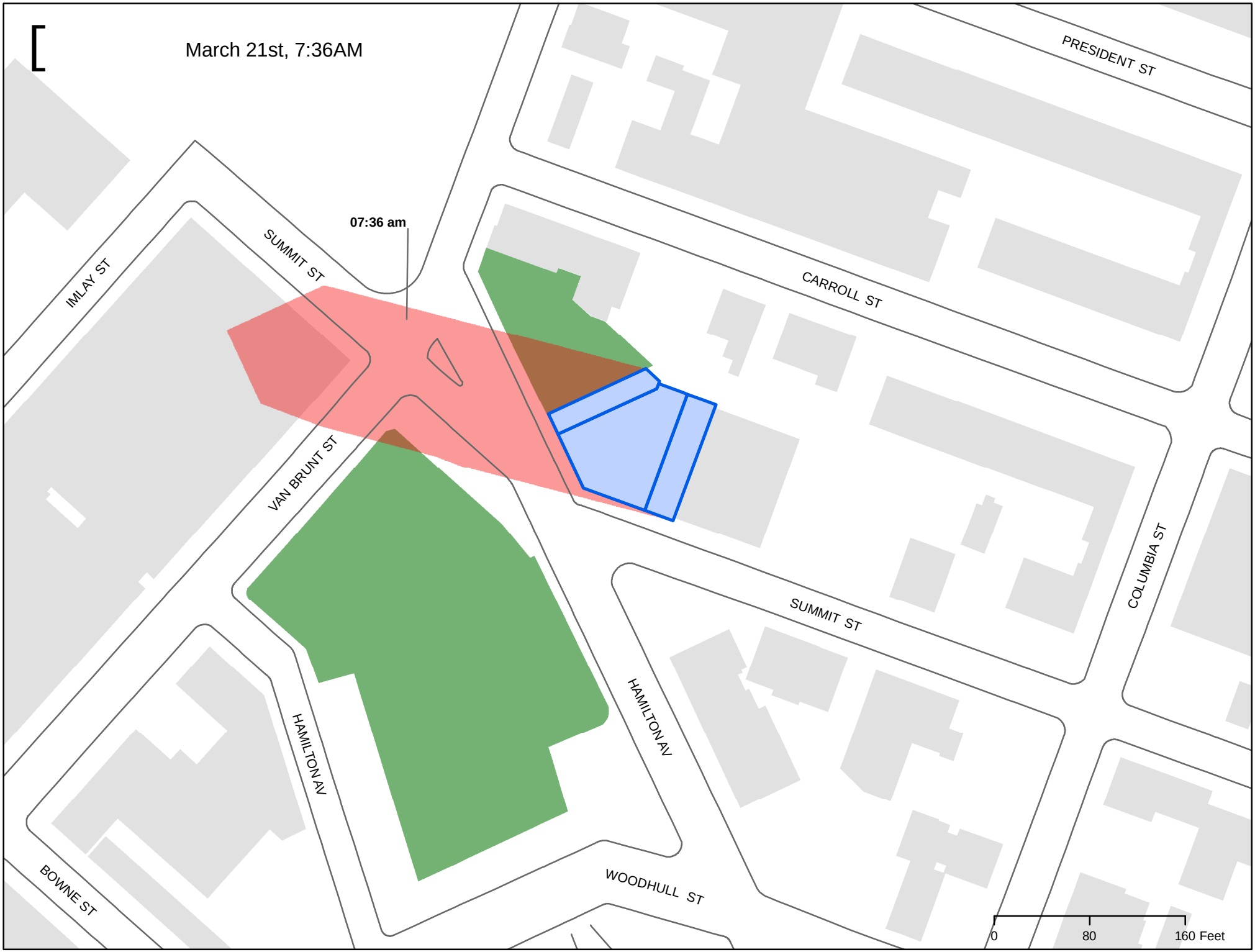
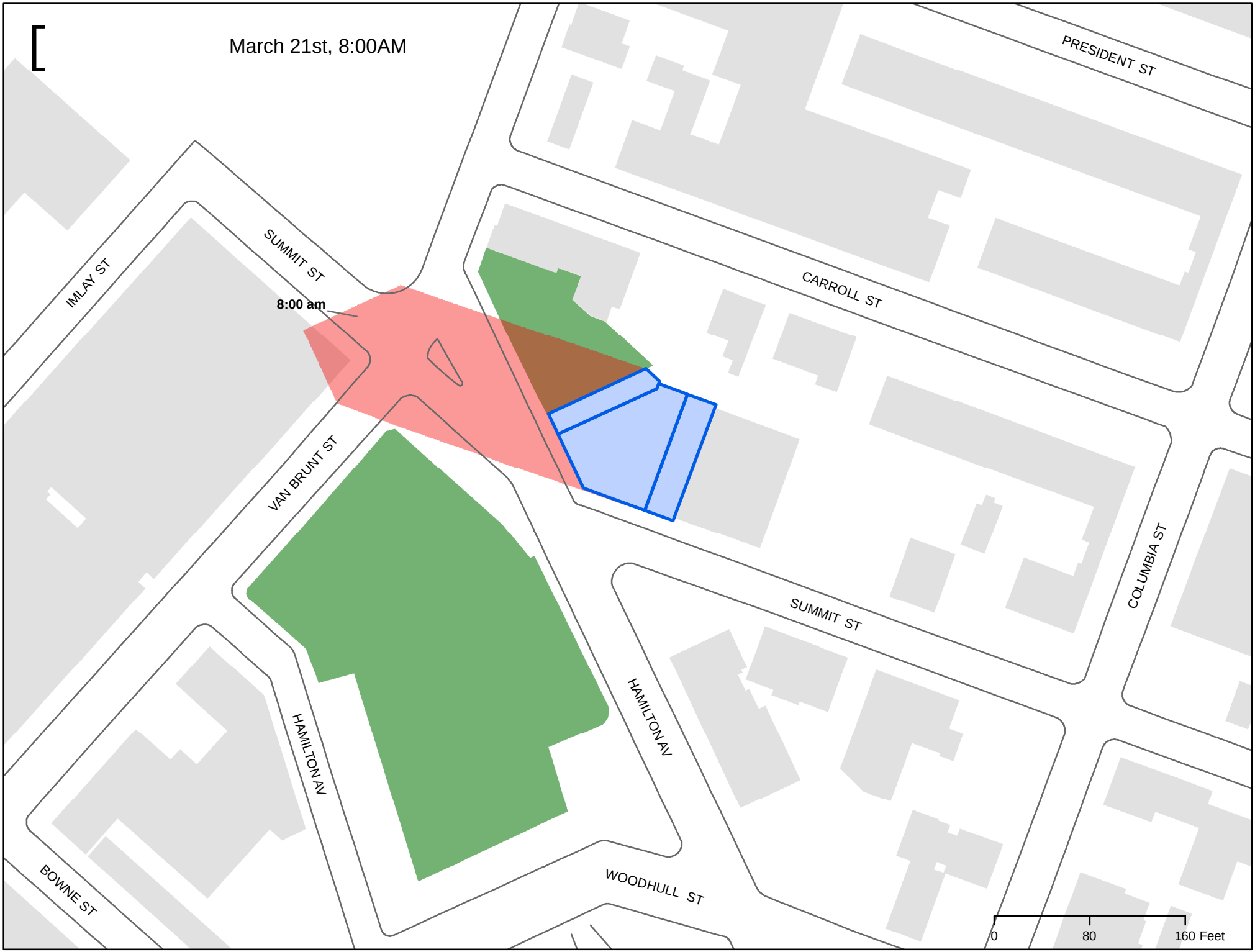
