NYBG - 2856 Webster Avenue
FRESH

Environmental Assessment Statement

CEQR #: 20DCP095X

ULURP #: N200258 ZCX, N200259 ZAX, N200260 LDX

Prepared for:
NYC Department of City Planning

Prepared on Behalf of:
JELB Webster, LLC

Prepared by:
Philip Habib & Associates

February 12, 2020

NYBG - 2856 WEBSTER AVENUE FRESH

ENIRONMENTAL ASSESSMENT STATEMENT

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EAS Form

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* NYBG- 2856 Webster Avenue FRESH

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
20DCP095X	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
N200258 ZCX, N200259 ZAX, N200260 LDX	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning			JELB Webster, LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Olga Abinader, Director			Russell Lang		
ADDRESS 120 Broadway			ADDRESS 7 Penn Plaza, Suite 600		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10001
TELEPHONE	EMAIL		TELEPHONE	EMAIL	
212-720-3423	oabinader@planning.nyc.gov		212-992-4545	rlang@ddny.com	

5. *Project Description*

The proposed project includes the redevelopment of Lots 118, 122, and 128 on Block 3273 in Bronx Community District 7 (see Figure 1). The 53,372 square-foot (sf) site is located at the southeast corner of Webster Avenue and Bedford Park Boulevard, and is bordered on the southeast by the right-of-way of the Metro North railroad's Harlem Line. The site is located within a C4-5D zoning district (an R7D equivalent). The total built area on-site at present is approximately 37,434 gsf. A supermarket is operating on the site, while a former laundromat and a space that previously contained an auto-related use on Lot 122 are vacant at present. An accessory parking lot with approximately 45 parking spaces, accessible from Webster Avenue, is located on Lot 122. There are four existing curb cuts that provide access to the property.

The proposed project involves the construction of two new 12-story mixed-use buildings (approximately 387,052 gsf) with approximately 464 affordable dwelling units and approximately 21,103 gsf of commercial space. It is anticipated that a supermarket will occupy the commercial space. The Applicant intends to pursue a FRESH supermarket certification and authorization pursuant to Sections 63-22 and 63-30 of the Zoning Resolution to permit an additional floor in a building with ground floor FRESH uses. The first phase of the proposed project will receive financing from the New York State Homes and Community Renewal (NYS HCR) program's Senior Housing Program (SENIOR) and NYC Department of Housing Preservation and Development (HPD)'s Senior Rental Assistance Program (SARA). Financing of the second phase is yet to be determined.

Project Location

BOROUGH	COMMUNITY DISTRICT(S)	STREET ADDRESS
Bronx	7	2856 Webster Ave.; 2870 Webster Ave.; 410 Bedford Park Blvd.
TAX BLOCK(S) AND LOT(S) Block 3273, Lots 118, 122, and 128		ZIP CODE 10458

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS

Webster Avenue on the northwest, Bedford Park Boulevard on the northeast, the Metro North railroad's Harlem Line right-of-way on the southeast.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY	ZONING SECTIONAL MAP NUMBER
C4-5D	3C

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 Sections 63-22; 63-30

***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	☒ FUNDING OF CONSTRUCTION, specify: See Attachment A, "Project Description"
☐ RULEMAKING	☐ POLICY OR PLAN, specify:
☐ CONSTRUCTION OF PUBLIC FACILITIES	☐ FUNDING OF PROGRAMS, specify:
☐ 384(b)(4) APPROVAL	☐ PERMITS, specify:
☐ OTHER, explain:	

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

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

***State or Federal Actions/Approvals/Funding*:** ☒ YES ☐ NO If "yes," specify: NYS HCR Sr Housing Program

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.): 53,372 Waterbody area (sq. ft) and type: 0

Roads, buildings, and other paved surfaces (sq. ft.): 53,372 Other, describe (sq. ft.): 0

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet):
approximately 387,052

NUMBER OF BUILDINGS: 2

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): Phase I: 133,250 gsf; Phase II: 253,802 gsf

HEIGHT OF EACH BUILDING (ft.):
Approx. 124 ft each

NUMBER OF STORIES OF EACH BUILDING: Phase I: 12 stories; Phase II: 12 stories

Does the proposed project involve changes in zoning on one or more sites? ☐ YES ☒ NO

If "yes," specify: The total square feet owned or controlled by the applicant:

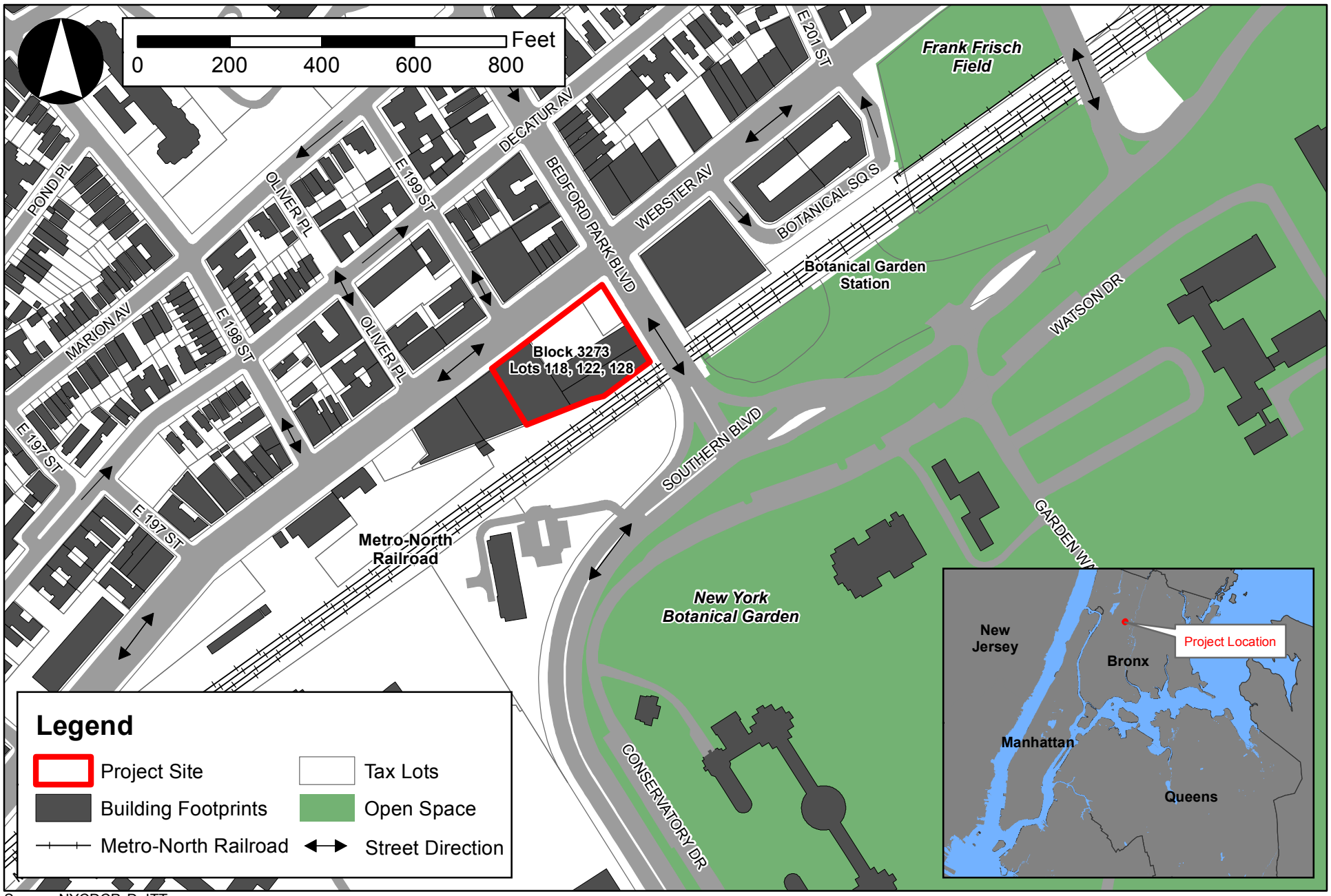
The total square feet not owned or controlled by the applicant:

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: 0 sq. ft. (width x length) VOLUME OF DISTURBANCE: 0 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 0 sq. ft. (width x length)

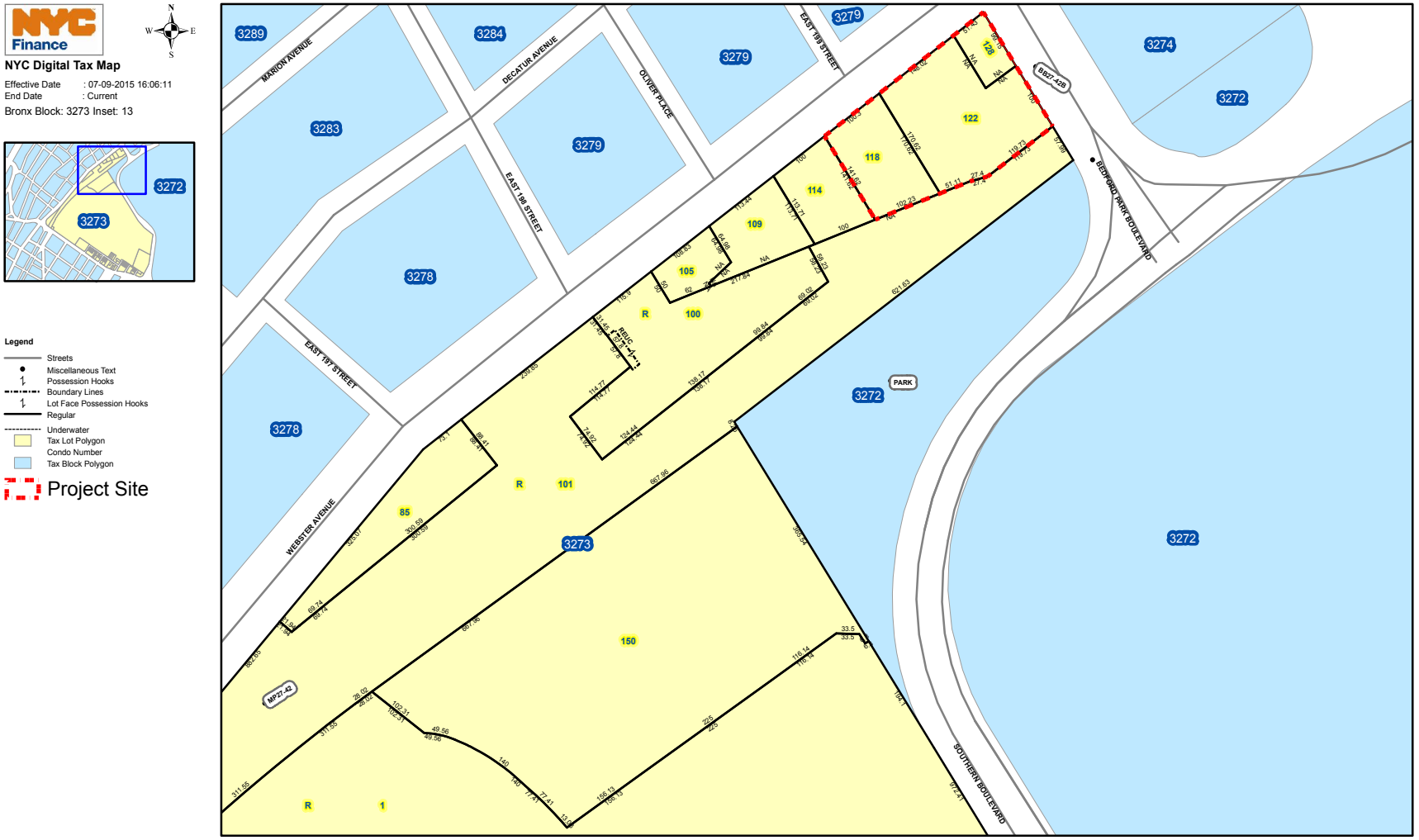


Source: NYCDCP, DoITT

NYBG - 2856 Webster Ave. FRESH EAS

Figure 1

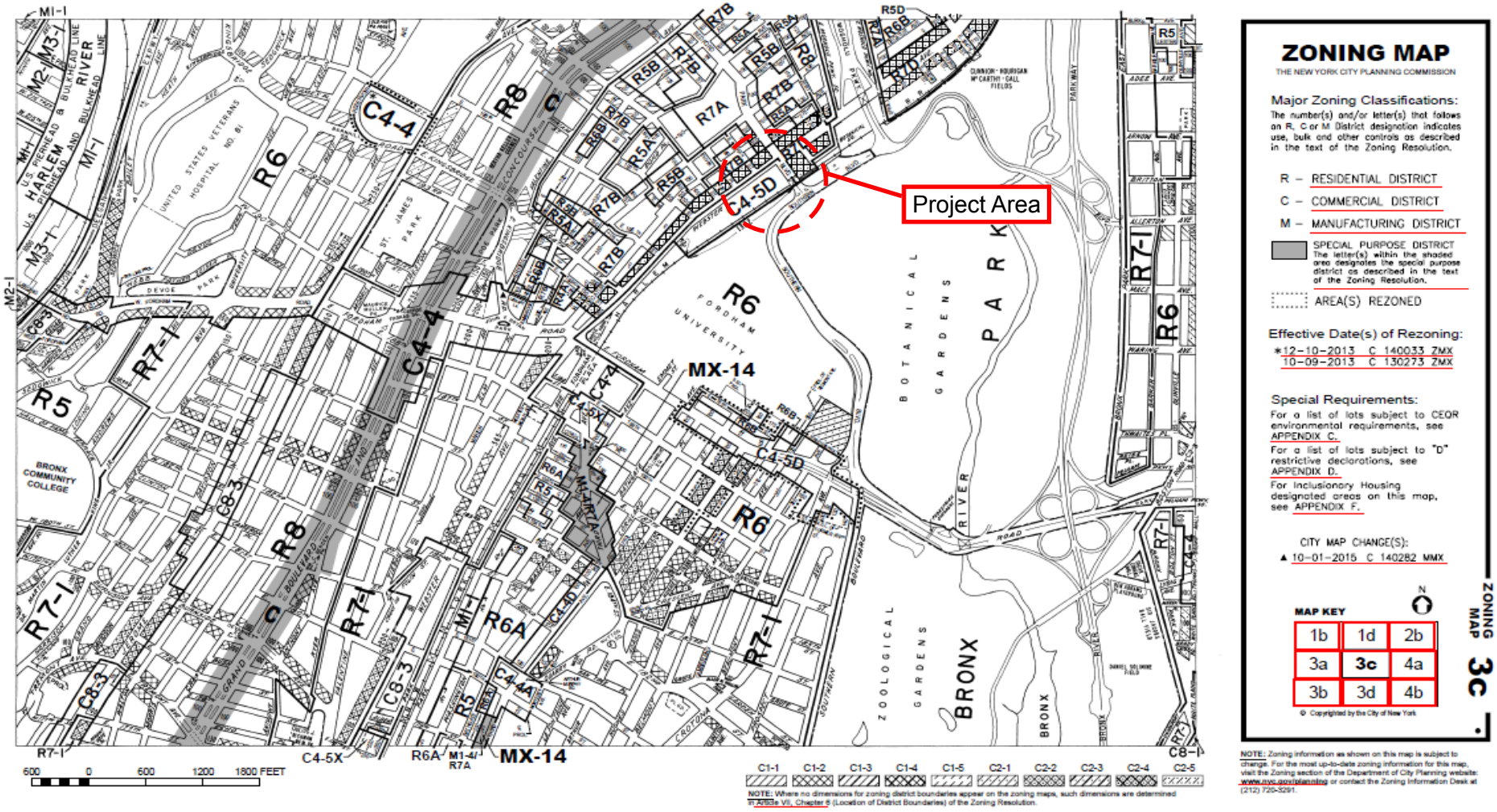
Project Site Location



NYBG - 2856 Webster Ave. FRESH EAS

Figure 2

Tax Map



ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

Major Zoning Classifications:

The number(s) and/or letter(s) that follows an R, C or M District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.

R – RESIDENTIAL DISTRICT

C – COMMERCIAL DISTRICT

M – MANUFACTURING DISTRICT

SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.

AREA(S) REZONED

Effective Date(s) of Rezoning:

*12-10-2013 C 140033 ZMX
10-09-2013 C 130273 ZMX

Special Requirements:

For a list of lots subject to CEQR environmental requirements, see APPENDIX C.

For a list of lots subject to "D" restrictive declarations, see APPENDIX D.

For Inclusionary Housing designated areas on this map, see APPENDIX F.

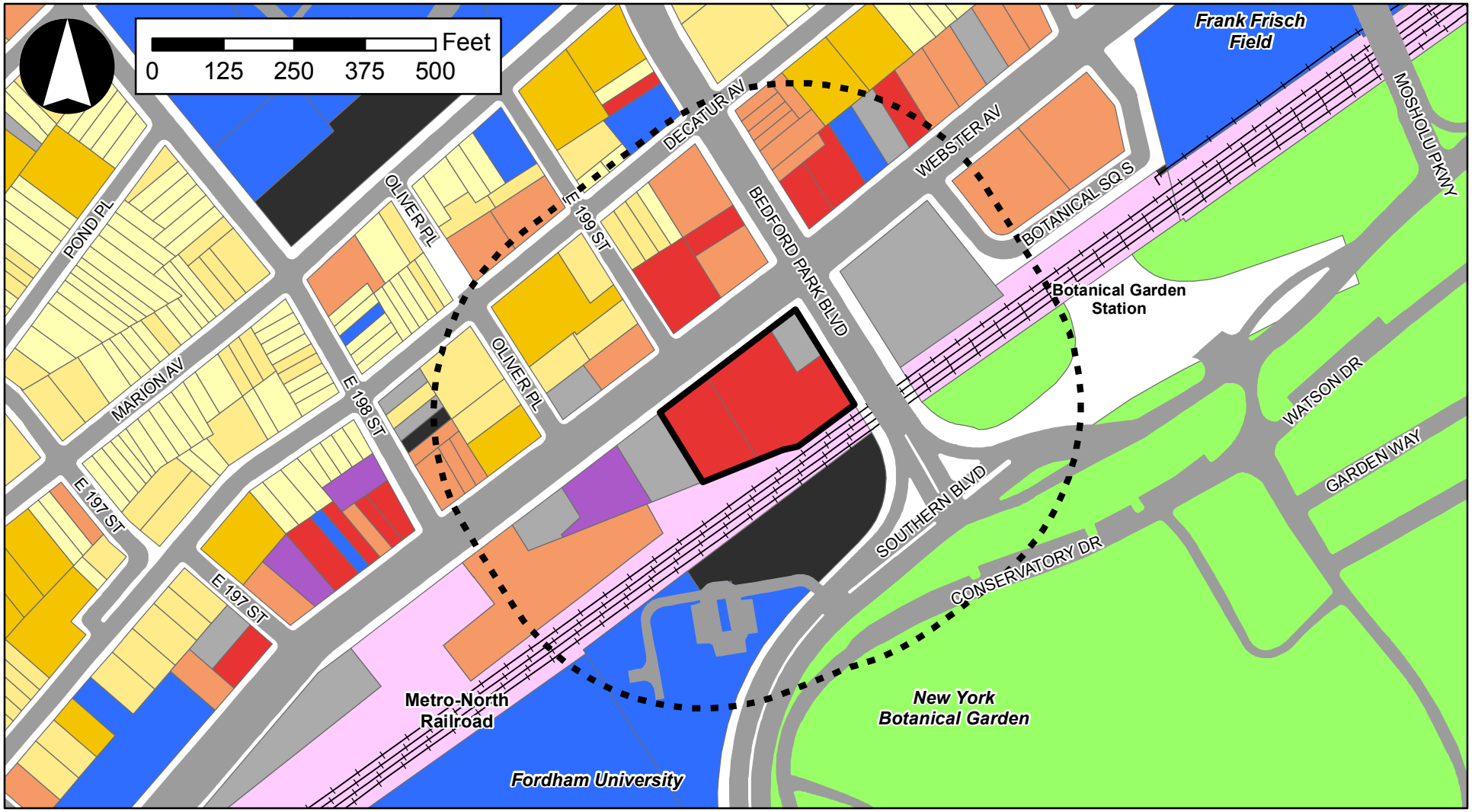
CITY MAP CHANGE(S):
▲ 10-01-2015 C 140282 MMX

MAP KEY

1b	1d	2b
3a	**3c**	4a
3b	3d	4b

ZONING MAP 3c

NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: www.nyc.gov/planning or contact the Zoning Information Desk at (212) 720-3291.



Legend

Project Site	One & Two Family Buildings	Mixed Commercial/Residential Buildings	Transportation/Utility	Parking Facilities
400-Foot Radius	Multi-Family Walkup Buildings	Commercial/Office Buildings	Public Facilities & Institutions	Vacant Land
Land Use	Multi-Family Elevator Buildings	Industrial/Manufacturing	Open Space	All Others or No Data

Source: PLUTO 2018 v2 (NYCDCP)

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Figure 4

Land Use Map

Figure 5
Photo Location Map

1. Looking southwest towards project site from corner of Webster Avenue and Bedford Park Boulevard

2. Looking southeast from corner of Webster Avenue and Bedford Park Boulevard

3. View of project site from corner of Webster Avenue and Bedford Park Boulevard

4. Looking northwest from corner of Webster Avenue and Bedford Park Boulevard

5. View of project site from Bedford Park Boulevard

6. Looking west towards rear of project site from Bedford Park Boulevard railroad overpass

7. Looking north along Webster Avenue towards project site

8. Looking north along Webster Avenue near East 199th Street

Description of Proposed Uses (please complete the following information as appropriate)				
	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	365,949	21,103	0	0
Type (*e.g.,* retail, office, school)	464 units	Supermarket	N/A	N/A

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

If "yes," please specify:

NUMBER OF ADDITIONAL RESIDENTS: 1,332 (an incremental increase of 97 residents over No-Action Condition)

NUMBER OF ADDITIONAL WORKERS: 63 (no incremental change as compared to the No-Action condition)

Provide a brief explanation of how these numbers were determined:

2.87 residents per unit (2010 Census); 3 employees per 1,000 gsf (standard assumption for local retail)

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:

An approximately 362,559 gsf residential and commercial building would be constructed on an as-of-right basis. Approximately 430 DUs would be constructed under the as-of-right condition. A 21,103 gsf commercial space would be provided and would likely include a supermarket use.

9. *Analysis Year* CEQR Technical Manual Chapter 2

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

2024

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS:

up to 48 months

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☐ YES ☒ NO IF MULTIPLE PHASES, HOW MANY? 2

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: It is anticipated that the construction loan financing for Phase I will close in March 2020, with construction commencing in June 2020. It is anticipated that the second phase of the Proposed Development is anticipated to close on construction loan financing in June 2022, with construction commencing July 2022. Accordingly, the RWCDS would use a 2024 Build Year for analysis purposes. However, it is important to note that the requested FRESH authorization would not result in significant changes to the construction schedule as compared to the as-of-right development.

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

☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: MTA Metro North Railroad right-of-way

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☒	☐
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☐	☒
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **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: Gas tanks related to historic use, possible LBP/ACM.	☒	☐
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?	☐	☒

	YES	NO
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(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): 1,642 pounds per week (increment over the as-of-right project that would be constructed under future No-Action conditions)		
○ 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): 4,308 annual BTUs (increment over the as-of-right project that would be constructed under future No-Action conditions)		
(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) See Attachment B	☐	☒
(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?	☒	☐

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

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
JELB Webster LLC	2/11/2020

SIGNATURE Russell J

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

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

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

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

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

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

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

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

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

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

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

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

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	NYC Department of City Planning, acting on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe, AICP	February 14, 2020
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 (EAS) 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 actions 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, and Noise:
An (E) designation (E-566) for hazardous materials, air quality, and noise has been incorporated into the proposed actions. Refer to Appendix 1: (E) Designation", attached to this Determination of Significance, for the sites affected by the (E) designation and applicable (E) designation requirements. This (E) designation will supersede the (E) designation (E-249) for hazardous materials and noise placed on the development site as part of the Webster Avenue Rezoning (CEQR No. 10DCP035X). The analysis concludes that with the (E) Designation requirements in place, the Proposed Actions would not result in significant adverse impacts to hazardous materials, air quality or noise.

Land Use, Zoning, and Public Policy:
A detailed analysis related to Land Use, Zoning, and Public Policy is included in the EAS. A significant adverse impact would occur if a proposed action would generate land uses incompatible with the surrounding area. The Proposed Actions include a zoning authorization to permit an additional story on a proposed building with ground floor FRESH uses, and a zoning certification for a proposed FRESH food store affecting Block 3273; Lots 118, 122, and 128 ("Affected Area") located in the Bedford Park neighborhood of Bronx, Community District 7. The actions would facilitate a proposal by the applicant to develop two 12-story mixed-use buildings totaling 387,052 gross square foot (gsf) with an approximate height of 115 feet. The buildings would contain 464 dwelling units and approximately 21,103 gsf of ground floor commercial space to be occupied by the proposed FRESH food store. . As such, the proposed actions would not introduce a new land use, nor affect the existing mixed-use character of the area. Furthermore, the proposed actions would have no adverse effect on zoning or public policy. The analysis concludes that no significant adverse impacts related to Land Use, Zoning, and Public Policy would result from the proposed actions.

Shadows:
A detailed shadows analysis in included in the EAS. The analysis identifies three sunlight-sensitive resource within the study area that include the New York Botanical Garden (NYBG), the landscaped greenspace on Southern Boulevard, and the Southern Boulevard Greenstreet. The shadows analysis determines that incremental shadow would reach the NYBG on the analysis days of June 21 for up to 21 minutes in the late afternoon. The analysis notes that incremental shadow would reach a landscaped area of the NYBG that contains trees, bushes, and grass. The landscaped greenspace would receive incremental shadows of up to two hours and 57 minutes during the late afternoon hours on the March 21/September 21, and May 6 / August 6 and June 21 analysis days. The Southern Boulevard Greenstreet would receive incremental shadow of up to 53 minutes during the late afternoon hours on the May 6/August 6 and June 21 analysis days. A significant adverse shadow impact could occur on a sunlight sensitive resource if that resource would receive less than four to six hours of direct sunlight per day during the growing season. The area of the sunlight sensitive resources that would be shaded by the incremental building height is not anticipated to adversely affect the vegetation, utilization or enjoyment of the NYBG, the landscaped greenspace on Southern Boulevard or the Southern Boulevard Greenstreet. The analysis concludes that the proposed actions would not result in a significant adverse impact from shadows.

Project Name: NYBG 2856 Webster Avenue FRESH
CEQR #: 20DCP095X
SEQRA Classification: Unlisted

Urban Design and Visual Resources:
An assessment related urban design and visual resources is included in the EAS. A significant adverse shadow impact may occur if the proposed development negatively affects the pedestrian experience. In the future with the proposed actions, the visual appearance within the primary study area and development site would change as the proposed authorization would allow an increase in the maximum building height by 15 feet to accommodate the proposed FRESH food store. This change would not alter the arrangement, appearance, or functionality of the primary study area such that the alteration would negatively affect a pedestrian experience of the area and would not meet the 2014 CEQR Technical Manual threshold for a significant adverse urban design impact. The analysis concludes that 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). Should you have any questions pertaining to this Negative Declaration, you may contact Alexander McClean at (212) 720-3429.

TITLE Deputy Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning, acting on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | (212) 720-3328
NAME Stephanie Shellooe, AICP	DATE February 14, 2020
SIGNATURE	
TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE February 18, 2020
SIGNATURE	

Project Name: NYBG 2856 Webster Avenue FRESH
CEQR #: 20DCP095X
SEQRA Classification: Unlisted

Determination of Significance Appendix: (E) Designation

To ensure that the proposed actions would not result in significant adverse hazardous materials, air quality, and noise, and (E) Designation (E-566) will be placed on the development sites as described below. This (E) designation will supersede the (E) designation (E-249) for hazardous materials and noise placed on the development site as part of the Webster Avenue Rezoning (CEQR No. 10DCP035X).

Hazardous Materials

The (E) Designation requirements for hazardous materials will be placed on Projected Development Site 1 (Block 3273; Lots 118, 122, and 128) as follows:

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

Project Name: NYBG 2856 Webster Avenue FRESH
CEQR #: 20DCP095X
SEQRA Classification: Unlisted

Air Quality

The (E) designation requirements for air quality would apply to Projected Development Site 1 (Block 3273; Lots 118, 122, and 128) as follows:

> **Projected Development Site 1 (Phase I), Block 3273, Lot 118: Any new development on Block 3273, Lot 118 must exclusively use natural gas as the type of fuel for HVAC system and hot water boiler, and ensure that emissions from the heating, ventilating and air conditioning and hot water equipment would be released through three stacks located at the height of at least 142.6 feet above grade, at least 240 feet from Bedford Park Boulevard, to avoid any potential significant adverse air quality impacts.**
>
> **Projected Development Site 1 (Phase II), Block 3273, Lots 122 and 128: Any new development on Block 3273, Lots 122 and 128 must exclusively use natural gas as the type of fuel for HVAC system and hot water boiler, and ensure that emissions from the heating, ventilating and air conditioning and hot water equipment would be released through three stacks located at the height of at least 142.6 feet above grade, and at most 55 feet from Bedford Park Boulevard, to avoid any potential significant adverse air quality impacts.**

Noise

The (E) designation requirements for noise would apply to Projected Development Site 1 (Block 3273; Lots 118, 122, and 128) as follows:

> **Projected Development Site 1, Block 3273, Lots 118, 122, and 128: In order to ensure an acceptable interior noise environment, future residential/commercial office uses must provide a closed-window condition with a minimum of 38 dBA window-wall attenuation on all facades facing Webster Avenue and all facades facing MTA Metro-North Railroad and all façades facing Oliver Place and the façades facing Bedford Park Boulevard within 50 feet of Webster Avenue and the façades facing Bedford Park Boulevard within 50 feet of MTA Metro-North Railroad and 33 dBA of attenuation on all other facades to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses as illustrated in the EAS. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.**

Attachment A

Project Description

I. INTRODUCTION

JELB Webster, LLC ("the Applicant") proposes to redevelop Lots 118, 122, and 128 on Block 3273 in Bronx Community District 7 with two 12-story mixed-use developments totaling approximately 390,000 gross square feet (gsf), with up to 464 affordable dwelling units and approximately 21,103 gsf of commercial space. It is anticipated that a FRESH supermarket would occupy the commercial space, with a FRESH certification (ZR Section 63-30) and authorization (ZR Section 63-22) being sought to permit up to an additional nine feet in height (an increase from 11 to 12 stories) in a building with ground floor FRESH uses. Additionally, the proposed project would receive financing from NYC HPD and NYS HCR. Collectively, the FRESH certification and authorization, and public financing comprise the "Proposed Actions" for the purposes of the environmental analysis.

This attachment provides a summary and description of the Proposed Actions, including project site location, existing conditions of the project site, project purpose and need, project description, reasonable worst-cast development scenario (RWCDS) under No-Action and With-Action conditions, and the governmental approvals required. The attached supplemental studies examine the potential for the proposed actions to result in impacts in any City Environmental Quality Review (CEQR) technical areas, including separate attachments with detailed analyses of land use, zoning, and public policy; shadows; urban design and visual resources; noise, and air quality in Attachments C through G, respectively. All other preliminary screening assessments are summarized in **Attachment B, "Supplemental Screening."**

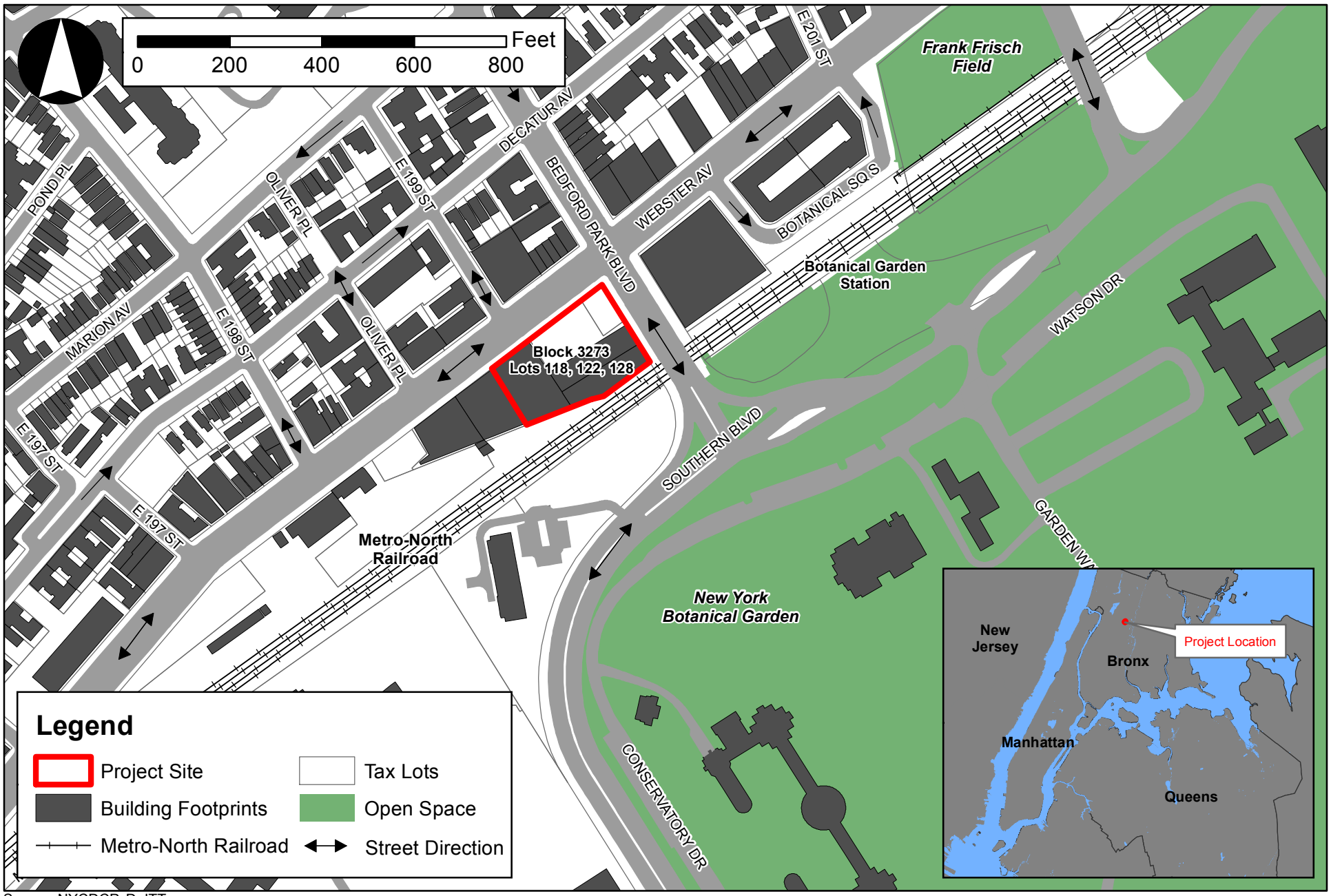
II. BACKGROUND AND EXISTING CONDITIONS

Project Site

The approximately 53,372 square-foot (sf) project site is located at 2856 Webster Avenue (Bronx Block 3273, Lots 118, 122, and 128) in the Bedford Park neighborhood of Bronx Community District 7 (see **Figure A-1**). The site fronts Webster Avenue to the north (approximately 300 feet of street frontage) and Bedford Park Boulevard to the east (approximately 199 feet of street frontage). The site is bordered on the southeast by the right-of-way of the Metro North railroad's Harlem Line (approximately 300 feet of right-of-way frontage).

