CEQR #21DCP081X

St. Joseph's -1949 Bathgate Avenue Rezoning

Environmental Assessment Statement

PREPARED FOR

St. Joseph Apartments LLC
475 Park Avenue South, Suite 2803
New York, NY, 10016
212.935.1622

PREPARED BY

One Penn Plaza, Suite 715
New York, NY 10119-0800
212.857.7350

February 26, 2021

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

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

Part I: GENERAL INFORMATION

PROJECT NAME St. Joseph's - 1949 Bathgate Avenue Rezoning

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
21DCP081X	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
210063ZMX, 210062ZRX	

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning			St. Joseph Apartments LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Olga Abinader, Director, EARD			Caroline G Harris, Goldman Harris LLC		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 475 Park Avenue South, Suite 2803		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10016
TELEPHONE 212-720-3423	EMAIL oabinad@planning.nyc.gov		TELEPHONE 212-935-1622	EMAIL charris@goldmanharris.com	

3. *Action Classification and Type*

SEQRA Classification

☐ UNLISTED ☒ TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended): 617.4(b)(9)

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

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

4. *Project Description*

The Applicant, St. Joseph Apartments LLC, proposes a zoning map amendment to rezone the Project Area (i.e., Block 3043, Lots 10, 16, 22, 23, and parts of Lots 8 and 30), located in the Tremont neighborhood of the Bronx, Community District 6, from an R6A to an R7D zoning district and a zoning text amendment of Appendix F of the Zoning Resolution to classify the project area as a Mandatory Inclusionary Housing (MIH) Designated Area (the "Proposed Actions"). The Project Area consists of the Development Site (Lots 10, 16, 22 and 23) and Non-Applicant Owned Sites (parts of Lots 8 and 30). The Proposed Actions would facilitate the construction on the Development Site of a 100% affordable, approximately 267,324 gsf (224,576 zsf), 11-story (96-foot tall) multi-family residential building with a total of up to 287 dwelling units. As a result of the mapping of a MIH designated area over the Project Area, 86 dwelling units would comply with MIH affordability Options 1 or 2 and be affordable in perpetuity. The Project Area is located within the transit zone; therefore, no parking would be required or provided.

Project Location

BOROUGH Bronx	COMMUNITY DISTRICT(S) 6	STREET ADDRESS 1949 Bathgate Avenue
TAX BLOCK(S) AND LOT(S) Block 3043, Lots 10, 16, 22, 23, 8 (p/o), 30 (p/o)		ZIP CODE 10457

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Regularly-shaped corner lot with 216 feet of frontage along the east side of Washington Avenue, 186 feet of frontage along the south side of East 178th Street, and 216 feet of frontage along the west side of Bathgate Avenue

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6A	ZONING SECTIONAL MAP NUMBER 3d

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION Appendix F

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

☐ LEGISLATION
☐ RULEMAKING
☐ CONSTRUCTION OF PUBLIC FACILITIES
☐ 384(b)(4) APPROVAL
☒ OTHER, explain: HPD funding (potential)

☐ FUNDING OF CONSTRUCTION, specify:
☐ POLICY OR PLAN, specify:
☐ FUNDING OF PROGRAMS, specify:
☐ PERMITS, specify:

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

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

***State or Federal Actions/Approvals/Funding*:** ☒ YES ☐ NO If "yes," specify: The Applicant may seek funding from New York State Housing Finance Agency

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 40,846
Waterbody area (sq. ft.) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 17,300± (buildings)
Other, describe (sq. ft.): 22,800± (planted gardens, rock outcroppings, pavement)

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 267,324
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 267,324
HEIGHT OF EACH BUILDING (ft.): 96
NUMBER OF STORIES OF EACH BUILDING: 11

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: 40,104
The total square feet not owned or controlled by the applicant: 742

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 40,104 sq. ft. (width x length)
VOLUME OF DISTURBANCE: up to 481,248± cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 40,104 sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2023
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 24
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY?
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: community facilities, transportation

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

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

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
LAND USE				
Residential	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type of residential structures	N/A	multi-family	multi-family	
No. of dwelling units	N/A	174	287	113
No. of low- to moderate-income units	N/A	48	287 as intended by applicant (86 per MIH)	239
Gross floor area (sq. ft.)	N/A	187,474	267,324	79,850
Commercial	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Describe type (retail, office, other)	N/A	N/A	N/A	
Gross floor area (sq. ft.)	N/A	N/A	N/A	
Manufacturing/Industrial	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type of use	N/A	N/A	N/A	
Gross floor area (sq. ft.)	N/A	N/A	N/A	
Open storage area (sq. ft.)	N/A	N/A	N/A	
If any unenclosed activities, specify:	N/A	N/A	N/A	
Community Facility	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type		N/A	N/A	
Gross floor area (sq. ft.)		N/A	N/A	
Vacant Land	☒ YES ☐ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	Lots 16 and 22 vacant and former church & rectory currenrly being demolished	N/A	N/A	
Publicly Accessible Open Space	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):	N/A	N/A	N/A	
Other Land Uses	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	N/A	N/A	N/A	
PARKING				
Garages	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	N/A	
No. of accessory spaces	N/A	N/A	N/A	
Operating hours	N/A	N/A	N/A	
Attended or non-attended	N/A	N/A	N/A	
Lots	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	N/A	
No. of accessory spaces	N/A	N/A	N/A	
Operating hours	N/A	N/A	N/A	
Other (includes street parking)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	N/A	N/A	N/A	
POPULATION				

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Residents	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify number:	N/A	445	735	289
Briefly explain how the number of residents was calculated:	The number of projected residents is based on a household average size of 2.56 for the census tract in which the development site is located (Census Tract 395). Source: 2015-2019 ACS.			
Businesses	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. and type	N/A	N/A	N/A	
No. and type of workers by business	N/A	N/A	N/A	
No. and type of non-residents who are not workers	N/A	N/A	N/A	
Briefly explain how the number of businesses was calculated:				
Other (students, visitors, concert-goers, *etc.*)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If any, specify type and number:	N/A	N/A	N/A	
Briefly explain how the number was calculated:				
ZONING				
Zoning classification	R6A	R6A	R7D	
Maximum amount of floor area that can be developed	3.00	3.00	4.20 (5.60 with inclusionary housing)	1.2 (2.6 with inclusionary housing)
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	mix of institutional, residential, mixed-use, industrial, commercial with some open space	mix of institutional, residential, mixed-use, industrial, commercial with some open space	mix of institutional, residential, mixed-use, industrial, commercial with some open space	
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

Part II: TECHNICAL ANALYSIS

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

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

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

	YES	NO
enhance, or otherwise protect it?		
iv. Indirect Business Displacement		
o Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	☐	☐
o Would the project capture retail sales in a particular category of goods to the extent that the market for such goods would become saturated, potentially resulting in vacancies and disinvestment on neighborhood commercial streets?	☐	☐
v. Effects on Industry		
o Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	☐	☐
o Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?	☐	☐
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
i. Child Care Centers		
o Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☒	☐
o If "yes," would the project result in a collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent?	☐	☒
o If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☒
ii. Libraries		
o Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
o If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	☐	☐
o If "yes," would the additional population impair the delivery of library services in the study area?	☐	☐
iii. Public Schools		
o Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
o If "yes," would the project result in a collective utilization rate of the elementary and/or intermediate schools in the study area that is equal to or greater than 100 percent?	☐	☐
o If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
iv. Health Care Facilities		
o Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
o If "yes," would the project affect the operation of health care facilities in the area?	☐	☐
v. Fire and Police Protection		
o Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
o If "yes," would the project affect the operation of fire or police protection in the area?	☐	☐
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
(c) If "yes," would the project generate more than 50 additional residents or 125 additional employees?	☐	☐
(d) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
(e) If "yes," would the project generate more than 350 additional residents or 750 additional employees?	☐	☐
(f) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐
(g) If "yes" to questions (c), (e), or (f) above, attach supporting information to answer the following:		
o If in an under-served area, would the project result in a decrease in the open space ratio by more than 1 percent?	☐	☐
o If in an area that is not under-served, would the project result in a decrease in the open space ratio by more than 5	☐	☒