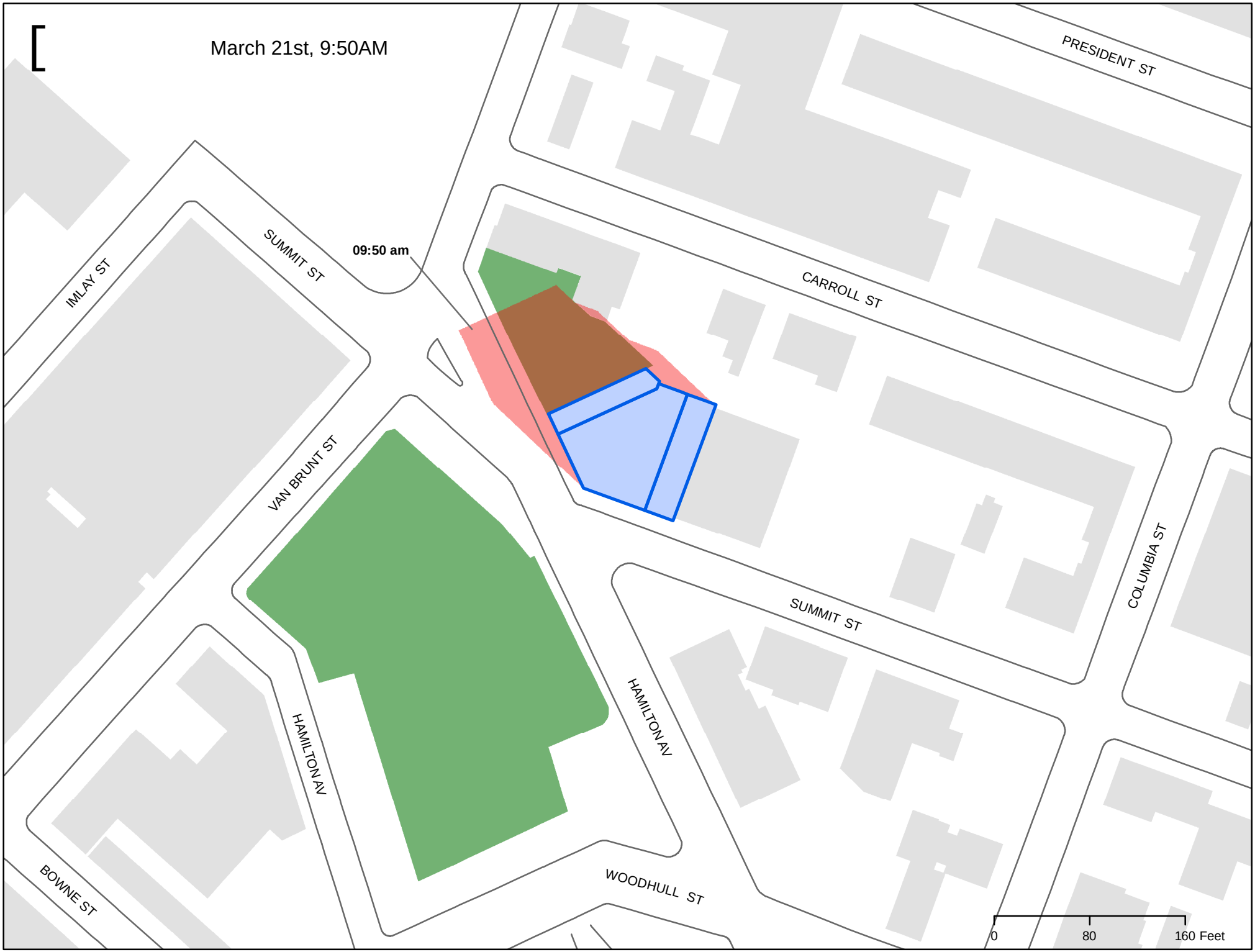
80
160 Feet