The site is located within a C4-5D zoning district, which is a contextual district. The residential district equivalent is R7D. The C4-5D district permits residential, commercial, and community facility development at a maximum FAR of 4.2 for each. Typical uses within this zoning district include specialty and department stores, theaters, and offices, all of which service larger geographical areas and generate more traffic than local shopping areas.

The Inclusionary Housing program and the Affordable Independent Residences for Seniors (AIRS) program both allow for an increase in the base FAR of 4.2 to a maximum FAR of 5.6. The proposed project would utilize the AIRS program by increasing the residential floor area by 1.25 square feet for every square-foot of senior housing provided on the zoning lot in quality housing buildings. As such, the maximum residential FAR in the R7D district can be increased to a maximum of 5.6 within the underlying contextual height and bulk regulations. New development must be built within a contextual envelope, requiring a 60- to 85-foot street wall before an allowable setback and having a maximum building height of 100 feet. Parking requirements vary with land uses on a site.



Source: NYCDCP, DoITT

NYBG - 2856 Webster Ave. FRESH EAS

Figure A-1

Project Site Location

The total built area on-site is approximately 37,434 gsf, and the three lots comprising the project site are currently occupied by commercial uses: Lot 118 contains a 15,616 sf commercial building formerly occupied by a laundromat, Lot 122 contains a 21,818 sf commercial building occupied by a supermarket and accessory parking, and Lot 128 contains a 45-space surface parking lot (accessible from Webster Avenue) associated with the supermarket on Lot 122. There are four existing curb cuts that provide access to the property.

Surrounding Area

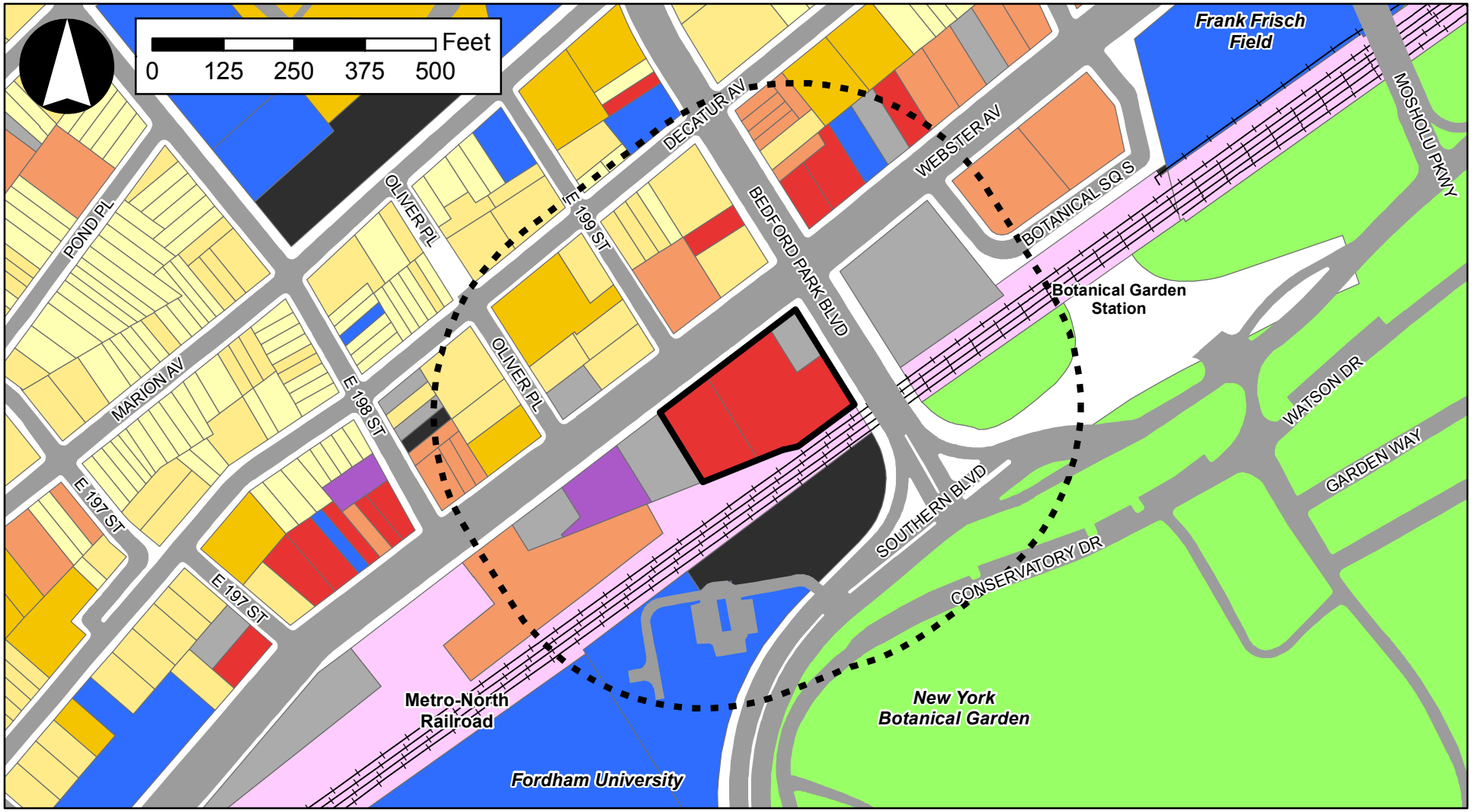
The project site is located in Bedford Park, in central Bronx. As shown in **Figure A-2**, land uses in the vicinity of the project site are predominantly comprised of residential and mixed commercial/residential uses, reflecting the residential zoning districts mapped throughout the surrounding area.

Mapped residential districts in the vicinity of the project site include R6 (mapped to the south of the project site on Block 3272), R7D/C2-4 (mapped to the north of the site on lots with frontage along Webster Avenue) and R7A/C1-4 and R7B (mapped to the north of the site on lots with frontage along Bedford Park Boulevard), as shown in **Figure A-3**. R6 zoning districts are widely mapped in built-up medium-density areas in the Bronx and can range in character with a diverse mix of building types and heights, including large-scale "tower in the park" developments. The maximum permitted residential FAR in R6 districts ranges from 0.78 to 2.43, with a maximum community facility FAR of 4.8. R7D districts serve to promote new contextual development along transit corridors, resulting in 8- to 10-story apartment buildings built near major transit routes. The maximum permitted FAR for both residential and community facility uses in R7D districts is 4.2. C2-4 commercial overlays permit 2.0 FAR of commercial uses when mapped in R7D districts. R7A districts are high-density contextual districts where Quality Housing regulations are mandatory, typically resulting in seven- and eight-story apartment buildings with high lot coverage. The maximum permitted residential FAR in R7A districts is 4.0. C1-4 commercial overlays permit 2.0 FAR of commercial uses when mapped in R7A districts. R7B districts are medium-density contextual districts where Quality Housing regulations are mandatory, typically resulting in six- and seven-story apartment buildings with high lot coverage. The maximum permitted residential FAR in R7B districts is 3.0.

Residential uses in the area surrounding the project site represent a variety of building typologies, including three-story attached and semi-attached rowhouses occupying smaller lots, some of which feature ground floor retail uses, older five- and six-story multi-family residential buildings with ground floor retail uses, and the nine-story Rose Hill apartment building located east of the project site, across the right-of-way of the Metro North railroad's Harlem Line.

Apart from residential uses with ground floor retail, the surrounding area contains several one-story commercial/office buildings. Directly north of the site, along Webster Avenue, a Family Dollar is present in a one-story commercial building. Parking uses in the surrounding area are located in older, one-story buildings and in parking lots along Webster Avenue. The parking garage for the New York Botanical Garden is located just north of the project site, at the northeastern corner of Webster Avenue and Bedford Park Boulevard.

Other notable land uses in the proximity of the project site consist of open space and institutional uses. The New York Botanical Garden is a large open space resource located to the east of the project site, separated from the site by the Metro-North Railroad right of way and Southern Boulevard. The local institutional uses include a post office (located north of the project site at 2963 Webster Avenue) and a university (the northeastern portion of the Rose Hill campus of Fordham University) is located to the southeast of the project site.



Legend

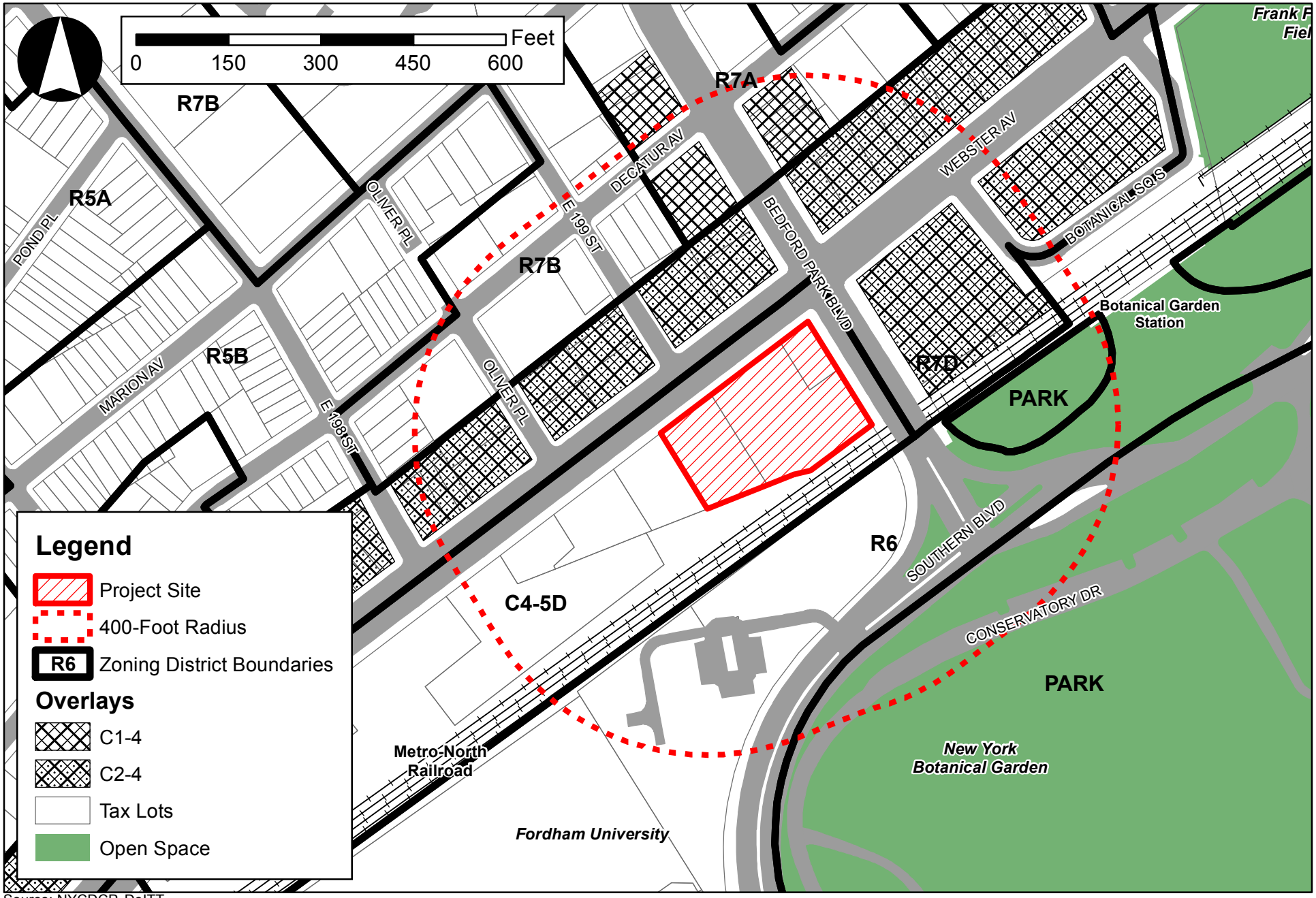
Project Site	One & Two Family Buildings	Mixed Commercial/Residential Buildings	Transportation/Utility	Parking Facilities
400-Foot Radius	Multi-Family Walkup Buildings	Commercial/Office Buildings	Public Facilities & Institutions	Vacant Land
Land Use	Multi-Family Elevator Buildings	Industrial/Manufacturing	Open Space	All Others or No Data

Source: PLUTO 2018v2 (NYCDCP)

NYBG - 2856 Webster Ave. FRESH EAS

Figure A-2

Land Use Map



Source: NYCDCP, DoITT

NYBG - 2856 Webster Ave. FRESH EAS

Figure A-3

Zoning Map

Several public transportation facilities serve the surrounding area. The Bedford Park Boulevard (4) Station and the Kingsbridge Road (B/D) Station are located approximately 0.25 miles to the northwest and west of the project site, respectively. The Botanical Garden Station (on the Metro-North railroad's Harlem Line) is located to the northeast of the site, with an entrance along Botanical Square South. The Bx41 and Bx41-SBS run along Webster Avenue, with the closest bus stop to the project site located at the intersection of Webster Avenue and Bedford Park Boulevard. Both the Bx41 and Bx41-SBS bus routes provide connections between the Hub and Williamsbridge in the Bronx. Additionally, the Bx26, providing service between Bedford Park and Co-op City Section 5, runs along Bedford Park Boulevard; the nearest bus stop to the project site is also located near the intersection of Webster Avenue and Bedford Park Boulevard.

III. THE PROPOSED ACTIONS

As described in greater detail below, the Applicant is seeking: (1) a zoning authorization from the New York City Planning Commission (CPC) to modify the maximum building height of a building containing a FRESH food store pursuant to Section 63-22; and (2) a zoning certification by the Chairperson of the CPC for a FRESH food store pursuant to Section 63-30. Additionally, as described below, the Applicant will also seek public financing to construct affordable housing.

An authorization is a discretionary action taken by the CPC that modifies specific zoning requirements if certain findings have been met. Authorizations are subject to ULURP review. The Proposed Actions are also subject to environmental review under CEQR.

Certification for a FRESH Food Store

The Applicant seeks a FRESH food store certification. A developer seeking to utilize the zoning incentives of the FRESH Program must demonstrate that the primary business of the retail space is the sale of food products. Prior to obtaining a building permit, the proposed grocery store must be certified as a FRESH food store by the Chairperson of the CPC, verifying that the store meets the floor area requirements, that the space is legally committed to use as a FRESH food store, and that a grocer has agreed to operate a FRESH food store in the developed space.

The requirements for a FRESH food store are:

- At least 6,000 sf of the store's selling area must be used for a general line of food and other grocery products, such as dairy, canned and frozen foods, fresh fruits and vegetables, fresh and prepared meats, fish and poultry, and non-food products, all intended for home preparation, consumption and use;
- At least 50 percent of the selling area must be used for the sale of a general line of food products;
- At least 30 percent of such selling area must be set aside for the sale of perishable goods, such as fresh produce, dairy and frozen foods (which may include fresh meats, poultry and fish), of which at least 500 sf must be used for the sale of fresh meat, fruits and vegetables;
- And a percentage of the ground floor street wall of a FRESH food store must be glazed and transparent, contributing to a more active streetscape. All new security gates on the store front are required to be at least 75 percent transparent.

A mixed-use building would be permitted with one additional square foot of residential floor area for every square foot of a FRESH food store, up to a maximum of 20,000 sf.

Authorization to Allow a 15-Foot Height Increase to Accommodate a FRESH Food Store

Contingent upon the applicant obtaining a FRESH certification, an authorization by the CPC may be sought to allow an increase in the maximum building height by up to 15 feet to accommodate the proposed FRESH food store. Approval of the Proposed Actions would result in a nine-foot height increase for the With-Action development (124-feet tall) as compared to the building that would be constructed on site on an as-of-right basis.

Public Financing

In addition, the Applicant is seeking public financing approval from city and state government. At the city level, it is expected that funding would be requested from HPD through the Senior Affordable Rental Assistance (SARA) program. At the state level, funding may be requested from New York State Homes and Community Renewal (HCR) in the form of the Senior Housing Program (SENIOR).

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

In the future without the Proposed Action (the No-Action scenario), no discretionary actions would be required to develop the site with a mixed-use building. It is anticipated that the site would be developed on an as-of-right basis pursuant to the site's existing C4-5D zoning with two 11-story buildings (approximately 115 feet tall) totaling approximately 362,559 gsf (combined FAR of 5.59). Approximately 430 DUs in approximately 341,456 gsf of residential space, and approximately 21,103 gsf of ground floor retail would be constructed. Similar to the Proposed Development, the construction of the as-of-right development would occur in two phases. If a supermarket is provided in the proposed retail space, it would not be certified as a FRESH supermarket in the future No-Action condition. As such, the as-of-right development would not include a bonus for the FRESH area on a portion of the 11th and 12th floor. The No-Action development also includes approximately 50 accessory parking spaces. Access to the parking level would be located on Webster Avenue via an existing curb cut.

No-Action Conditions within 400 Feet of the Project Site

There are no known developments that are planned to be constructed within 400 feet of the project site by the 2024 analysis year.

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

In the future with the Proposed Action (the With-Action Scenario), it is anticipated that the proposed zoning authorization, and zoning certification would be granted, along with the requisite public financing approvals. As such, the Proposed Development would include additional floor area and additional dwelling units, as compared to the as-of-right building that would be constructed under No-Action conditions.

As described above, the Applicant proposes to develop two new 12-story mixed-used residential buildings in two sequential phases. The combined total of the Proposed Development would be approximately 387,052 gsf (318,833 zoning square feet [zsf]). The combined total of the Proposed Development would include 464 affordable DUs in approximately 365,949 gsf (297,730 zsf) of residential area and 21,103 gsf of a FRESH Food Store on the ground floor (see **Table A-1**). The Proposed Development would include 50 accessory off-street parking spaces accessed along Webster Avenue. **Table A-2** provides a comparison of existing, No-Action and With-Action conditions on the Project Site.

Table A-1: With-Action Scenario

Block	Lot	Max. No-Action Residential GSF	Max. No-Action Commercial GSF	Max. With-Action Residential GSF	Max. With-Action Commercial GSF	Max. Residential GSF Increment[2]	Max. Commercial GSF Increment[2]
3273	118 122 128	341,456 (430 DUs)	21,103	365,949 (464 DUs)	21,103	+24,493 (34 DUs)	+0

The first phase of the Proposed Development would be comprised of 120,463 gsf (96,130 zsf) of residential space and 12,787 gsf (12,787 zsf) of FRESH Food Store space in approximately 133,250 gsf (108,917 zsf). The FRESH Food Store would be comprised of the following:

- 6,135 zsf of general line of food products for home preparation (non-perishable), consistent with the requirement of the greater of 3,000 zsf or a minimum of 50 percent of food and non-food retail space (6,017 zsf minimum required);
- 3,922 zsf of perishable food to satisfy the requirement of 2,000 zsf or minimum 30 percent of food and non-food retail space, with a minimum of 500 zsf within the perishable food space to be designated for the sale of fresh produce;
- 1,976 zsf of non-food grocery space; and,
- 754 zsf of non-retail space (consisting of 220 zsf of office and storage, 187 zsf of restrooms, and 347 zsf of refrigerated storage). Additional on-site storage is not required as the grocery tenant has an off-site storage and warehousing facility nearby that will serve the store.

The proposed 12,033 zsf FRESH Food Store space for a general line of food and non-food grocery exceeds the minimum 6,000 zsf requirement for a FRESH Food Store.

The overall 12,787 zsf FRESH Food Store proposed in the first phase of the development would be able to open and begin operations while construction of Phase II is ongoing. Further, the requested zoning authorization for an increase in maximum building height for Phase I would be attributed to only the FRESH Food Store area that is provided within Phase I.

The second phase of the Proposed Development would be comprised of 245,486 gsf (201,600 zsf) of residential space and 8,316 gsf (8,316 zsf) of FRESH Food Store space in approximately 253,802 gsf (209,916 zsf). As noted above, the portion of the FRESH Food Store provided in Phase II would be an extension of an already operational FRESH Food Store that would be provided in Phase I. With the addition of the 8,316 zsf of FRESH Food Store space, the combined store would be comprised of the following:

- 10,200 zsf of general line of food products for home preparation (non-perishable), consistent with the requirement of the greater of 3,000 zsf or a minimum of 50 percent of food and non-food retail space (10,175 zsf minimum required);
- 6,125 zsf of perishable food to satisfy the requirement of 2,000 zsf or minimum 30 percent of food and non-food retail space (which would equal 6,105 zsf), with a minimum of 500 zsf within the perishable food space to be designated for the sale of fresh produce;
- 4,024 zsf of non-food grocery space; and,
- 754 zsf of non-retail space (consisting of 220 zsf of office and storage, 187 zsf of restrooms, and 347 zsf of refrigerated storage).

Table A-2: Comparison of Existing, No-Action, and With-Action Conditions on the Project Site (Block 3273, Lots 118, 122, 128)

	Existing Conditions		No-Action Condition		With-Action Condition		Increment
LAND USE							
Residential	☐YES	☒NO	☒ YES	☐ NO	☒ YES	☐ NO	
If "yes," specify the following:							
Describe type of residential structure	N/A		Multi-Family Residential with Ground Floor Retail		Multi-Family Residential with Ground Floor Retail		-
No. of dwelling units	0		430		464		+34
No. of low- to moderate-income units	0		430		464		+34
Gross floor area (sf)	0		341,456		365,949		+24,493
Commercial	☒ YES	☐ NO	☒ YES	☐ NO	☒ YES	☐ NO	
If "yes," specify the following:							
Type of use	Supermarket, laundromat		Supermarket		FRESH Food Store		-
Gross floor area (sf)	37,434		21,103		21,103		-
Manufacturing/Industrial	☐ YES	☒ NO	☐ YES	☒ NO	☐ YES	☒ NO	
If "yes," specify the following:							
Type of use	-		-		-		-
Gross floor area (sf)	-		-		-		-
Open storage area (sf)	-		-		-		-
If any unenclosed activities, specify:	-		-		-		-
Community Facility	☐ YES	☒ NO	☐ YES	☒ NO	☐ YES	☒ NO	-
If "yes," specify the following:							
Type	-		-		-		-
Gross floor area (sf)	-		-		-		-
Vacant Land	☐ YES	☒ NO	☐ YES	☒NO	☐ YES	☒ NO	
If "yes," describe:	-		-		-		-
Other Land Uses	☐ YES	☒ NO	☐ YES	☒ NO	☐ YES	☒ NO	
If "yes," describe:			-		-		
PARKING							
Garages	☐ YES	☒ NO	☒ YES	☐ NO	☒ YES	☐ NO	
If "yes," specify the following:							
No. of public spaces	-		-		-		-
No. of accessory spaces	-		50		50		-
Lots	☒ YES	☐ NO	☐ YES	☒ NO	☐ YES	☒ NO	
If "yes," specify the following:							
No. of public spaces	-		-		-		-
No. of accessory spaces	**50**		-		-		-
ZONING							
Zoning classification	C4-5D + Inclusionary Housing		C4-5D + Inclusionary Housing/AIRS		C4-5D + Inclusionary Housing/AIRS		
Maximum amount of floor area that can be developed	298,883 zsf (with 5.6 FAR for Inclusionary Housing)		298,883 zsf (with 5.6 FAR for Inclusionary Housing)		318,833 zsf (includes up to 19,997 zsf of additional SF for FRESH bonus)		+19,950 zsf
Predominant land use and zoning classifications within the land use study area(s) or a 400 ft. radius of proposed project	Residential, Commercial, Mixed-Use, Institutional/ Public Facilities, Transportation/ Utility, Industrial/ Manufacturing, Open Space, and Vacant Land		Residential, Commercial, Mixed-Use, Institutional/ Public Facilities, Transportation/ Utility, Industrial/ Manufacturing, Open Space, and Vacant Land		Residential, Commercial, Mixed-Use, Institutional/ Public Facilities, Transportation/ Utility, Industrial/ Manufacturing, Open Space, and Vacant Land		

The 20,349 zsf of space (excludes the 754 square-foot non-retail portion of the FRESH Food Store) for a general line of food and non-food grocery exceeds the minimum 6,000 zsf requirement for a FRESH Food Store.

The overall 8,316 zsf portion of the FRESH Food Store proposed in the second phase of the development would be an expansion of the Phase I FRESH Food Store. As such, the requested zoning authorization for an increase in maximum building height for Phase II would be attributed to only the FRESH Food Store area that is provided within Phase II.

VI. PURPOSE AND NEED OF THE PROPOSED ACTION

The requested zoning authorization and certification would increase the permitted floor area by up to 20,000 sf and would allow for the increase in total building height to accommodate the additional floor area as an incentive for providing a FRESH food store. The proposed FRESH food store would supply nutritious food to a community designated as underserved by neighborhood grocery stores.

The requested actions would allow for the development of a higher number of affordable housing units as compared to the No-Action condition, helping to address affordable housing goals set forth by the City in *Housing New York: A Five-Borough, Ten-Year Plan* and the subsequent plan Housing New York 2.0, released in October 2017 and OneNYC. The Proposed Development would be constructed on a site that is located in close proximity to public transportation, extending the streetwall continuity and pedestrian activity around the project site.

VII. REQUIRED APPROVALS AND REVIEW PROCEDURES

The Applicant is seeking approval of three actions: a zoning authorization to modify the maximum building height of a building containing a FRESH food store pursuant to Section 63-22, a zoning certification for a FRESH food store pursuant to Section 63-30, and public financing approval for the construction of affordable housing. An authorization is a discretionary action taken by the CPC that modifies specific zoning requirements if certain findings have been met. Authorizations are subject to ULURP review. The Proposed Actions are also subject to environmental review under CEQR.

Attachment B

Supplemental Screening Analyses

I. INTRODUCTION

This EAS has been prepared in accordance with the guidance and methodologies presented in the 2014 *CEQR Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a detailed technical analysis be undertaken. Using this guidance, preliminary screening assessments were conducted for the Proposed Actions to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the EAS Form, including Land Use, Zoning, and Public Policy; Shadows; Urban Design and Visual Resources; Hazardous Materials; Air Quality; Noise, Public Health, Neighborhood Character, and Construction supplemental screening assessments are provided in this attachment. Detailed analyses, as required, are provided in Attachments C through G. The remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial CEQR thresholds and/or are unlikely to result in significant adverse impacts. These areas screened out from any further assessment include: Socioeconomic Conditions; Community Facilities and Services; Open Space; Shadows; Historic and Cultural Resources; Natural Resources; Hazardous Materials; Water and Sewer Infrastructure; Solid Waste and Sanitation Services; Energy; Transportation; Greenhouse Gas Emissions and Climate Change; Public Health; and, Neighborhood Character. **Table B-1** presents a summary of analysis screening information for the Proposed Actions.

As described in **Attachment A, "Project Description,"** JELB Webster, LLC ("the Applicant") proposes to redevelop Lots 118, 122, and 128 on Block 3273 in Bronx Community District 7 with two 12-story mixed-use developments totaling approximately 387,052 gross square feet (gsf), with up to 464 affordable dwelling units (DUs) and approximately 21,103 gsf of commercial space. It is anticipated that a FRESH supermarket would occupy the commercial space, with a FRESH certification (ZR Section 63-30) and authorization (ZR Section 63-22) being sought to permit up to an additional 15 feet in height (an increase from 11 to 12 stories) in a building with ground floor FRESH uses. It should be noted that the Proposed Actions would result in an increase in height of approximately nine-feet. Additionally, the proposed project would receive financing from NYC HPD and NYS HCR. Collectively, the FRESH certification and authorization, and public financing comprise the "Proposed Actions" for the purposes of the environmental analysis.

The requested zoning authorization and certification would increase the permitted floor area by up to 20,000 sf and would allow for the increase in total building height to accommodate the additional floor area as an incentive for providing a FRESH food store. The proposed FRESH food store would supply nutritious food to a community designated as underserved by neighborhood grocery stores. The requested actions would allow for the development of a higher number of affordable housing units as compared to the No-Action condition, helping to address affordable housing goals set forth by the City in Housing New York: A Five-Borough, Ten-Year Plan. The Proposed Development would be constructed on a site that is located in close proximity to public transportation, extending the streetwall continuity and pedestrian activity around the project site.

The reasonable worst case development scenario (RWCDS) With-Action condition for project site consists of a total of approximately 464 affordable DUs; approximately 21,103 gsf of supermarket space; and approximately 50 accessory parking spaces.

The RWCDS No-Action condition represents the baseline against which the consequences of the Proposed Actions will be compared. The effect of the Proposed Actions, therefore, represents the incremental effects on conditions that would result from the net change in development between No-Action and With-Action conditions (the "project increment"). Under RWCDS No-Action conditions, it is assumed that the project site would be redeveloped in accordance with the existing C4-5D zoning regulations. The RWCDS No-Action scenario assumes the construction of approximately two 11-story mixed-use buildings totaling 362,559 gsf, including approximately 430 dwelling units and an approximately 21,103 gsf supermarket.

Table B-1:
Summary of CEQR Technical Area Screening

***CEQR* TECHNICAL AREA**	**SCREENED OUT PER EAS FORM**	**SCREENED OUT PER SUPPLEMENTAL SCREENING**	**DETAILED ANALYSIS REQUIRED**
Land Use, Zoning, & Public Policy			X
Socioeconomic Conditions	X		
Community Facilities and Services	X		
Open Space	X		
Shadows			X
Historic & Cultural Resources	X		
Urban Design & Visual Resources			X
Natural Resources	X		
Hazardous Materials		X	
Water and Sewer Infrastructure	X		
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation	X		
Air Quality			X
Greenhouse Gas Emissions	X		
Noise			X
Public Health		X	
Neighborhood Character		X	
Construction		X	

As such, the anticipated RWCDS net project increment includes an incremental increase of approximately 34 DUs in approximately 24,493 gsf. There would be no incremental change to the commercial square footage or the on-site parking supply in the future with the Proposed Actions. The application of screening thresholds and, where warranted, detailed analyses, is based on this net incremental development, which represents the RWCDS for the Proposed Actions.

II. SUPPLEMENTAL SCREENING AND SUMMARY OF DETAILED ANALYSES

Land Use, Zoning, and Public Policy

According to the 2014 *CEQR Technical Manual*, a detailed assessment of land use, zoning and public policy is appropriate if an action would result in a significant change in land use or would substantially affect regulations or policies governing land use. Zoning and public policy analyses are typically performed in conjunction with a land use analysis when an action would change the zoning on the site or result in the loss of a particular use. Land use analyses are required when an action would substantially affect land use regulation.

The Proposed Actions include a zoning authorization and zoning certification for a FRESH food store. The requested zoning authorization and certification would increase the permitted floor area by up to 20,000 sf and would allow for the increase in total building height to accommodate the additional floor area as an incentive for providing a FRESH food store. The proposed FRESH food store would supply nutritious food to a community designated as underserved by neighborhood grocery stores.

The requested actions would allow for the development of a higher number of affordable housing units as compared to the No-Action condition, helping to address affordable housing goals set forth by the City in *Housing New York: A Five-Borough, Ten-Year Plan* and the subsequent plan *Housing New York 2.0*, released in October 2017 and *OneNYC*. The Proposed Development would be constructed on a site that is located in close proximity to public transportation, extending the streetwall continuity and pedestrian activity around the project site.

A detailed land use, zoning, and public policy assessment is provided in **Attachment C, "Land Use, Zoning, and Public Policy."** As discussed therein, no significant adverse land use, zoning, or public policy impacts are expected in the future with the Proposed Actions.

Shadows

A shadows assessment considers actions that result in new shadows long enough to reach a publicly accessible open space or historic resource (except within an hour and a half of sunrise or sunset). For actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight). According to the *2014 CEQR Technical Manual*, some open spaces contain facilities that are not sunlight-sensitive, and do not require a shadow analysis including paved areas (such as handball or basketball courts) and areas without vegetation.

As described above, the Proposed Actions would result in the addition of a single floor to an as-of-right 11-story, 115-foot-tall building through the provision of a FRESH grocery store. The Proposed Actions would facilitate the development of two new 12-story buildings of up to approximately 124 feet in height (up to approximately 141 feet to the top of the bulkhead). As the Proposed Actions would allow for taller buildings than would be permitted on an as-of-right basis, and as sunlight-sensitive open space resources are located within the vicinity of the Project Area, a shadows screening was conducted to determine whether the RWCDS would result in new shadows long enough to reach sunlight-sensitive resources as compared to No-Action conditions.

As discussed in **Attachment D, "Shadows,"** the Proposed Actions would not result in significant adverse shadows impacts. While the proposed project would cast incremental shadows on a portion of the New York Botanical Garden, the shadows analysis determined that the duration and coverage of incremental shadows on the New York Botanical Garden and the landscaped greenspace on Southern Boulevard would not be significant or adverse. Incremental shadows on the New York Botanical Garden as a result of the proposed building's additional floor would last for 21 minutes on the June 21 analysis day. Project-generated incremental shadows would occur during the late afternoon hours and would last for approximately 39 minutes on March 21/September 21, two hours and 17 minutes on May 6/August 6, and two hours and 57 minutes on June 21 analysis days at the landscaped greenspace on Southern Boulevard. Incremental shadows would reach the Greenstreet at Southern Boulevard on the May 6/August 6 and June 21 analysis days for 26 minutes and 53 minutes, respectively. These areas contain trees, bushes, and grass. Additionally, all of the areas that would be shaded as a result of the increased building height would continue to receive adequate sunlight during the morning, afternoon, and evening hours, and as such, the proposed increased building height associated with the Proposed Actions would not have significant

adverse effects on any of the identified green spaces. Therefore, incremental shadows that would result from the incremental height of the building are not anticipated to adversely affect the utilization or enjoyment of the New York Botanical Garden or the Landscaped Greenspace on Southern Boulevard.