	YES	NO
percent?		
o If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:	☐	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☐	☒
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year.		
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. Lot 30 (a Non-Applicant Owned Site within the Project Area) is improved with a three-story parochial school (f/k/a the 48th Police Precinct Station). It is on the National Register of Historic Places (listed in 1983). See Attachment.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
(c) If "yes" to either of the above, please provide the information requested in Chapter 10. See Attachment		
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
o If "yes," list the resources and attach supporting information on whether the project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
o If "yes," complete the Jamaica Bay Watershed 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?	☒	☐
o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See Attachment	☐	☐
(i) Based on the Phase I Assessment, is a Phase II Investigation needed? Yes. An (E) Designation for hazardous materials will be applied to the Development Site to address requirements relating to potentail subsurface contamination.	☒	☐
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?	☐	☒

	YES	NO
(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 that listed in Table 13-1 in Chapter 13?	☐	☐
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☐
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or contribute contaminated stormwater to a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
(i) If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation.		
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 4,012		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
o If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	☐	☐
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 10,116,995,000		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway/rail trips per station or line?	☐	☐
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☐
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☐
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation.		
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) Would the proposed project result in the development of 350,000 square feet or more?	☐	☒

	YES	NO
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?	☐	☐
o If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-803 of the Administrative Code of the City of New York). Please attach supporting documentation.	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. See Attachment.		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☐	☒
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	☐	☒
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
o The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
o Closure of a community facility or disruption in its services?	☐	☒
o Activities within 400 feet of a historic or cultural resource?	☒	☐
o Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
o Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒

(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.

Construction activities related to the proposed project would last approximately 24 months and would be limited to construction of the new building on the Development Site. Governmental oversite of construction in New York City is extensive and involves a number of City, State, and Federal agencies, each with specific areas of responsibility, including the New York City Department of Buildings, the New York City Department of Environmental Protection, the New York City Fire Department, the New York City Department of Transportation Office of Construction Mitigation and Coordination (DOT OCMC), New York City Transit, the New York City Landmarks Preservation Commission, the New York State Department of Environmental Conservation, the New York State Department of Labor, the U.S. Environmental Protection Agency, and the Occupational Safety and Health Administration.

The project would comply with the requirements of the New York City Noise Control Code, which limits construction activities to weekdats between the hours of 7:00 AM and 6:00 PM (absent a permit), requires that a Construction Noise Mitigation Plan be implemented, and sets noise limits for specific pieces of construction equipment.

In the event of closure of any portion of sidewalk element(s) or travel lanes is needed, such temporary closures would be fulyl addressed through coordination with DOT OCMC. Based on the project's adherence to New York City's stringent requirements related to construction, a preliminary

	YES	NO

construciton assessment is not warranted.

As the site is located adjacent to a building listed on the National Register of Historic Places. However, this resource would not be adversely impacted by construction activities because they would be subject to protection from construction-related damage under the New York City Department of Buildings' (DOB) Technical Policy and Procedure Notice (TPPN) #10/88.

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	SIGNATURE	DATE
Nancy Doon, VHB	Nancy Doon	02/26/2021

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

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

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

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

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

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☐ ☒

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

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

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

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

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

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME: Olga Abinader	DATE: February 26, 2021
SIGNATURE: 	

NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The applicant, St. Joseph Apartments LLC, is seeking a zoning map amendment to rezone the project area (Block 3043, Lots 10, 16, 22, 23, and parts of Lots 8 and 30), located in the Tremont neighborhood of the Bronx, Community District 6, from an R6A to an R7D zoning district and a zoning text amendment to Appendix F of the Zoning Resolution to classify the project area as a Mandatory Inclusionary Housing (MIH) Designated Area. The proposed actions would facilitate the development of a 100% affordable, approximately 267,324 gsf, 11-story multi-family residential building with a total of up to 287 dwelling units on Lots 10, 16, 22, and 23. Although the applicant intends for all unit to be affordable, the mapping of a MIH designated area over the project area insures that 86 dwelling units would comply with MIH affordability Options 1 or 2 and be affordable in perpetuity. Compared to the no-action condition, the proposed actions would result in the same land uses, but at a higher density. The land use of the proposed project would be consistent with that of the surrounding area, which currently has many multi-family residential elevator buildings. The analysis shows that while the
zoning of the project area would change from R6A to R7D, the proposed actions would not result in changes to the zoning or land use patterns in the surrounding area. In addition, the proposed actions would not conflict with applicable public policy goals. Therefore, the proposed actions would not result in significant adverse impacts to Land Use, Zoning and Public Policy.

Community Facilities and Services

Child Care

A detailed analysis related to child care is included in the EAS. The CEQR Technical Manual indicates that if the child care utilization rate exceeds 100 percent, and is reduced by over 5 percent compared to the No-Action condition, a significant adverse impact may be identified. The proposed actions would introduce an increment of 239 affordable units compared to the No-Action condition, which would generate approximately 33 additional children under the age of six who would be eligible for publicly funded child care programs. A detailed analysis showed that the proposed actions would result in an increase of 2.2% in the collective utilization rate of the child care/Head Start centers in the study area. At a utilization rate of 96.4%, the collective utilization rate of the group childcare/Head Start centers in the study area would not exceed 100 percent. Therefore, the proposed actions would not result in significant adverse impacts to child care facilities.

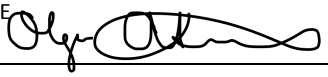
Shadows

The EAS includes a detailed analysis related to shadows, which focuses on incremental shadows cast on the El Batey De Doña Provi Garden. The CEQR Technical Manual states that 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 CEQR Technical Manual also states that the features of a resource indicate its sensitivity to shadows. The detailed analysis shows that the garden would continue to receive mostly uninterrupted sunlight for seven or more hours on the three analysis days during which it would receive shading from the proposed project. Therefore, the garden would continue to have ample sunlight to support the viability of vegetation and the users' enjoyment of the garden. In conclusion, the proposed actions would not result in significant adverse shadows impacts, and the El Batey De Doña Provi Garden would not experience significant adverse shadow impacts as a result of the proposed actions.

Hazardous Materials and Air Quality

An (E) designation (E-602) related to hazardous materials and air quality would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials and air quality analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

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 Rachel Antelmi at rantelmi@planning.nyc.gov.

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME Olga Abinader	DATE February 26, 2021
SIGNATURE 	

Project Name: St. Joseph's - 1949 Bathgate Avenue
CEQR # 21DCP081X
SEQRA Classification: Type I

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE March 1, 2021
SIGNATURE	

Project Name: St. Joseph's - 1949 Bathgate Avenue
CEQR # 21DCP081X
SEQRA Classification: Type I

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Bronx	Block 3043 / Lots 10, 16, 22, 23

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-602**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

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

Hazardous Materials

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

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

Project Name: St. Joseph's - 1949 Bathgate Avenue
CEQR # 21DCP081X
SEQRA Classification: Type I

Air Quality

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

> ***Projected Development Site 1:*** *Any new residential development on the above-referenced property must ensure the heating, ventilating, and air conditioning (HVAC) system and hot water equipment stack is located at the building's highest tier and at least 100 feet above grade to avoid any potential significant adverse air quality impacts.*