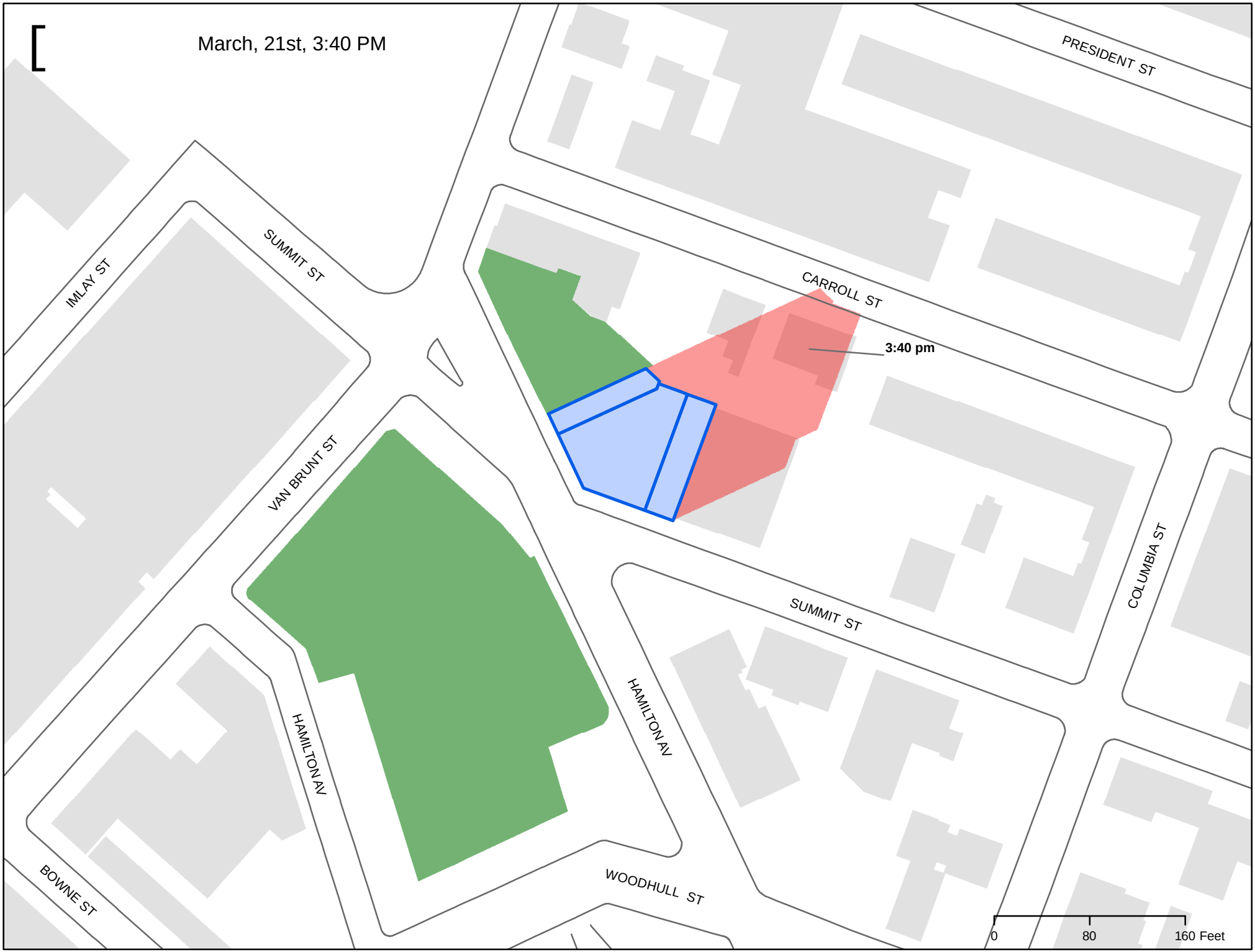

Dec. 21st, 2:53 PM
2:53 pm
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet

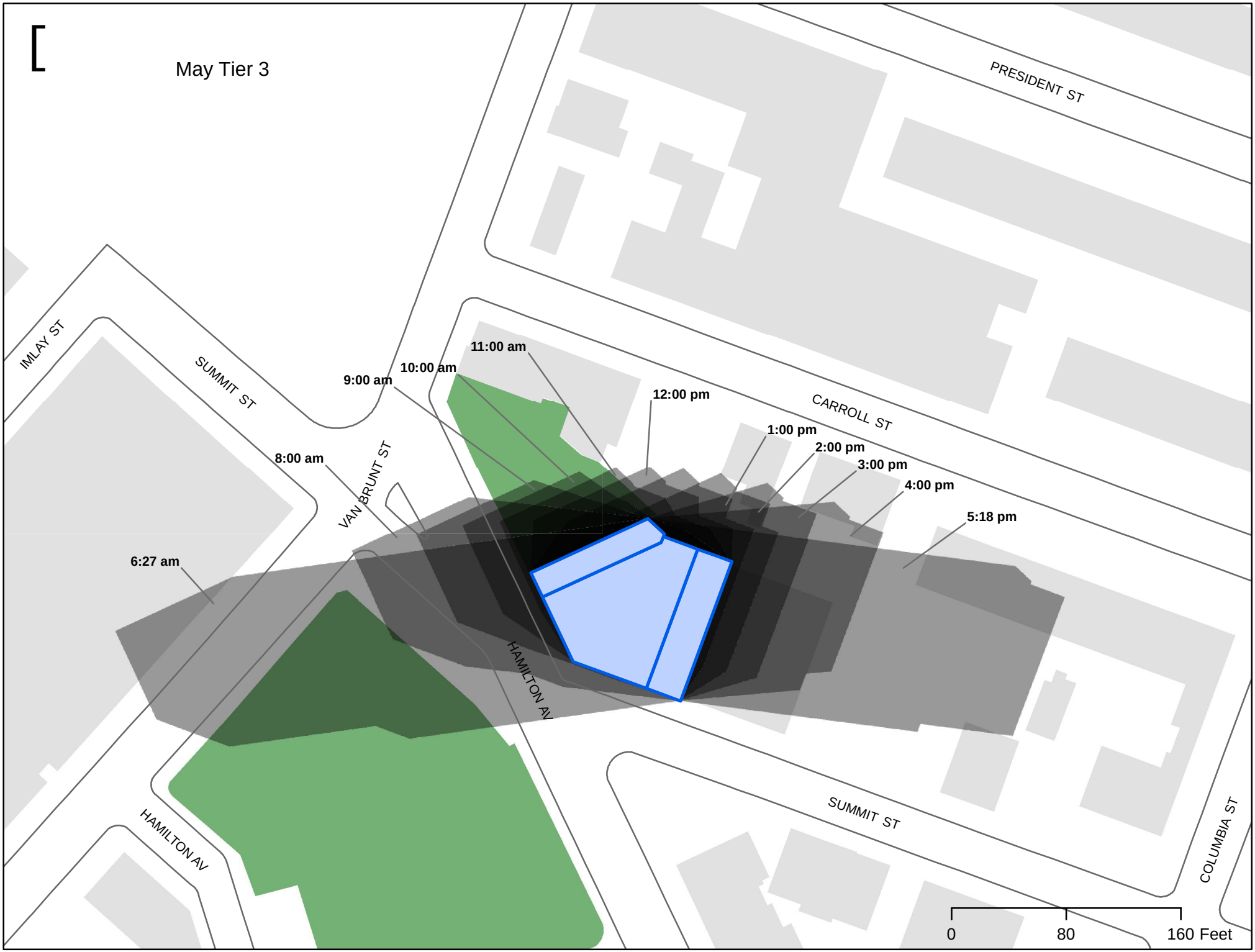

March Tier 3
PRESIDENT ST
12:00 pm
11:00 am
10:00 am
9:00 am
7:36 am
1:00 pm
2:00 pm
3:00 pm
4:00 pm
4:29 pm
IMLAY ST
SUMMIT ST
VAN BRUNT ST
CARROLL ST
HAMILTON AV
HAMILTON AV
SUMMIT ST
COLUMBIA ST
0
80
160 Feet