Urban Design and Visual Resources

An area's urban components and visual resources together define the look and character of the neighborhood. The urban design characteristics of a neighborhood encompass the various components of buildings and streets in the area. These include building bulk, use and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For CEQR analysis purposes, this includes only views from public and publicly accessible locations and does not include private residences or places of business.

An analysis of urban design and visual resources is appropriate if an action would (a) result in buildings that have substantially different height, bulk, form, setbacks, size, scale, use or arrangement than exists in an area; (b) change block form, de-map an active street or map a new street, or affect the street hierarchy, street wall, curb cuts, pedestrian activity or streetscape elements; or (c) result in above-ground development in an area that includes significant visual resources.

As the Proposed Actions would result in new predominately residential buildings with heights and bulks exceeding the current as-of-right zoning envelope, a detailed urban design and visual resources analysis is warranted and is provided in **Attachment D, "Urban Design and Visual Resources."** As detailed in **Attachment D**, there would be no significant adverse impacts to urban design or visual resources as a result of the Proposed Actions.

Hazardous Materials

As detailed in the 2014 *CEQR Technical Manual*, the goal of a hazardous materials assessment is to determine whether an action may increase the exposure of people or the environment to hazardous materials, and if so, whether this increased exposure would result in potential significant public health or environmental impacts. A hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi-volatile organic compounds, methane, polychlorinated biphenyls 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; (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials.

The project site was included in the 2010 Webster Avenue Rezoning (CEQR# 10DCP035X). Due to the historical use of several properties within the boundaries of the Webster Avenue Rezoning Area, an (E) designation (E-249) was placed on several properties, including the project site (Block 3273, Lots 118, 122, and 128), in order to avoid any potential impacts related to hazardous materials. The text of the (E) designation is as follows:

> **Due to the possible presence of hazardous materials on the aforementioned designated sites there is potential for contamination of the soil and groundwater. To determine if contaminations exists and perform and appropriate remediation, the following tasks must be undertaken by the fee owner(s) of the lot restricted by this (E) designation prior to any demolition or disturbance of soil on the lot.**

Task 1- Sampling Protocol

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

Task 2- Remediation Determination and Protocol

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

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

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

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

Air Quality

According to the guidance provided in the 2014 *CEQR Technical Manual*, air quality analyses are conducted in order to assess the effect of an action on ambient air quality, or effects on the Proposed Development because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and "stationary sources," pollutants produced by fixed facilities. As per the *CEQR Technical Manual*, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts.

Per the EAS Form, further analysis of air quality mobile sources from action-generated vehicle trips has been screened out in accordance with 2014 *CEQR Technical Manual* assessment screening thresholds. According to the *CEQR Technical Manual* CO screening threshold criteria, if 170 or more project-generated vehicles pass through an intersection in any given peak period or if a project would result in a substantial number of local or regional diesel vehicle trips, there is the potential for mobile air quality impacts and a detailed analysis is required. For the preliminary PM assessment, the screening is based on the number of heavy duty diesel vehicles (HDDVs) or its equivalent in vehicular emissions generated by a proposed

project; the determination of HDDV equivalents is based on the vehicle increment, vehicle mix, and roadway classification of the intersection. As also indicated in the EAS Form, the Proposed Actions would not exceed any threshold identified in Table 16-1 of the *CEQR Technical Manual* and would result in fewer than 50 vehicle trips per peak hour at any given intersection, and therefore would not exceed the *CEQR Technical Manual* screening criteria for CO analysis at any intersection. The project site has frontage along Webster Avenue and Bedford Park Boulevard, which are classified as principal and minor arterials. As such, the Proposed Actions would also pass the screening thresholds in New York City Department of Environmental Protection's (DEP's) Equivalent Truck Calculation Matrix for principal and minor arterials, and would not exceed the *CEQR Technical Manual* screening criteria for $PM_{2.5}$ analysis at any intersection. Therefore, detailed mobile source air quality analysis at intersections is not required, and no significant adverse mobile source air quality impacts would occur.

Although there is a parking garage located at 2960 Webster Avenue, immediately across Bedford Park Boulevard to the northeast of the project site, the air quality analysis that was conducted for the 2960 Webster Avenue EAS (CEQR No.07BSA043X) concluded that the parking garage would not result in any significant adverse mobile source air quality impacts. As such, the parking garage would not pose a risk to the proposed residential development at 2856 Webster Avenue.

Stationary source impacts could occur with actions that create new stationary sources or pollutants, such as emission stacks for industrial plants, hospitals, or other large institutional uses, or a building's boiler stacks used for heating/hot water, ventilation, and air conditioning ("HVAC") systems, that can affect surrounding uses. Impacts from boiler emissions associated with a development are a function of fuel type, stack height, minimum distance of the stack on the source building to the closest building of similar or greater height, building use, and the square footage size of the source building. In addition, stationary source impacts can occur when new uses are added near existing or planned emissions stacks, or when new structures are added near such stacks and those structures change the dispersion of emissions from the stacks so that they affect surrounding uses.

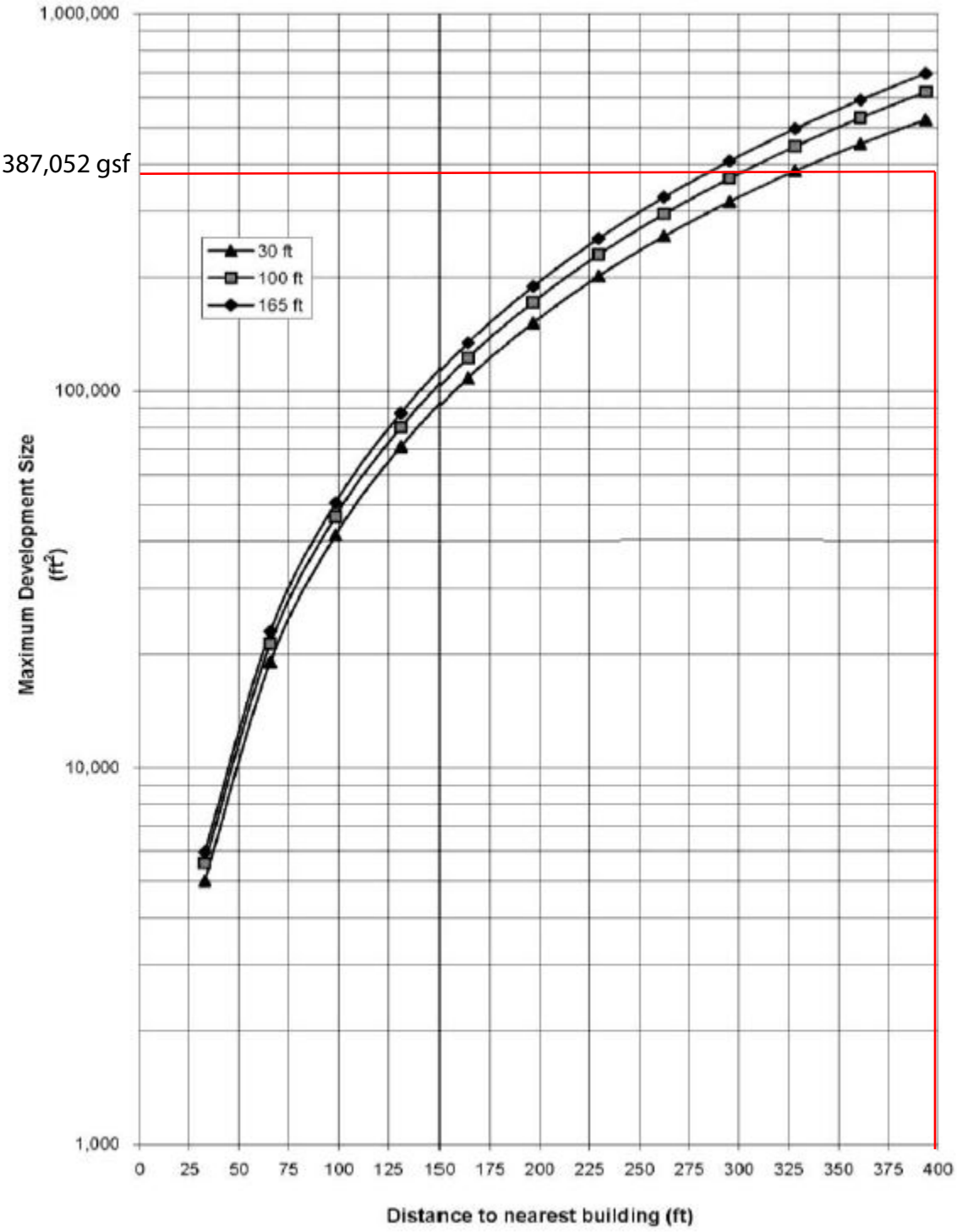
The Proposed Development would use fossil fuels for HVAC purposes. Emissions from the HVAC system of the Proposed Development has the potential to affect air quality levels at other nearby existing land uses. According to *CEQR Technical Manual* guidance, the impacts of these emissions would be a function of fuel type, stack height, building size, and location of each emissions source relative to nearby sensitive land uses. A stationary source screen was conducted with Figure 17-3 of the 2014 *CEQR Technical Manual* to determine if the Proposed Actions have the potential to result in stationary source impacts on nearby existing land uses. As shown in **Figure B-1**, the Proposed Development would be below this initial screening level.

As the Proposed Development consists of two new 12-story mixed-used residential buildings, it was analyzed for potential project-on-project stationary source impacts, which is provided in **Attachment G, "Air Quality."** As discussed in **Attachment G**, the stationary source air quality analysis determined that the Proposed Development would not result in significant adverse stationary source air quality impacts to existing buildings through incorporating fuel oil and stack location restrictions that would be mandated through an (E) designation (E-566). As discussed therein, no significant adverse stationary air quality impacts are expected in the future with the Proposed Actions.

Noise

The purpose of a noise analysis is to determine both a proposed action's potential effects on sensitive noise receptors and the potential effects of ambient noise levels on new sensitive uses introduced by an action. The principal types of noise sources affecting the New York City environment are mobile sources (primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with

Figure 17-3:
Stationary Source Screen



*2,000 feet from the nearest building taller than 115 feet

manufacturing operations or building HVAC systems), and construction noise (e.g. trucks, bulldozers, power tools, etc.).

The Proposed Actions would introduce new sensitive uses (i.e. residential uses) to project site located adjacent to an open, below-grade railroad cut right-of-way (the MTA Metro North Railroad Harlem and New Haven lines) and near heavily trafficked roadways (Webster Avenue and Bedford Park Boulevard). Therefore, a detailed noise assessment is required to determine if ambient noise levels have the potential to adversely affect future project occupants, and has been provided in **Attachment F, "Noise."** As discussed in the attachment, noise monitoring was conducted at the two street frontages of the project site and near the MTA Metro North Railroad Harlem Line tracks. These measurements were used as a baseline for determining total noise levels with the Proposed Actions, which would add noise due to project-generated traffic.

As detailed in the attachment, future 2024 peak period L_{10} values at the monitored sites will range from a minimum of 71.6 dBA to a maximum of 81.7 dBA, and the greatest increases in noise levels from No-Action conditions to With-Action conditions will be 0.17 dBA. As the relative increases in noise under With-Action conditions are below 3.0 dBA when compared to the No-Action conditions, no significant adverse impacts due to project-generated traffic would occur.

Attenuation of Proposed Building Frontages Facing the Street

With-Action L_{10} noise levels at receptor locations 1 and 2 along the street frontages of the project site would fall under the "Clearly Unacceptable" and "Marginally Unacceptable (III)" CEQR noise exposure categories, respectively. Therefore, the Applicant-proposed buildings would be required to provide special window-wall attenuation measures above the minimum window-wall attenuation of 25 dBA in order to achieve a 45 dBA interior noise level for residential/community facility uses, and an attenuation of 20 dBA for commercial uses. These attenuation values are based on the anticipated L_{10} noise levels under With-Action conditions. Based on the With-Action L_{10} attenuation of 38 dBA and 33 dBA would be required at receptor locations 1 and 2, respectively. However, as a result of the 2011 Webster Avenue Rezoning an (E) designation (E-249) for noise was placed on Lots 118, 122, and 128. E-249 stipulates that a minimum of 37.2 dBA of noise attenuation be required on facades that front on Bedford Park Boulevard on Lots 122 and 128 (receptor location 2) and that all other facades on Lots 122 and 128 require 35 dBA of noise attenuation. Additionally, E-249 stipulates that all building facades on Lot 118 require a minimum 35 dBA of attenuation (receptor locations 1 and 2).[1] As such, a new (E) designation (E-566) would need to be created to update the building attenuation requirements for the project site to reflect the results of the latest noise analysis presented in Attachment F.

Attenuation of Proposed Building Frontage Facing the MTA Metro North Tracks

With-Action L_{10} noise levels at receptor location 3 along the MTA Metro North Railroad Harlem and New Haven Line tracks would fall under the "Marginally Unacceptable (IV)" CEQR noise exposure category. Thus, attenuation would be required above the standard 25 dBA/20 dBA in order to maintain interior noise levels of 45 dBA/50 dBA or lower for residential/community facility or commercial uses, at these locations, respectively. Based on the conservative FTA noise prediction methodology, the maximum predicted L_{10} noise level would be 81.3 dBA along the Proposed Development's southeastern façade. Therefore, attenuation of 38 dBA would be required on the facades of Lots 118 and 128 that face the MTA Metro North Railroads Harlem and New Haven Line tracks.

[1] The existing (E) designation (E-249) was established using the now obsolete 2010 CEQR guiding document.

Public Health

Public health involves the activities that society undertakes to create and maintain conditions in which people can be healthy. Many public health concerns are closely related to air quality, water quality, hazardous materials, and noise.

According to the guidance of the 2014 *CEQR Technical Manual*, a public health assessment may be warranted if a project results in (a) increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; (b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect groundwater to be used as a source of drinking water; (c) solid waste management practices that could attract vermin and result in an increase in pest populations; (d) potential significant adverse impacts to sensitive receptors from noise and odors; (e) vapor infiltration from contaminants within a building or underlying soil that may result in significant adverse hazardous materials or air quality impacts; (f) exceedances of accepted federal, state, or local standards; or (g) other actions that might not exceed the preceding thresholds but might, nonetheless, result in significant health concerns.

As detailed in the analyses provided in this EAS, the Proposed Actions would not result in significant adverse impacts in the areas of air quality, water quality, hazardous materials, or noise. Therefore, the Proposed Actions do not have the potential to result in significant adverse public health impacts, and a further assessment is not warranted.

Neighborhood Character

According to the 2014 *CEQR Technical Manual*, an assessment of neighborhood character may be appropriate if a proposed project has the potential to result in significant adverse impacts on land use, zoning, public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise, or when a project may have moderate effects on several of the elements that define a neighborhood's character.

The Proposed Actions would not adversely affect any component of the surrounding area's neighborhood character. The Proposed Actions would not conflict with the surrounding activities, nor would they significantly impact land use patterns. As described above, the developments that would be facilitated by the Proposed Actions would bring occupancy and activity to the project site. The Proposed Development would bring new residential and commercial uses to the project site that has historically been occupied by manufacturing uses. The proposed residential and local retail uses would add affordable housing and convenient amenities to the neighborhood, and would further enhance the mixed-use character of the area.

As discussed in the urban design and shadows sections, the Proposed Actions would facilitate the development of new residential and mixed use buildings of similar bulk, form, height and scale to the existing and planned developments in the surrounding area. In addition, there would be no significant adverse shadows impacts on adjacent open spaces or historic resources.

The Proposed Actions would not result in any significant transportation impacts, or significant changes in traffic patterns within the study area. Nor would there be any significant adverse impacts on any of the other technical areas related to neighborhood character. Therefore, the Proposed Actions would not have any significant adverse impacts on neighborhood character, and further analysis is not warranted.

Construction

Although temporary, construction impacts can include noticeable and disruptive effects from an action that is associated with construction or could induce construction. Determination of the significance of construction impacts and need for mitigation is generally based on the duration and magnitude of the impacts. Based on *CEQR Technical Manual* guidance, when the duration of construction is expected to be short-term (less than two years), any impacts resulting from construction generally do not require detailed assessment. Construction impacts are usually important when construction activity could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, and air quality conditions.

The Proposed Actions consist of a zoning authorization to modify the maximum building height of a building containing a FRESH food store pursuant to ZR Section 63-22 and also include a zoning certification from the CPC Chairperson for a FRESH food store pursuant to ZR Section 63-30. Additionally, the Applicant will also seek public financing to construct affordable housing. The requested zoning authorization and certification would increase the permitted floor area by up to 20,000 sf and would allow for the increase in total building height to accommodate the additional floor area as an incentive for providing a FRESH food store, as compared to the No-Action condition at the site. Under the With-Action condition, the Applicant proposes to develop two new 12-story mixed-used residential buildings with ground floor FRESH supermarket.

Similar to the No-Action condition, the Proposed Development under the With-Action condition would be constructed in two sequential phases that would not overlap (see **Figure B-2**). A site-specific construction schedule was developed by the Applicant for the Proposed Development based on experience with other projects and the Applicant's consultation with its construction managers. As shown in **Figure B-2**, each construction phase would be considered short-term, as each phase is expected to be less than two years (Phase I- 22 months; Phase 2- 23 months). There would also be an approximately two-month gap between the completion of the first phase of construction and the onset of the second phase of construction. It is anticipated that the construction loan financing for Phase I will close in late spring 2020, with construction commencing in early summer 2020. It is anticipated that the second phase of the Proposed Development is anticipated to close on construction loan financing in late spring 2022, with construction commencing in early summer 2022. Accordingly, the RWCDS would have a 2024 Build Year for analysis purposes.

Figure B-2
Preliminary Construction Schedule: With-Action Condition

Construction Task	Approx. Start Date	Approx. End Date	Approx. Duration (Months)
Phase 1 Construction			
Demolition	3/1/2019	4/30/2019	2
Excavations	4/1/2020	7/31/2020	3
Piles	6/1/2020	9/30/2020	4
Caissons	6/1/2020	9/30/2020	4
Concrete	10/1/2020	12/31/2020	3
Site Utilities	11/1/2020	12/31/2020	2
Superstructure	1/1/2021	8/31/2021	8
Temp Hoist	3/1/2021	12/31/2021	10
Interior Rough in	2/1/2021	10/31/2021	9
Building Façade	3/1/2021	12/31/2021	10
Elevator Inspection	11/1/2021	11/30/2021	1
Interior Finishes	3/1/2021	2/28/2022	10
Inspections	2/1/2022	3/31/2022	2
TCO	3/1/2022	3/31/2022	1
Phase 2 Construction			
Demolition	5/1/2022	7/31/2022	2
Excavations	7/1/2022	10/31/2022	3
Piles	9/1/2022	12/31/2022	4
Caissons	9/1/2022	12/31/2022	4
Concrete	1/1/2023	3/31/2023	3
Site Utilities	2/1/2023	3/31/2023	2
Superstructure	4/1/2023	11/30/2023	8
Temp Hoist	6/1/2023	3/31/2023	10
Interior Rough in	5/31/2023	1/31/2024	9
Building Façade	6/1/2023	3/31/2024	10
Elevator Inspection	2/1/2024	2/29/2024	1
Interior Finishes	6/1/2023	5/31/2024	11
Inspections	5/1/2024	6/30/2024	2
TCO	6/1/2024	6/30/2024	1

Construction of the Proposed Development would follow applicable federal, state, and local laws for building and safety, as well as local noise ordinances, as appropriate. Construction specifications would require that construction contractors comply with all applicable legal requirements including environmental regulations and obtain necessary permits for the duration of construction.

As detailed in the Hazardous Materials section above, due to the historical use of several properties within the boundaries of the Webster Avenue Rezoning Area, an (E) designation (E-249; (CEQR# 10DCP035X)) was placed on several properties, including the project site (Block 3273, Lots 118, 122, and 128), in order to avoid any potential impacts related to hazardous materials. An (E) designated site is an area designated on a zoning map within which no change of use or development requiring a New York City Department of Building's (DOB) permit may be issued without approval of OER. These sites require the OER's review to ensure protection of human health and the environment from any known or suspected hazardous materials associated with the site. The (E) designation ensures that the fee owner conduct a testing and sampling protocol and remediation, where appropriate, to the satisfaction of the OER before the issuance of a permit by DOB. The environmental requirements for the (E) designation also include a mandatory construction-related health and safety plan, which must also be approved by the OER before any remedial activities that may be required would be permitted to begin. The Proposed Actions would not change any processes or activities related to the (E) designation or any potential site remediation. Any potential construction-related hazardous materials impact would be avoided through measures required by the (E) designation including site investigation, testing, remediation, and the implementation of a construction health and safety plan (CHASP).

Similar to the as-of-right development, the Proposed Development would result in temporary disruptions including construction related traffic, dust, noise, or mobile source emissions. However, these effects would be temporary, as the duration of construction activities for each phase of the Proposed Development is not expected to exceed 24 months and construction activity would mostly be limited to the hours of 7:00 AM to 5:00 PM on weekdays. It is anticipated that construction staging would primarily occur on the project site. Construction activities are not expected to adversely affect surrounding land uses. As required by City regulations, sidewalk protection bridges and full height plywood barriers would be installed to protect the public right of way. Periodic lane and sidewalk closures likely would be required to facilitate material delivery, construction debris removal, and related activities. Standard practices would be followed to ensure safe pedestrian and vehicular access to nearby buildings and along affected streets and sidewalks. During construction, access to all adjacent buildings, residences, and other uses would be maintained according to the regulations established by the DOB. Construction activity on the project site may also involve the operation of several pieces of diesel equipment or machinery during peak construction of the Proposed Project. However, through adherence to relevant guidelines and regulations including the *New York City Noise Control Code* and *New York City Air Pollution Control Code*, development facilitated by the Proposed Actions would not result in significant adverse construction-related noise or air quality impacts. While the Proposed Development would result in temporary disruptions, these effects are not considered as significant or adverse. Therefore, no further analysis is warranted.

Attachment C

Land Use, Zoning and Public Policy

I. INTRODUCTION

This attachment examines the Proposed Actions' compatibility and consistency with land use patterns in the surrounding area, ongoing development trends, land use and zoning policies, as well as other public policies. This analysis has defined a study area within which the Proposed Actions would have the potential to affect land use or land use trends. Following guidance provided in the 2014 *CEQR Technical Manual*, this study area encompasses a 400-foot radius surrounding the proposed project. The land use study area boundary generally extends from lots fronting Decatur Avenue to the north, Botanical Square South to the east, Southern Boulevard/Conservatory Drive to the south, and East 198th Street to the west (refer to **Figure C-1**).

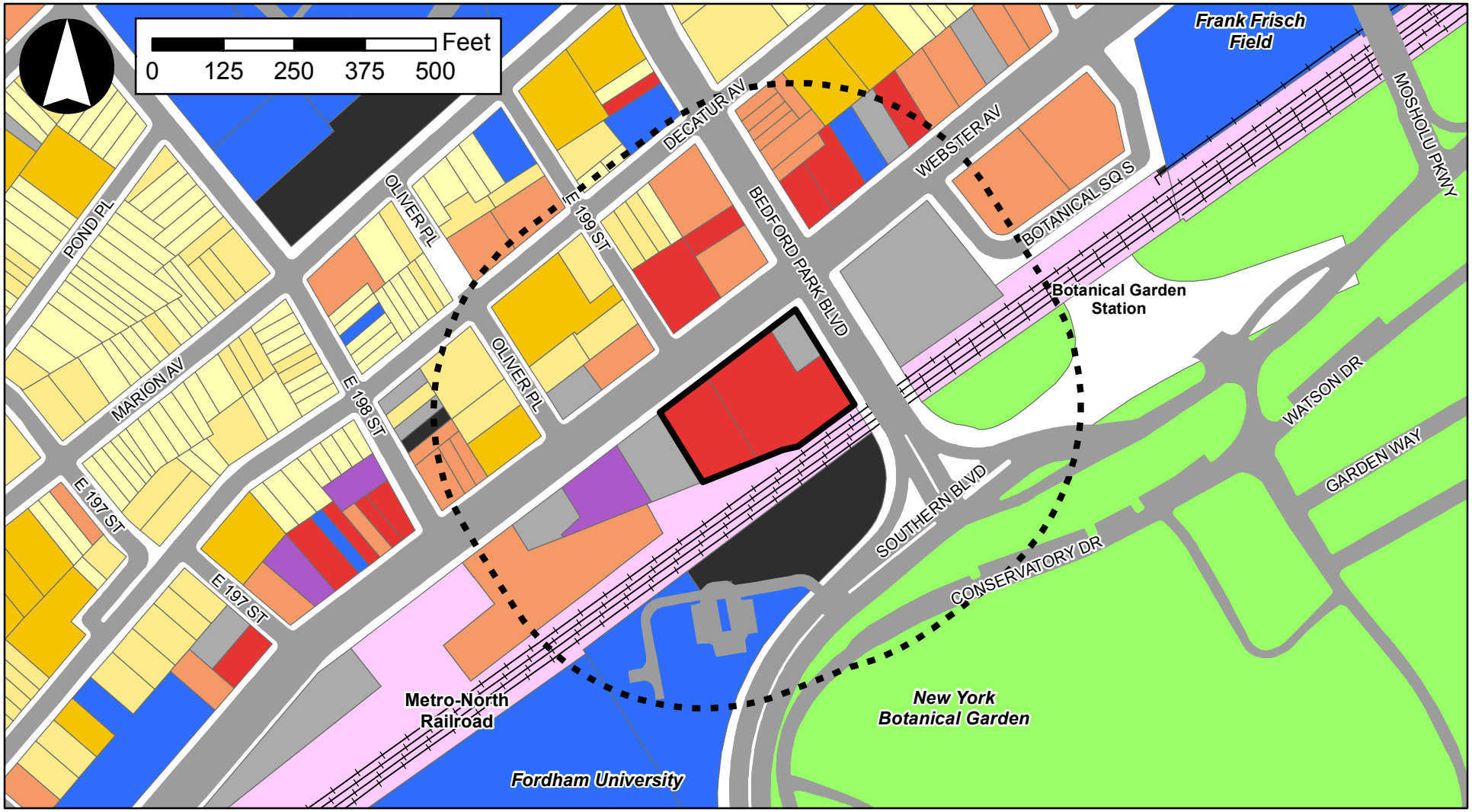
As described in **Attachment A, "Project Description,"** the Proposed Actions would include: (1) a zoning authorization to modify the maximum building height of a building containing a FRESH food store pursuant to Section 63-22; (2) a zoning certification for a FRESH food store pursuant to Section 63-30; and (3) public financing approval from NYC HPD and NYS HCR for the construction of affordable apartments.

The purpose of the Proposed Actions is to increase the permitted floor area of the planned development by up to 20,000 zoning square feet (zsf) and to allow for the increase in total building height by up to 15 feet to accommodate the additional floor area as an incentive for providing a FRESH food store. The proposed FRESH food store would supply nutritious food to a community designated as underserved by neighborhood grocery stores. The requested actions would allow for the development of a higher number of affordable housing units as compared to the No-Action condition, helping to address affordable housing goals set forth by the City in Housing New York: A Five-Borough, Ten-Year Plan. (refer to **Figure C-1**).

The reasonable worst case development scenario (RWCDS) With-Action condition for the project site consists of a total of approximately 464 dwelling units (DUs), all of which would be affordable; approximately 21,103 gsf of commercial space; and approximately 50 accessory parking spaces.

The RWCDS No-Action condition represents the baseline against which the consequences of the Proposed Actions will be compared. The effect of the Proposed Actions, therefore, represents the incremental effects on conditions that would result from the net change in development between No-Action and With-Action conditions (the "project increment"). Under RWCDS No-Action conditions, it is assumed that the Applicant-owned project site would be developed on an as-of-right basis pursuant to the site's existing C4-5D zoning with two 11-story buildings (approximately 115 feet tall) totaling approximately 362,559 gsf (combined FAR of 5.59). Approximately 430 DUs in approximately 341,456 gsf of residential space, and approximately 21,103 gsf of ground floor retail would be constructed. The No-Action development would also include approximately 50 accessory parking spaces.

As such, the anticipated RWCDS net project increment includes an incremental increase of approximately 34 DUs and no change in the amount of commercial space or parking spaces. The assessment provided in this attachment concludes that the Proposed Actions would be compatible with and support land use, zoning, and public policies in the area. As shown in the analysis presented below, the Proposed Actions would not result in significant adverse impacts related to land use, zoning, or public policy.



Legend

Project Site	One & Two Family Buildings	Mixed Commercial/Residential Buildings	Transportation/Utility	Parking Facilities
400-Foot Radius	Multi-Family Walkup Buildings	Commercial/Office Buildings	Public Facilities & Institutions	Vacant Land
Land Use	Multi-Family Elevator Buildings	Industrial/Manufacturing	Open Space	All Others or No Data

Source: PLUTO 2018v2 (NYCDCP)

NYBG - 2856 Webster Ave. FRESH EAS

Figure C-1

Land Use Map

II. EXISTING CONDITIONS

Land Use

Project Site

The project site encompasses approximately 53,372 sf of combined lot area on Lots 118, 122, and 128, which are located in the northeastern section of Block 3273 in the Bedford Park neighborhood of Bronx CD 7 (refer to **Figure C-1**). Block 3273 is a large, irregularly shaped block containing the Rose Hill campus of Fordham University; the project site, located north of Fordham, is separated from the university campus by the Metro-North Railroad. The three lots comprising the project site are currently occupied by commercial uses: Lot 118 (15,612 sf) contains a 15,616 sf commercial building formerly occupied by a laundromat, Lot 122 (32,762 sf) contains a 21,818 sf commercial building occupied by a supermarket and associated parking, and Lot 128 (4,998 sf) contains a surface parking lot associated with the supermarket on Lot 122.

Additionally, the Metro-North Railroad right-of-way (Lot 101), an open railway cut, is located adjacent to the project site on Block 3273.

400-Foot Study Area

The study area for land use is generally bounded by lots fronting Decatur Avenue to the north, Botanical Square South to the east, Southern Boulevard/Conservatory Drive to the south, and East 198th Street to the west (refer to **Figure C-1**). As shown in **Table C-1**, land uses in the study area includes a mix of residential, mixed commercial/residential, commercial/office, and parking uses. While multi-family walkup buildings constitute the largest percentage of total lots (25.4 percent), transportation and utility uses comprise the largest percentage of total lot area (29.1 percent) in the secondary study area.

Table C-1:
Existing Land Uses within the Secondary Study Area

Land Use	No. of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential	21	35.6%	138,111	11.6%	516,877	38.4%
One- & Two-Family Buildings	*3*	*5.1%*	*5,463*	*0.5%*	*7,536*	*0.6%*
Multi-Family Walkup Buildings	*15*	*25.4%*	*93,057*	*7.8%*	*334,107*	*24.8%*
Multi-Family Elevator Buildings	*3*	*5.1%*	*39,591*	*3.3%*	*175,234*	*13.0%*
Mixed Commercial/Residential Buildings	14	23.7%	104,183	8.7%	191,490	14.2%
Commercial/Office Buildings	6	10.2%	70,067	5.9%	61,759	4.6%
Industrial/Manufacturing	1	1.7%	10,500	0.9%	22,530	1.7%
Transportation/Utility[1]	2	3.4%	347,041	29.1%	0	0.0%
Public Facilities & Institutions	4	6.8%	307,249	25.8%	210,660	15.6%
Open Space[1]	2	3.4%	89,889	7.5%	0	0.0%
Parking Facilities	7	11.9%	79,214	6.6%	343,980	25.5%
Vacant Land	2	3.4%	45,561	3.8%	0	0.0%
Total	**59**	**100%**	**1,191,815**	**100%**	**1,347,296**	**100%**

Source: 2018v1 PLUTO (NYCDCP).
[1]**Note:** The tax lot containing the New York Botanical Garden (Block 3272; Lot 1) is partially located within the 400-foot secondary study area. Only 62,070 sf of the total 8,955,000 sf tax lot is within the secondary study area. Therefore, only the area of the New York Botanical Garden within the secondary study area (62,070 sf) is included in the table above. Similarly, the Metro-North Railroad (Block 3273; Lot 1) is partially located within the secondary study area and extends for over a half-mile southwest of the secondary study area. Therefore, only 57,791 sf of area included in the secondary study area is accounted for in the above table.

As detailed in **Table C-1**, the residential uses in the study area consist primarily of low-rise multi-family walk-up buildings (24.8 percent of building area) and mid-rise multi-family elevator buildings (13.0 percent of building area). The New York Botanical Garden is a large open space resource located in the southeastern section of the study area.

As shown in **Figure C-1**, the Metro-North Railroad right-of-way (Block 3273, Lot 101; Block 3274, Lot 51), an open railway cut, extends east-west through the study area and is adjacent to the project site.

Zoning

Project Site

As shown in **Figure C-2**, the project site is zoned C4-5D and has an existing built Floor Area Ratio (FAR) of 0.7, which is less than the permitted FAR of 4.2.

400-Foot Study Area

In 2011, Webster Avenue and the Bedford Park and Norwood neighborhoods to the north were contextually rezoned. As a result of the Webster Avenue Rezoning (ULURP Nos. 110085ZMX and N110086ZRX and CEQR No. 10DCP035X), the Development Site was rezoned from C8-2 to C4-5D. The area to the north of the Development Site was rezoned from R7-1 to R7A, R5B, R7B and a variety of commercial overlay districts.

As shown in **Figure C-2**, the study area includes a variety of residential zoning districts, two commercial overlays, a single commercial district (C4-5D), and Mandatory Inclusionary Housing and FRESH designated areas. Each zoning district is summarized in **Table C-2** and detailed below.