EAS Figures

Figure 1 Site Location Map

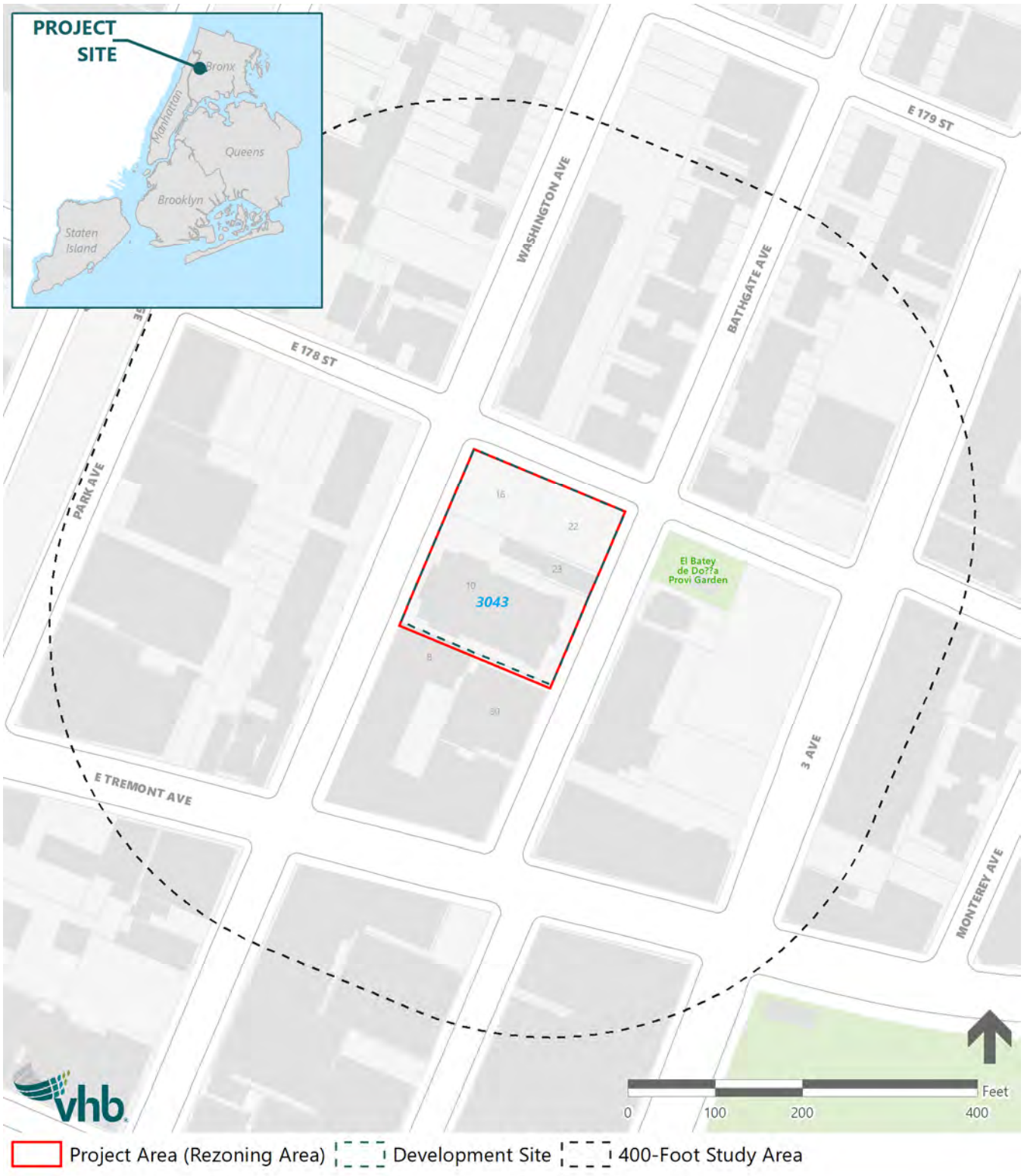


Figure 2 Tax Map

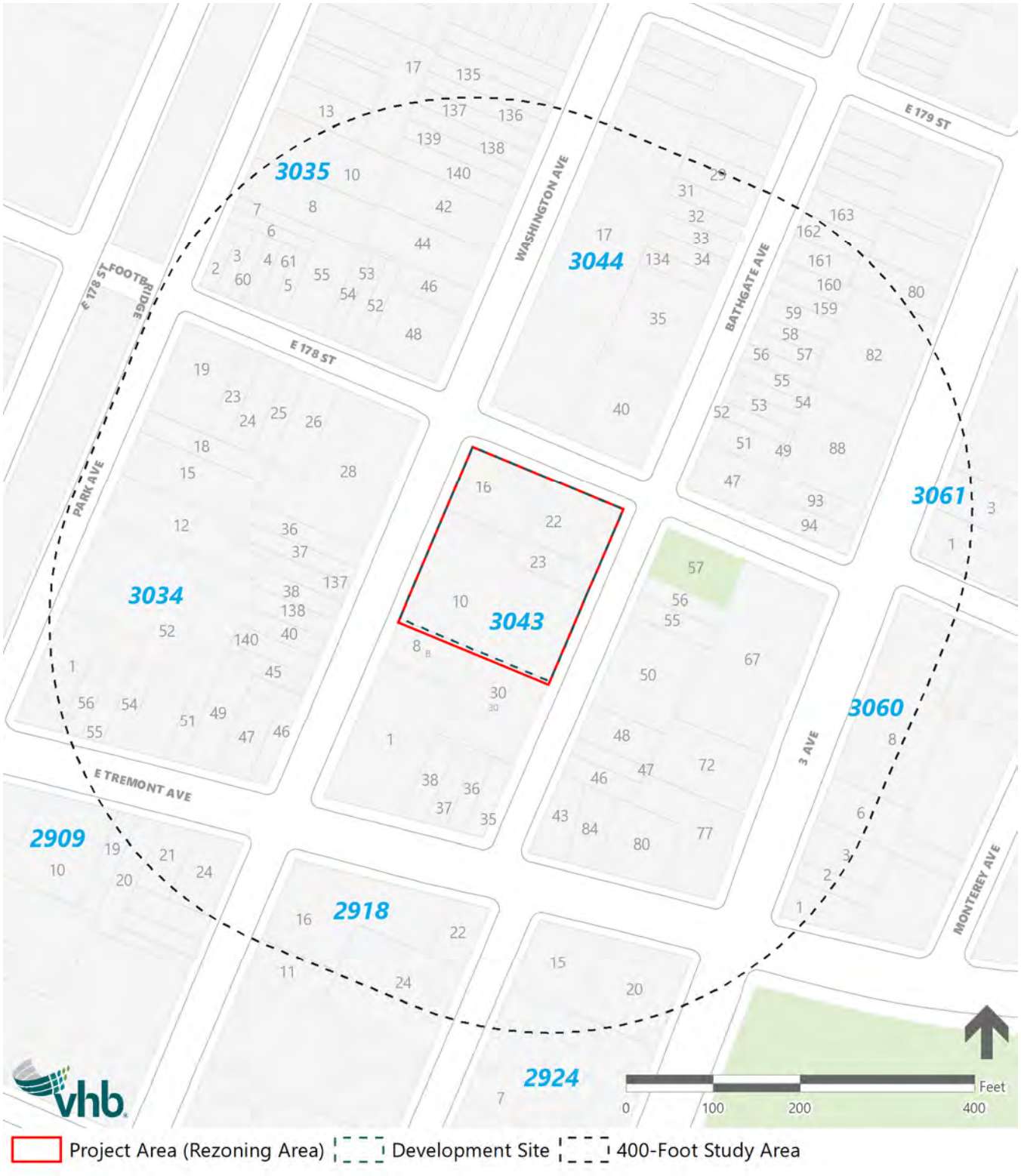


Figure 3.1 Existing Zoning Map

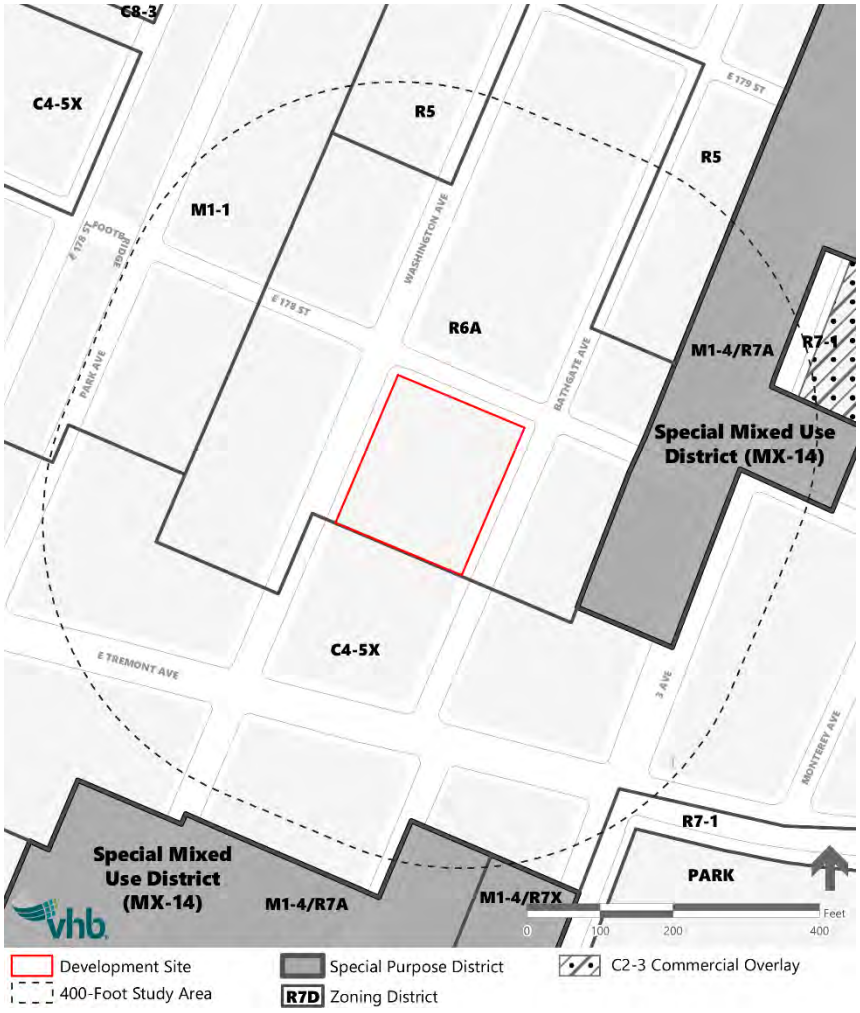


Figure 3.2 Proposed Zoning Map

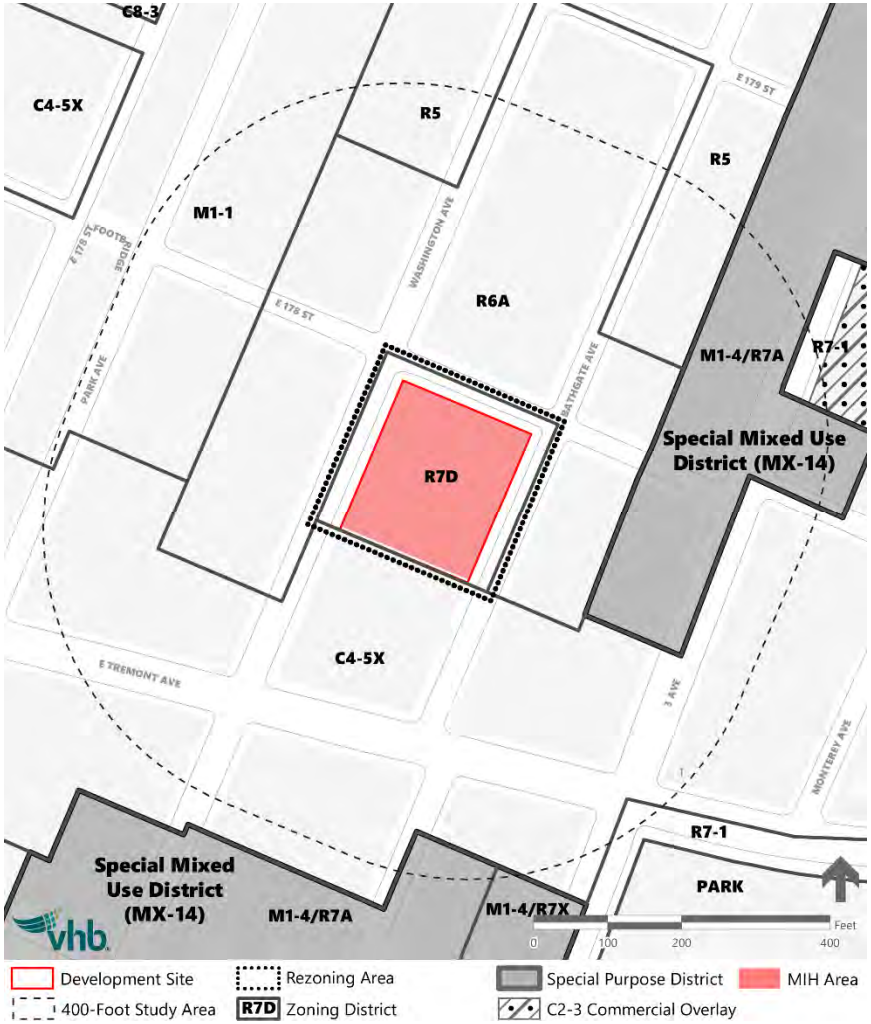


Figure 4 Land Use Map



Figure 5 Photo Key Map



Figure 5a Project Site Photos

Photo 1 View of project site facing southwest from E 178th and Bathgate Avenue



Photo 2 View of the project site facing northwest from Bathgate Avenue



Photo 3 View of the project site facing northeast from Washinton Avenue



Photo 4 View of the project site facing southeast from corner of Washington Ave and E 178th Street



1

Project Description

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

Introduction

The Applicant, St. Joseph Apartments LLC, is seeking the following actions from the City Planning Commission (CPC): a zoning map amendment to rezone six lots, Block 3043, Lots 10, 16, 22, 23, and portions of Lots 8 and 30, (the "Project Area") from R6A to R7D; and a zoning text amendment to Zoning Resolution (ZR) Appendix F to designate a new Mandatory Inclusionary Housing (MIH) Area at the Project Area (the "Proposed Actions").

The Proposed Actions would facilitate the development of a residential building on Lots 10, 16, 22 and 23 of approximately 267,324 gross square feet (gsf), totaling up to 287 units, all of which would be affordable (the "Proposed Project"). As a result of the mapping of a MIH designated area over the Project Area, up to 86 dwelling units would comply with MIH affordability Options 1 or 2 and be affordable in perpetuity. However, the Applicant intends for all 287 units to be affordable.

Development Site and Project Area

The Project Area consists of Bronx Block 3043, Lots 10, 16, 22, 23, and portions of Lots 8 and 30 located in the Tremont neighborhood of the Bronx, Community District 6 (see EAS Figure 1). The Development Site comprises Lot 10, a through lot; Lot 23, an interior lot; and Lots 22 and 16, both corner lots, for a total lot area of 40,104 square feet.