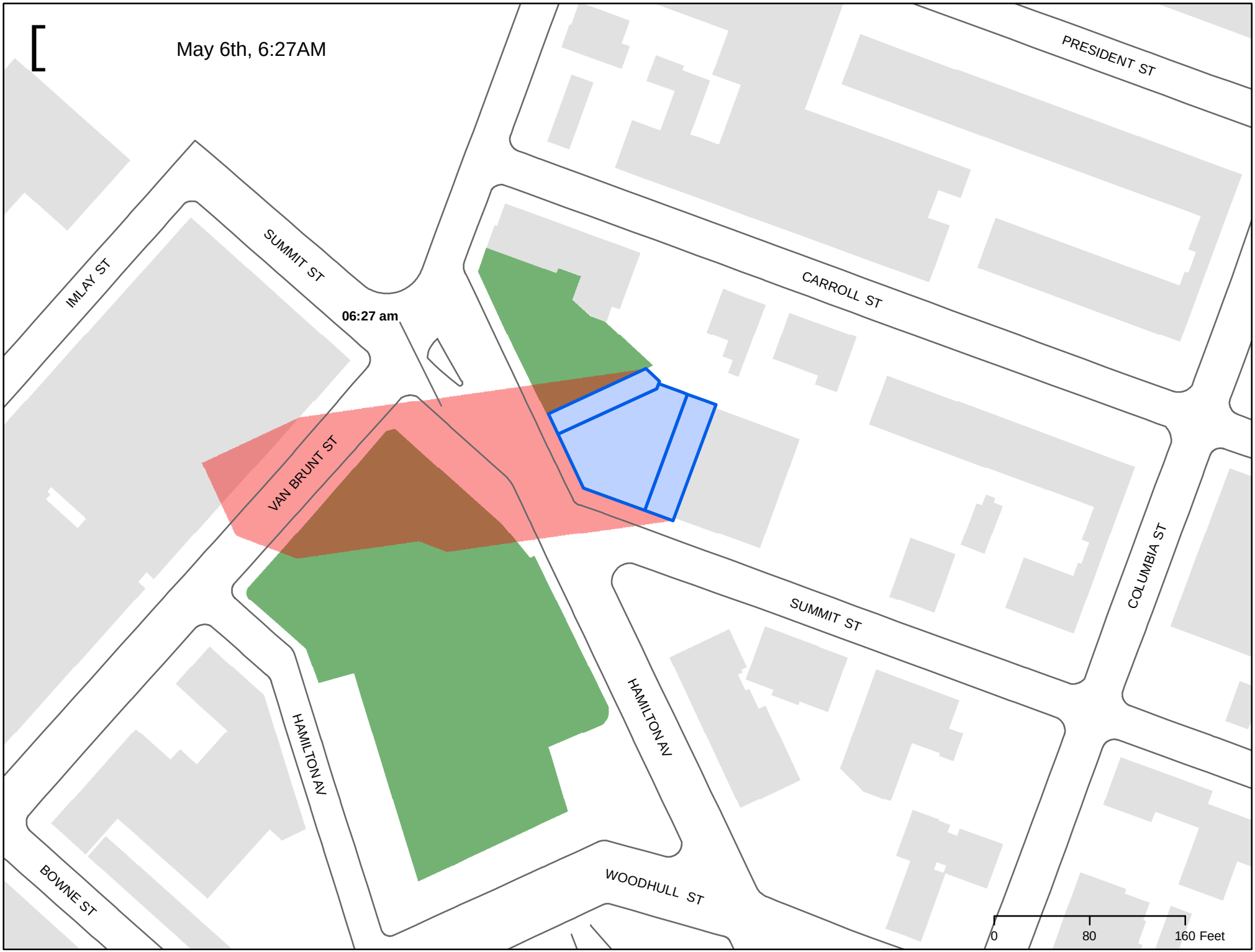

March 21st, 7:36AM
07:36 am
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet