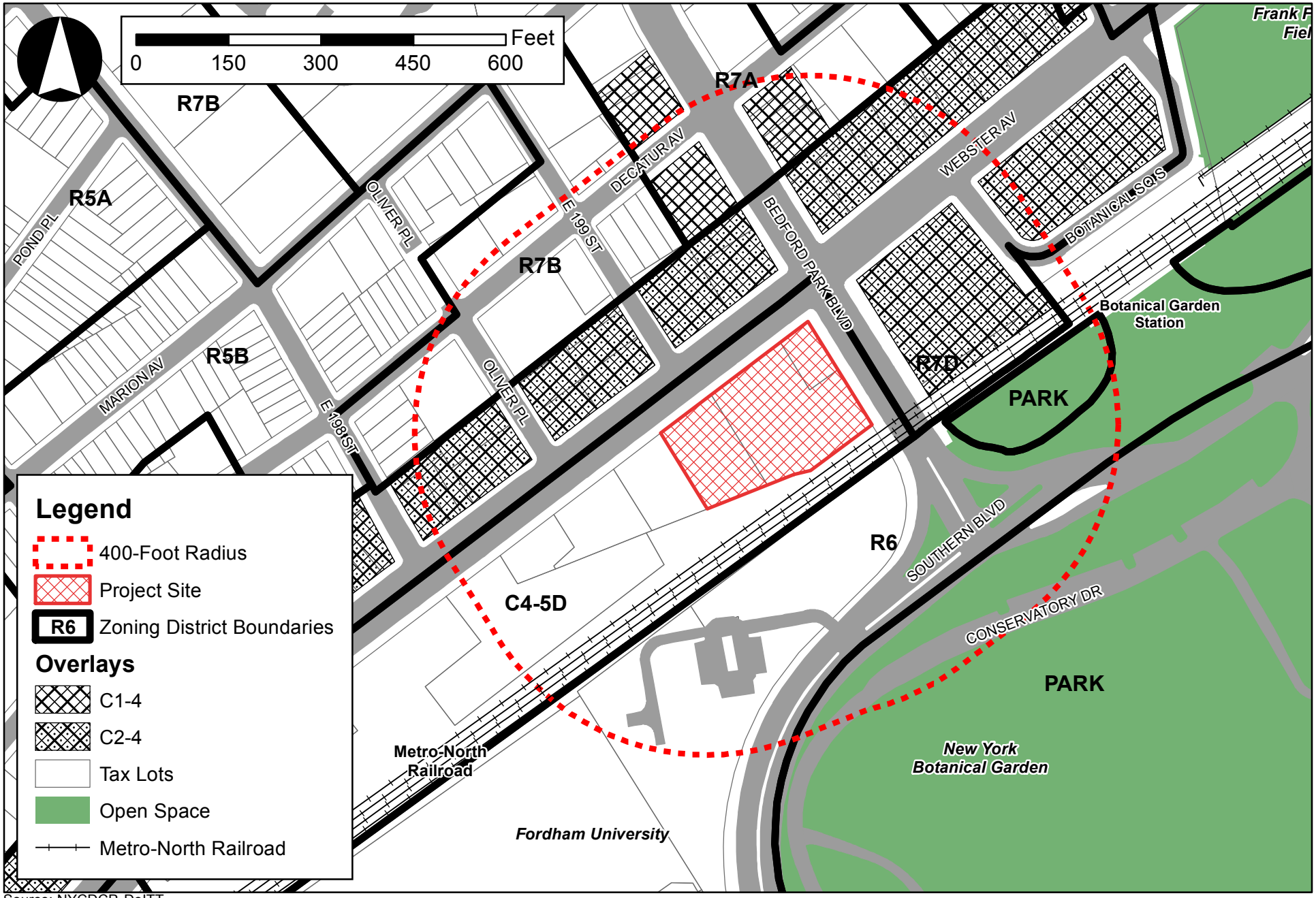
Table C-2:
Existing Zoning within the Secondary Study Area

Zoning District	Building Type	Permitted Use Groups	Maximum FAR
R5B	Contextual Low-Density Residential	1-4	R: 1.35 CF: 2.0
R6	Medium-Density Residential	1-4	R: 2.43 CF: 4.8
R7A	Contextual High-Density Residential	1-4	R: 4.0 CF: 4.0
R7B	Contextual Medium-Density Residential	1-4	R: 3.0 CF: 3.0
R7D	Contextual Residential Along Transit Corridors	1-4	R: 4.2 CF: 4.2
C4-5D	Contextual General Commercial	1-6, 8-10, 12	R: 4.2 C: 4.2 CF: 4.2
C1-4 Overlay	Local Retail Commercial Overlay	1-6	C: 2.0
C2-4 Overlay	Local Service Commercial Overlay	1-9, 14	C: 2.0

Notes: Refer to **Figure C-2**.

R5B

Lots along Marion Avenue between East 197th Street and East 199th Street, particularly on the southwest side of Marion Avenue, are zoned R5B. R5B zoning districts are residential districts that permit detached and semi-detached buildings, generally three stories in height. R5B districts have a maximum FAR of 1.35



Source: NYCDCP, DoITT

NYBG- 2856 Webster Ave. FRESH EAS

Figure C-2

Zoning Map

with a maximum streetwall height of 30 feet and a maximum building height of 33 feet. Parking is required for 66 percent of DUs.

R6
The Rose Hill campus of Fordham University, as well as lots located to the south of the project site and the Metro-North right-of-way, is in an R6 zoning district. R6 zoning districts are medium-density residential districts ranging from large-scale "tower in the park" developments to neighborhoods with a diverse mix of building types. R6 districts have a maximum FAR of 2.43 with a maximum building height governed by a sky exposure plane, which begins 60 feet above the street line. Parking is required for 70 percent of DUs in R6 zoning districts.

R7A
Lots near the intersection of Decatur Avenue and Bedford Park Boulevard are zoned R7A. R7A zoning districts are high-density contextual districts where Quality Housing regulations are mandatory, typically resulting in seven- and eight-story apartment buildings with high lot coverage. R7A districts permit a maximum FAR of 4.0 with a minimum base height of 40 feet, a maximum base height of 65 feet, and a maximum building height of 80 feet. Parking is required for 50 percent of DUs in R7A zoning districts.

R7B
Lots with frontage along Decatur Avenue from E. 198th Street to E. 199th Street, located to the north of the project site, are in an R7B zoning district. R7B zoning districts are medium-density contextual districts where Quality Housing regulations are mandatory, typically resulting in six- and seven-story apartment buildings with high lot coverage. R7B districts have a maximum FAR of 3.0 with a minimum base height of 40 feet, and a maximum building height of 75 feet. Parking is required for 50 percent of DUs in R7B zoning districts.

R7D
Lots with frontage along Webster Avenue, located north and east of the project site, are zoned R7D. R7D zoning districts are established to promote new contextual development along transit corridors. R7D districts permit a maximum FAR of 4.2 within a minimum base height of 60 feet, a maximum base height of 85 feet, and a maximum building height of 100 feet. Parking is required for 50 percent of DUs in R7D zoning districts.

C4-5D
The project site, as well as lots located between Webster Avenue and the Metro-North right-of-way from Bedford Park Boulevard and E. 197th Street, are zoned C4-5D. C4-5D zoning districts are contextual regional commercial districts located away from central business districts. Typical uses include specialty and department stores, theaters, and offices, all of which service larger geographical areas and generate more traffic than local shopping areas. C4-5D zoning districts permit a maximum FAR of 4.2. The maximum base height within the C4-5D district is 85 feet (95 feet for developments including housing through the Inclusionary Housing Program and/or AIRS). After a setback from the streetwall, buildings in the C4-5D district are permitted to rise to a maximum height of 100 feet. Parking requirements vary with land uses on a site.

Commercial Overlays
Commercial overlays are mapped within residential districts along streets that serve local retail needs. As shown in **Figure C-2**, commercial overlays (C1-4 and C2-4) are mapped in the study area on Webster Avenue, and Bedford Park Boulevard. In residential areas R6 through R10, commercial overlays provide a maximum commercial FAR of 2.0. Overlay districts differ from other commercial districts in that residential bulk is governed by the residence district within which the overlay is mapped. In mixed buildings, commercial uses are limited to one or two floors, and must always be located below the

residential uses. Typical commercial uses in overlays include neighborhood grocery stores, restaurants, and beauty parlors. C2-4 commercial overlays permit a slightly wider range of uses, such as funeral homes and repair services.

Inclusionary Housing

The lots fronting Webster Avenue between E. 198th Street and Botanical Square South in the center of the 400-foot study area fall within an Inclusionary Housing Designated Area. The City's Inclusionary Housing Program promotes economic integration in areas of the City undergoing substantial new residential development by offering an optional floor area bonus in exchange for the creation or preservation of affordable housing. In order to obtain the bonus, the program allows for the provision of a certain number of new or rehabilitated affordable units either on-site or off-site, in exchange for an increase of up to 20 percent of residential floor area.

Affordable Independent Residences for Seniors

The maximum floor area ratio for affordable independent residences for seniors (AIRS) utilizing the Quality Housing bulk regulations are increased to a maximum FAR of 5.6 by increasing residential floor area by 1.25 square feet for every square-foot of low income floor area or senior housing provided on the zoning lot in quality housing buildings.

Public Policy

According to CEQR guidance, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports, which pertain to the study area. If proposed actions could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is warranted. As described below, the Proposed Actions do not warrant a detailed assessment of public policies.

The project site and the 400-foot study area are not controlled by or located in any urban renewal areas, 197-a Plans, designated in-place industrial parks, or within the coastal zone boundary. In addition, the Proposed Actions do not involve the siting of any public facilities (Fair Share). The 400-foot study area is under the jurisdiction of PlaNYC 2030 and Housing New York, as discussed below.

One New York: The Plan for a Strong and Just City ("OneNYC")

Released in 2007, PlaNYC was undertaken by Mayor Bloomberg and the Mayor's Office of Long Term Planning and Sustainability to prepare the City for one million more residents, strengthen its economy, combat climate change, and enhance the quality of life for all New Yorkers. An update to PlaNYC in April 2011 built upon the objectives set forth in 2007 and provided new goals and strategies. PlaNYC represents a comprehensive and integrated approach to planning for New York City's future. It includes policies to address three key challenges that the City faces over the next twenty years: population growth; aging infrastructure; and global climate change. In the 2011 update, elements of the plan were organized into 10 categories—housing and neighborhoods, parks and public space, brownfields, waterways, water supply, transportation, energy, air quality, solid waste, and climate change—with corresponding goals and initiatives for each category.

In April 2015, the Mayor's Office of Sustainability released OneNYC, a comprehensive plan for a sustainable and resilient City for all New Yorkers, addressing social, economic, and environmental

challenges ahead. OneNYC builds upon the goals and objectives set forth in PlaNYC, and expands on the critical targets established under the previous plan. Growth, sustainability, and resiliency remain at the core of OneNYC, with equity added as a guiding principle throughout the plan. Specific targets and initiatives included in OneNYC relevant to the Proposed Actions include making New York City home to 4.9 million jobs by 2040, enabling the average New Yorker to reach 25 percent more jobs (1.8 million jobs) within 45 minutes by public transit, lifting 800,000 New Yorkers out of poverty or near-poverty by 2025, and reducing annual economic losses from climate-related events.

As the *2014 CEQR Technical Manual* has yet to be updated to address the approach of OneNYC, the PlaNYC sustainability assessment, as described below, will continue to be utilized on large publicly-sponsored projects.

New York City Food Retail Expansion to Support Health Program (FRESH)

The FRESH program provides zoning and discretionary tax incentives to promote the establishment and retention of neighborhood grocery stores in communities throughout the five boroughs that lack full-line grocery stores. Both the project site and 400-foot study area are located within a FRESH designated area, and are eligible for both zoning and discretionary tax incentives.

The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator in FRESH-eligible areas that meet the following criteria:

- Provide a minimum of 6,000 sf of retail space for a general line of food and non-food grocery products intended for home preparation, consumption and utilization;
- Provide at least 50 percent of a general line of food products intended for home preparation, consumption and utilization;
- Provide at least 30 percent of retail space for perishable goods that include dairy, fresh produce, fresh meats, poultry, fish, and frozen foods; and
- Provide at least 500 sf of retail space for fresh produce.

Financial incentives are available to eligible grocery store operators and developers to facilitate and encourage FRESH Food Stores in the designated area. These incentives include real estate tax reductions, sales tax exemptions, floor area bonuses, and mortgage recording tax deferrals.

The proposed project seeks a FRESH certification and authorization. As a consequence of the Proposed Actions, the proposed project would replace an existing supermarket with another full-service grocery store that would be consistent with the FRESH program, therefore it would not alter or conflict with this public policy.

Housing New York

On May 5, 2014, the City released Housing New York, a five-borough, ten-year strategy to build and preserve affordable housing throughout New York City in coordination with strategic infrastructure improvements to foster a more equitable and livable New York City through an extensive community engagement process. The plan outlines more than 50 initiatives to support the administration's goal of building or preserving 200,000 units of high-quality affordable housing to meet the needs of more than 500,000 people. The plan intends to do this through five guiding policies and principles: fostering diverse, livable neighborhoods; preserving the affordability and quality of the existing housing stock;

building new affordable housing for all New Yorkers; promoting homeless, senior, supportive, and accessible housing; and refining City financing tools and expanding funding sources for affordable housing. Housing New York further calls for fifteen neighborhood studies to be undertaken in communities across the five boroughs that offer opportunities for affordable housing.

Subsequently, on October 24, 2017, the City released Housing New York 2.0, which increased the affordable housing goal to 300,000 units by 2026. The updated and expanded plan outlines six goals: (1) creating more homes for seniors; (2) helping New Yorkers buy a piece of their neighborhoods; (3) building a firewall against displacement; (4) protecting affordability at Mitchell-Lama buildings; (5) capitalizing on advances in technology and innovative design to expand modular building and micro-units; and (6) unlocking the potential of vacant lots.

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

Land Use

Project Site

Under No-Action conditions, no discretionary actions would be required to develop the site with a mixed-used building. It is anticipated the site would be developed on an as-of-right basis pursuant to the site's existing C4-5D zoning with two 11-story buildings (approximately 115 feet tall) totaling approximately 362,559 gsf (combined 5.59 FAR). The as-of-right building would contain 430 DUs and approximately 21,103 gsf of ground floor retail. The two buildings would include 50 accessory parking spaces.

400-Foot Study Area

Within the 400-foot secondary study area, there are no known projects anticipated to be completed in the future without the Proposed Actions by the 2024 build year.

Zoning

Project Site

In the future without the Proposed Actions, no zoning changes are anticipated.

Public Policy

There are no expected changes to public policy in the 400-foot study area in the future without the Proposed Actions.

Secondary Study Area

In the future without the Proposed Actions, no changes to zoning are anticipated in the 400-foot study area.

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

As discussed in detail below, the Proposed Actions would consist of (1) a zoning authorization to modify the maximum building height of a building containing a FRESH food store pursuant to Section 63-22; and

(2) a zoning certification for a FRESH food store pursuant to Section 63-30. Approval of the Proposed Actions would allow the applicant to increase the maximum building height of the Proposed Development at the site.

In addition, the Applicant is seeking public financing approval from city and state government. At the city level, it is expected that funding would be requested from HPD through the Senior Affordable Rental Assistance (SARA) program. At the state level, funding may be requested from New York State Homes and Community Renewal (HCR) in the form of the Senior Housing Program (SENIOR).

Land Use

As shown in **Table C-3**, the project site would accommodate a new mixed-use commercial and residential building in both the RWCDS No-Action and With-Action conditions. In the future with the Proposed Actions, the two buildings on the project site would accommodate an incremental increase of 24,493 gsf of residential space with 34 additional dwelling units on portion of the 11th floor and the 12th floor of each building.

Table C-3:
RWCDS No Action v. With-Action Conditions

Block	Lot	Max. No-Action Residential GSF	Max. No-Action Commercial GSF	Max. With-Action Residential GSF	Max. With-Action Commercial GSF	Max. Residential GSF Increment[2]	Max. Commercial GSF Increment[2]
3273	118	341,456 (430 DUs)	21,103	365,949 (464 DUs)	21,103	+24,493 (34 DUs)	+0
	122						
	128						

Assessment

The Proposed Actions would not result in significant adverse impacts to land use in the vicinity of the project site. The Proposed Actions would allow increased residential development in an increasingly residential urban neighborhood where there is a strong demand for affordable housing. Additionally, as indicated above, the No-Action development on the project site would include residential uses; however, the Proposed Actions would result in the development of approximately 34 affordable housing units which would not be developed under No-Action conditions.

Zoning

Assessment

The Proposed Actions would not result in significant adverse impacts to zoning as the Proposed Actions would not alter zoning within or around the project site. The Proposed Actions would result in incremental development that would use the FRESH bonus as a means to provide additional affordable residential units. As such, the Proposed Actions would not result in significant adverse zoning impacts.

Public Policy

There are no anticipated changes to public policy in the future with the Proposed Actions.

Assessment

As discussed above, the OneNYC initiative was released on April 22, 2015. OneNYC sets a goal of creating 240,000 new housing units—both market rate and affordable—within the next decade. Another goal of the plan focuses on providing New Yorkers with transit access from their homes to good jobs. Through transit investments, job creation in diverse locations, and transit-accessible housing construction, OneNYC has set a goal to ensure that by 2040, the average New Yorker will be able to reach 1.8 million jobs by transit within 45 minutes. The Proposed Actions would be consistent with these two goals by providing affordable housing in an area supported by many transit options. Thus, the Proposed Actions would support several of PlaNYC's, Housing New York's and OneNYC's sustainability initiatives, as well as help support the City's gradual transition to a more sustainable city.

Further, as described above, the proposed project seeks a FRESH certification and authorization. As a consequence of the Proposed Actions, the proposed project would replace an existing supermarket with another full-service grocery store that would be consistent with the FRESH program, therefore it would not alter or conflict with this public policy.

Attachment D

Shadows

I. INTRODUCTION

According to the 2014 *CEQR Technical Manual*, an adverse shadows impact is considered to occur when an incremental shadow from a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource, or threatens the viability of vegetation or other resources. Pursuant to CEQR guidance, 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. Sunlight-sensitive resources can include publicly accessible open spaces, architectural resources, natural resources, and Greenstreets. In general, shadows on city streets, sidewalks, buildings, or project-generated open spaces are not considered significant under CEQR. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under CEQR.

According to the *CEQR Technical Manual*, a shadows assessment is required only if a proposed action would result in structures (or additions to existing structures) of 50 feet or more and/or be located adjacent to, or across the street from, a sunlight-sensitive resource. As described in **Attachment A, "Project Description,"** the Proposed Actions would allow for an increase in building height and facilitate the development of an additional floor of residential uses on two adjacent buildings on Webster Avenue in the Bronx, near the New York Botanical Garden, with a maximum height of approximately 124 feet (approximately 141 feet when including the mechanical bulkhead). Therefore, a detailed shadows analysis was prepared to determine the potential for the proposed buildings to result in significant adverse impacts on sunlight-sensitive resources.

II. PRINCIPAL CONCLUSIONS

The Proposed Actions would not result in significant adverse shadows impacts. While the proposed project would cast incremental shadows on a portion of the New York Botanical Garden, the shadows analysis determined that the duration and coverage of incremental shadows on the New York Botanical Garden, the landscaped greenspace on Southern Boulevard, and the Southern Boulevard Greenstreet would not be significant or adverse. Incremental shadows as a result of the Proposed Development's additional height would last for 21 minutes on New York Botanical Garden on the June 21 analysis day. Project-generated incremental shadows would occur during the late afternoon hours and would last for approximately 39 minutes on March 21/September 21, two hours and 17 minutes on May 6/August 6, and two hours and 57 minutes on June 21 analysis days at the landscaped greenspace on Southern Boulevard. Incremental shadows would exist on the May 6/August 6 and June 21 analysis days for 26 minutes and 53 minutes, respectively, on the Southern Boulevard Greenstreet. These areas contain trees, bushes, and grass. Additionally, all of the areas that would be shaded as a result of the increased building height would continue to receive adequate sunlight during the morning, afternoon, and evening hours, and as such, the proposed increased building height associated with the Proposed Actions would not have significant adverse effects on any of the identified green spaces. Therefore, incremental shadows that would result from the incremental height of the building are not anticipated to adversely affect the utilization or enjoyment of the New York Botanical Garden or the Landscaped Greenspace on Southern Boulevard.

III. METHODOLOGY

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. For projects resulting in structures less than 50 feet tall, a shadow assessment is generally not necessary, unless the site is adjacent to a park, historic resource, or important natural feature (if the feature that makes the structure significant depends on sunlight).

First, a preliminary screening assessment must be conducted to ascertain whether shadows resulting from a project could reach any sunlight-sensitive resource at any time of year. The *CEQR Technical Manual* defines sunlight-sensitive resources as those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. The following are considered to be sunlight-sensitive resources:

- *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in an open space establishes its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement.
- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features are considered, as opposed to the entire architectural resource. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids, such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychromy [multicolored] features found on Victorian Gothic Revival or Art Deco facades); historic landscapes, such as scenic landmarks, including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as a historic landmark.
- *Natural resources where the introduction of shadows could alter the resource's condition or microclimate.* Such resources could include surface water bodies, wetlands, or designated resources, such as coastal fish and wildlife habitats.

The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around the project site representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier, which reduces the area that could be affected by project-generated shadows by accounting for a specific range of angles that can never receive shade in New York City due to the path of the sun in the northern hemisphere. If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by new shadows by looking at specific representative days of the year and determining the maximum extent of shadow over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow resulting from the project. In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern were modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21 vernal equinox (or the September 21 autumnal equinox, which is approximately the same), the June 21 summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6 or August 6 (which are approximately the same). For the cold-weather months, the December 21 winter solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive historic and natural resources. The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

The detailed analysis provides the data needed to assess the shadow impacts. The effects of the new shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The result of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text. As described in the *CEQR Technical Manual*, an incremental shadow is generally not considered significant when its duration is no longer than ten minutes at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of ten minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

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

In general, a significant adverse shadows impact occurs when the incremental shadows added by a proposed building falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other natural resources.

IV. PRELIMINARY SCREENING

Tier 1 Screening Assessment

According to the 2*014 CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height and occurs on December 21 (the winter solstice). The height of the proposed buildings was used to determine the longest shadow study area (Tier 1 Assessment). As discussed in **Attachment A, "Project Description,"** approval of the Proposed Actions would result in the increase in building height (approximately nine feet) to planned as-of-right 11-story buildings, resulting in two 124-foot tall buildings (approximately 141 feet when including the mechanical bulkhead). Therefore, the maximum shadow radius would be approximately 606-feet (refer to **Figure D-1**). Within this longest shadow study area, there are three resources that are potentially sunlight-sensitive: The New York Botanical Garden, a landscaped greenspace owned by the Department of Parks and Recreation, and the Greenstreet at Southern Boulevard (refer to **Figure D-1**). Therefore, further screening was warranted in order to determine whether these resources could be affected by project-generated shadows.

Tier 2 Screening Assessment

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

As presented in **Figure D-1**, portions of the New York Botanical Garden and the landscaped greenspace owned by the Department of Parks and Recreation, and the entirety of the Southern Boulevard Greenstreet fall within the proposed project's maximum shadow radius, and based on the Tier 2 Screening Assessment, it cannot be ruled out that the proposed project would cast shadows on these locations.

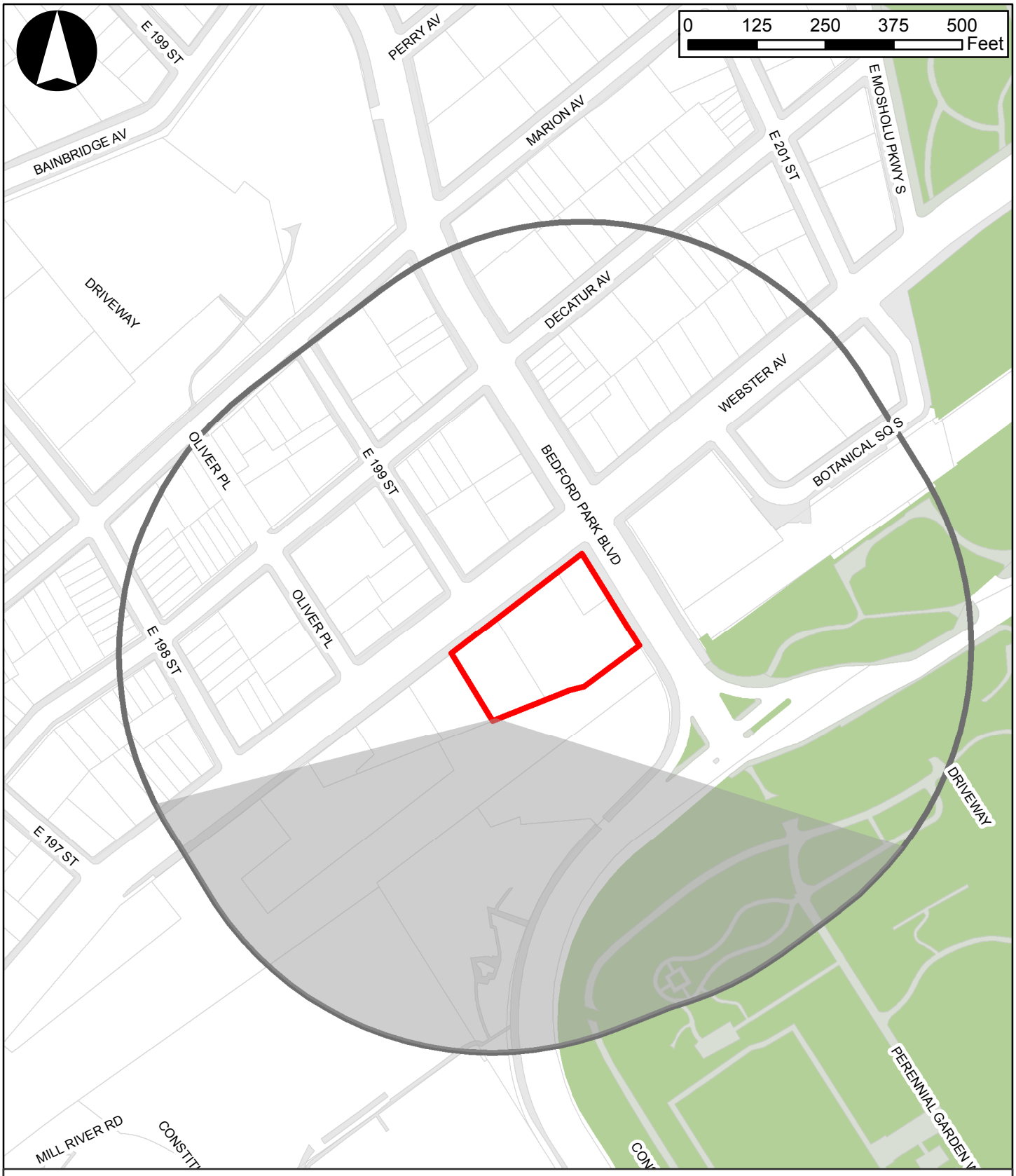
Tier 3 Screening Assessment

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

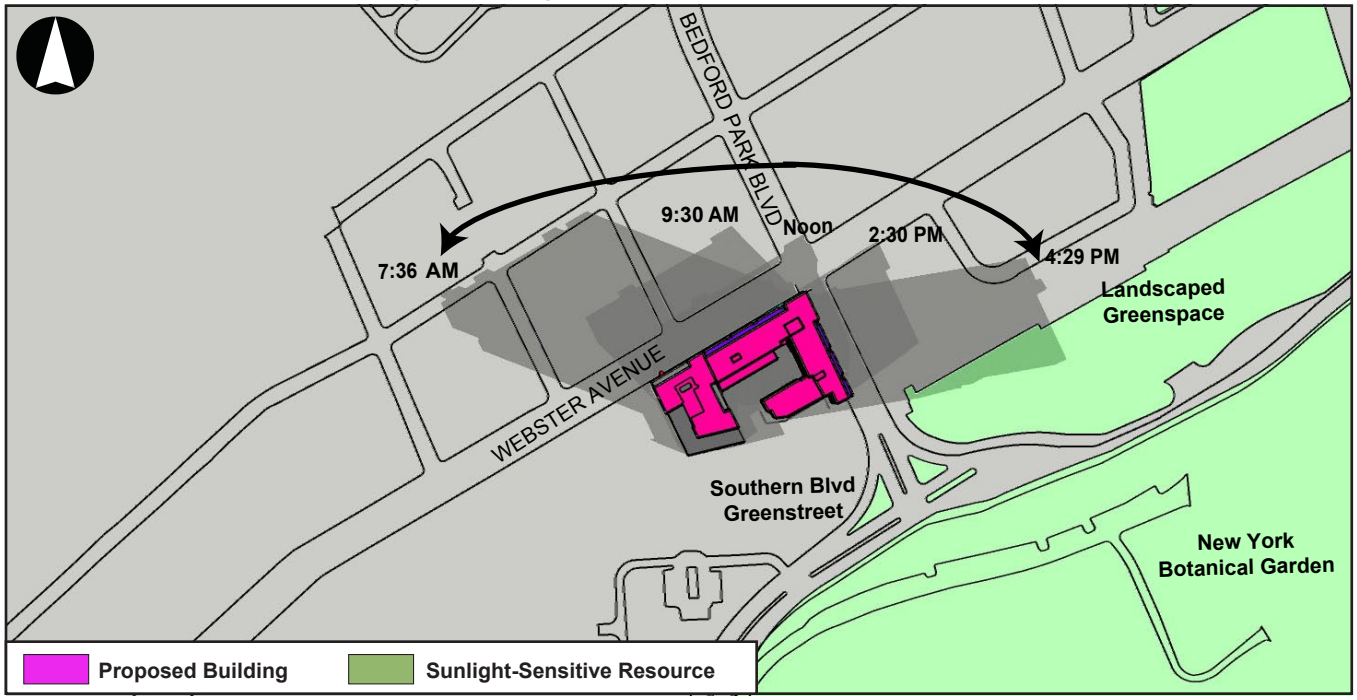
As project-generated shadows could reach nearby sunlight-sensitive resources, a Tier 3 assessment was performed using three dimensional (3D) computer mapping software. The 3D model was used to calculate and display project-generated shadows on individual representative analysis dates. The model contains 3D representations of the elements in the base map used in the preceding assessments and a 3D model of the proposed project. At this stage of the assessment, surrounding buildings and structures within the study area were not included in the model so that it may be determined whether project-generated shadows would reach any sunlight-sensitive resources.

Figures D-2a and **D-2b** illustrate the range of project-generated shadows that could occur in the absence of existing buildings on the four representative analysis days. The Tier 3 analysis shows that the New York Botanical Garden, the landscaped greenspace north of Southern Boulevard, and the Southern Boulevard Greenstreet would receive project-generated shadows on three of the four CEQR analysis periods.

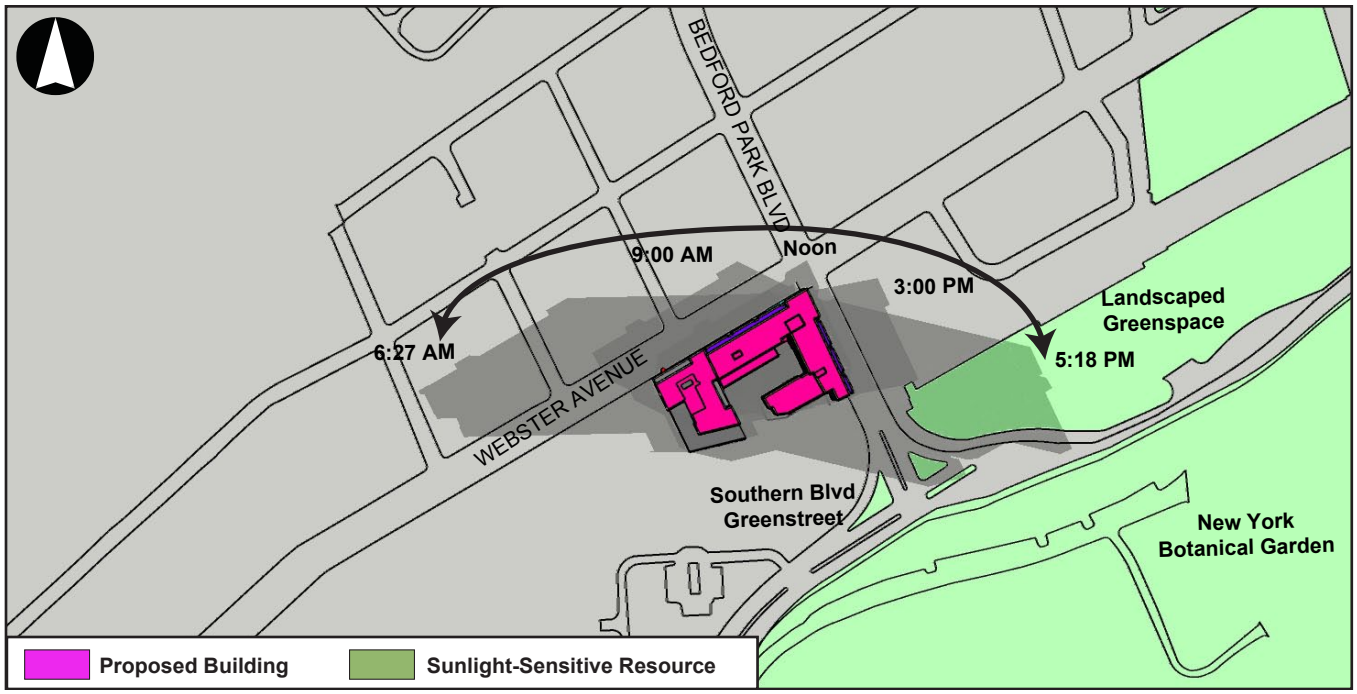
Tier I and II Shadows Assessment



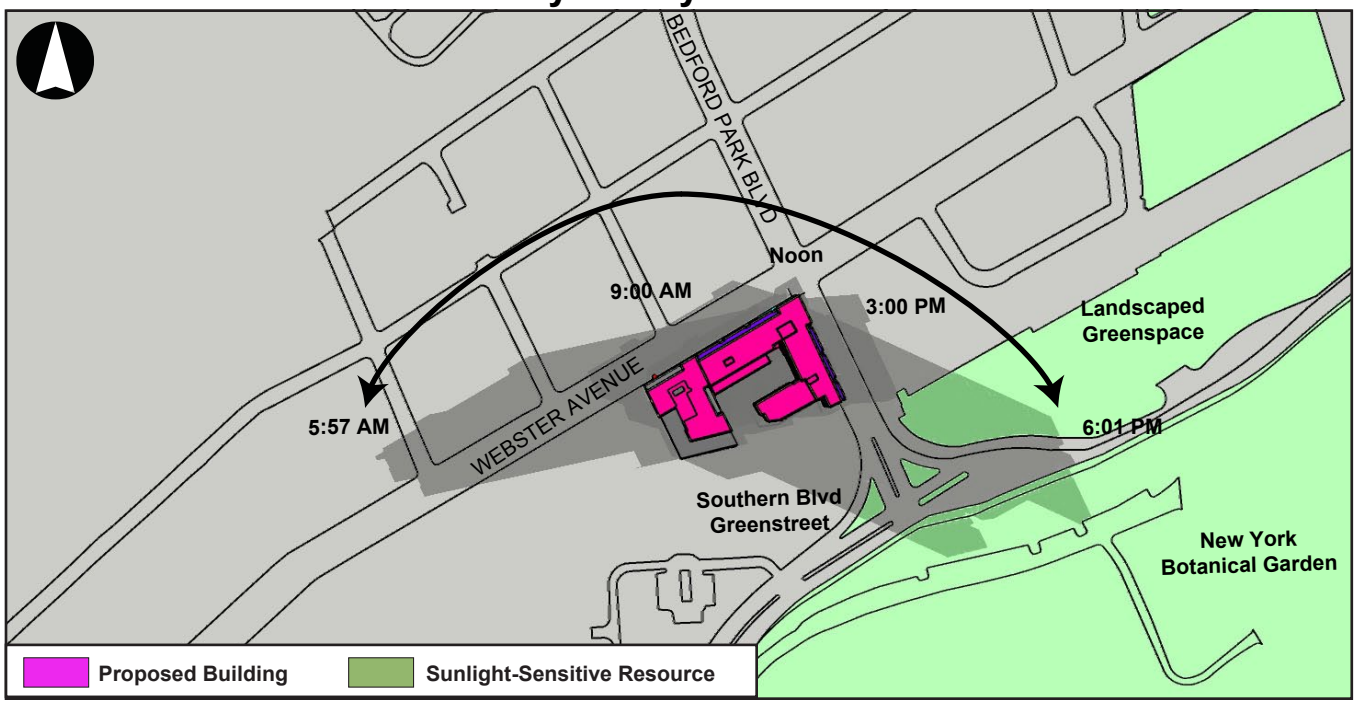
Analysis Day: March 21 / September 21



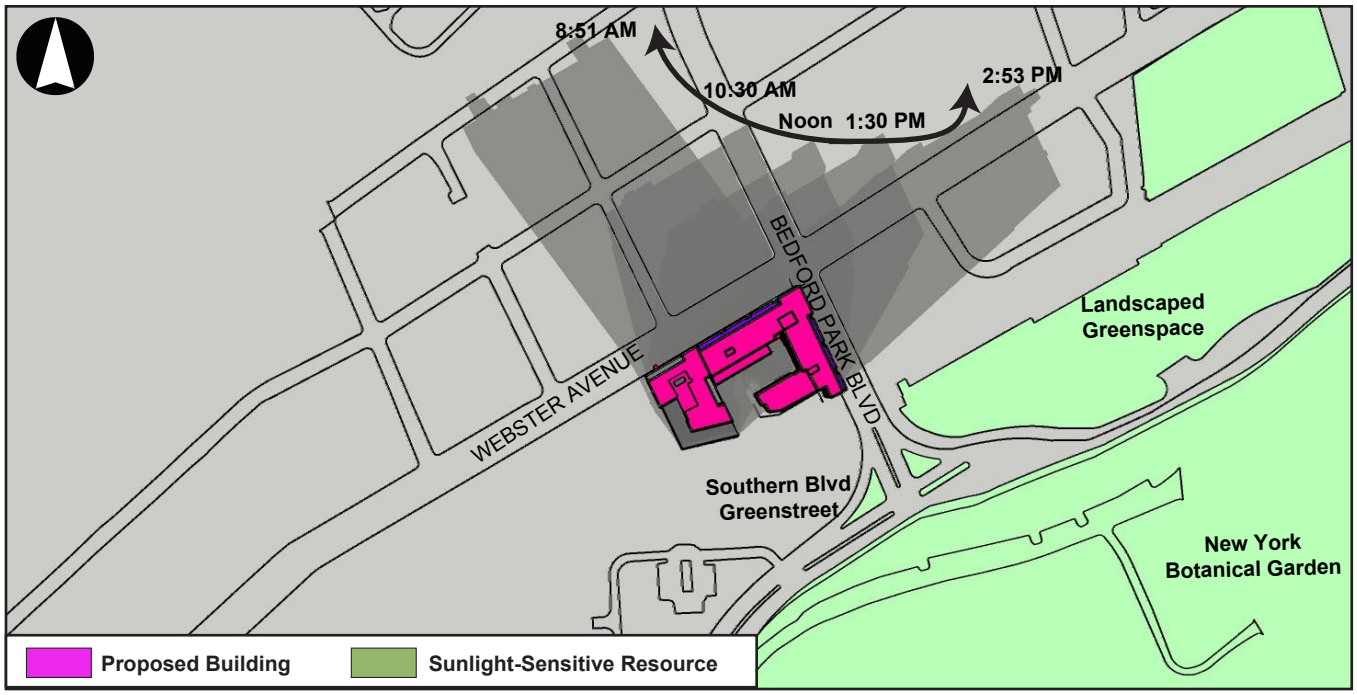
Analysis Day: May 6 / August 6



Analysis Day: June 21



Analysis Day: December 21



Therefore, a detailed shadow analysis is required to determine the extent and duration of project-generated incremental shadows on these open space resources.