As shown in EAS Figure 3.1, the Development Site is zoned R6A. The Development Site (Block 3043, Lots 10, 16, 22, and 23) is a regularly shaped corner lot with 216 feet of frontage along Washington Avenue, 186 feet along East 178th Street, and 216 feet along Bathgate Avenue. The northwestern portion of Lot 10, along Washington Avenue, and Lots 16 and 22 are not improved and are currently vacant. The southwestern portion of Lot 10, along Washington Avenue, and eastern portion, along Bathgate Avenue, was improved with a 55-foot-tall, one-story church, which is currently undergoing demolition. Lot 23 is currently vacant and formerly contained a 4-story rectory building.

In addition to the Development Site, the Project Area also includes small portions (only a four-foot sliver) of two adjacent lots, Lot 8 and Lot 30, that are not controlled by the Applicant (the "Non-Applicant-Owned Sites"). These two lots are largely in the C4-5X (R7X equivalent) zoning district with the small, four-foot slivers in the R6A district (see EAS Figure 3.1). Lot 8 is an interior lot fronting on Washington Avenue, and Lot 30 is an interior lot fronting on Bathgate Avenue. Lot 8 is improved with a four-story office building. The building on Lot 8 is not eligible for listing on the National or State Register of Historic Places and not an LPC-designated landmark. Lot 30 is improved with a three-story parochial school (a.k.a., the 48th Police Precinct Station). This building is listed on the National Register of Historic Places but is not an LPC-designated landmark.

The Parish of St. Joseph was established in 1873 and the existing church buildings on the Development Site were constructed in 1911 and 1922. The St. Joseph church was closed in August 2015 and the parish was merged with St. Simon Stock Church, also in the Tremont neighborhood of the Bronx. The Development Site has been vacant since 2016, and demolition is underway.