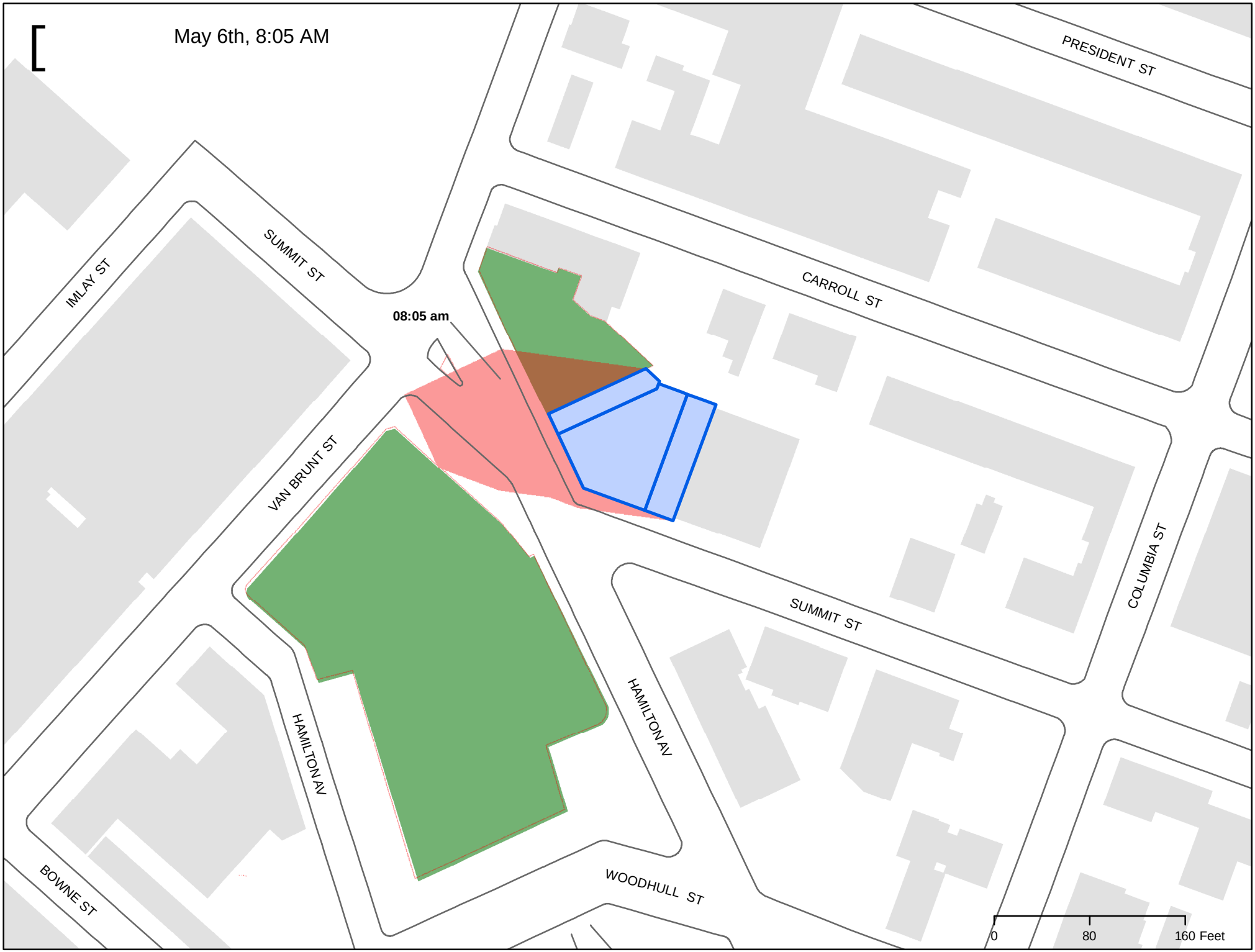

March 21st, 8:00AM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
8:00 am
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet

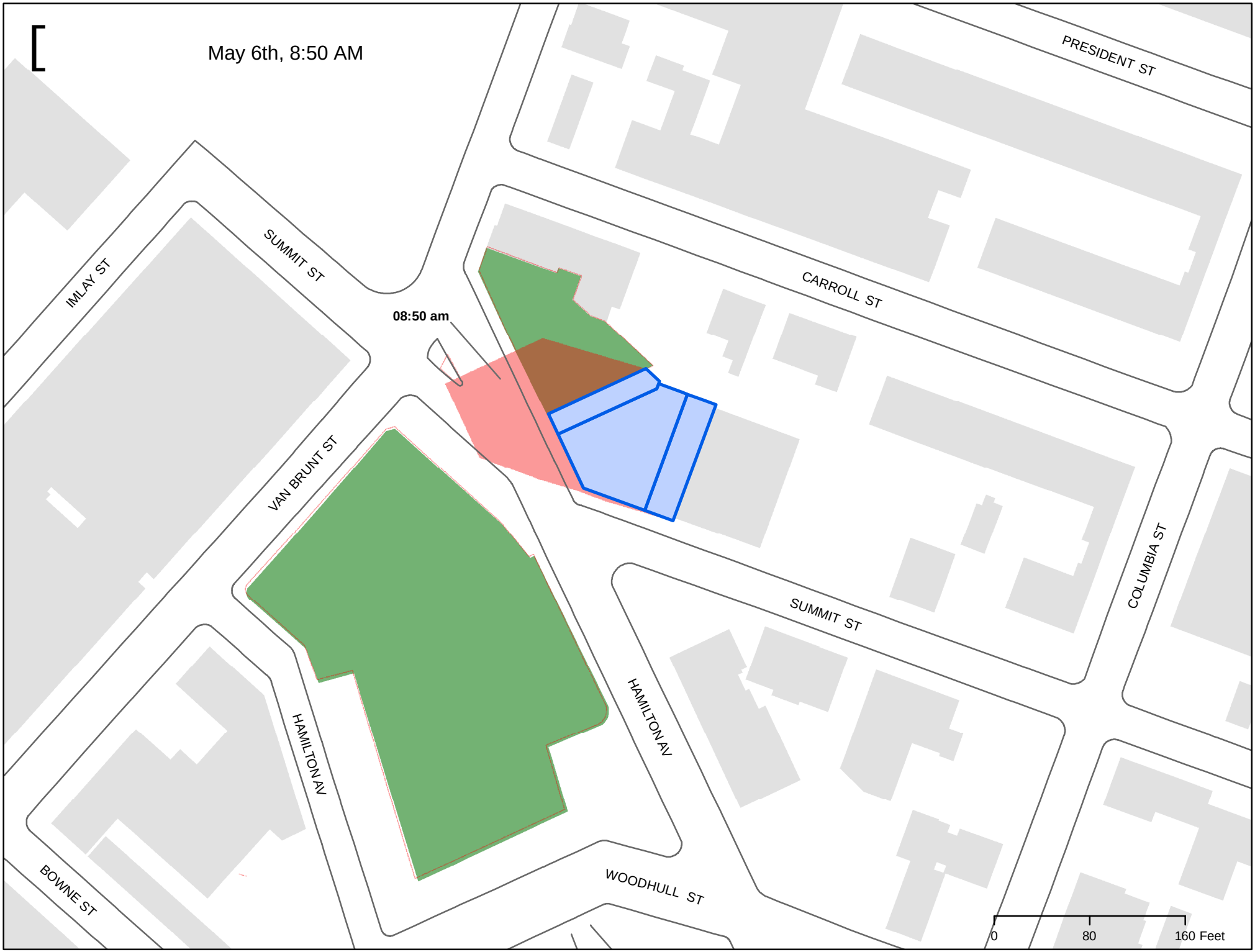

March 21st, 9:50AM
09:50 am
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet

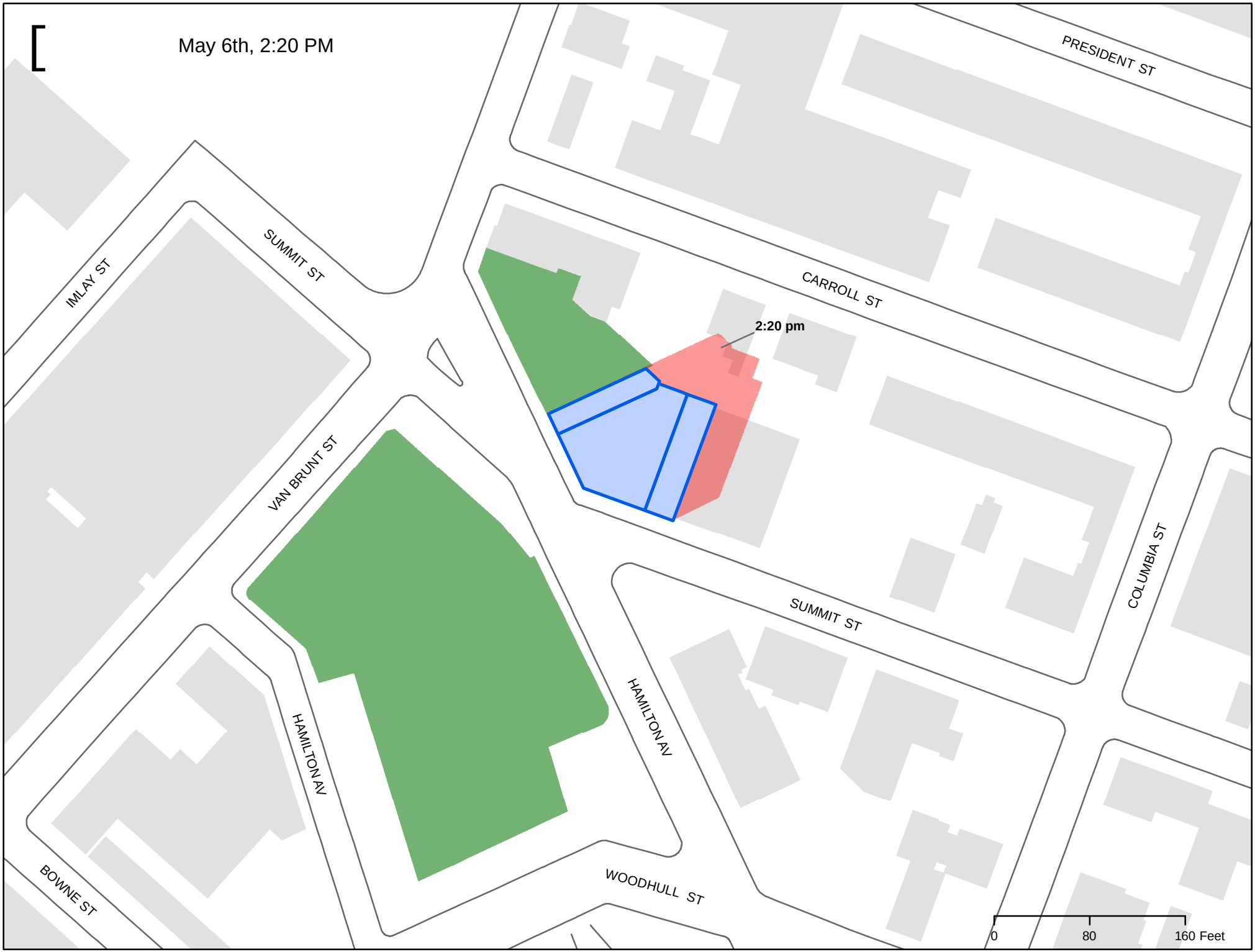

March, 21st, 3:40 PM
PRESIDENT ST
SUMMIT ST
IMLAY ST
CARROLL ST
3:40 pm
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
BOWNE ST
WOODHULL ST
0
80
160 Feet

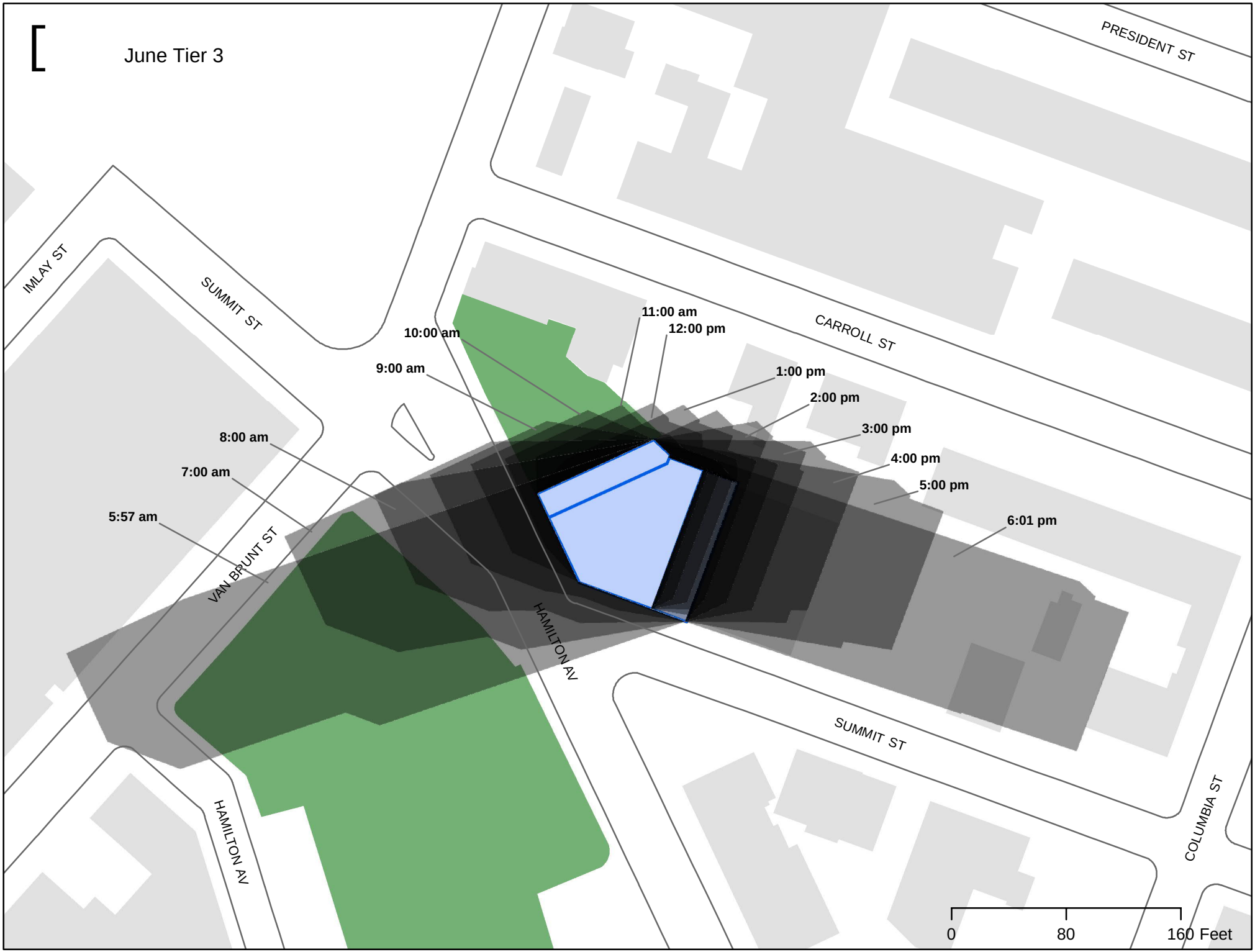

May Tier 3
PRESIDENT ST
CARROLL ST
IMLAY ST
SUMMIT ST
VAN BRUNT ST
HAMILTON AV
HAMILTON AV
SUMMIT ST
COLUMBIA ST
6:27 am
8:00 am
9:00 am
10:00 am
11:00 am
12:00 pm
1:00 pm
2:00 pm
3:00 pm
4:00 pm
5:18 pm
0
80
160 Feet