V. DETAILED ANALYSIS OF SHADOW IMPACTS

Resources of Concern

New York Botanical Garden

As shown in **Figure D-2b**, the increased height for the proposed buildings associated with the Proposed Actions could potentially result in incremental shadows on a small area in the northwestern portion of the New York Botanical Garden. The New York Botanical Garden is a 250-acre plant research and conservation organization. Originally founded in 1891, the garden was designated as a National Historic Landmark in 1967. The garden features over 1 million plants and receives nearly 1 million visitors annually. The New York Botanical Garden features a conservatory, several gardens, and a forest. The New York Botanical Garden is open from 10:00 AM – 6:00 PM Tuesday through Sunday and there is a fee to enter the garden. As the New York Botanical Garden is a private-access fee-charging space, it is considered a "private open space" pursuant to the *CEQR Technical Manual.*

Landscaped Greenspace

As shown in **Figure D-1,** in the area north of Southern Boulevard and east of Bedford Park Boulevard is a small landscaped greenspace owned by the NYC Department of Parks and Recreation. The area is zoned in a medium-density residential district (R6). The area includes walking paths connecting users of the Botanical Garden MTA Train Station to Bedford Park Boulevard, trees, and grass fields.

Southern Boulevard Greenstreet

At the intersection of Southern Boulevard and Bedford Park Boulevard are several designated greenstreet areas (refer to **Figure D-1**). These greenstreets contain trees, grass, and other formal landscaping. There is no seating on any of these greenstreets. No incremental shadows would be cast on the Southern Boulevard Greenstreet.

Shadows Analysis

Per CEQR guidance, shadows analyses were performed for the two sunlight-sensitive resource identified above, on four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of potential shadows over the course of the year. CEQR guidance define the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset. As discussed above, the results of the shadow analysis show the incremental difference in shadows between the No-Action and With-Action scenarios. **Table D-1** summarizes the entry and exit times and total duration of project-generated incremental shadows on sunlight-sensitive resources.

As shown in **Table D-1**, the proposed buildings would increase the duration of shadow coverage on the New York Botanical Garden on the June 21 analysis day. The increased height on the Proposed Development as a result of the Proposed Actions would also increase the duration of shadow coverage on the Landscaped Greenspace on the March 21/September 21, May 6/August 6, and June 21 analysis days. It

should be noted that, per the *2014 CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early November. As such, the times reported in this attachment for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect the Eastern Daylight Savings Time.

Table D-1:
Duration of Incremental Shadows on Sunlight Sensitive Resources

	Analysis Day	March 21/Sept. 21	May 6/August 6	June 21	December 21
		7:36 AM – 4:29 PM	**6:27 AM – 5:18 PM**	**5:57 AM – 6:01 PM**	**8:51 AM – 2:53 PM**
New York Botanical Garden	Shadow Enter-Exit Time	-	-	5:40 PM – 6:01 PM	-
	Incremental Shadow Duration	-	-	***21 minutes***	-
Landscaped Greenspace	Shadow Enter-Exit Time	3:51 PM – 4:29 PM	3:01 PM - 5:18 PM	3:04 PM – 6:01 PM	
	Incremental Shadow Duration	***39 minutes***	***2 hours and 17 minutes***	***2 hours and 57 minutes***	
Southern Boulevard Greenstreet	Shadow Enter-Exit Time	-	4:52 PM – 5:18 PM	5:08 PM – 6:01 PM	-
	Incremental Shadow Duration	-	***26 minutes***	***53 minutes***	-

Notes:
All times are Eastern Standard Time; Daylight Savings Time was not accounted for per *2014 CEQR Technical Manual* guidance.
Table D-1 indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.

Figures D-3, D-4a, **D-4b**, **D-5a** and **D-5b** show the extent of project-generated incremental shadows on the sunlight sensitive resources. As shadows are in constant motion, these figures illustrate the extent of incremental shadows at particular moments in time, highlighted in red.

March 21/September 21

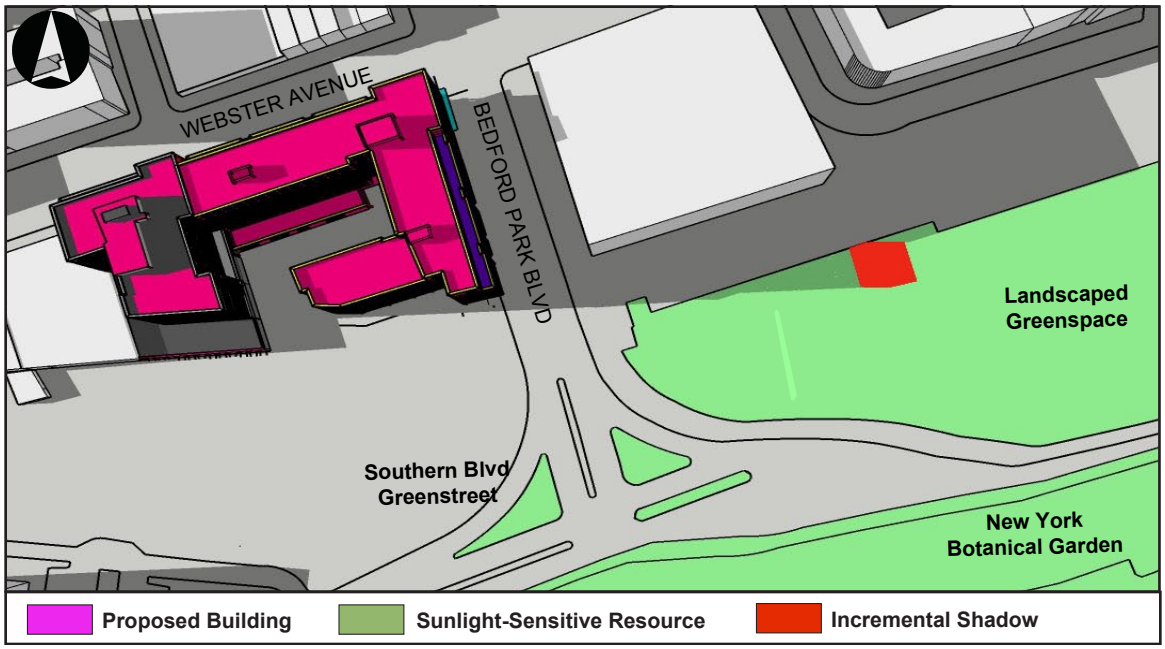
On March 21/September 21 the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. March is considered the beginning of the growing season in New York City, and September 21, which has the same shadow patterns as March 21, is also within the growing season. On the March 21/September 21 analysis day, incremental shadows from the development's building height would enter the landscaped greenspace at 3:51 PM and remain until the end of the analysis period (refer to **Figure D-3** and **Table D-1**).

May 6/August 6

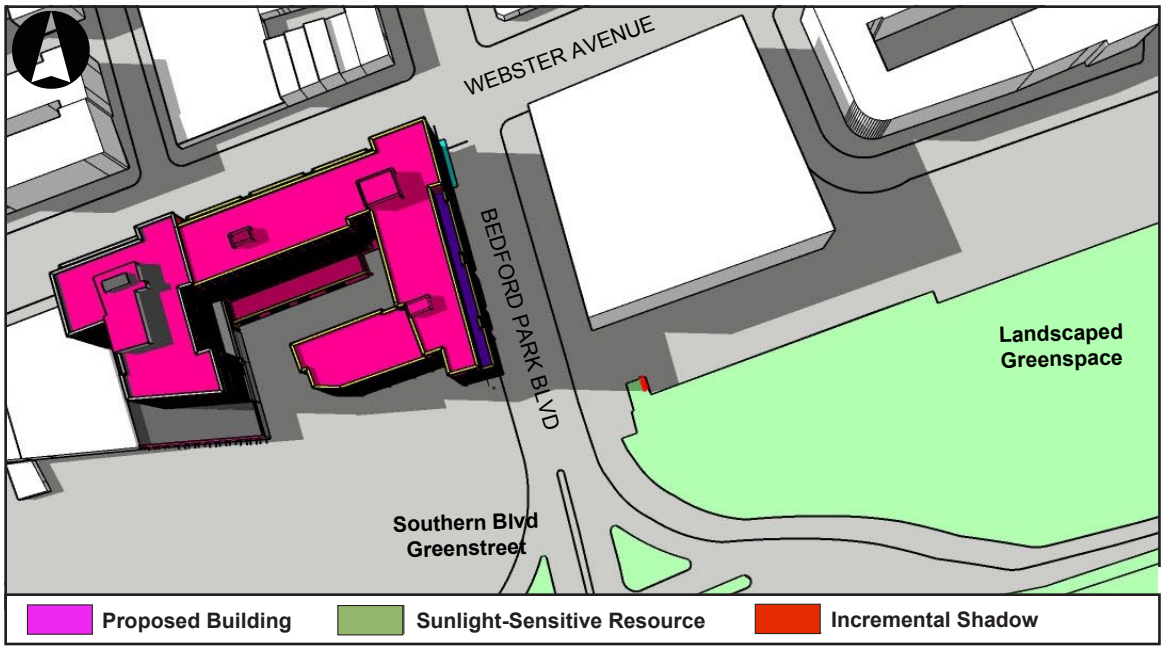
On May 6/August 6, the midpoint between the equinoxes and the solstices, the time period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. May 6 and August 6 are both within the growing season in New York City. On the midpoint between the equinoxes and the solstices, the development's increase in building height would cast incremental shadows on a small portion of the landscaped greenspace from 3:01 PM to 5:18 PM, for a duration of two hours and 17 minutes (refer to **Figures D-4a** and **D-4b**). Incremental shadows would also be cast on the Southern Boulevard Greenstreet from 4:52 – 5:18 PM for a total of 26 minutes.

Incremental Shadows on March 21/September 21

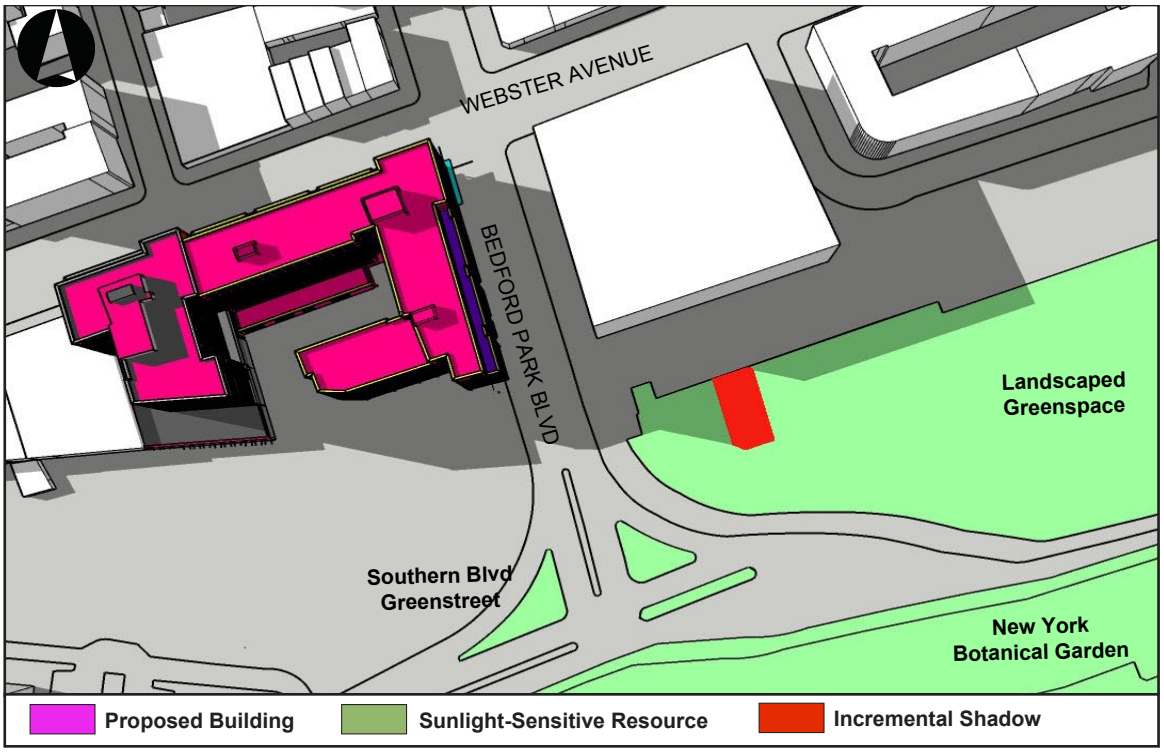
4:15 PM



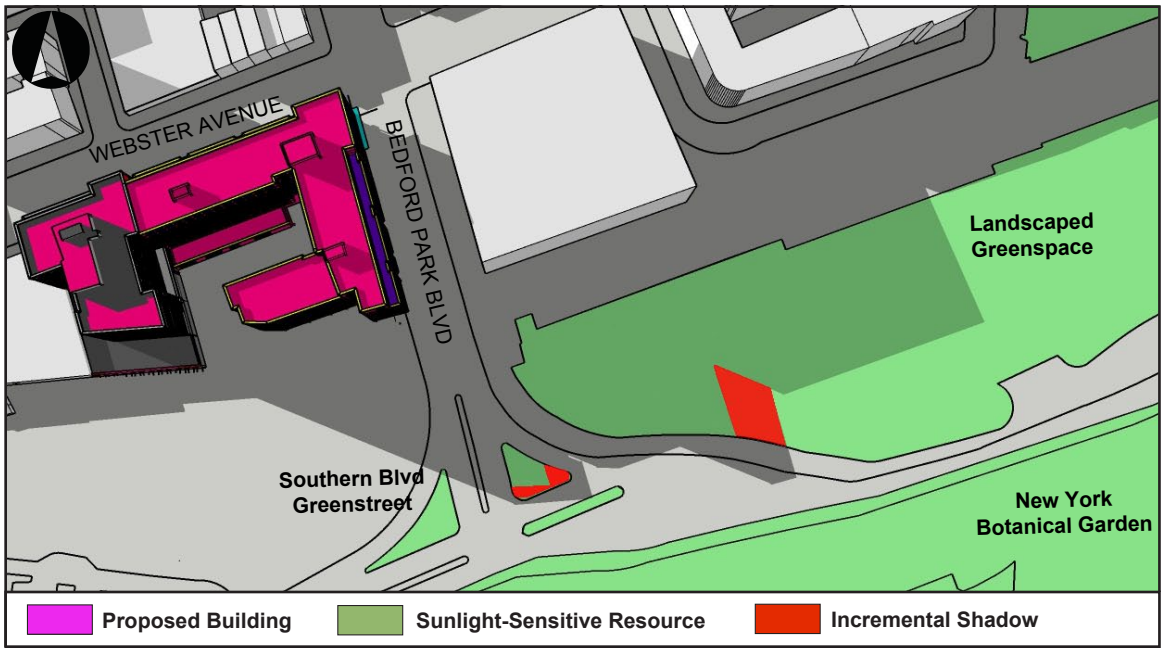
3:15 PM


WEBSTER AVENUE
BEDFORD PARK BLVD
Landscaped Greenspace
Southern Blvd Greenstreet
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

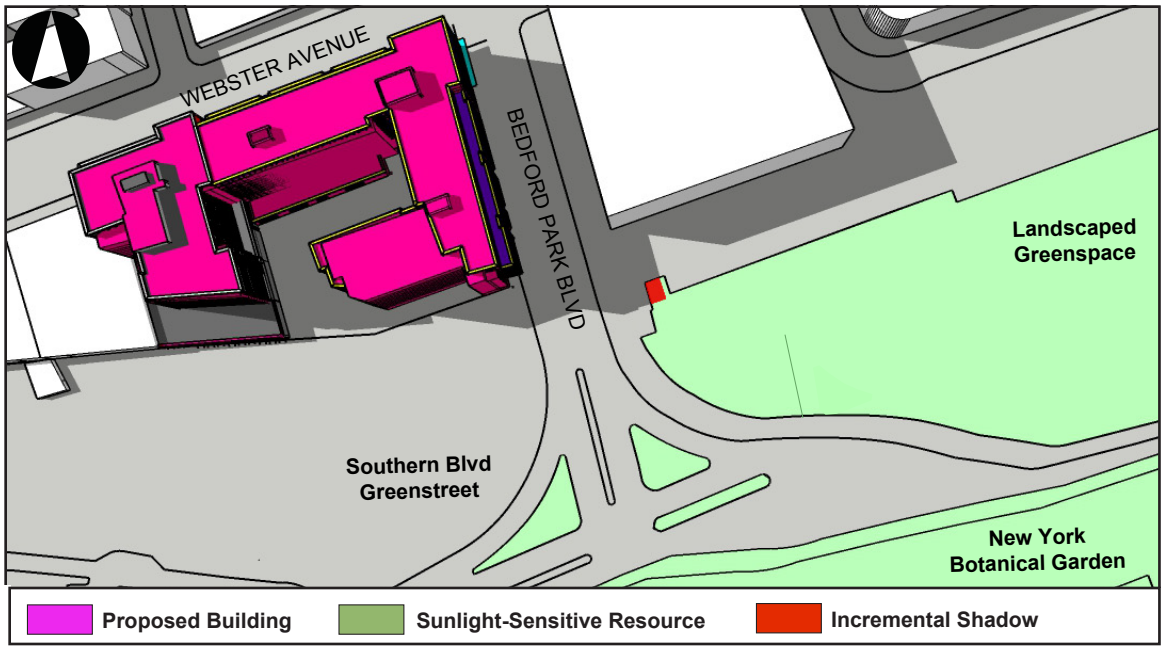
4:15 PM


WEBSTER AVENUE
BEDFORD PARK BLVD
Landscaped Greenspace
Southern Blvd Greenstreet
New York Botanical Garden
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

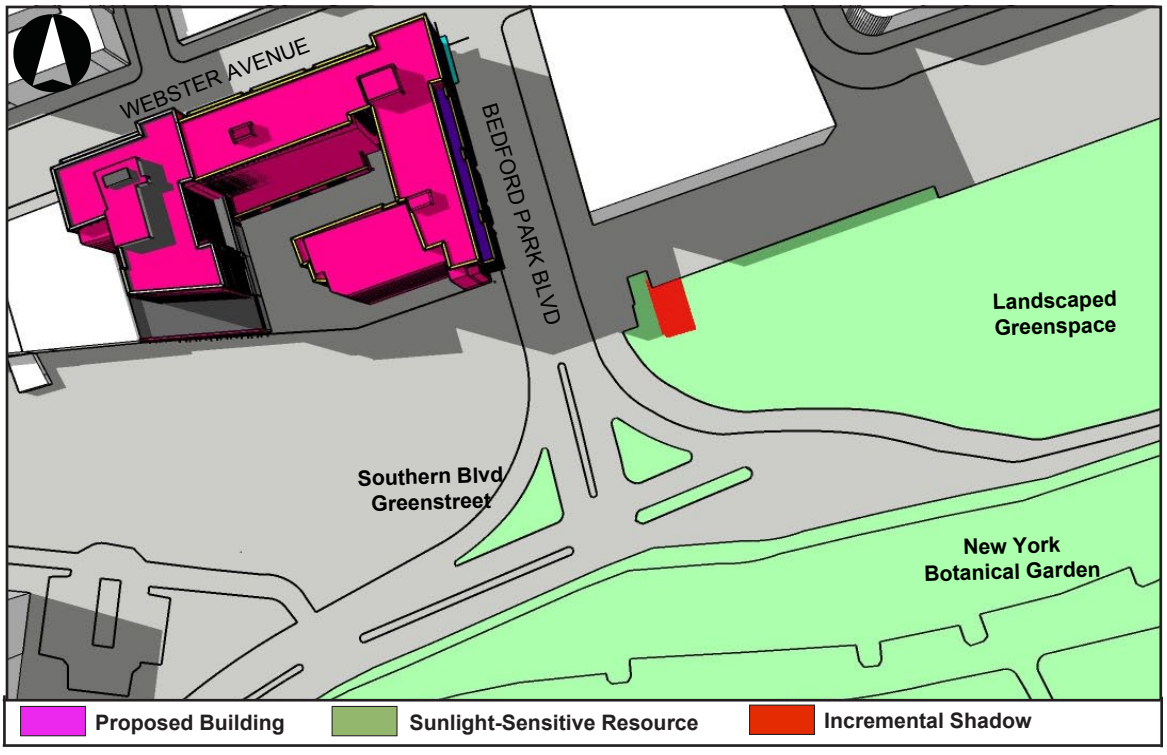
5:15 PM


WEBSTER AVENUE
BEDFORD PARK BLVD
Landscaped Greenspace
Southern Blvd Greenstreet
New York Botanical Garden
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

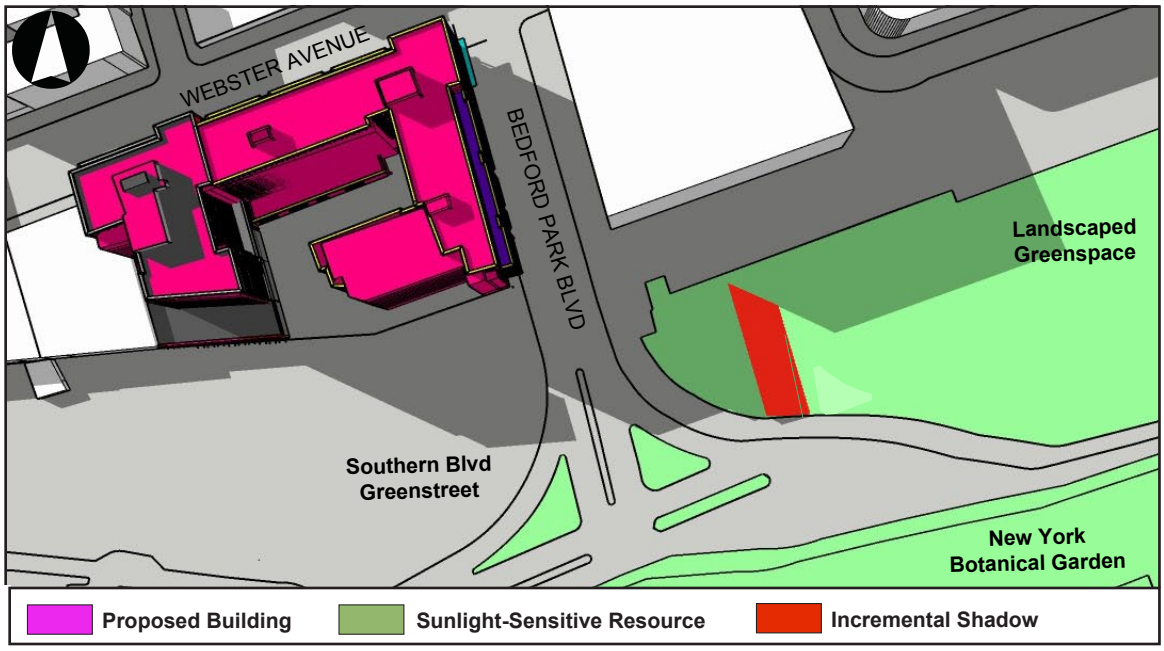
3:15 PM


WEBSTER AVENUE
BEDFORD PARK BLVD
Landscaped Greenspace
Southern Blvd Greenstreet
New York Botanical Garden
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

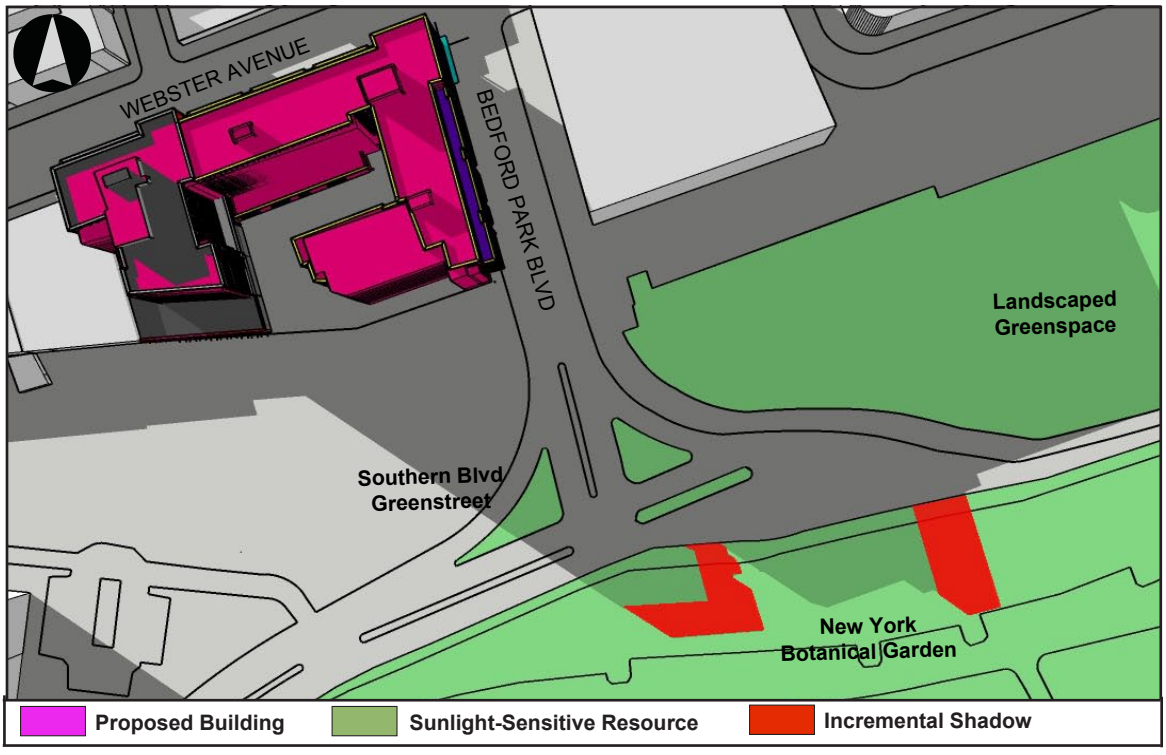
4:00 PM


WEBSTER AVENUE
BEDFORD PARK BLVD
Landscaped Greenspace
Southern Blvd Greenstreet
New York Botanical Garden
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

5:00 PM


WEBSTER AVENUE
BEDFORD PARK BLVD
Landscaped Greenspace
Southern Blvd Greenstreet
New York Botanical Garden
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

6:00 PM


WEBSTER AVENUE
BEDFORD PARK BLVD
Landscaped Greenspace
Southern Blvd Greenstreet
New York Botanical Garden
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

June 21

On June 21 the time period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. On the summer solstice, which is the day of the year with the longest period of daylight, the sun is most directly overhead and generally shadows are shortest and move across the widest angular range from west to east. June 21 is within the growing season in New York City. On the June 21 analysis day, the development's increase in building height would cast incremental shadows on the landscaped greenspace from 3:04 PM to 6:01 PM, for a duration of two hours and 57 minutes. Incremental shadows would exist on the Southern Boulevard Greenstreet from 5:08 – 6:01 PM for an increment of 53 minutes. Finally, incremental shadows would reach the New York Botanical Garden from 5:40 PM to 6:01 PM, for a duration of 21 minutes. As shown in **Figures D-5a** and **D-5b**, incremental shadows would be limited to northwestern portions of this open space resource. These incremental shadows would not extend past the Bronx Park Road, an access road into the New York Botanical Garden.

Assessment

A shadows impact occurs when incremental shadows from a proposed building fall on a sunlight sensitive resource or feature and reduces direct sunlight exposure. Determining whether or not this impact is significant depends on the extent and duration of the incremental shadows and the specific context in which the impact occurs.

For open spaces, the uses and features of the space indicate its sensitivity to shadows. Shadows occurring during the cold-weather months of interest generally do not affect the growing season of outdoor vegetation; however, their effects on other uses and activities should be assessed. Therefore, this sensitivity is assessed for both (1) warm-weather-dependent features or vegetation that could be affected by a loss of sunlight during the growing season; and (2) features, such as benches, that could be affected by a loss of winter sunlight. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Consequently, the assessment of an open space's sensitivity to increased shadow focuses on identifying the existing conditions of its facilities, plantings, and uses, and the sunlight requirements for each.

New York Botanical Garden

The shadows analysis determined that the duration and coverage of incremental shadows on the New York Botanical Garden would not be significant or adverse. Project-generated incremental shadows would occur during the late afternoon hours and would last for approximately 21 minutes on June 21. On this analysis day, incremental shadows would be limited to a small portion in the northwestern corner of the Botanical Garden. This area contains trees, bushes, and grass. No active programming containing any unique plants from the New York Botanical Garden is located in this area. Additionally, the Botanical Garden would continue to receive adequate sunlight during the morning, afternoon, and evening hours, and as such, the addition of a single floor to the proposed buildings would not have significant adverse effects on any vegetation in New York Botanical Garden. Therefore, the incremental shadows are not anticipated to adversely affect the utilization or enjoyment of the New York Botanical Garden.

Landscaped Greenspace

Incremental shadows would reach this open space resource on the March 21/ September 21, May 6/August 6, and June 21 analysis days. Across these three analysis days, incremental shadow coverage would vary between 39 minutes and two hours and 57 minutes in duration. As shown in **Figures D-3** through **D-5**, the

extent of incremental shadow coverage would be limited. The greenspace would continue to receive adequate sunlight during the morning and early afternoon hours. Therefore, incremental shadows that would result from the Proposed Development's additional floor are not anticipated to adversely affect the utilization or enjoyment of the landscaped greenspace.

Southern Boulevard Greenstreet

Incremental shadows would reach the Southern Boulevard Greenstreet for two of the four analysis days. On the May 6/ August 6 and June 21 analysis days, incremental shadows would exist on the greenstreet ranging between 26 and 53 minutes. The greenspace would continue to receive adequate sunlight during the morning and early afternoon hours. Therefore, incremental shadows that would result from the proposed development's additional floor are not anticipated to adversely affect the vegetation of the greenstreet.