In September 2010, CPC approved a large rezoning affecting 75 blocks within the Tremont area of the Bronx, in which most of the surrounding area was rezoned (C 100407 ZMX). The goal of the rezoning was to promote a healthy mix of uses, including affordable housing and retail and commercial, primarily along the Third Avenue and Tremont Avenue corridors. As part of the rezoning, portions of the R7-1, C8-3 (no residential equivalent), and C4-4 (R7-2 equivalent) districts in the surrounding area, including the Development Site, were downzoned to contextual districts in an effort to preserve neighborhood scale and building height, precluding the development of as-of-right towers or height factor developments. As a result, the rezoning left R6A, M1-4/R7A, and C4-5X (an R7X equivalent) which would permit maximum building heights of 70 feet, 80 feet, and 125 feet, respectively.

Since the rezoning, the recently adopted city-wide Zoning for Quality and Affordability (ZQA) (N 160049 ZRY) and Mandatory Inclusionary Housing (MIH) (N 160051 ZRY) text amendments now allow greater building heights for select programs, including MIH, in those same contextual districts. Specifically, these same districts now permit heights up to 85 feet, 95 feet, and 145 feet, respectively, while using all qualifying criteria (including Qualifying

Ground Floors ("QGF") and Affordable Independent Residences for Seniors (AIRS) or MIH programs).

The Project Area is in a Transit Zone, which is generally an area of the city within one-half mile of a subway station, where special lower accessory parking requirements apply for affordable housing. The Tremont Avenue B/D New York City Transit subway station is approximately 0.45 mile west of the Project Area. The Metro North Harlem Line Tremont station, and several MTA bus stations are also located near the Project Area.

Proposed Actions

The Proposed Actions would apply to the Project Area and would consist of:

- Zoning Map Amendment from R6A to R7D; and
- Zoning Text Amendment to Appendix F to designate a new Mandatory Inclusionary Housing Area

The Applicant may also seek funding from New York State Housing Finance Agency.

Proposed Project

The Proposed Project would consist of a new approximately 267,324-gsf residential building and would contain up to 287 affordable dwelling units, of which it is assumed that up to 86 units would be permanently affordable under MIH affordability Options 1 or 2. However, the Applicant intends for all 287 units to be affordable. The Proposed Project would have a total zoning floor area of 224,576 zoning square feet (zsf), with a Floor Area Ratio (FAR) of 5.6.

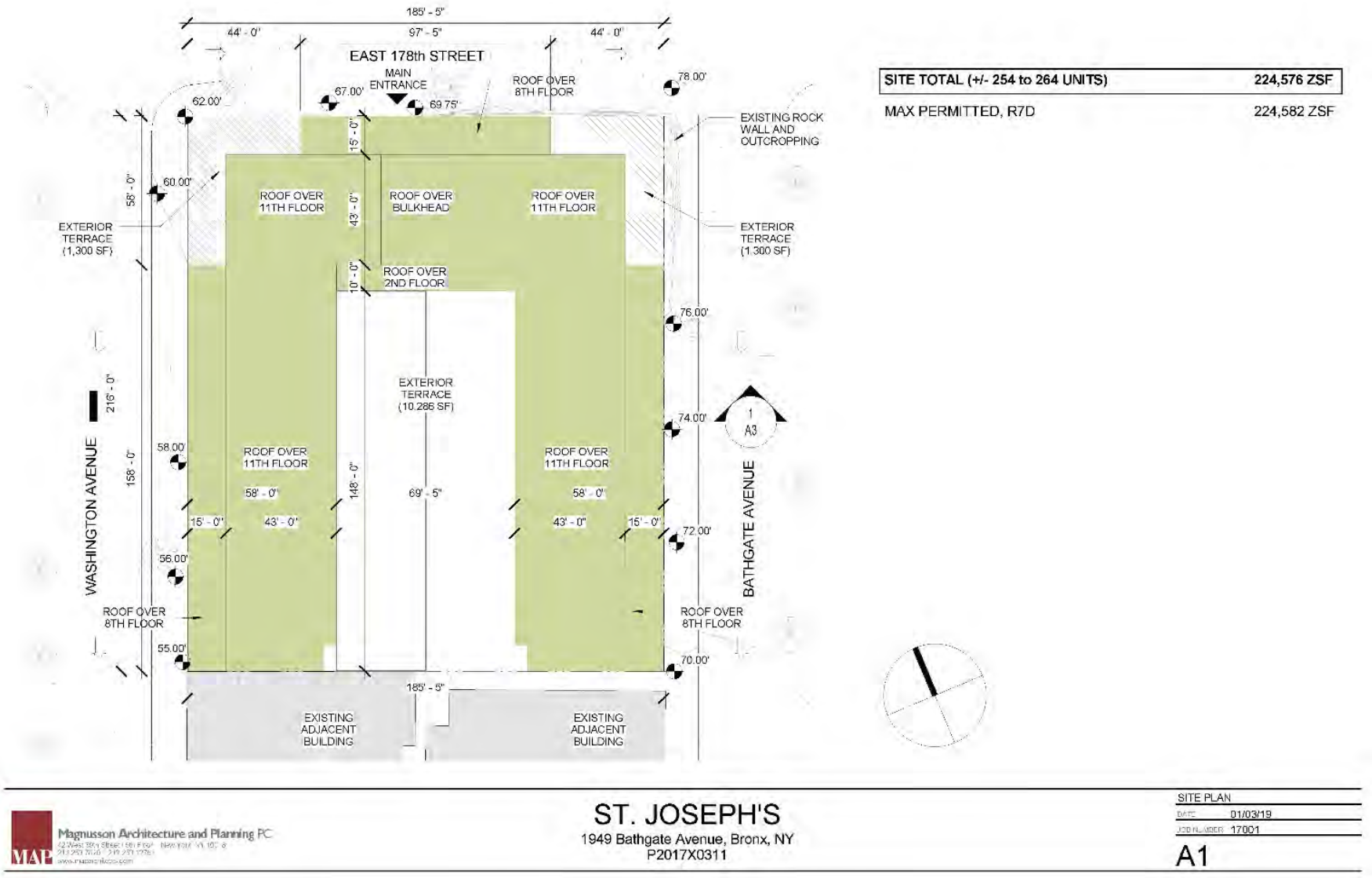
The Applicant intends for the Proposed Project to include 130 units of supportive housing. The supportive housing and associated services would be for individuals with severe mental illness, for youth aging out of the foster care program and for individuals with developmental disabilities. The Applicant intends for the remaining 157 units to be affordable housing for families.

A site plan and massing for the Proposed Project are provided in **Figure 1-1** and **Figure 1-2**. An illustrative site rendering is shown on **Figure 1-3**. The ground level would feature residential apartments as well as exterior terraces in an inner courtyard. Residential apartments would be located on the upper floors, to be accessed from the main residential entrance on East 178th Street.

The building would be U-shaped, 11 stories, and 96.5 feet tall to the roofline along all three sides (north, east, and west) of the U-shaped design. The building would step down to eight stories (67.5 feet) along the three street frontages while remaining 11 stories at the two street corners. Open, landscaped areas would abut the building at the street corners and within the central portion of the U-shaped design.