May 6th, 6:27AM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
06:27 am
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet

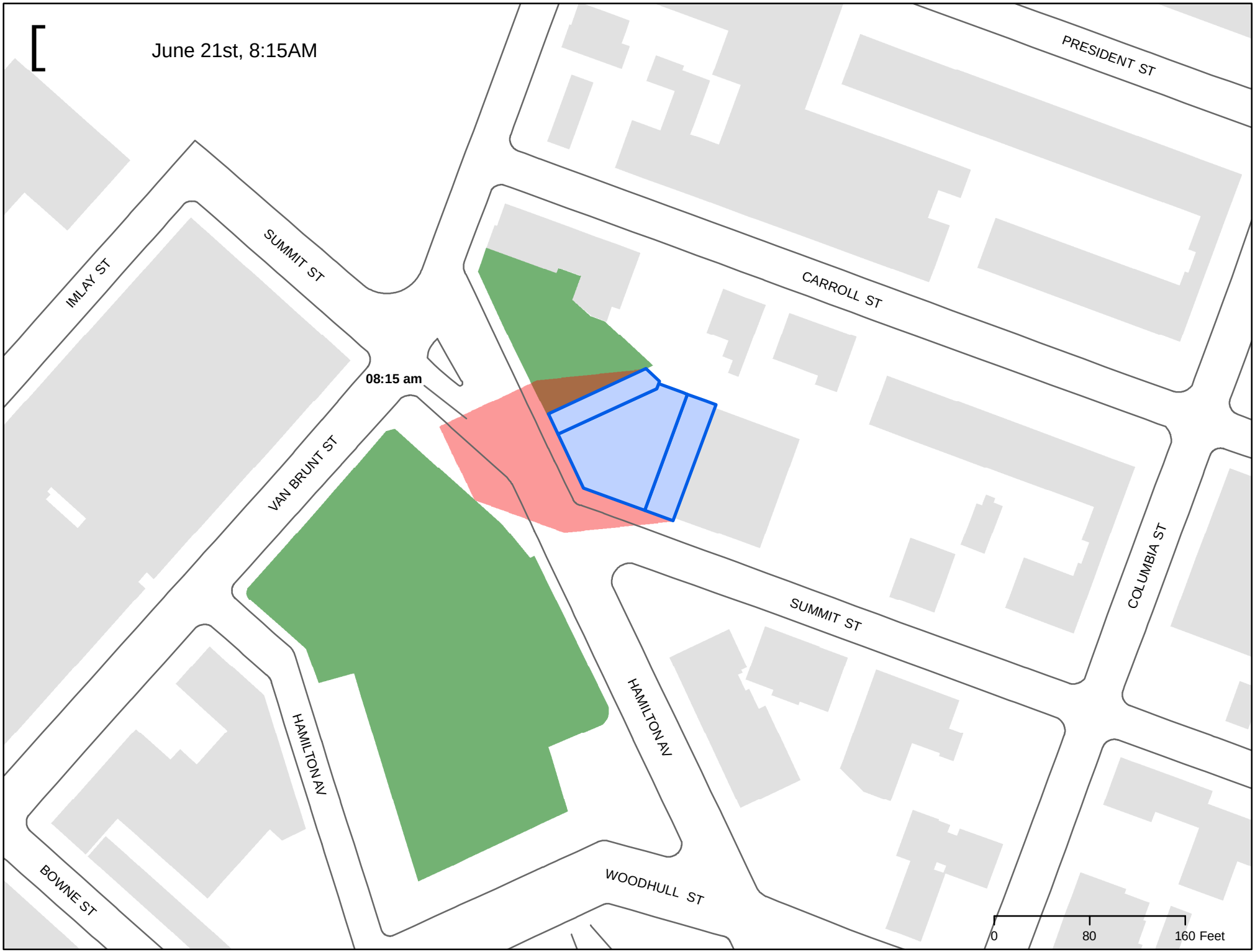

May 6th, 8:05 AM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
08:05 am
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet

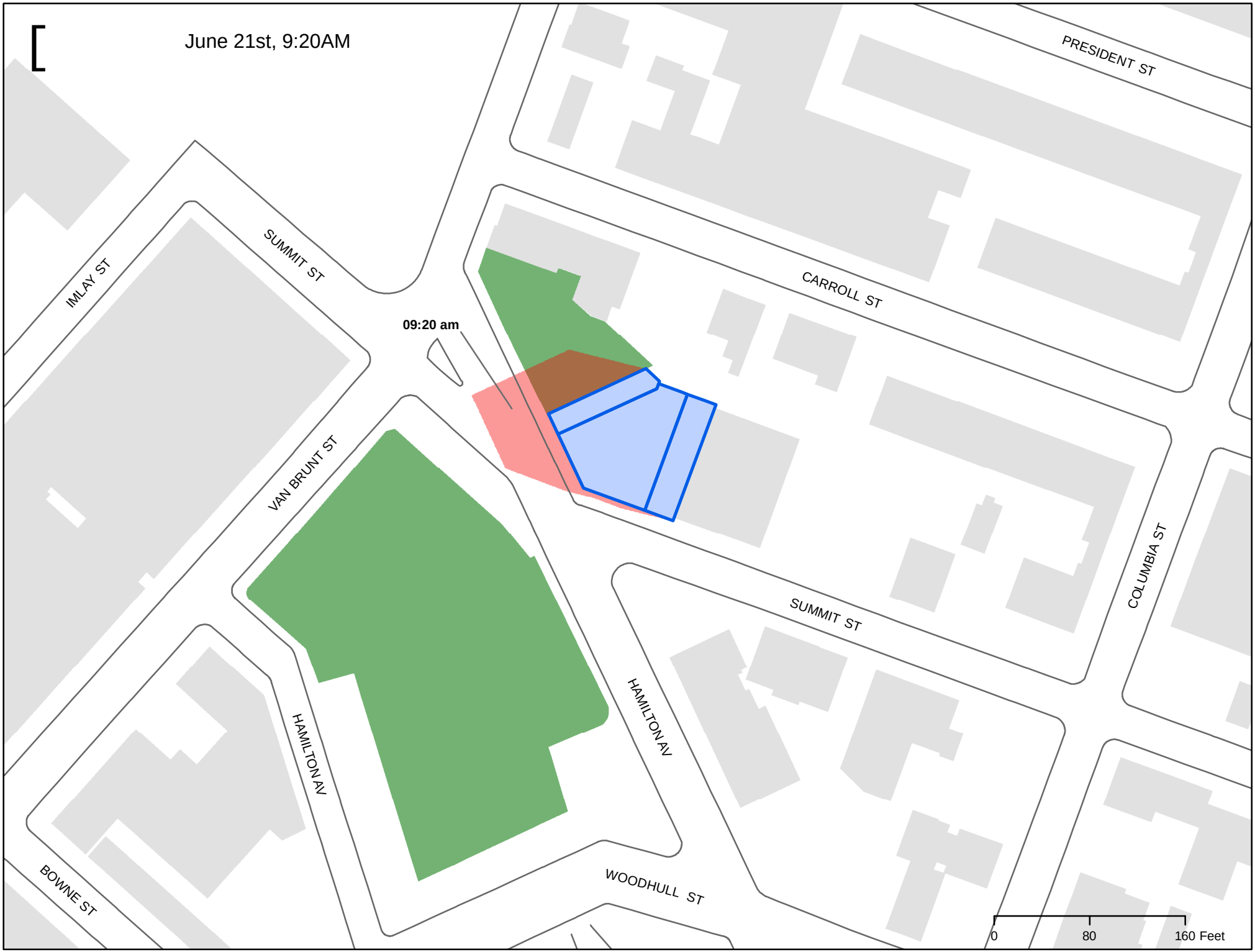

May 6th, 8:50 AM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
08:50 am
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet

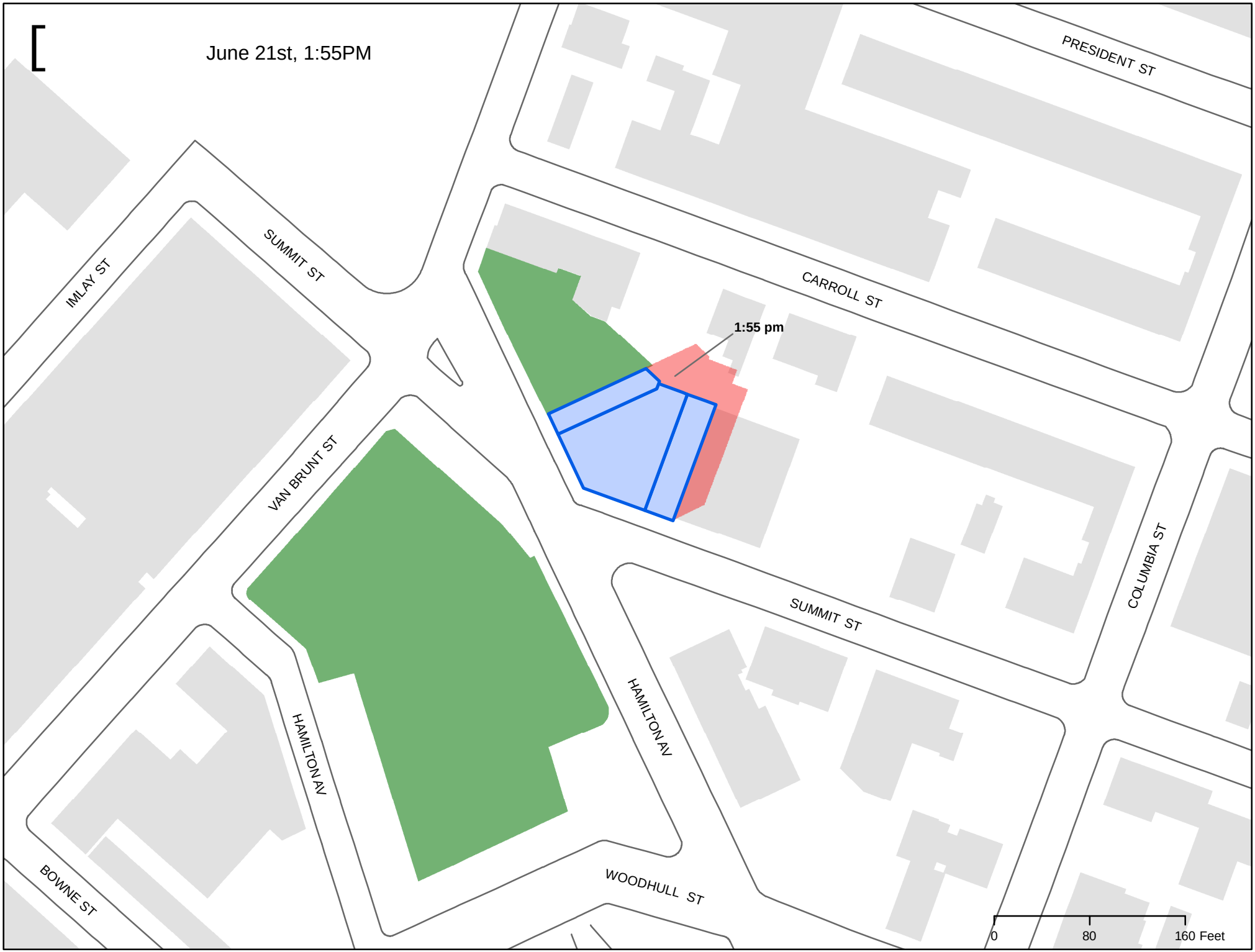

May 6th, 2:20 PM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
VAN BRUNT ST
2:20 pm
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet


June Tier 3
PRESIDENT ST
IMLAY ST
SUMMIT ST
CARROLL ST
10:00 am
11:00 am
12:00 pm
9:00 am
1:00 pm
2:00 pm
8:00 am
3:00 pm
7:00 am
4:00 pm
5:00 pm
5:57 am
6:01 pm
VAN BRUNT ST
HAMILTON AV
SUMMIT ST
HAMILTON AV
COLUMBIA ST
0
80
160 Feet


June 21st, 5:57AM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
05:57am
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet


June 21st, 8:15AM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
08:15 am
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet


June 21st, 9:20AM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
09:20 am
VAN BRUNT ST
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet


June 21st, 1:55PM
PRESIDENT ST
CARROLL ST
SUMMIT ST
IMLAY ST
VAN BRUNT ST
1:55 pm
COLUMBIA ST
SUMMIT ST
HAMILTON AV
HAMILTON AV
WOODHULL ST
BOWNE ST
0
80
160 Feet

Revised Environmental Assessment Statement
41 Summit Street Rezoning
Brooklyn, NY

Urban Design
No-Action

Revised Environmental Assessment Statement
41 Summit Street Rezoning
Brooklyn, NY

Urban Design
With- Action

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