Attachment E

Urban Design and Visual Resources

I. INTRODUCTION

The *City Environmental Quality Review* (CEQR) *Technical Manual* states that the urban design components and visual resources determine the "look" of a neighborhood—its physical appearance, including the street pattern, the size and shape of buildings, their arrangement on blocks, streetscape features, natural resources, and noteworthy views that may give an area a distinctive character. Pursuant to CEQR methodology, actions that would allow a project to potentially obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings may warrant a detailed urban design and visual resources analysis. The Proposed Actions include: (i) a certification by the Chairperson of the City Planning Commission (CPC) pursuant to ZR Section 63-30 for a FRESH Food Store; and, (ii) an authorization by the City Planning Commission pursuant to Section 63-22 to allow an increase in the maximum building height by 15 feet. Additionally, the proposed project would receive financing from NYC HPD and NYS HCR. The Proposed Actions would result in a development that would differ from what is permitted as-of-right, and as such, an analysis of urban design and visual resources is appropriate.

As discussed in **Attachment A, "Project Description,"** the Applicant is proposing to redevelop the project site with two adjacent 12-story mixed-use residential and commercial buildings totaling approximately 387,052 gross square foot (gsf) (the "Proposed Project"). The Proposed Project would include approximately 464 dwelling units (DUs) and approximately 21,103 gsf of commercial space to be occupied by a FRESH food store. The Proposed Project would also include approximately 50 accessory parking spaces which would be accessible via a curb cut on Webster Avenue.

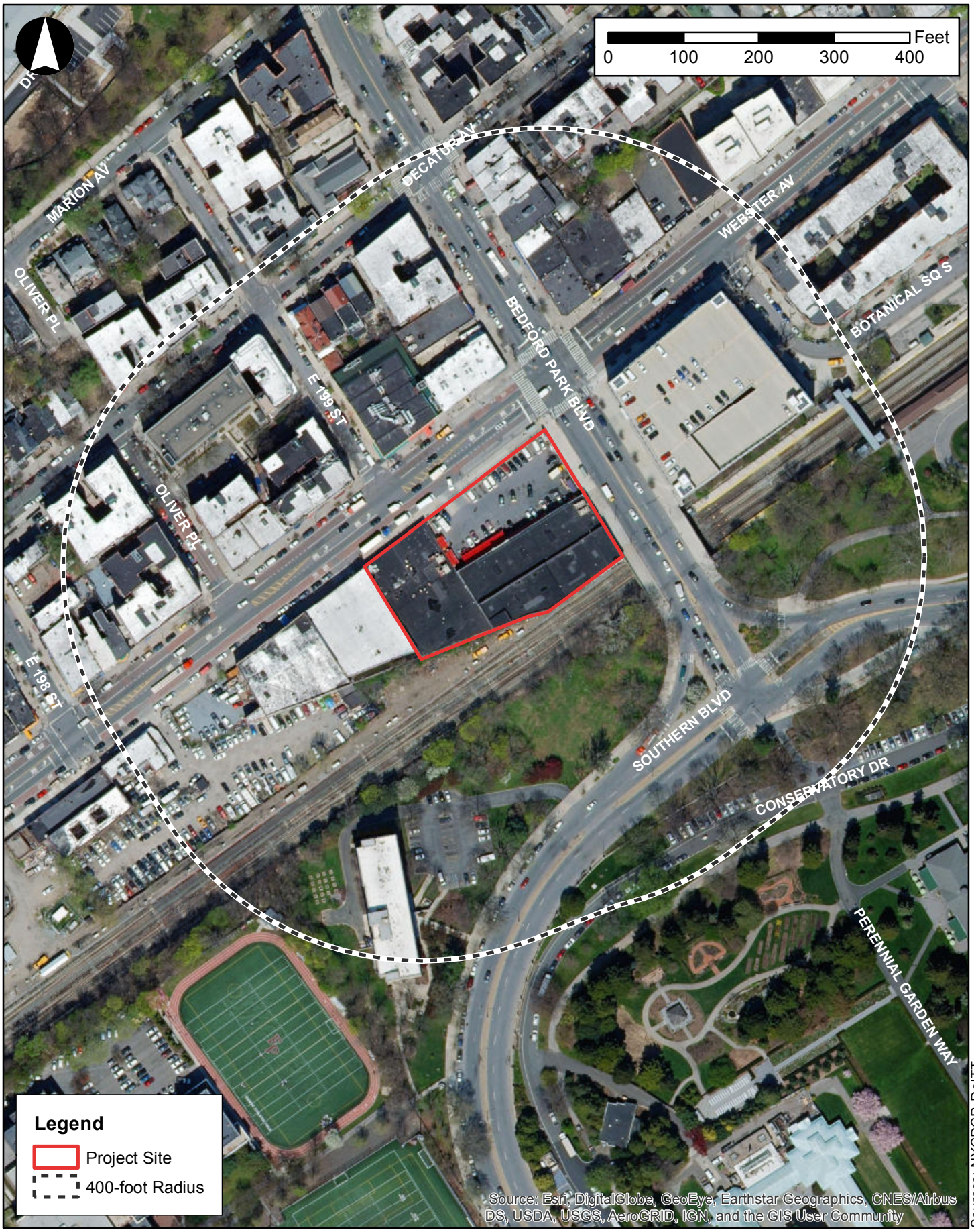
This attachment considers the potential for the Proposed Actions to affect the urban design characteristics and visual resources of the project site and the surrounding secondary study area. As described in **Attachment A, "Project Description,"** the project site is comprised of three tax lots (Lot 118, 122, and 128) on the corner of Bronx Block 3273 in the Bedford Park neighborhood of Bronx Community District (CD) 7 (see **Figure E-1).** The technical analysis presented below follows the guidance of the *CEQR Technical Manual* and addresses each of the above-listed characteristics for existing conditions, the future without the Proposed Actions (the No-Action scenario), and the future with the Proposed Actions (the With-Action scenario) for a 2024 Build Year.

II. PRINCIPAL CONCLUSIONS

Urban Design

The proposed authorization to allow an increase in the maximum building height by 15 feet, which is necessary to accommodate the proposed FRESH food store, would allow a development that differs from what is permitted as-of-right. However, development facilitated by the Proposed Actions would not result in significant adverse impacts on urban design as defined by the guidance for determining impact significance set forth in the 2014 *CEQR Technical Manual*. In the future with the Proposed Actions, the visual appearance on the project site would not be noticeably different as compared to the No-Action condition and thus the pedestrian experience of the project site would not be noticeably altered. Therefore, the Proposed Actions would not meet the *CEQR Technical Manual* threshold for a significant adverse urban design impact in that the Proposed Actions would not alter the arrangement, appearance, or functionality of the project site such that the alteration would negatively affect a pedestrian's experience of the area.

Figure E-1
Urban Design Study Area



Visual Resources

There is one visual resource that can be seen from the project site. The New York Botanical Garden is visible from the southern portion of the 400-foot secondary study area. The Proposed Project under the With-Action scenario would not obstruct or eliminate any public views or affect any existing view corridors or views to this visual resource. As such, the Proposed Actions would not result in any significant adverse impacts to visual resources.

III. METHODOLOGY

In accordance with the *CEQR Technical Manual,* this analysis considers the effects of the Proposed Project on the following elements that collectively form an area's urban design:

- *Street Pattern and Streetscape*—the arrangement and orientation of streets define location, flow of activity, and street views and create blocks on which buildings and open spaces are arranged. Other elements including sidewalks, plantings, street lights, curb cuts, and street furniture also contribute to an area's streetscape.
- *Buildings*—building size, shape, pedestrian and vehicular entrances, lot coverage, and orientation to the street are important urban design components that define the appearance of the built environment.
- *Open Space*—open space includes public and private areas that do not include structures, including parks and other landscaped areas, cemeteries, and parking lots.
- *Natural features*—natural features include vegetation and geologic and aquatic features that are natural to the area.
- *View Corridors and Visual Resources*—visual resources include significant natural or built features, including important view corridors, public parks, landmark structures or districts, or otherwise distinct buildings.
- *Wind* – Channelized wind pressure from between tall buildings and downwashed wind pressure from parallel tall buildings may cause winds that may jeopardize pedestrian safety.

In general, an assessment of urban design is needed when a project may have effects on one or more of the elements that contribute to the pedestrian experience, described above. As the Proposed Actions could result in physical changes to the project site beyond the bulk, form, and height currently permitted as-of-right, they have the potential to result in development that could alter the arrangement, appearance, and functionality of the built environment and, therefore, change the experience of a pedestrian in the project area. The following urban design analysis follows the guidance of the *CEQR Technical Manual.*

Per criteria of Section 230 of the *CEQR Technical Manual*, a wind condition analysis is not warranted for the Proposed Actions. The project site is not located in a high wind location, such as directly along the waterfront, nor is it in a location where wind conditions from the waterfront are not attenuated by buildings or natural features.

Study Area

The urban design study area consists of both a primary study area, where the urban design effects of the Proposed Actions are direct, and a secondary study area (refer to **Figure E-1**). For the purpose of this assessment, the primary study area consists of the project site. The secondary study area extends approximately 400-feet from the boundary of the project site and encompasses areas that have the potential to experience indirect impacts as a result of the Proposed Actions. It is generally bounded by Decatur Avenue to the north, the midblock of Webster Avenue between Bedford Park Boulevard and East 201st

Street to the east, Southern Boulevard to the south, and East 198th Street to the west. Both the primary and secondary study areas have been established in accordance with *CEQR Technical Manual* guidance.

The analysis of urban design and visual resources is based on May 2019 field visits, photography, and computer imaging of the project site and the surrounding 400-foot study area.

IV. PRELIMINARY ASSESSMENT

Pursuant to CEQR, a preliminary assessment of urban design is appropriate when there is the potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning. CEQR further stipulates a detailed analysis is warranted for projects that would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings. According to the *CEQR Technical Manual*, detailed analyses are generally appropriate for area-wide rezonings that include an increase in permitted floor area or changes in height and setback requirements. The increased scale, in terms of bulk, form, and height, on the project site would be a notable change from the pedestrian's perspective to the appearance and character of the site compared to the No-Action conditions. The visual appearance would be enhanced and thus the pedestrian experience of the project site would change; however, this change would not meet the *CEQR Technical Manual* threshold for a significant adverse urban design impact in that it would not alter the arrangement, appearance, or functionality of the project site such that the alteration would negatively affect a pedestrian's experience of the area. As such, the Proposed Actions would not result in a substantial alteration to the streetscape of the neighborhood, and therefore, a preliminary analysis of urban design has been conducted and is provided below.

Existing Conditions

Primary Study Area (Project Site)

Urban Design

Buildings

The approximately 53,372 sf project site (Block 3273; Lots 118, 122, and 128) has approximately 199 feet of northern frontage along Bedford Park Boulevard and approximately 300 feet of western frontage along Webster Avenue. As shown in **Figure E-2**, the project site is currently occupied by a one-story supermarket on Lot 122 and a vacant one-story commercial building on Lot 118. Lot 128 is occupied by an off-street parking lot for customers of the supermarket on Lot 122.

Street Pattern and Streetscape

A typical street grid pattern exists in the immediate vicinity of the project site. Southeast of the project site and the Metro North tracks, the street grid pattern becomes irregular as Southern Boulevard enters the New York Botanical Garden and Fordham University campus. Webster Avenue, immediately of the project site is a two-way is a 100-foot wide, six-lane road. Each side of the road includes a parallel parking lane, a bus-only lane, and a lane for other vehicles. Bedford Park Boulevard is adjacent to the project site's northern frontage. The 100-foot wide street is a two-way street and includes two lanes in each direction. Streetscape elements are common and include standard street signs, cobra head lampposts, and bus shelters on both the Webster Avenue and Bedford Park Boulevard frontages (see **Figure E-3**).

1) Looking southeast from Webster Avenue towards Lots 122 and 128 on the Project Site.

2) Looking southeast from Webster Avenue towards the vacant building on Lot 118.

3) Looking northwest towards the Project Site from Bedford Park Boulevard.

4) Looking west from Bedford Park Boulevard toward the southeastern facade of the Project Site and the MTA Metro North Harlem Line tracks.

*Photos taken 5/15/2019

5) Looking southeast from Webster Avenue towards Lot 128.

6) Looking south along Bedford Park Boulevard adjacent to the Project Site.

7) Looking southeast towards Lots 122 and 128 of the Project Site.

8) Looking southwest from the intersection of Bedford Park Boulevard and Webster Avenue towards the Project Site.

*Photos taken 5/15/2019

Natural Features and Open Space

There are no natural features or open space resources located within the project site.

View Corridors and Visual Resources

There are no view corridors within the project site or any visual resources visible from the project site.

Secondary Study Area

Urban Design

Buildings

Table C-1 in **Attachment C, "Land Use, Zoning, and Public Policy,"** summarizes the existing generalized land uses within the 400-foot land use study area by land area and built square footage. Overall, as reflected in **Table C-1** and in **Figures E-4** through **E-6**, the secondary study area contains primarily medium density residential buildings and mixed commercial/residential buildings, as well as a small number of public facilities and institutions. As shown in **Figure E-6**, buildings generally range in built density between 1.25 – 5.0 FAR. The building with the highest FAR in the secondary study area is located northeast of the project site on the corner of Webster Avenue and Bedford Park Boulevard and is a 7.18 FAR parking garage owned by the New York Botanical Garden. Building heights in the secondary study area range between three to six stories. The tallest building in the secondary study area is the nine-story Rosehill Apartment building located on Southern Boulevard.

Street Pattern and Streetscape

The street pattern in the secondary study area is composed of rectilinear blocks within a street grid system along Decatur Avenue and Webster Avenue. With the exception of Decatur Avenue and Botanical Square, streets in the secondary study area are two-way streets. Major thoroughfares in the secondary study area include Webster Avenue and Bedford Park Boulevard which are discussed in greater detail above. Decatur Avenue is a one-way street carrying northeast bound traffic. Parking is available on both sides of the street. East 199th Street and Oliver Place each run northwest-southeast through the secondary study area. These streets each include parking on one side of the street and are two-way streets. South of the project site, the Metro North Harlem line tracks break up the secondary study area's street grid. South of the tracks is Southern Boulevard which curves around the New York Botanical Garden and campus of Fordham University. Streetscape elements throughout the area include standard street signs, cobra head lampposts, and street trees along Decatur Avenue, Bedford Park Boulevard and East 199th Street (refer to **Figure E-7**).

Natural Features and Open Space

Open space in the secondary study area is limited to surface parking lots and the New York Botanical Garden. The 250-acre Botanical Garden is a privately operated open space, but is publicly accessible on Wednesdays.

View Corridors and Visual Resources

The New York Botanical Garden is the only visual resource visible from within the secondary study area (refer to **Figure E-8**).

9) Looking northeast from the intersection of Webster Avenue and Bedford Park Boulevard.

10) Looking south from Decatur Avenue towards East 199th Street.

11) Looking north towards the building on the corner of Oliver Place and Webster Avenue.

12) Looking east from the intersection of Decatur Avenue and Bedford Park Boulevard.

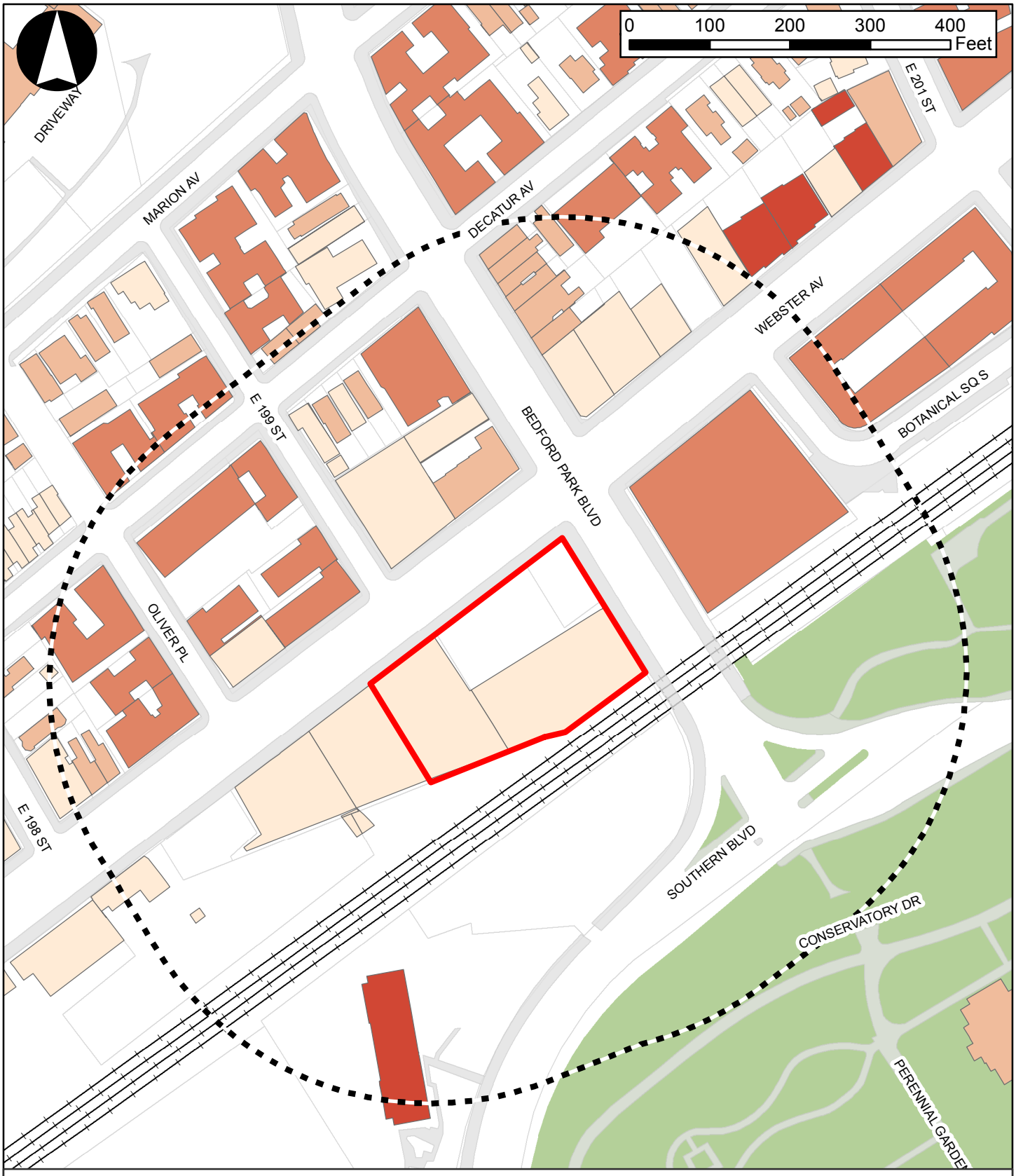
*Photos taken 5/15/2019

NYBG - 2856 Webster Ave. FRESH EAS

Figure E-4

Study Area - Buildings

Figure E-5
Building Height



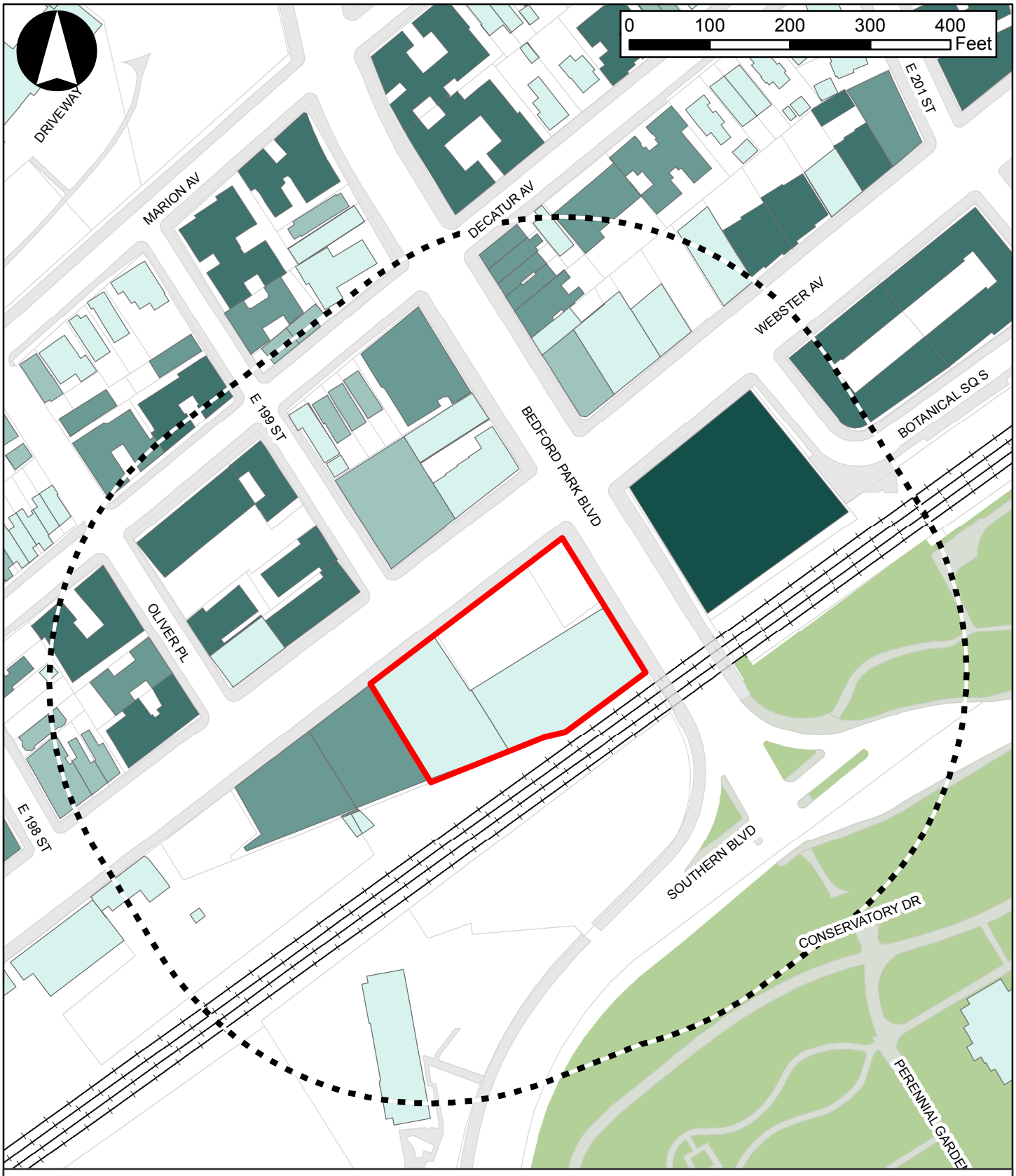
Legend

- Project Site
- 400-Foot Radius
- Metro-North Railroad

Number of Floors

- 1 - 2 Stories
- 3 - 4 Stories
- 5 - 6 Stories
- 7 - 10 Stories
- Greater than 10 Stories

Figure E-6
Built FAR



Legend

- Project Site
- 400-Foot Radius
- Metro-North Railroad

Built FAR

- 0.0 - 1.25 FAR
- 1.26 - 2.0 FAR
- 2.01 - 4.0 FAR
- 4.0.1 - 6.0 FAR
- Greater than 6.0 FAR

13) Looking southeast along Bedford Park Boulevard from Decatur Avenue.

14) Looking east on Decatur Avenue towards Bedford Park Boulevard.

15) Looking northwest on Oliver Place.

16) Looking northeast along Webster Avenue towards the Project Site.

*Photos taken 5/15/2019

17) Looking south from the intersection of Bedford Park Boulevard and Southern Boulevard towards the New York Botanical Garden. To the right is the Fordham University campus.

18) Looking northwest from Southern Boulevard towards the northern portion of the Fordham University campus.

*Photos taken 5/15/2019

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

Primary Study Area (Project Site)

In the future without the Proposed Actions, it is anticipated that the Applicant would pursue as-of-right development on the project site. The as-of-right development would include two 11-story buildings (approximately 115 feet tall) totaling 362,559 gsf (combined FAR of 5.59). The as-of-right development would include 430 DUs and 21,103 gsf of ground floor retail space. The development would include 50 accessory parking space and would be accessed via an existing curb cut on Webster Avenue.

Secondary Study Area

There are no known projects that are expected to be completed before the 2024 build year in the secondary study area.

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

This section describes the effects of the Proposed Actions on the urban design and visual resource conditions in the area by 2024 and evaluates the potential for the Proposed Actions to result in significant adverse impacts. As discussed above, because the With-Action condition would result in a larger development than the No-Action condition, the With-Action condition is analyzed for its potential to result in significant adverse urban design and visual resources impacts.

Primary Study Area (Project Site)

In the future with the Proposed Actions, the FRESH food store certification and authorization to allow an increase in the maximum building height would both be approved. With the approved Proposed Actions, two 12-story buildings totaling approximately 387,052 gsf of mixed-use commercial/residential development containing 464 DUs, approximately 21,103 gsf of commercial space to be occupied by a FRESH food store, and approximately 50 accessory parking spaces would be constructed on the project site.

Urban Design

Buildings

The Applicant plans to redevelop the site with two 12-story mixed-use commercial/residential buildings. The residential component would consist of approximately 365,949 gsf, containing 464 DUs. In addition, 50 accessory parking spaces would be provided on-site. As shown in **Figure E-9** and **E-10**, the proposed buildings would be designed to complement the built character of Webster Avenue, which is comprised of predominantly higher-density, multi-family residential development.

Street Pattern and Streetscape

The Proposed Actions would not result in changes to the streetscape or the arrangement or orientation of streets surrounding the project site.

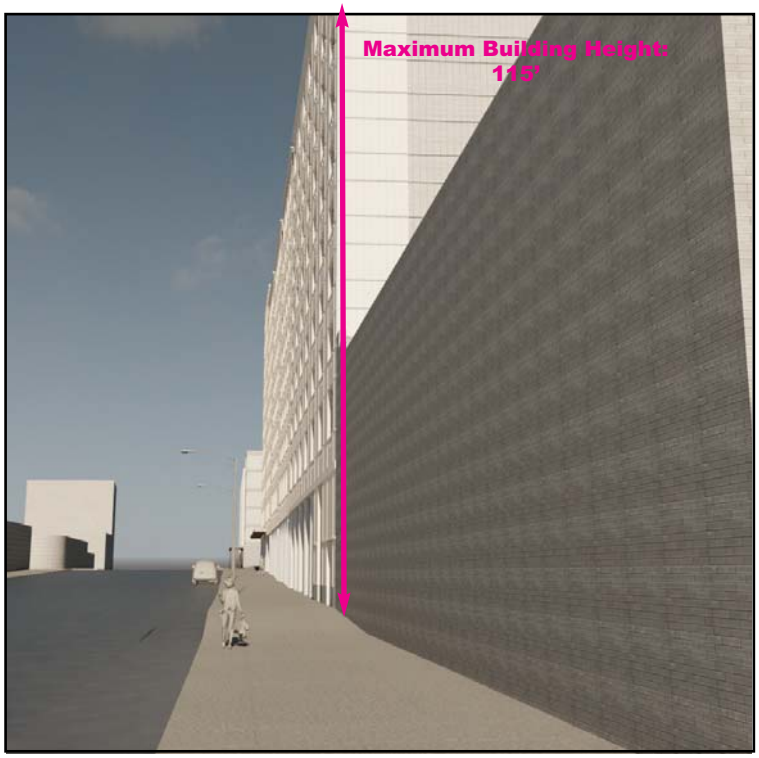
View facing northwest along Bedford Park Boulevard

No-Action

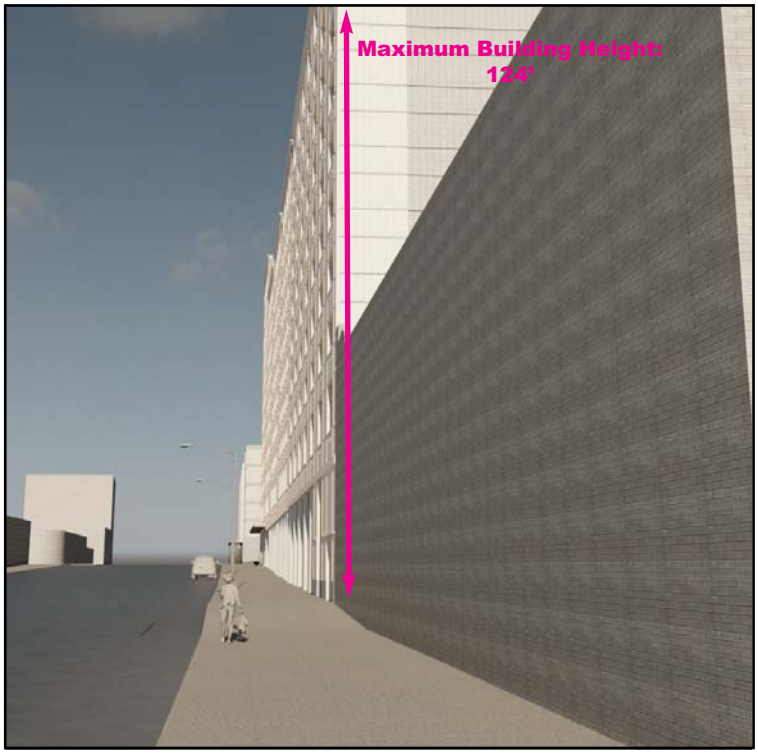
With-Action

FOR ILLUSTRATIVE PURPOSES ONLY

View facing northeast along Webster Avenue



No-Action



With-Action

FOR ILLUSTRATIVE PURPOSES ONLY

Natural Features and Open Space

As discussed above, there are no natural features or open space resources located within the project site.

Visual Resources and View Corridors

As discussed previously, there are no visual resources or view corridors located within the project site.

Assessment

As shown in **Figures E-9** and **E-10** which depict the Proposed Development under the With-Action scenario, the Proposed Actions would alter the urban design character of the project site. The Proposed Development would introduce an additional story (approximately 9 feet of additional building height) to the Proposed Development. The increased scale, both in terms of bulk and height (scale), would not be a significant change from the pedestrian's perspective to the appearance and character of the project site compared to the No-Action conditions.

Compared to the future without the Proposed Actions, in the future with the Proposed Actions, the visual appearance would differ slightly and thus the pedestrian experience of the project site would not be noticeably altered. Therefore, the Proposed Actions would not meet the *CEQR Technical Manual* threshold for a significant adverse urban design impact in that they would not alter the arrangement, appearance, or functionality of the project site such that the alteration would negatively affect a pedestrian's experience of the area.

Secondary Study Area

Urban Design

Buildings

The mixed-use commercial/residential uses that would be developed under the With-Action scenario would be in keeping with existing land uses in the secondary study area, and would maintain the mixed-use character of Webster Avenue. In addition, there would be no change to building arrangement, bulk, use or type in the secondary study area as a result of the Proposed Actions. Within the secondary study area, there is a range of existing building density and heights. The proposed With-Action development would match the scale of buildings found in the secondary study area.

Street Pattern and Streetscape

The proposed With-Action development is expected to be consistent with the street pattern and streetscape found throughout the secondary study area.

Natural Features and Open Space

There is only one open space within the secondary study area. The New York Botanical Garden is approximately 300 feet southeast of the project site. Due to the distance between the New York Botanical Garden and the project site, the Proposed Actions would not have a significant adverse impact on any open space or natural features in the secondary study area.

Visual Resources and View Corridors

The New York Botanical Garden is the only visual resource located in the secondary study area. The visual resource is visible from Southern Boulevard and from Bedford Park Boulevard, south of the project site.

Assessment

As shown in **Figures E-9** and **E-10**, the Proposed Actions would not alter the urban design character of the secondary study area.

Compared to the future without the Proposed Actions, in the future with the Proposed Actions, the visual appearance would differ slightly and thus the pedestrian experience in the secondary study area would not be noticeably altered. Therefore, the Proposed Actions would not meet the *CEQR Technical Manual* threshold for a significant adverse urban design impact in that they would not negatively affect a pedestrian's experience of the area. Overall, the Proposed Actions are expected to improve urban design conditions within the secondary study area, and as such, the Proposed Actions would not result in a significant adverse impact to urban design in the secondary study area. In addition, although the Proposed Actions would result in a building that is larger in scale than is allowed as-of-right, from a pedestrian's perspective, the Proposed Project would not the pedestrian experience of those in the secondary study area.

Attachment F

Noise

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions and subsequent development to result in significant adverse noise impacts. Based on CEQR transportation analysis thresholds, it was determined that the proposed project would generate fewer than fifty peak hour vehicle trips, and therefore, a traffic analysis was not conducted and no significant adverse traffic impacts are anticipated. However, in accordance with the guidelines established in the *CEQR Technical Manual*, a noise analysis was performed to identify the potential noise impacts to the proposed project from the existing noise environment (traffic and rail noise) and identify the required level of attenuation to achieve an acceptable interior noise level of 45 dBA. Based on a field survey of land uses in the area, it was determined that no stationary noise sources contribute significantly to noise levels in the area, and a stationary noise source analysis would not be necessary.

II. PRINCIPAL CONCLUSIONS

Noise from increased traffic generated by the proposed project would not cause noise level impacts at sensitive receptors along the adjacent roadway (Webster Avenue and Bedford Park Boulevard) as the relative increases in noise levels would fall well below the impact criterion of 3.0 dBA between No-Action and With-Action conditions.

Based on the noise analysis presented herein, the maximum predicted L_{10} noise level adjacent to the Development Site is expected to be 81.7 dBA along the Development Site's Webster Avenue frontage (receptor location 1), 77.5 dBA along the site's Bedford Park Boulevard frontage (receptor location 2), and 81.3 dBA along the site's southeast façade along the MTA Metro-North Railroad's Harlem Line and New Haven Line tracks, which is an open rail cut in the vicinity of the Development Site (receptor location 3). Based on these maximum predicted With-Action noise levels, attenuation of 38 dBA would be required on all facades facing Webster Avenue, MTA Metro-North Railroad, Oliver Place, and the facades facing Bedford Park Boulevard within 50 feet of Webster Avenue and the facades facing Bedford Park Boulevard within 50 feet of MTA Metro-North Railroad and 33 dBA of attenuation on all other facades to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses. However, as described in detail below, an existing (E) designation for noise (E-249) exists for Lots 118, 122, and 128 of the Development Site. This existing (E) designation requires attenuation of 37.2 dBA along any façade facing Bedford Park Boulevard on Lots 122 and 128 and 35 dBA of attenuation on any other façade on these two lots, and 35 dBA of attenuation on all facades on Lot 118. As such, a new (E) designation (E-566) would need to be created to update the building attenuation requirements for the Development Site to reflect the results of the latest noise analysis presented below. With implementation of the attenuation levels required pursuant to the new (E) designation (E-566), the Proposed Project would provide sufficient attenuation to achieve the 2014 *CEQR Technical Manual* interior noise level guidance of 45 dBA or lower for residential uses/community facility uses and 50 dBA for commercial uses. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation requirements.