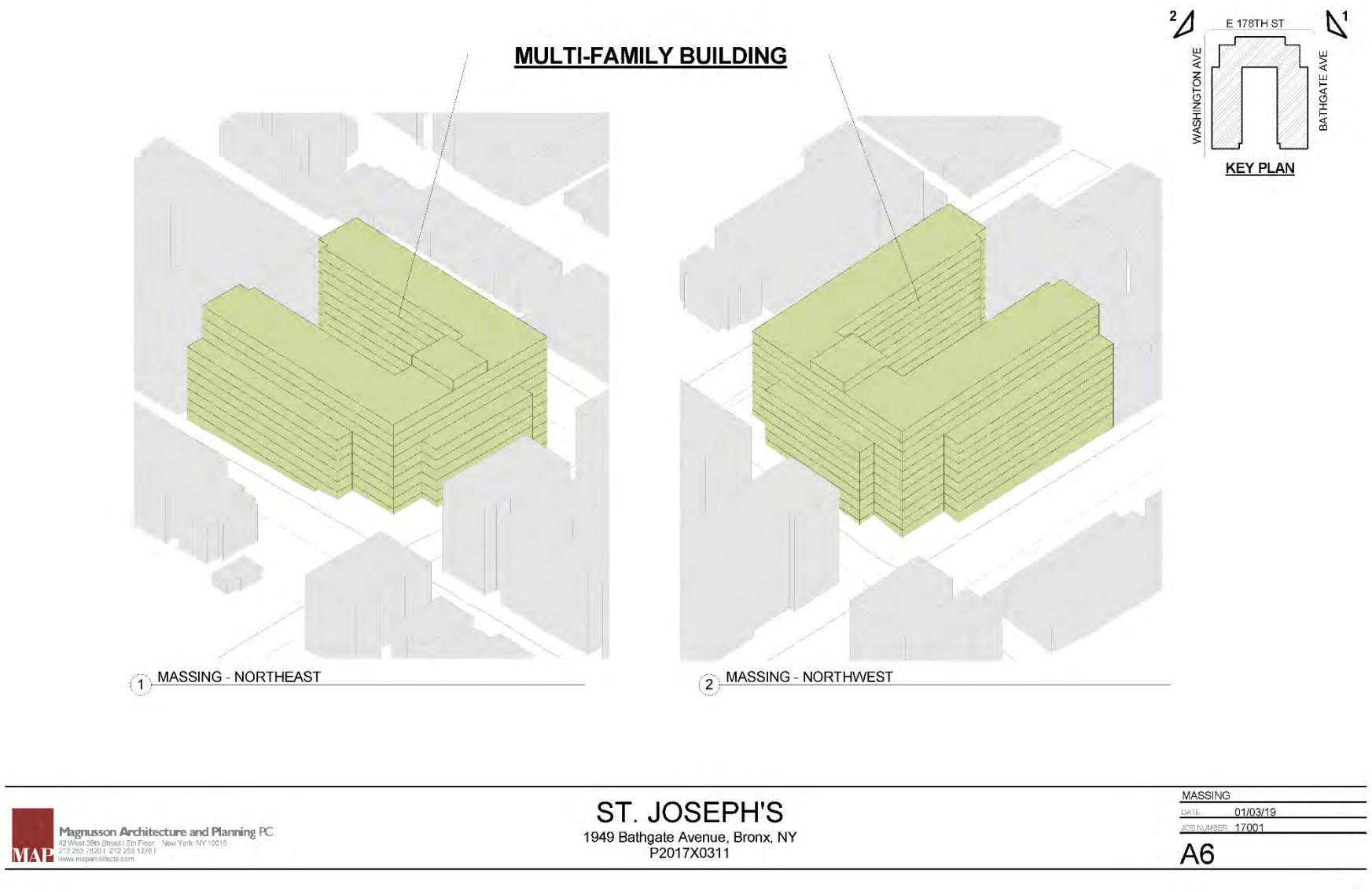
As described above, the Development Site is in a Transit Zone; therefore, no parking will be required or provided.

Figure 1-1 Proposed Development Site Plan



Source: Magnusson Architecture and Planning, P.C.
For Illustrative Purposes Only

Figure 1-2 Proposed Project Massing



Source: Magnusson Architecture and Planning, P.C.

For Illustrative Purposes Only

Figure 1-3 Proposed Project Illustrative Rendering



Project Purpose and Need

The Proposed Actions are necessary in order to facilitate the development of the Proposed Project. The Applicant believes that the proposed affordable multi-family residential building would contribute to achieving the City's stated goal of creating new affordable housing units, as expressed in Mayor Bill de Blasio's affordable housing plan, "Housing New York" and "Housing 2.0."

The rezoning to R7D and the establishment of an MIH area would allow for an increased number of units than what is allowed as-of-right, as well as up to 86 permanently affordable units pursuant to MIH Option 1 or 2. The proposed rezoning would also facilitate the creation of new affordable housing in Bronx Community District 6, where 35.6 percent of households are severely rent burdened (spending more than 50 percent of their income on rent).[1]

The Applicant, St. Joseph Apartments LLC, is a subsidiary of Catholic Homes New York, which is the housing development office of Catholic Charities. Catholic Homes New York develops safe, affordable housing for families and seniors. In partnership with the Association of New York Catholic Homes, New York Institute for Human Development and in collaboration with the Archdiocese of New York, Catholic Charities of New York creates new affordable homes while preserving existing units, continuing decades of work building strong, sustainable communities through affordable housing. Reusing underutilized church-owned sites for affordable housing is central in working towards this mission. To date, Catholic Charities of New York has now developed 13 buildings with over 2,770 units of affordable housing for families and seniors. The Proposed Actions would further the mission of the Applicant to provide new safe affordable housing,

Finally, the project would revive a vacant, underutilized site.

Analysis Framework and Reasonable Worst-Case Development Scenario

The *CEQR Technical Manual* will serve as guidance on the methodologies and impact criteria for evaluating the potential environmental effects of the Proposed Project that would result from the discretionary actions. The CEQR assessment examines the incremental differences between the Reasonable Worst-Case Development Scenario (RWCDS) of the future without the Proposed Actions in place (No-Action condition) and the future with the Proposed Actions in place and the associated development operation (With-Action condition).

For the purpose of the environmental analyses, the No-Action condition represents the future absent the Proposed Actions and serves as the baseline by which the Proposed Project (or With-Action condition) is compared to determine the potential for significant environment impacts. The difference between the No-Action and With-Action conditions represents the increment to be analyzed in the CEQR process.

For the purposes of analysis the Project Area refers to Bronx Block 3043, Lots 10, 16, 22, 23, and portions of Lots 8 and 30, whereas the Development Site (or "Projected Development

[1] NYU Furman Center. *State of New York City's Housing and Neighborhoods in 2018*. Available from: https://furmancenter.org/files/sotc/SOC_2018_Full_2018-05-22.pdf.

Site 1") refers to Block 3043, Lots 10, 16, 22, and 23, where the proposed development would be located.

Future No-Action Condition

Without the proposed rezoning, the Applicant would develop the Development Site with an as-of-right building consistent with the regulations of the existing R6A district, since the existing buildings are currently being demolished. The future No-Action condition is assumed to include the development of a 3.0 FAR, seven-story, 187,474 gsf multi-family residential building (156,395 zsf) consisting of up to 174 units. Given the mission of the Applicant to develop safe, affordable housing, approximately 48 units would be affordable. The Applicant would not seek any discretionary funding for the 48 affordable units. The building would have a maximum allowable height of 70 feet (or 75 feet if providing Quality Ground Floor) after a maximum base height of 60 feet (65 feet if providing Quality Ground Floor). The future No-Action condition would be developed as-of-right within the current zoning regulations to the maximum permitted FAR and height at the Development Site, without the adoption of an Inclusionary Housing bonus. A massing for the future No-Action condition is provided in **Figure 1-4**.

Figure 1-4 No-Action Massing



Source: Magnusson Architecture and Planning, P.C.

Future With-Action Condition

As noted above, the Proposed Actions would result in rezoning the Project Area to R7D with MIH applicability and would facilitate the development of a 267,324-gsf (224,576-zsf) multi-

family residential building on the Development Site. The Proposed Project would be 11 stories and 96 feet in height, with a proposed FAR of 5.6, maximizing the available FAR permitted by the proposed zoning. The Proposed Project would contain up to 287 residential units—the Applicant intends for all 287 to be affordable—with up to 86 units permanently affordable under MIH Options 1 or 2. The Development Site is in a Transit Zone; as such, no parking would be provided. For analysis purposes, the Proposed Project represents the With-Action condition.

Increment for Analysis

In total, the future With-Action condition would result in a net increase of 79,850 gsf over the future No-Action condition (see **Table 1-1**). The total FAR incremental increase would be 2.6. There would be no incremental ground disturbance between the No-Action and With-Action conditions.

Table 1-1 Future No-Action and With-Action Comparison

	No-Action Condition	With-Action Condition	Increment
Total GSF	187,474	267,324	+79,850
Total ZSF	156,395	224,576	+68,181
FAR	3.0	5.6	+2.6
Units	174 (48 affordable)	287 (287 affordable, 86 under MIH)	+113 (+239 affordable, +38 under MIH)
Height	7-stories	11-stories	3-stories
Parking Spaces	63	0	-63

*The Applicant intends for all 287 units to be affordable.

Analysis (Build) Year

The 2023 build year assumes approval of the actions and commencement of construction in 2021, and up to two-year construction period.

2

Land Use, Zoning, and Public Policy

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

Introduction

The Applicant, St. Joseph Apartments LLC, is seeking a Zoning Map Amendment to rezone the Project Area from an R6A to an R7D zoning district and a Zoning Text Amendment to designate the Project Area into an MIH area. The Proposed Actions would facilitate the development of a 100% affordable multi-family residential building.

Methodology

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

- Describes existing and future land uses and zoning information, and describes any changes in zoning that could cause changes in land use;
- Characterizes the land use development trends in the area surrounding the Development Site that might be affected by the Proposed Action; and
- Determines whether the Proposed Project is compatible with those trends or may alter them.

The following assessment method was used to determine the potential for the Proposed Project to result in significant adverse impacts on Land Use, Zoning, and Public Policy:

1. Establish a "Study Area", a geographic area surrounding the Development Site to determine how the Proposed Project may affect the immediate surrounding area. For this assessment, a Study Area of 400 feet surrounding the Development Site was used.
2. Identify data sources, including any public policies (formal plans, published reports) to be used to describe the existing and No-Action conditions related to Land Use, Zoning, and/or Public Policy.
3. Assess the Proposed Project's potential effects on Land Use, Zoning and Public Policy to determine whether the Proposed Project is consistent with or conflicts with area land uses, zoning, or the identified policies.
    - If a Proposed Project could conflict with the identified policies, a detailed assessment would be conducted; or
    - If the Proposed Project is found to not conflict with the identified policies, no further assessment is needed.

Assessment

Existing Conditions

Land Use

Development Site

The Development Site consists of Bronx Block 3043, Lots 10, 16, 22, and 23. As shown in **Figure 2-1**, Lot 10 was improved with a 55-foot-tall, one-story church, which is currently undergoing demolition. Lot 23 formerly contained a recently demolished 4-story rectory building. Demolition was commenced on both buildings in accordance with NYC Department of Buildings (DOB) demolition permits. Lots 16 and 22 are currently vacant.

Figure 2-1 Land Use Map



Study Area

The Study Area contains a variety of uses—including mixed-use, commercial, community facilities, parking, and industrial and manufacturing uses (see **Figure 2-1**).

The area east and south of the Development Site contain one- to four-story commercial buildings, particularly along the East Tremont Avenue commercial corridor. The commercial uses in this area consist primarily of local retail, small delis/restaurants, and two- to four-story office buildings. There are also a few auto-centric businesses such as auto sales. The mixed-use residential and commercial buildings are also primarily located south of the Development Site along East Tremont Avenue.

The area north of the Development Site consists predominantly of one- and two-family homes as well as two- to eight-story multi-family walk-ups/elevator buildings. Three large multi-family elevator buildings are just north across the street from the Development Site, and another that just completed construction in 2019 lies northwest of the site.

There are a few institutional uses located in the Study Area, including St. Joseph's school located across Bathgate Avenue east of the Development Site; Christ Apostolic Church International located south of the Development Site along East Tremont Avenue; a YMCA south of the Development Site on Bathgate; and East Tremont Head Start and Tremont United Methodist Church located across Washington Avenue west of the Development Site.

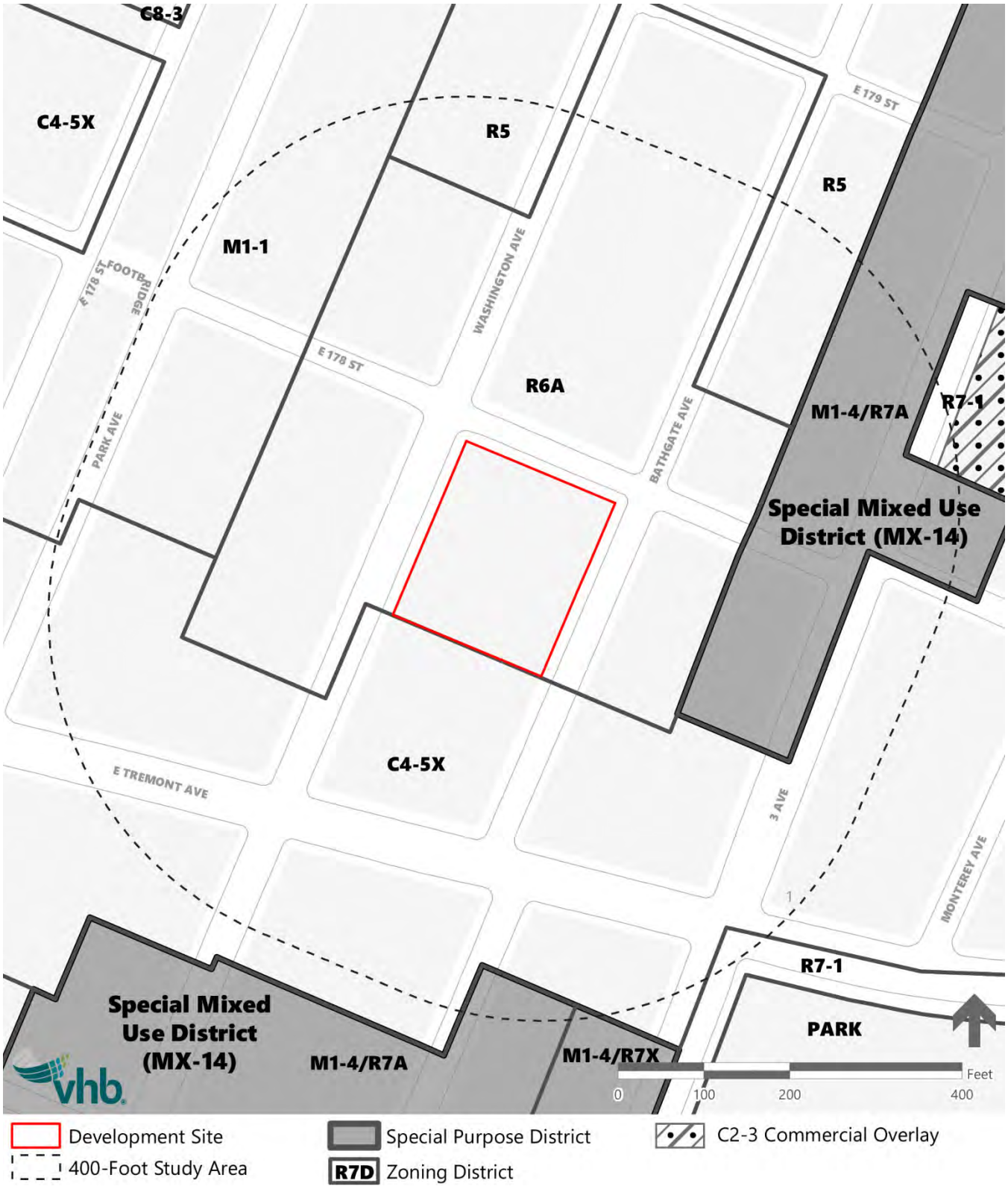
Manufacturing uses in the Study Area are primarily one-story warehouses and are located along Park and 3rd Avenue. There is also a large self-storage facility on 3rd Avenue and 178th Street. The Study Area also contains several parking facilities and vacant lots east and west of the Development Site. Transportation and utility land uses within the Study Area consist of auto repair shops and the Metro North Railroad corridor just west of the Study Area.

There is limited open space within the Study Area. El Batey de Dona Provi, a community garden, lies across from the project sit on Bathgate. Tremont Park is located just outside of the Study Area to the southeast.

Zoning

The Development Site is located within a R6A zoning district (see **Figure 2-2**). The area immediately south of the Development Site is within a C4-5X (R7X equivalent) zoning district. The western portion of the Study Area consists of a M1-1 district and the area north is an R5 district. The eastern portion of the Study Area is zoned M1-4/R7A district and is a Special Mixed-Use District (MX-14).