III. NOISE FUNDAMENTALS

Quantitative information on the effects of airborne noise on people is well documented. If sufficiently loud, noise may adversely affect people in several ways. For example, noise may interfere with human activities such as sleep, speech communication, and tasks requiring concentration or coordination. It may also cause annoyance, hearing damage, and other physiological problems. Although it is possible to study these effects on people on an average or statistical basis, it must be remembered that all the stated effects of noise on people vary greatly with the individual. Several noise scales and rating methods are used to quantify the effects of noise on people. These scales and methods consider factors such as loudness, duration, time of occurrence, and changes in noise level with time.

"A"-Weighted Sound Levels (dBA)

Noise is typically measured in units called decibels (dB), which are ten times the logarithm of the ratio of the sound pressure squared to a standard reference pressure squared. Because loudness is important in the assessment of the effects of noise on people, the dependence of loudness on frequency must be taken into account in the noise scale used in environmental assessments. Frequency is the rate at which sound pressures fluctuate in a cycle over a given quantity of time and is measured in Hertz (Hz), where 1 Hz equals 1 cycle per second. Frequency defines sound in terms of pitch components. In the measurement system, one of the simplified scales that accounts for the dependence of perceived loudness on frequency is the use of a weighting network (known as A-weighting) that simulates the response of the human ear. For most noise assessments, the A-weighted sound pressure level in units of dBA is used due to its widespread recognition and its close correlation to perception. In this analysis, all measured noise levels are reported in dBA or A-weighted decibels. Common noise levels in dBA are shown in **Table F-1**.

Table F-1:
Common Noise Levels

Sound Source	(dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Soft Whisper at 5 meters	30
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Note: A 10 dBA increase appears to double the loudness and a 10 dBA decrease appears to halve the apparent loudness.
Sources: *CEQR Technical Manual*/Cowan; James P., *Handbook of Environmental Acoustics,* Van Nostrand Reinhold, New York, 1994. Egan, M. David, *Architectural Acoustics,* McGraw-Hill Book Company, 1988.

Community Response to Changes in Noise Levels

Table F-2 shows the average ability of an individual to perceive changes in noise. Generally, changes in noise levels less than 3 dBA are barely perceptible to most listeners. However, as illustrated in **Table F-2**, 5 dBA changes are readily noticeable. 10 dBA changes are normally perceived as doublings (or halvings) of noise levels. These guidelines permit direct estimations of an individual's probable perception of changes in noise levels.

Table F-2:
Average Ability to Perceive Changes in Noise Levels

Change (dBA)	Human Perception of Sound
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	A dramatic change
40	Difference between a faintly audible sound and a very loud sound

Source: Bolt Beranek and Neuman, Inc., *Fundamentals and Abatement of Highway Traffic Noise* (Report No. PB-222-703). Prepared for the Federal Highway Administration (FHA), June 1973.

Noise Descriptors Used in Impact Assessment

Because the sound pressure level unit (dBA) describes a noise level at just one moment and very few noises are constant, other ways of describing noise over extended periods of time have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level" (L_{eq}) can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour [denoted by $L_{eq(1)}$] or 24 hours [denoted as $L_{eq(24)}$]), conveys the same sound energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and x percent of the time, respectively. Discrete event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

The relationship between L_{eq} and levels of exceedance is worth noting. Because L_{eq} is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little, L_{eq} will approximate L_{50} or the median level. If the noise fluctuates broadly, the L_{eq} will be approximately equal to the L_{10} value. If extreme fluctuations are present, the L_{eq} will exceed L_{90} or the background level by 10 or more decibels. Thus the relationship between L_{eq} and the levels of exceedance will depend on the character of the noise. In community noise measurements it has been observed that the L_{eq} is generally between L_{10} and L_{50}. The relationship between L_{eq} and exceedance levels has been used in this analysis to characterize the noise sources and to determine the nature and extent of their impact at all receptor locations.

For the purposes of this analysis, the maximum one-hour equivalent sound level ($L_{eq(1)}$) has been selected as the noise descriptor to be used in the noise impact evaluation. $L_{eq(1)}$ is the noise descriptor used in the *CEQR Technical Manual* for noise impact evaluation and is used to provide an indication of highest expected sound levels; $L_{10(1)}$ is the noise descriptor used in the *CEQR Technical Manual* for building attenuation. Hourly statistical noise levels (particularly L_{10} and L_{eq} levels) were used to characterize the relevant noise sources and their relative importance at each receptor location. The L_{dn} is the noise descriptor

used in the *U.S. Department of Housing and Urban Development* (HUD) *Noise Guidebook*, which sets exterior noise standards for housing construction projects receiving federal funds.

Applicable Noise Codes and Impact Criteria

New York City Noise Code

The New York City Noise Control Code, as amended in December 2005, contains prohibitions regarding unreasonable noise and specific noise standards, including plainly audible criteria for specific noise sources. In addition, the amended code specifies that no sound source operating in connection with any commercial or business enterprise may exceed the decibel levels in the designated octave bands at specified receiving properties.

CEQR Technical Manual Noise Standards

The New York City Department of Environmental Protection (DEP) has set external noise exposure standards. These standards are shown in **Table F-3**.

Table F-3:
Noise Exposure Guidelines for Use in City Environmental Impact Review

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

Notes:
(i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;
[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.
[2] Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and old-age homes.
[3] One may use the Federal Aviation Administration- (FAA-) approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved Integrated Noise Model (INM) Computer Model using flight data supplied by the Port Authority of New York and New Jersey.
[4] External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).
Source: DEP (adopted policy 1983).

Noise Exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. The standards shown are based on maintaining an interior noise level for the worst-case hour L_{10} of less than or equal to 45 dBA. Attenuation requirements are shown in **Table F-4**.

Table F-4:
Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise level with Proposed Action	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Attenuation[A]	(I) 28 dBA	(II) 31 dBA	(III) 33 dBA	(IV) 35 dBA	$36 + (L_{10} - 80)^B$ dBA

Notes:
[A] The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dBA 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 dBA increments for L_{10} values greater than 80 dBA.
Sources: DEP; *CEQR Technical Manual*

Impact Criteria

In addition, the *CEQR Technical Manual* uses the following criteria to determine whether a proposed residential and/or community facility development would be subject to a significant adverse noise impact: (1) the impact assessments compare the projected future With-Action condition $L_{eq(1)}$ noise levels to those calculated for the No-Action condition; (2) if the No-Action levels are less than 60 dBA $L_{eq(1)}$ and the analysis period is not a nighttime period, the threshold for a significant impact would be an increase of at least 5 dBA $L_{eq(1)}$ (for the 5 dBA threshold to be valid, the resultant With-Action condition noise level would have to be equal to or less than 65 dBA); if the No-Action noise level is equal to or greater than 62 dBA $L_{eq(1)}$ or if the analysis period is a nighttime period (defined under CEQR standards as being between 10 PM and 7 AM), the incremental significant impact threshold would be 3 dBA $L_{eq(1)}$ (if the No-Action noise level is 61 dBA $L_{eq(1)}$, the maximum incremental increase would be 4 dBA, since an increase higher than this would result in a noise level higher than the 65 dBA $L_{eq(1)}$ threshold).

HUD Development Guidelines

The *HUD Noise Guidebook* sets exterior noise standards for housing construction projects based on L_{dn} values (see **Table F-5**). The L_{dn} refers to a 24-hour average noise level with a ten dB penalty applied to the noise levels during the hours between 10:00 PM and 7:00 AM, due to increased sensitivity to noise levels during these hours. If the exterior noise level is 65 L_{dn} to 70 L_{dn}, 25 dBA of noise attenuation must be provided; if the exterior noise level is 70 L_{dn} to 75 L_{dn}, 30 dBA of noise attenuation is required; and if the exterior noise level exceeds 75 L_{dn}, sufficient attenuation must be provided to bring interior levels down to 45 L_{dn} or lower for residential uses.

Table F-5:
HUD Exterior Noise Standards

	Acceptable	Normally Unacceptable	Unacceptable
Noise Level With Proposed Actions	$Ldn \leq 65$	$65 < Ldn \leq 75$	$75 < Ldn$

Source: HUD

For this analysis, L_{dn} levels were estimated using the following equation:

$$L_{dn} = L_{10} - 3$$

The method used to determine L_{dn} values is to measure the loudest hourly L_{10} for a typical day and then to estimate the L_{dn} from this loudest hourly L_{10}.

IV. NOISE PREDICTION METHODOLOGY

Future noise levels resulting from traffic were calculated with a proportional modeling technique used as a screening tool to estimate changes in noise levels. The proportional modeling technique is an analysis methodology recommended for analysis purposes in the *CEQR Technical Manual*. The noise analysis examined the weekday AM, midday, and PM peak hours. Noise emissions from train operations were analyzed pursuant to the methodology contained in the May 2006 Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment* guidance manual. A detailed description of these noise prediction methodologies is provided below.

Proportional Modeling

Proportional modeling was used to determine No-Action and With-Action noise levels along the Development Site's frontages, as discussed in more detail below. Proportional modeling is one of the techniques recommended in the *CEQR Technical Manual* for mobile source analysis.

Using this technique, the prediction of future noise levels (where traffic is the dominant noise source) is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine No-Action and With-Action noise levels. Vehicular traffic volumes (counted during the noise recording), are converted into PCE values, for which one medium-duty truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of thirteen cars, one heavy-duty truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of eighteen cars. Future noise levels are calculated using the following equation:

FNA NL =10 log (NA PCE/E PCE) + E NL

where:

FNA NL = Future No-Action Noise Level

NA PCE = No-Action PCEs

E PCE = Existing PCEs

E NL = Existing Noise Level

Sound levels are measured in decibels and therefore increase logarithmically with sound source strength. In this case, the sound source is traffic volumes measured in PCEs. For example, assume that traffic is the dominant noise source at a particular location. If the existing traffic volume on a street is 100 PCEs and if the future traffic volumes were increased by 50 PCEs to a total of 150 PCEs, the noise level would increase by 1.8 dBA. Similarly, if the future traffic were increased by 100 PCEs, or doubled to a total of 200 PCEs, the noise level would increase by 3.0 dBA.

To calculate the No-Action PCE values, an annual background growth rate of 0.25 percent for the 2024 Build Year was added to the PCE noise values based on counted vehicles.[2] In order to obtain the necessary

[2] Calculations according to Table 16-4 of the *CEQR Technical Manual.*

future With-Action noise PCE values to calculate the With-Action noise levels, the travel demand forecast presented in at the end of this attachment was utilized. As indicated in this table, the total incremental vehicles generated per hour were estimated at 55 (53 cars and two trucks) in the AM peak hour; 32 (31 cars and one truck) in the midday peak hour; and 32 incremental vehicles (all automobiles) during the PM peak hour. As a trip assignment was not prepared to the proposed project, these incremental vehicles were conservatively assigned to each receptor location.

Train Noise Modeling

Pursuant to the guidelines of the *CEQR Technical Manual* Section 332.3, "Train Noise," noise from train operations along the MTA Metro-North Railroad Harlem Line and New Haven Line tracks located to the southeast of the Development Site were calculated using the detailed noise analysis methodology contained in the May 2006 FTA *Transit Noise and Vibration Impact Assessment* guidance manual. Using this methodology, L_{eq} values may be calculated as a function of a number of factors, including the distance between the track and the receptor, number of trains, average number of cars per train, train speed, track conditions, and whether the track is on grade or on structure. Values calculated using the FTE methodology may either be used directly, or, based upon measured, adjusted based on adjustment factors developed to account for site-specific differences between measured and model-predicted values.

The FTA analysis starts with predicting the source noise levels, expressed in terms of Sound Exposure Level (SEL) at a reference distance and a reference speed. These are given in Table 5-1 of the FTA guidance manual and are reproduced in **Table F-6**, below.

Table F-6:
Reference SELs at 50 Feet from Track and 50 mph

Source/Type		Reference Conditions	Reference SEL (SEL_{ref}), dBA
Commuter Rail, At-Grade	Locomotives	Diesel-electric, 3000hp, throttle 5	92
		Electric	90
	Diesel Multiple Unit (DMU)	Diesel-powered, 1200hp	85
	Horns	Within ¼-mile of grade crossing	110
	Cars	Ballast, welded rail	82
Rail Transit		At-grade, ballast, welded rail	82
Transit Whistles/Warning Devices		Within 1/8-mile of grade crossing	93
AGT	Steel Wheel	Aerial, concrete, welded rail	80
	Rubber Tire	Aerial, concrete guideway	78
Monorail		Aerial straddle beam	82
Maglev		Aerial, open guideway	72

Source: FTA *Transit Noise and Vibration Impact Assessment* guidance manual, Table 5-1 (May 2006).

After determining the reference levels for each of the noise sources, the next step is to determine the noise exposure at 50 feet expressed in terms of $L_{eq(h)}$ and L_{dn}. The additional data needed include: number of train passbys during the day (defined as 7 AM to 10 PM) and night (defined as 10 PM to 7 AM); peak hour train volume; number of vehicles per train; maximum speed; guideway configuration; noise barrier location; and location of highway and street grade crossings, if any. These data are used to obtain adjustment factors to calculate $L_{eq(h)}$ at 50 feet. Once the $L_{eq(h)}$ at 50 feet from each of the railroad tracks located to the east of the Development Site were determined, the values were adjusted based on the distance between each track and the Development Site using the noise exposure vs. distance formulas presented in Section 6.3.1 of the FTA guidance manual. The applicable distance corrections for the tracks, based on their locations between 23.3 and 43.8 feet from the Development Site's southeastern facade ranged from 3.3 dBA (for the track located

closest to the Development Site) to 0.5 dBA (for the track located furthest from the site). Lastly, the resultant $L_{eq(h)}$ for each of the tracks were added logarithmically to the monitored background value to determine the combined $L_{eq(h)}$ along the Development Site's southeastern facade.

Using the FTA methodology described above, existing noise levels emitted from the Metro-North tracks were calculated for the weekday Daytime (7 AM to 10 PM) and Nighttime (10 PM to 7 AM) periods for receptor location 3 according to the current Metro-North timetables for the Harlem Line and New Haven Line. This included calculating the L_{eq} SEL values at 50 feet and comparing these to the monitored noise levels at receptor location 3, as summarized in **Table F-7**, below.

Table F-7:
FTA Forecasted Noise Levels For Receptor Location 3

Receptor	Maximum Monitored L_{eq}	Maximum Monitored L_{10}	FTA Forecasted L_{eq}	FTA Forecasted L_{10}
3	76.81	78.42	79.71	81.32

V. EXISTING NOISE LEVELS

Selection of Noise Receptor Locations

The Development Site fronts Webster Avenue to the northwest and Bedford Park Boulevard to the northeast. On the southeastern border of the Development Site is the Metro North's Harlem Line and New Haven Line railroad tracks. As vehicle and train emissions both contribute to existing noise levels in the surrounding area, noise monitoring was conducted at three locations: the approximate midpoint along the Development Site's Webster Avenue frontage (receptor location 1), the approximate midpoint of the Development Site's Bedford Park Boulevard (receptor location 2), and the southeast corner of the project site on Bedford Park Boulevard closest to the Metro North Harlem Line tracks. The noise monitoring locations are presented in **Figure F-1**.

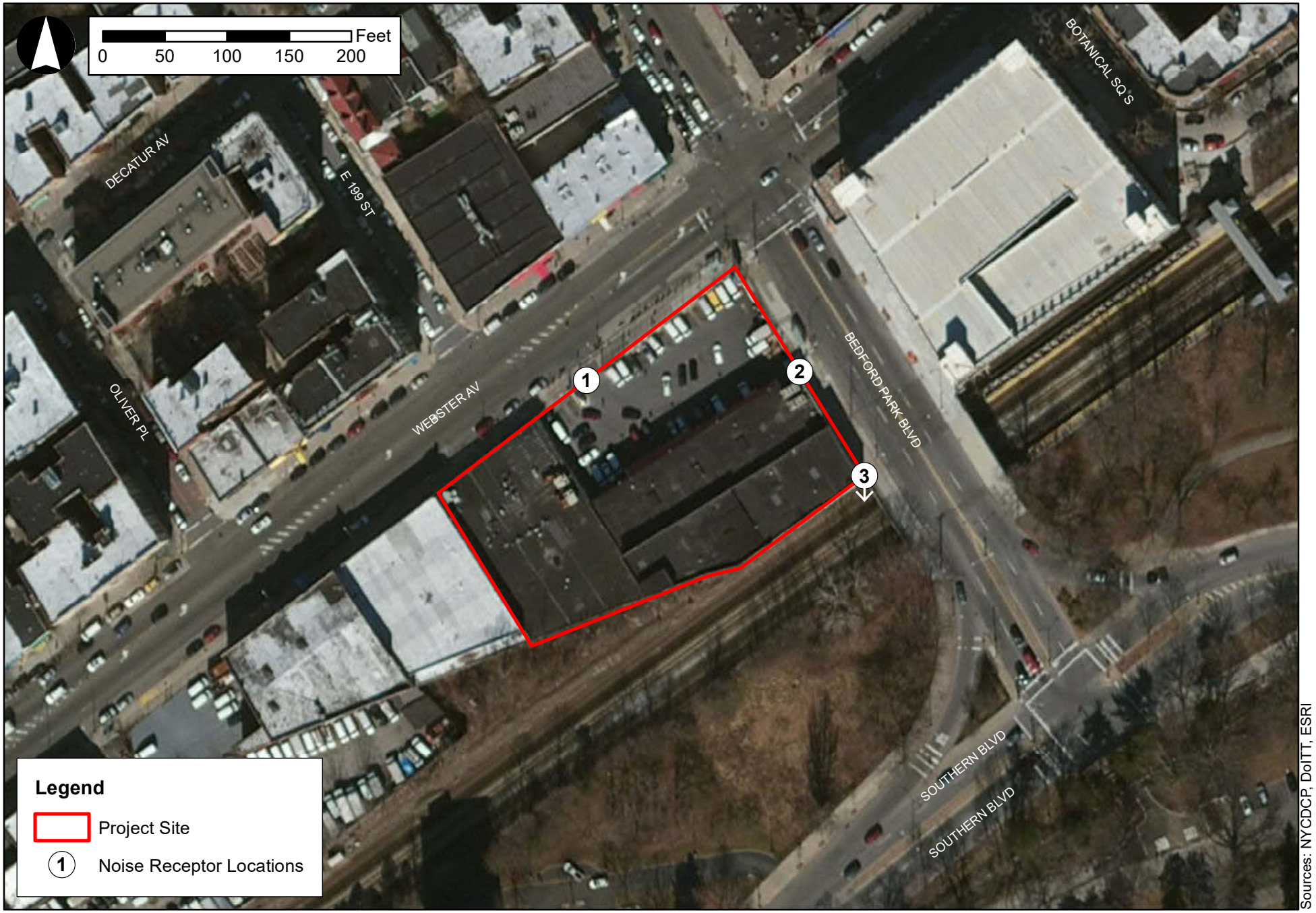
Noise Monitoring

Noise monitoring at the receptor locations was conducted on Tuesday May 21st, 2019. The weather on May 21st, was partly sunny with a high temperature off 68° F. Twenty-minute measurements were performed at receptor locations 1 and 2 and One-hour measurements was performed at receptor location 3 for three noise analysis time periods: (1) weekday AM peak hour (8 AM to 9 AM); (2) weekday midday peak hour (12 PM to 1 PM); and (3) weekday PM peak hour (5 PM to 6 PM) to establish existing noise levels. For the purpose of this analysis, during the receptor location 1 and 2 noise recording, vehicles were counted and classified.[3]

Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by ANSI) sound level meter. This assembly was mounted at a height of five feet above the ground surface on a tripod and at least six feet away from any sound-reflecting surfaces to avoid major interference with source sound level that was being measured.

[3] It should be noted that on May 19, 2019, construction roadwork was being performed adjacent to the Development Site while noise monitoring was being conducted, thus resulting in higher-than-usual ambient noise levels in the vicinity of the Development Site. Specifically, roadwork was located along the southeastern side of Webster Avenue between Bedford Park Boulevard and Botanical Square (refer to DOT permit X022019126A35) directly adjacent the Development Site's Webster Avenue frontage, and roadwork on this day included jack-hammering.



NYBG - 2856 Webster Avenue FRESH EAS

Figure F-1

Noise Monitoring / Receptor Locations

The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. Only traffic-related noise was measured; noise from other sources (e.g., emergency sirens, aircraft flyovers, etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at Noise Monitoring Locations

Noise monitoring results for three receptor locations are shown in **Table F-8**. As indicated in the table, existing L_{eq} noise levels at receptor location 1 range from 71.1 to 77.6 dBA in the three weekday peak hours, with the highest monitored noise levels during the AM peak hour. In terms of CEQR Noise Exposure Categories, existing noise levels at receptor location 1 are "Clearly Unacceptable". Existing L_{eq} noise levels at receptor location 2 range from 70.6 to 73.9 dBA in the three weekday peak hours, with the highest monitored noise levels during the PM peak hour. In terms of CEQR Noise Exposure Categories, existing noise levels at receptor location 2 are "Marginally Unacceptable (III)." Existing L_{eq} noise levels at receptor location 3 range from 72.0 to 76.8 dBA in the three weekday peak hours, with the highest monitored noise levels during the AM peak hour. In terms of CEQR Noise Exposure Categories, existing noise levels at receptor location 3 are "Marginally Unacceptable (IV)."

Table F-8:
Existing Noise Levels at Monitoring Location (in dBA)

Receptor	Measurement Location	Time	L_{eq}	L_{max}	L_{min}	L_1	L_{10}	L_{50}	L_{90}	CEQR Noise Exposure Category
1	Webster Avenue frontage	AM	77.6	95.5	58.8	88.1	**81.6**	72.6	65.8	Clearly Unacceptable
		MD	74.6	91.1	61.2	82.4	77.4	73.0	66.8	
		PM	71.1	94.2	59.6	83.1	71.5	66.3	63.0	
2	Bedford Park Boulevard frontage	AM	73.5	89.0	65.7	80.7	76.6	71.5	68.1	Marginally Unacceptable (III)
		MD	70.6	89.5	56.8	81.6	72.6	67.1	62.9	
		PM	73.9	95.3	59.6	83.3	**77.4**	69.8	64.5	
3	Bedford Park Boulevard (Metro North Tracks)	AM	76.8	110.8	56.3	86.4	**78.4**	67.6	63.0	Marginally Unacceptable (IV)
		MD	72.0	104.8	55.5	82.7	73.9	65.8	61.5	
		PM	75.2	105.5	56.5	85.3	75.8	66.9	62.7	

Notes: Highest L_{10} value at each receptor location indicated in **bold.**

Existing L_{dn} Noise Levels

As part of the Proposed Actions, the Proposed Development may receive Federal funding. L_{dn} noise levels were therefore calculated for the corresponding receptor locations, as described above in the "HUD Development Guidelines" section. Using this methodology, the L_{dn} for receptor locations 1, 2, and 3 were estimated to be 78.6 dBA, 74.4 dBA, and 75.4 dBA, respectively. According to HUD criteria, the calculated Existing L_{dn} noise level at receptor location 2 would fall in the "normally unacceptable" category, and receptor locations 1 and 3 would all fall in the "unacceptable" category.

Existing Train Noise Levels

As noted above, in addition to the noise monitoring outlined above, noise from existing Metro North train operations was calculated using the detailed noise analysis methodology contained in the FTA guidance manual, *Transit Noise and Vibration Impact Assessment* (May 2006). Based on the analysis, it was

determined that the peak existing combined L_{10} noise level from the Metro-North Harlem Line and New Haven Line trains would be 81.3 dBA at receptor location 3 (refer to **Table F-7**).

VI. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION)

As outlined in **Attachment A, "Project Description,"** in the 2024 No-Action condition, no discretionary actions would be required to develop the site with a mixed-use building. It is anticipated that the site would be developed on an as-of-right basis pursuant to the site's existing C4-5D zoning with two 11-story buildings (approximately 108 feet tall) totaling approximately 362,559 gsf (combined FAR of 5.59). Approximately 435 DUs in approximately 341,456 gsf of residential space, and approximately 21,103 gsf of ground floor retail would be constructed. Similar to the proposed development, the construction of the as-of-right development would occur in two phases. If a supermarket is provided in the proposed retail space, it would not be certified as a FRESH supermarket. As such, the as-of-right development would not include a bonus for the FRESH area on a 12th floor. The No-Action development also includes approximately 50 accessory parking spaces. Access to the parking level would be located on Webster Avenue via an existing curb cut. Future No-Action noise levels at the three receptor locations were calculated using the noise prediction methodology described above in Section V. **Table F-9** compares the future No-Action and existing noise levels at the receptors.

Table F-9:
Future No-Action Noise Levels at Receptor Locations (in dBA)

Receptor	Measurement Location	Time	Existing L_{eq}	No-Action L_{eq}	Change in L_{eq} from Existing Conditions	No-Action L_{10}	CEQR Noise Exposure Category
1	Webster Avenue frontage	AM	77.6	77.7	0.07	**81.6**	Clearly Unacceptable
		MD	74.6	74.6	0.07	77.5	
		PM	71.1	71.2	0.07	71.6	
2	Bedford Park Boulevard frontage	AM	73.5	73.5	0.07	76.6	Marginally Unacceptable (III)
		MD	70.6	70.6	0.07	72.7	
		PM	73.9	73.9	0.07	**77.5**	
3	Bedford Park Boulevard (Metro North Tracks)	AM	76.8	76.9	0.07	**78.5**	Marginally Unacceptable (IV)
		MD	72.0	72.1	0.07	74.0	
		PM	75.2	75.3	0.07	75.9	

Notes: Highest L_{10} value at each receptor location indicated in **bold.**

As indicated in **Table F-9**, noise levels at receptor location 2 are expected to increase by no more than 0.07 dBA in the 2024 No-Action condition as a result of general background growth in the area, and, therefore, future No-Action noise levels would remain in the "Clearly Unacceptable" CEQR noise exposure category for receptor locations 1 and the "Marginally Unacceptable (III)" CEQR noise exposure category for receptor location 2. Noise levels at receptor location 3 is expected to remain in the "Marginally Unacceptable (IV)." CEQR noise exposure category.

No-Action L_{dn} Noise Levels

As described above in the "HUD Development Guidelines" section, the L_{dn} for receptor locations 1, 2 and 3 was estimated according to the methodology described above to be 78.6 dBA, 74.5 dBA, and 75.5 dBA, respectively. According to HUD criteria, the calculated No-Action L_{dn} noise level at receptor location 2 would remain in the "normally unacceptable" category and the calculated No-Action L_{dn} noise levels at receptor locations 1 and 3 would all remain in the "unacceptable" category, as under existing conditions.

No-Action Train Noise Levels

In addition, based on the FTA noise prediction methodology, as no significant changes in train operations are anticipated in the 2024 No-Action condition, the maximum predicted L_{10} noise level would be 81.3 dBA at receptor location 3, as under existing conditions.

VII. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION)

In the future with the proposed project, the Development Site would be developed with two 12-story mixed-use buildings comprising up to 464 affordable dwelling units and approximately 21,103 gsf of ground floor food store space. Future With-Action noise levels at the receptor locations were calculated using the trip generation and noise prediction methodology described above in Section III. **Table F-10** presents the calculated noise levels under 2024 Build conditions.

Table F-10:
Future With-Action Noise Levels at Receptor Locations (in dBA)

Receptor	Measurement Location	Time	No-Action L_{eq}	With-Action L_{eq}	Change in L_{eq} from No-Action Conditions	With-Action L_{10}	CEQR Noise Exposure Category
1	Webster Avenue frontage	AM	77.69	77.8	0.12	**81.7**	Clearly Unacceptable
		MD	74.65	74.7	0.07	77.5	
		PM	71.18	71.2	0.07	71.6	
2	Bedford Park Boulevard frontage	AM	73.53	73.7	0.17	76.8	Marginally Unacceptable (III)
		MD	70.63	70.7	0.11	72.8	
		PM	73.95	74.0	0.05	**77.5**	
3	Bedford Park Boulevard (Metro North Tracks)	AM	76.9	77.0	0.12	**78.6**	Marginally Unacceptable (IV)
		MD	72.1	72.1	0.08	74.1	
		PM	75.3	75.3	0.05	75.9	

Notes: Highest L_{10} value at each receptor location indicated in **bold.**

As shown in **Table F-10**, in the future with the proposed actions the maximum projected L_{10} noise level at receptor location 1 would be 81.7 dBA, 77.5 dBA at receptor location 2, and 78.6 dBA at receptor location 3, placing these receptor locations in the "Clearly Unacceptable", "Marginally Unacceptable (III)", and "Marginally Unacceptable (IV)" CEQR noise exposure categories, respectively. Comparing future With-Action noise levels with future No-Action noise levels, the maximum increase in the L_{eq} noise levels would be 0.17 dBA. As noise levels at all receptor locations would increase by less than three dBA in all peak hours, increases of this magnitude would not be perceptible, and, in accordance with *CEQR Technical Manual* criteria, the proposed project would not result in significant adverse noise impacts.

With-Action L_{dn} Noise Levels

As described above in the "HUD Development Guidelines" section, the L_{dn} for receptor locations 1, 2, and 3 was estimated according to the methodology described above to be 78.7 dBA, 74.5 dBA, and 75.6 dBA, respectively. According to HUD criteria, the calculated With-Action L_{dn} noise level at receptor location 1 would remain in the "normally unacceptable" category and the calculated With-Action L_{dn} noise levels at receptor locations 1 and 3 would remain in the "unacceptable" category, as under Existing and No-Action conditions.

With-Action Train Noise Levels

In addition, based on the conservative FTA noise prediction methodology, as no significant changes in train operations are anticipated in the 2024 With-Action condition, the maximum predicted L_{10} noise level would be 81.3 dBA at receptor location 3, as under existing and No-Action conditions. Using this methodology, the maximum L_{10} noise levels at receptor location 3 are higher than those projected using the proportional modeling technique presented in **Table F-10**. Therefore, the calculated L_{10} noise levels based on the FTA methodology at receptor location 3 will be used to determine building attenuation requirements for the Development Site's southeastern frontages facing the Metro-North Harlem and New Haven lines.

VIII. BUILDING ATTENUATION REQUIREMENTS

CEQR

As shown earlier in **Table F-4**, the *CEQR Technical Manual* has set noise attenuation requirements for buildings based on exterior L_{10} noise levels. Recommended noise attenuation values for buildings are designed to maintain a maximum interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial uses, and are determined based on exterior L_{10} noise levels.

As described above and presented in **Table F-10**, based on the proportional modeling technique, the maximum L_{10} noise level along the Development Site's Webster Avenue frontage would be 81.7 dBA. Along the Bedford Park Boulevard frontage, the maximum L_{10} noise level in the With-Action scenario would be 77.5 dBA. Based on the FTA noise prediction methodology, which estimated noise emissions for the tracks located to the southeast of the Development Site, it was determined that the peak L_{10} noise levels from the Metro North trains would be 81.3 dBA along the proposed project's southeast facade.

Based on these maximum predicted With-Action noise levels, 38 dBA of attenuation would be required on all facades facing Webster Avenue, MTA Metro-North Railroad, Oliver Place, and the façades facing Bedford Park Boulevard within 50 feet of Webster Avenue and the facades facing Bedford Park Boulevard within 50 feet of the MTA Metro-North Railroad, and 33 dBA on all other facades to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses.

(E) Designation

A (E) designation for noise provides a notice of the presence of an environmental requirement pertaining to high ambient noise levels on a particular tax lot. If an area is proposed to be rezoned, and the accompanying environmental analysis indicates that development on a property may be adversely affected by noise, then an (E) designation for window/wall attenuation and alternate means of ventilation may be placed on the property by the lead agency in order to address such issues in conjunction with any new development or new use of the property. For new developments, enlargements of existing buildings, or changes in use, the NYC Department of Buildings (DOB) will not issue a building permit until the environmental requirements of the (E) designation are satisfied. The Office of Environmental Remediation (OER) administers the (E) Designation Environmental Review Program.

As part of the 2011 Webster Avenue Rezoning (CEQR No. 10DCP035X) an (E) designation (E-249) for noise was placed on Block 3273; Lots 122, 128, and 118.[4] The text for the (E) designation E-249 is as follows:

Block: 3273; Lots 122, 128, and 118;

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 37.2 dB(A) window-wall attenuation on any building façade which fronts Bedford Park Boulevard as well as a minimum of 35 dB(A) window-wall attenuation on any other building façade, 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 or HUD-approved fans.

Block 3273, Lots 85, 105, 109, 114, 118, Block 3276, Lot 1, Block 3277, Lots 28, 36, 40, 41, 4, 5, Block 3278, Lots 31, 33, 80, 81, 82, 83, 84, 85, 88, Block 3279, Lot 50, Block 3280, Lots 37, 39, 42, 45, 46, 48, 49, 52, 55, 58, 65, 67, 61, Block 3330, Lots 40, 42, 43, 50, 51, 52, 55, 57, 68, Block 3331, Lots 45, 48, 53, 57, 64, 74, 75, 80, Block 3355, Lots 116, 136, Block 3356, Lots 200, 206, 214, Block 3357, Lots 7, 12, 15, 16, 18, 23, 21, 25, 28, 32, 33, 37, 52, 53, 54, 55, Block 3360, Lots 33, 38, 44, 50, 62:

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 35 dB(A) window-wall attenuation in all 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 or HUD-approved fans.

As the Development Site includes Block 3273, Lots 118, 122, and 128, and as the existing (E) designation (E-249) was established using the now obsolete 2010 CEQR guiding document, a new (E) designation (E-566) would be needed. Based on the latest noise analysis evaluated under the current CEQR guidance document (the 2014 *CEQR Technical Manual*) detailed above, attenuation requirements along all frontages facing Webster Avenue, MTA Metro-North Railroad, Oliver Place, and the façades facing Bedford Park Boulevard within 50 feet of Webster Avenue and the facades facing Bedford Park Boulevard within 50 feet of MTA Metro-North Railroad would need to be revised to require 38 dBA of attenuation, and all other facades would need to be revised to require 33 dBA attenuation to ensure an interior noise level of 45 dBA for residential uses and 50 dBA for commercial office uses (refer to **Figure F-2**).[5]

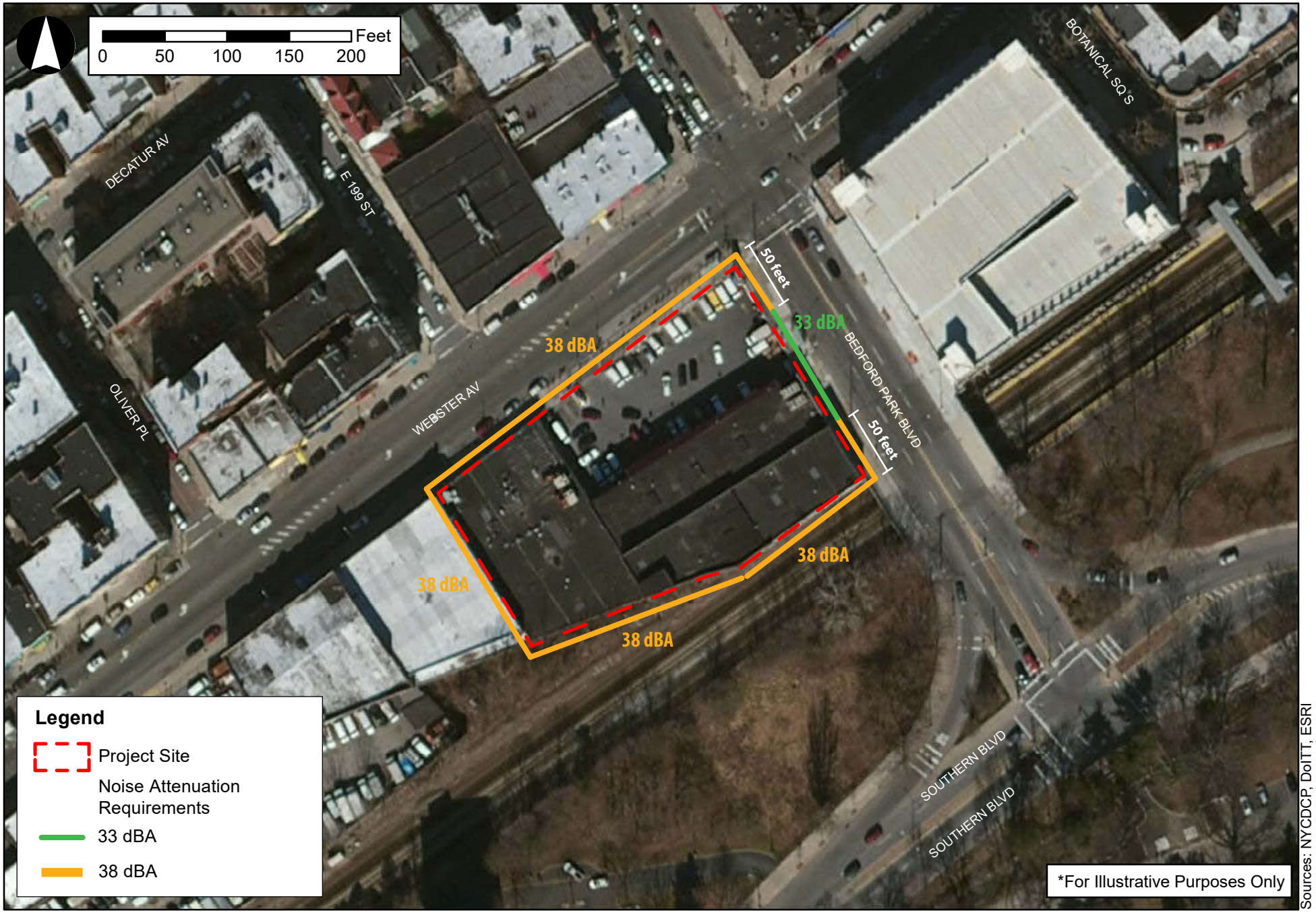
As such, the text of the new (E) designation (E-566) would be as follows:

Block: 3273; Lots 118, 122, and 128

In order to ensure an acceptable interior noise environment, future residential/commercial office uses must provide a closed-window condition with a minimum of 38 dBA window-wall attenuation on all façades facing Webster Avenue and all facades facing MTA Metro-North

[4] It should be noted that the 2011 Webster Avenue Rezoning (CEQR No. 10DCP035X) was evaluated under the 2010 *CEQR Technical Manual*, which is now considered an obsolete CEQR guiding document and has since been superseded by the 2012 *CEQR Technical Manual* and the current, most up-to-date 2014 *CEQR Technical Manual*.

[5] Formerly required 35 dBA along Webster Avenue and 37.2 along Bedford Park Boulevard as evaluated under the 2010 CEQR guiding document.



NYBG - 2856 Webster Avenue FRESH EAS

Figure F-2

Noise Attenutation Requirements

Railroad and all facades facing Oliver Place and the façades facing Bedford Park Boulevard within 50 feet of Webster Avenue and the façades facing Bedford Park Boulevard within 50 feet of MTA Metro-North Railroad and 33 dBA of attenuation on all other facades to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses as illustrated in the EAS. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Per the (E) designation requirements, in order to receive a Certificate of Occupancy from the NYC Department of Buildings (DOB) the proposed action must comply with these required composite window/wall attenuation values in order to maintain proper interior noise levels. With this institutional control in place, the Proposed Development would not result in any significant adverse noise impacts related to building attenuation and no further analysis is necessary.

HUD

As described above in the "HUD Development Guidelines" Section, the L_{dn} noise levels for the receptor locations 1, 2, and 3 were estimated using the methodology described above to be 78.7 dBA, 74.5 dBA, and 78.3 dBA, respectively. According to HUD criteria, the calculated With-Action L_{dn} noise level at receptor location 1 would fall in the "normally unacceptable" category and the calculated With-Action L_{dn} noise levels at receptor locations 1 and 3 would fall in the "unacceptable" category. To satisfy HUD development guidelines, any future residential uses within the Development Site (Lots 118, 122, 128) would require a minimum of 30 dBA of building attenuation on any frontages facing Bedford Park Boulevard, and a minimum of 34 dBA of building attenuation on any frontages facing Webster Avenue or the Metro-North Harlem and New Haven lines. For the Development Site, the requirements for window-wall building attenuation, as well as the requirement for an alternate means of ventilation, will be satisfied by the CEQR requirements outlined in the new (E) designation (E-566) above, as the CEQR requirements are more conservative and would provide a minimum of approximately 3-to-4 dBA of additional building attenuation than required under the HUD Development Guidelines.

IX. OTHER NOISE CONCERNS

Mechanical Equipment

No detailed designs of the building's mechanical systems (i.e., heating, ventilation, and air conditioning systems) are available at this time. However, those systems will be designed to meet all applicable noise regulations and requirements and would be designed to produce noise levels that would not result in any significant increase in ambient noise levels. In addition, the building mechanical systems would be designed with enclosures where necessary to meet all applicable noise regulations (i.e., Subchapter 5 §24-227 of the New York City Noise Control Code and the NYC DOB Building Code) and to avoid producing levels that would result in any significant increase in ambient noise levels.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptor would be located within one mile of an existing flight path, or cause aircraft to fly through existing or new flight paths over or within one mile of a receptor. Since the Development Site is not within one mile of an existing flight path, no initial aircraft noise impact screening analysis is warranted.

Attachment G

Air Quality

I. INTRODUCTION

JELB Webster ("The Applicant") proposes the redevelopment of Lots 118, 122, and 128 on Block 3273 in the Bronx with two 12-story mixed-use mostly residential buildings with ground floor FRESH supermarket ("Proposed Development"). As part of the Proposed Actions, a City Planning Commission (CPC) authorization is being sought to modify the maximum building height of a building containing a FRESH food store pursuant to Zoning Resolution Section 63-22. Approval of the requested zoning authorization would result in a 9-foot height increase (an increase from 11 to 12 stories) for the building proposed on Lot 118, and would allow for a greater number of affordable housing units at the site.

As described in Attachment A, "Project Description," the two proposed buildings would be developed in two sequential phases. Phase I would occupy Lot 118 (Building 1), while Phase II would occupy Lots 122 and 128 (Building 2). The first phase of the Proposed Development would be comprised of 120,463 gross square foot (gsf) of residential space and 12,787 gsf of FRESH food store space, for a total floor area of approximately 133,250 gsf. The second phase of the Proposed Development would be comprised of 245,486 gsf of residential space and 8,316 gsf of FRESH food store space, for a total of approximately 253,802 gsf. Because both proposed buildings would be the same height, emissions released from the heating, ventilation, and air conditioning (HVAC) systems of each proposed building could potentially impact sensitive receptors (i.e., windows) on the other building.

Air quality, which is a general term used to describe pollutant levels in the atmosphere, would be affected by the construction of this development. Therefore, a project-on-project analysis needs to be conducted to determine whether the potential impacts of the HVAC emissions would be significant. As described in further detail in Attachment B, "Supplemental Screening," there are no buildings taller than the proposed buildings within 400 feet of the Proposed Development, and therefore, a detailed project-on-exiting analysis is not warranted.

The air quality impacts of the Proposed Development were estimated following the procedures and methodologies prescribed in the 2014 *New York City Environmental Quality Review (CEQR) Technical Manual*. Because both buildings are located less than the 30 feet from each other, the *CEQR Technical Manual* screening procedure is not applicable for the Proposed Development, and a detailed analysis with USEPA AERMOD dispersion model is warranted and provided herein.

II. RELEVANT AIR POLLUTANTS

The EPA has identified several pollutants, which are known as criteria pollutants, as being of concern nationwide. As the proposed buildings would be heated by natural gas, the two criteria pollutants associated with natural gas combustion – nitrogen dioxide (NO_2) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) – were considered for analysis.

III. APPLICABLE AIR QUALITY STANDARDS AND SIGNIFICANT IMPACT CRITERIA

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA. The NAAQS are concentrations set for each of the criteria pollutants in order to protect public health and the nation's welfare, and New York has adopted the NAAQS as the State

ambient air quality standards. This analysis addressed compliance of the potential impacts with the 1-hour and annual NO_2 NAAQS.

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to *CEQR* apply a $PM_{2.5}$ significant impact criteria (based on concentration increments) developed by the New York City Department of Environmental Protection (NYCDEP) to determine whether potential adverse $PM_{2.5}$ impacts would be significant. If the estimated impacts of a proposed project are less than these increments, the impacts are not considered to be significant. This analysis addressed compliance of the potential impacts with the 24-hour and annual $PM_{2.5}$ *CEQR* significant impact criteria.

The current standards that were applied to this analysis, together with their health-related averaging periods, are provided in **Table G-1** below.

Table G-1:
Applicable National Ambient Air Quality Standards and CEQR Significant Impacts Criteria

Pollutant	Averaging Period	NAAQS	CEQR Significant Impact Criteria
NO_2	1 Hour	0.10 ppm (188 µg/m^3)	
	Annual	.053 ppm (100 µg/m^3)	
$PM_{2.5}$	24 Hour	35 µg/m^3	7.6 µg/m^3
	Annual	12 µg/m^3	0.3 µg/m^3

Source: *US Environmental Protection Agency, "National Primary and Secondary Ambient Air Quality Standards." (49 CFR 50) (www.epa.gov/air/criteria.html) and New York State Department of Environmental Conservation (http://www.dec.ny.gov/chemical/8542.html.*
Notes: ppm = parts per million
µg/m^3 = micrograms per cubic meter

NO_2 NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO_2, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The one-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the three-year average of the 98th percentile of daily maximum one-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating one-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100 percent) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NO_x/NO_2 ratio of 80 percent to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module to account for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. If Tier 1 is used, the average of three-year NO_2 background concentrations should be added to the modeled concentrations to compare with the one-hour NO_2 NAAQS standard.

Based on New York City Department of Planning (NYCDCP) guidance, Tier 1, as the most conservative modeling approach, should initially be applied as a preliminary screening tool to determine whether violations of the NAAQS is likely to occur. If exceedances of the one-hour NO_2 NAAQS were estimated, the less conservative Tier 3 approach should be applied.

The annual NO_2 standard is 0.053 parts per million (ppm or 100 ug/m^3). In order to conservatively estimate annual NO_2 impacts, a NO_2 to NOx ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO_2 analysis, was applied.

$PM_{2.5}$ CEQR Significant Impact Criteria

CEQR Technical Manual guidance includes the following criteria for evaluating significant adverse $PM_{2.5}$ incremental impacts:

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

A 24-hour $PM_{2.5}$ background concentration of 19.9 ug/m^3 was obtained from the New York Botanical Garden (Pfizer) monitoring station as the average of the 98th percentile for the latest three years of monitoring data collected by the NYSDEC for 2016-2018. As the applicable background value is 19.9 ug/m^3, half of the difference between the 24-hour $PM_{2.5}$ NAAQS and this background value is 7.6 ug/m^3. As such, a significant impact criterion of 7.6 ug/m^3 was used for determining whether the potential 24-hour $PM_{2.5}$ impacts of the Proposed Development are considered to be significant.

For an annual average adverse $PM_{2.5}$ incremental impact, according to *CEQR Technical Manual* guidance:

> *Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 ug/m^3 at any receptor location for stationary sources.*

The above 24-hour and annual significant impact criteria were used to evaluate the significance of predicted $PM_{2.5}$ impacts.

IV. PROPOSED DEVELOPMENT DESCRIPTION

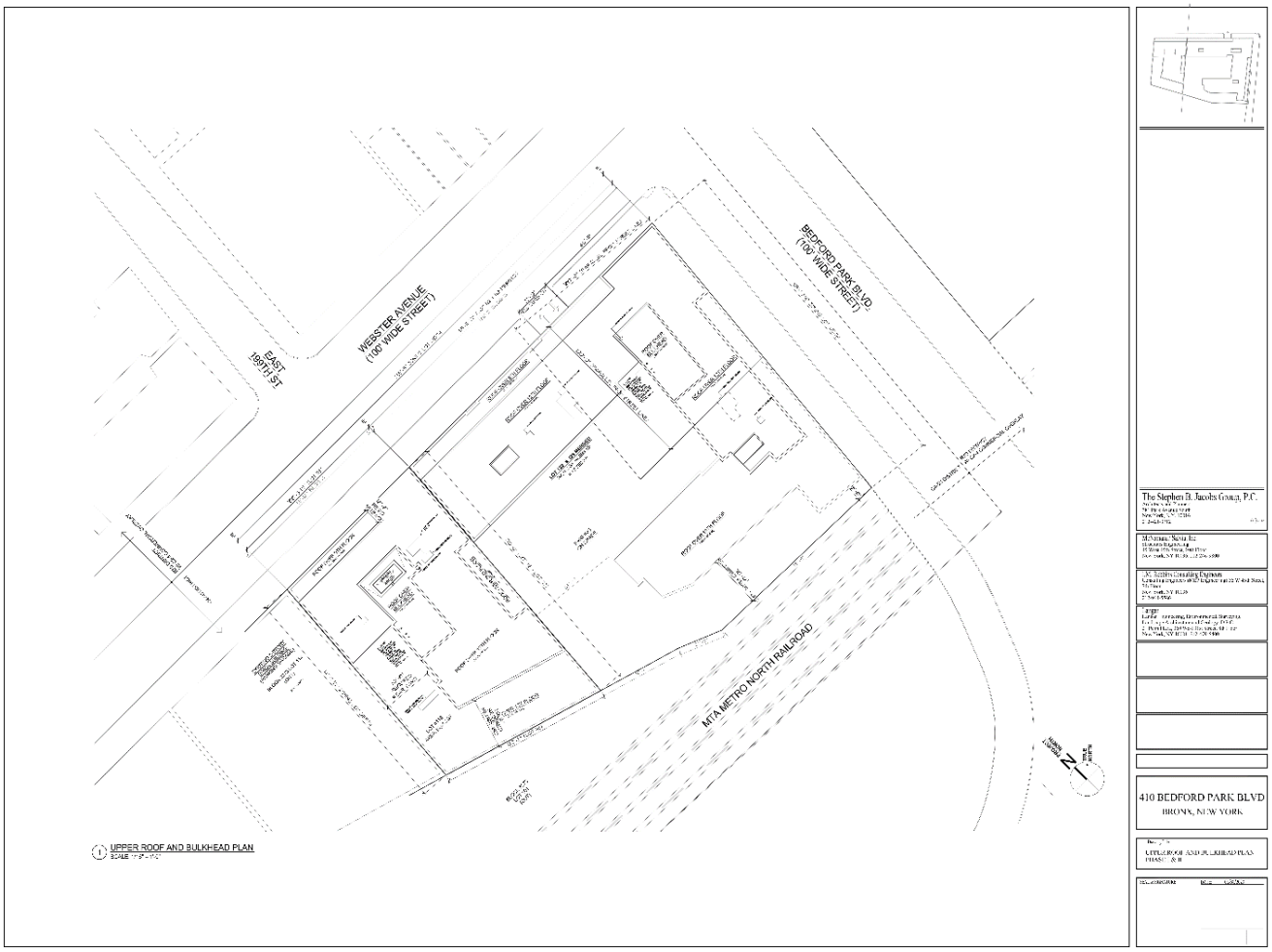
Based on the Proposed Development's design, both proposed buildings (Building 1 and 2) are envisioned to have irregular shapes with bulkheads above the twelfth floor roofs. The major parameters that were used in this analysis are as follows:

- Building 1 (Phase I) –height of approximately 124 feet, and 133,250 gsf floor area.
- Building 2 (Phase II) –height of approximately 124 feet, and 253,802 gsf floor area.

Each proposed building would have a bulkhead on which three HVAC exhaust chimneys (stacks) would be located. The height of each bulkhead is expected to be approximately 137.57 feet. The exhaust chimneys would terminate five feet above the roof of the bulkhead, making the height of the stacks 142.57 feet above grade. Each exhaust chimney diameter on Building 1 is eight inches, and each diameter on Building 2 is twelve inches.

The roof plan of the Proposed Development is provided on **Figure G-1**.

Figure G-1: Roof Plan of Proposed Development



Source: Roof plan provided by project architects, Stephen B Jacobs Group PPC.

The project-on-project HVAC analysis estimated the following potential air quality impacts:

1. Building 1 emissions impact Building 2: and
2. Building 2 emissions impact Building 1.

V. DETAILED DISPERSION ANALYSIS

The detailed dispersion modeling analysis used the latest version of EPA's AERMOD dispersion model 9 (EPA version 19181). In accordance with *CEQR Technical Manual* guidance, this analysis was conducted assuming stack tip downwash, urban dispersion surface roughness length, elimination of calms, with and without downwash effect on plume dispersion. AERMOD's Plume Volume Molar Ratio Method (PVMRM) module could be utilized for one-hour NO_2 analysis -- to account for NO_x to NO_2 conversion if applicable.

Analyses were conducted with and without the effects of wind flow around the proposed buildings (i.e., with and without downwash) and both sets of results are reported.

Emissions Factors

Emission rates were estimated as follows:

- As both proposed buildings would be heated by natural gas, emission rates of NOx and $PM_{2.5}$ were calculated based on annual natural gas usage corresponding to the gross square footage of each building and EPA AP-42 emission factors for firing natural gas combustion in boilers less than 100 million British Thermal Units per hour (MMBtu/hr.);

- $PM_{2.5}$ emissions from natural gas combustion accounted for both filterable and condensable particulate matter;

- Short-term NO_2 and $PM_{2.5}$ emission rates were estimated by accounting for seasonal variation in heat and hot water demand; and

- The natural gas fuel usage factor 59.1 cubic foot per square foot per year (cf/sf/year) was obtained from CEQR Table US1, Total Energy Consumption, Expenditures and Intensities, 2005, Part I: Housing Unit Characteristics and Energy Use Indicators for New York using conservative factor for residential uses.

Stack diameters were provided by the project architects. Stack exit velocities were estimated based on values obtained from DEP's "CA Permit" database for the corresponding boiler size (i.e., rated heat input or MMBtus per hour). Boiler sizes were estimated based on assumption that all fuel would be consumed during the 100-days (or 2,400-hour) heating season. All stack exit temperatures were assumed to be 300°F (423°K), which is appropriate for building boilers.

Estimated $PM_{2.5}$ and NO_2 emission rates are provided in **Table G-2**. Emissions were evenly spread between three exhaust chimneys on each of the proposed buildings.

Table G-2: Estimated Short-term and Annual Emission Rates

Building ID	Block/Lot	Receptor Building	Stack Height (1)	Total Floor Area	$PM_{2.5}$ Emission Rate Per Chimney (2)		NO_2 Emission Rate Per Chimney	
			feet	ft^2	g/sec	g/sec	g/sec	g/sec
					24-hr	Annual	1-hr	Annual
Building 1	3273/118	Building 2	142.6	133,250	1.05E-03	2.87E-04	1.38E-02	3.78E-03
Building 2	3273/122,128	Building 1	142.6	253,802	2.00E-03	5.48E-04	2.63E-02	7.21E-03

1. Stack heights on Building 1 and Building 2 are 5 feet above 198.57-foot bulkhead
2. $PM_{2.5}$ emission factor for natural gas combustion of 7.6 lb./10^6 cubic feet included filterable and condensable particulate matter (Filterable $PM_{2.5}$ =1.9 lb./10^6 ft^3 and condensable $PM_{2.5}$ = 5.7 lb./10^6 ft^3 (AP-42, Table 1.4-2).

Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. The data were processed by Trinity Consultants, Inc. using the current EPA AERMET and EPA procedures. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the five-year period.

Five years of meteorological data were combined into a single multiyear file to conduct 24-hour $PM_{2.5}$ and one-hour NO_2 modeling. The $PM_{2.5}$ special procedure which incorporated into AERMOD calculates concentrations at each receptor for each year modeled, averages those concentrations across the number of

years of data, and then selects the highest values across all receptors of the five-year averaged highest values.

Background Concentrations

In order to conduct the one-hour NO_2 Tier 3 analysis, hourly NO_2 and hourly ozone background concentrations was developed from available monitoring data collected by the New York State Department of Environmental Conservation (NYSDEC) at the Queens College 2 monitoring station for the five consecutive years (2014-2015), and compiled into AERMOD's required hourly emission (NO_2) and concentration (ozone) data format.

The maximum one-hour NO_2 background concentration at Botanical Garden (Pfizer) monitoring station of 55.2 ppb or 104.2 ug/m^3, which is three-year average of the 98th percentile of daily maximum one-hour concentrations for 2016-2018, and the annual NO_2 background concentration of 14.44 ppb or 27.24 ug/m^3, which is the maximum annual average for latest three years from Queens College monitoring station, were also used. Annual $PM_{2.5}$ background concentrations for the same time period is 8.1 ug/m3.

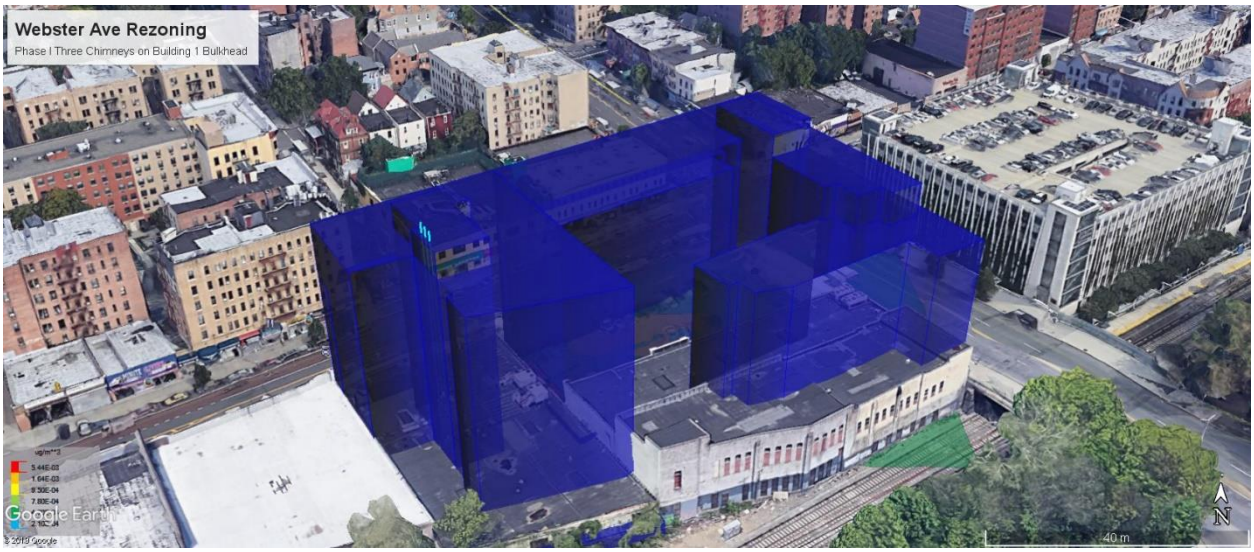
Stack and Receptor Locations for the Proposed Development

According to design, each proposed building would have an independent HVAC system firing natural gas. Exhaust emissions from the respective HVAC systems of each proposed building would be released through three chimneys located on bulkheads above the roof of twelfth floor with a height of approximately 137.57 . The exhaust chimneys would terminate five feet above the roof of bulkhead (**Figures G-2** and **G-3** below).

Each proposed building is envisioned to be a tiered structure with tiers of different heights – one-story base, 9-story, 10-story, and upper 12-story sections, plus terraces on the second floor and roof. Receptors were placed around all faces of each proposed building tier in 10-foot increments on all floor levels, starting above the ground and extending up to the height of approximately 118 feet which is five feet below the level of the twelfth floor roof, which is the tallest height of the upper windows. More than 1,500 receptors on each building were placed to ensure than the maximum impacts are estimated.

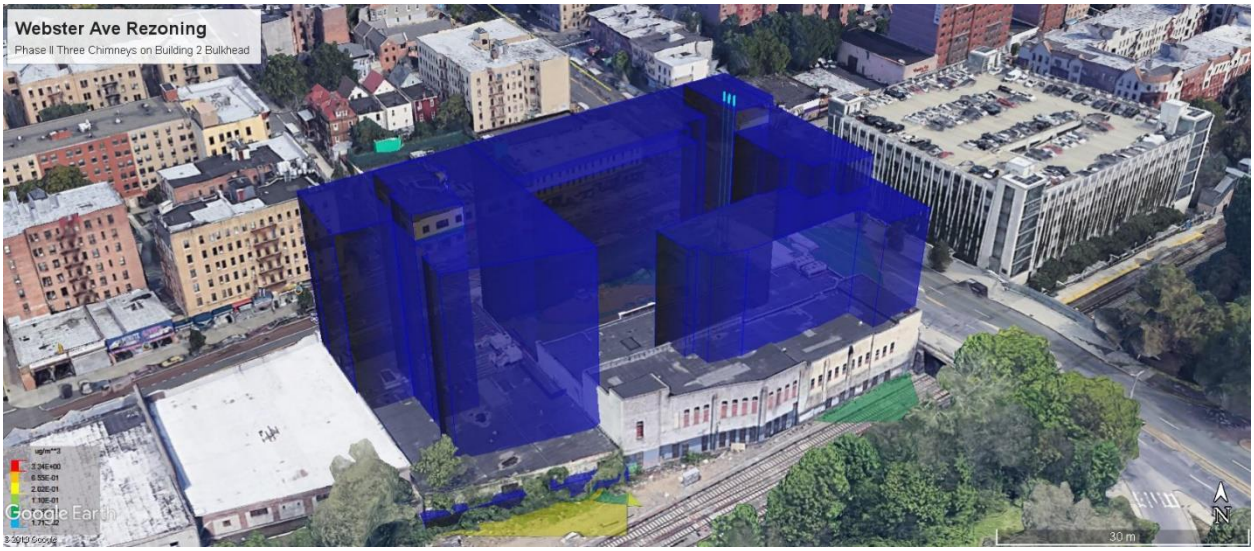
With stacks (chimneys) on bulkheads and receptors five feet below upper windows, the difference between the HVAC exhaust plume and receptors would be more than 18 feet, with that plume centerline above the upper windows (receptors) where the highest impacts occur. In addition, despite the fact that the proposed buildings are expected to almost be attached to each other, the stacks of each building would be located on bulkheads that would be set back from the receptors of the opposite building, with the distance between the stacks and the closest receptors at least than 65 feet for Building 1 and 145 feet for Building 2.

Figure G-2: 3-D Google View of Phase I Building (Building 1) with associated Stacks on Bulkheads



Notes: 3D massing of the Proposed Development is for illustrative purposes.

Figure G-3: 3-D Google View of Phase II Building (Building 2) with associated Stacks on Bulkheads



Notes: 3D massing of the Proposed Development is for illustrative purposes.

VI. ANALYSIS RESULTS

$PM_{2.5}$ Results

With Downwash

The results of the $PM_{2.5}$ analysis with downwash indicate that the potential impacts of the HVAC emissions from Building 1 on Building 2 receptors and Building 2 on Building 1 receptors would not be significant. The estimated 24-hr $PM_{2.5}$ impact for Building 1 (0.1 ug/m^3 and annual impact < 0.1 ug/m^3) and for Building 2 (0.1 ug/m^3 and <0.1 ug/m^3) are less that the CEQR significant 24-hr/annual impact criteria of 7.6 ug/m^3 and 0.3 ug/m^3, respectively (**Table G-3**). The 24-hr/annual total estimated concentrations for both buildings (with added background concentration of 8.1 ug/m3) are also less than the $PM_{2.5}$ NAAQS of 35ug/m^3 and 12 ug/m^3, respectively.

Table G-3: $PM_{2.5}$ Analysis Results with Downwash

Site ID	Block/Lot	Receptor Building	24-hour Maximum Impact	Annual Impact	CEQR Significant Impact Criteria	
					24-hour	Annual
			µg/m^3	µg/m^3	µg/m^3	µg/m^3
Building 1	3273/118	Building 2	0.37	<0.1	7.6	0.3
Building 2	3273/122,128	Building 1	0.29	<0.1	7.6	0.3

NO_2 Results

With Downwash

A Tier 1 NO_2 analysis was sufficient to demonstrate compliance with one-hour/annual NO_2 NAAQS. The maximum estimated one-hour NO_2 concentration would be less than the one-hour NAAQS of 188 ug/m^3, and the maximum estimated annual concentration would be less than the annual NAAQS of 100 ug/m^3 (see **Table G-4**).

Table G-4: NO_2 Analysis Results with Downwash

Site ID	Block/Lots	Receptor Building	1-hour Conc. (1)	Annual Conc.(2)	NAAQS
			µg/m^3	µg/m^3	µg/m^3
Building 1	3273/118	Building 2	112.8	27.2	188
Building 2	3273/122,128	Building 1	112.2	27.2	188

Notes:
1. Tier 1 analysis
2. Total one-hour/annual NO_2 concentrations include background values of 104.2 and 27.2 ug/m^3, respectively.

$PM_{2.5}$ Results

Without Downwash Effect

The result of the $PM_{2.5}$ analysis without downwash is that the potential impacts of the HVAC emissions from Building 1 on Building 2 receptors and Building 2 on Building 1 receptors would also not be significant. The estimated 24-hr $PM_{2.5}$ impact for Building 1 (0.1 ug/m^3) and annual impact < 0.1 ug/m^3 and for Building 2 (0.26 ug/m^3 and <0.1 ug/m^3) are less that the CEQR significant 24-hr/annual impact criteria of 7.6 ug/m^3 and 0.3 ug/m^3, respectively (see **Table G-5**). The 24-hr/annual total estimated concentrations for both buildings (with added background concentration of 8.1 ug/m^3) are also less than the $PM_{2.5}$ NAAQS of 35ug/m^3 and 12 ug/m^3, respectively.

Table G-5: $PM_{2.5}$ Results without Downwash

Site ID	Block/Lot	Receptor Building	24-hour Maximum Impact	Annual Impact	CEQR Significant Impact Criteria	
					24-hour	Annual
			µg/m^3	µg/m^3	µg/m^3	µg/m^3
Building 1	3273/118	Building 2	0.20	<0.1	7.6	0.3
Building 2	3273/122,128	Building 1	0.26	<0.1	7.6	0.3

NO_2 Results

Without Downwash Effect

The maximum estimated one-hour NO_2 concentration is less than the one-hour NAAQS of 188 ug/m^3, and the maximum estimated annual concentration is less than the annual NAAQS of 100 ug/m^3 (**Table G-6**). A Tier 1 NO2 analysis was sufficient to demonstrate compliance with one-hour/annual NO_2 NAAQS.

Table G-6: NO_2 Analysis Results without Downwash

Site ID	Block/Lots	Receptor Building	1-hour Conc. (1)	Annual Conc.(2)	NAAQS
			µg/m^3	µg/m^3	µg/m^3
Building 1	3273/118	Building 2	111.1	27.2	188
Building 2	3273/122,128	Building 1	114.3	27.2	188

Notes:
1. The Tier 1 analysis
2. Total 1-hour/annual NO_2 concentrations include background values of 104.2 and 27.2 ug/m^3, respectively.

As shown in **Table G-3** to **G-6**, predicted maximum pollutant concentrations with and without downwash are almost the same, which indicates that the building structures have little effect on plume dispersion around the buildings under the proposed design.

VII. (E) DESIGNATION FOR THE PROJECT SITE

Even though no significant air quality impacts from the Proposed Development HVAC systems would occur under the proposed design, (E) designations (E-566) should be imposed on each phase of the Proposed Development that would administer the following restrictions:

1. The HVAC exhaust stacks should be located on bulkhead on each building;
2. The HVAC exhaust stack heights above the ground should be specified;

3. Three stacks on each building bulkhead are to be utilized with each location specified;
4. Architectural drawings for full buildout of development identifying stack locations on bulkhead need be specified as a part of certification; and
5. The exclusive use of natural gas in HVAC system of each building should be specified.

Compliance with these (E) designation requirements (E-566) would ensure that no adverse air quality impact would occur.

(E) designation on Phase I of development will include (1) restrictions on the location and minimum stack (chimney) heights for any residential/commercial developments on Block 3273, Lot 118, and (2) the exclusive use of natural gas in the HVAC system, as follows:

Any new development on Block 3273, Lot 118 must exclusively use natural gas as the type of fuel for HVAC system and hot water boiler, and ensure that emissions from the heating, ventilating and air conditioning and hot water equipment would be released through three stacks located at the height of at least 142.6 feet above grade, at least 240 feet from the lot line facing Bedford Park Boulevard, to avoid any potential significant adverse air quality impacts.

(E) designation on Phase II of development will include (1) restrictions on the location and minimum stack (chimney) heights for any residential/commercial developments on Block 3273, Lots 122 and 128, and (2) the exclusive use of natural gas in the HVAC system, as follows:

Any new development on Block 3273, Lots 122 and 128 must exclusively use natural gas as the type of fuel for HVAC system and hot water boiler, and ensure that emissions from the heating, ventilating and air conditioning and hot water equipment would be released through three stacks located at the height of at least 142.6 feet above grade, and at most 55 feet from the lot line facing Bedford Park Boulevard, to avoid any potential significant adverse air quality impacts.

VIII. CONCLUSION

The potential air quality impacts of the HVAC emissions from the Proposed Development, with the required (E) designations, would not be significant.