Figure 2-2 Existing Zoning Map



R6A districts permit residential and community facility uses. Commercial and manufacturing uses are not permitted. They permit a residential floor area ratio (FAR) of 3.00 (or up to 3.60 pursuant to the IH program, if applicable) and community facility FAR of 4.80. R6A districts require developments to comply with QH bulk. For QH developments, absolute envelope controls are imposed; specifically, a minimum base height of 40 feet, a maximum base height of 60 feet and a maximum building height of 70 feet. The maximum building height may be increased up to 75 feet for developments with a QGF. For QH developments in IH areas or providing MIH, the maximum base height can be increased up to 65 feet and the maximum building height can be increased up to 80 feet or 85 feet with a QGF (but not more than eight stories).

C4-5X districts permit commercial, residential and community facility uses. Manufacturing uses are not permitted. They permit a commercial FAR of 4.0. It is equivalent to an R7X district, which permits a residential FAR of 5.0 and a community facility FAR of 5.0. There are no bonuses for plazas or arcades in C4-5X districts. C4-5X districts permit developments with a maximum base height of 85 feet and maximum building heights of 120 feet. With the R7X district equivalent, any residential development, or residential portion of a development, has similar bulk controls as the R7X district, described above. Tower regulations are not applicable in C4-5X districts.

M1-1 districts permits commercial, manufacturing and certain community facility uses. Residential uses are not permitted. It permits a commercial FAR and manufacturing FAR of 1.0 and community facility FAR of 2.40. M1-1 districts permit developments with maximum base heights of up to 30 feet, then apply a sky exposure plane (1-to-1 for both narrow and wide streets). Tower regulations are not applicable in M1-1 districts.

R5 districts permit residential and community facility uses. Commercial and manufacturing uses are not permitted. They permit a residential FAR of 1.25 and a community facility FAR of 2.0. R5 districts permit developments with a maximum street wall height of 30 feet, then a setback of 15 feet is required. The maximum building height permitted is 40 feet.

M1-4/R7A and M1-4/R7X districts (in the MX-14) allow mixed uses. Specifically, for community facility, commercial, and manufacturing uses, the M1-4 district regulations govern. M1-4 districts permit a commercial/manufacturing FAR of 2.0 and community facility FAR of 6.50. M1-4 districts regulate the bulk for developments containing community facility, commercial or manufacturing use. The district permits a maximum base height of up to 60 feet, then apply a sky exposure plane (2.7 to 1 for narrow streets and 5.6 to 1 for wide streets). For residential uses in M1-4/R7A and M1-4/R7X districts, the R7A and R7X district regulations govern.

R7A and R7X districts require developments to comply with Quality Housing ("QH") bulk. R7A district designations permit a residential FAR of 3.45 and R7X district designations permit a residential FAR of 3.75 (or 4.6 FAR and 5.0 FAR, respectively, pursuant to the IH program, as applicable). The R7A district permits a maximum base height of 65 feet and a maximum building height of 80 feet. The maximum base height may be increased up to 75 feet and the maximum building height may be increased up to 85 feet (but not more than eight stories) for developments with a QGF. For QH developments in IH areas or providing MIH, the maximum base height can be increased up to 75 feet and the maximum building height can be increased up to 90 feet or 95 feet with a QGF (but not more than nine stories).

The R7X district permits a maximum base height of 85 feet and a maximum building height of 120 feet. The maximum base height may be increased up to 95 feet and the maximum building height may be increased up to 125 feet (but not more than 12 stories) for developments with a QGF. For QH developments in IH areas or providing MIH, the maximum base height can be increased up to 105 feet and the maximum building height can be increased up to 140 feet or 145 feet with a QGF (but not more than nine stories). Tower regulations are applicable in M1-4 districts, but not applicable for residential development or any portion of a development with residential use.

Public Policy

Housing New York: A Five-Borough, Ten-Year Plan

On May 5, 2014, the de Blasio administration released Housing New York: A Five-Borough, Ten-Year Housing Plan ("Housing New York"), a plan to build or preserve 200,000 affordable residential units. To achieve this goal, the plan aims to double the New York City Department of Housing Preservation and Development (HPD)'s capital budget, target vacant and underused land for new development, protect tenants in rent-regulated apartments, streamline rules and processes to unlock new development opportunities, contain costs, and accelerate affordable construction. The plan details the key policies and programs for implementation, including developing affordable housing on underused public and private sites. In 2017, Housing New York 2.0 was released as an update to the original 10-year plan, which increased this number from 200,000 to 300,000 homes.

One New York: The Plan for a Strong and Just City

In April 2007, the Mayor's Office of Long-Term Planning and Sustainability released PlaNYC: A Greener, Greater New York (PlaNYC). Since that time, updates to PlaNYC have been issued that build upon the goals set forth in 2007 and provide new objectives and strategies. In 2015, One New York: The Plan for a Strong and Just City (OneNYC) was released by the Mayor's Office of Sustainability and the Mayor's Office of Recovery and Resiliency. OneNYC builds upon the sustainability goals established by PlaNYC and focuses on growth, equity, sustainability, and resiliency. Goals outlined in the report include those related to housing (ensuring access to affordable, high-quality housing) and thriving neighborhoods (ensuring that neighborhoods will be well-served). OneNYC sets forth specific targets for the creation of new housing units.

No-Action Condition

Absent the Proposed Project (the future No-Action condition), the Applicant would develop the site with an as-of-right building consistent with the regulations of the existing R6A district, since existing buildings are currently being demolished. The future No-Action condition is assumed to include the development of a 3.0 FAR, seven-story, 187,474 gsf multi-family residential building (156,395 zsf) consisting of 164-to-174 units. Approximately 48 units would be affordable. The building would be built to the maximum permitted FAR and height at the Development Site, without the adoption of an Inclusionary Housing bonus.

Land Use and Zoning

The future No-Action condition would introduce a new residential land use to the currently vacant Development Site; this is consistent with the site's zoning.

The Development Site and Study Area would continue to be governed by the various zoning regulations found in the area, as described in the Existing Conditions section above.

There are two No-Action developments under construction that will be completed by the build year—1969 Washington Avenue, an eight-story, 49-unit residential building; and 1880 Bathgate Avenue, a mixed-use residential, commercial, and community facility building with 190 units. Just outside the Study Area there are a few more similar developments under construction, a seven-story hotel building at 1893 Washington Avenue and a 12-story, 256-unit building at 4215 Park Avenue. These developments will be governed by the current land use and zoning regulations.

Public Policy

In the future No-Action condition, there are no known public policy changes that are anticipated to affect the Development Site or Study Area.

With-Action Condition

The Proposed Actions would facilitate the development of an approximately 267,324 gsf, 11-story multi-family residential building consisting of up to 287 dwelling units, 100 percent of which would be permanently affordable under MIH affordability Options 1 or 2. The Proposed Project would have a total zoning floor area of 224,576 zoning square feet (zsf), with a 5.6 FAR.

Land Use

In the With-Action condition, the Development Site would maintain the same land uses as under the No-Action condition, but at a higher density. As discussed above, the Study Area is characterized by a mix of residential, mixed-use, commercial, community facilities, parking, and industrial and manufacturing uses. The land use of the Proposed Project would be consistent with that of the Study Area, which currently has many multi-family elevator buildings and would have more in the No-Action condition.

Zoning

As detailed in Section 1, Project Description, the Applicant is seeking a zoning map amendment to rezone the Development Site from R6A to an R7D zoning district and a zoning text amendment to Appendix F to designate the Development Site as a MIH Area.

The Proposed Actions would allow for an increased number of units than what is allowed as-of-right. As compared to the No-Action condition, more than five times the number of affordable units would be provided on the site.

The Proposed Actions include the following zoning changes:

› **Proposed Zoning Map Amendment:** A zoning map amendment to Zoning Map 3D would change the zoning of the Development Site from a R6A to an R7D zoning. The

proposed R7D district is a medium-density contextual residential district to promote development along transit corridors. It allows residential (Use Groups 1 and 2) and community facility land uses (Use Groups 3 and 4) with a maximum residential FAR of 4.2 (5.6 with inclusionary allowances). Buildings with qualifying ground floors developed pursuant to the Inclusionary Housing Program in R7D districts are restricted to a maximum base height of 95 feet, require a setback above the maximum base height, and are limited to a maximum building height of 10 feet.

- **Proposed Zoning Text Amendment:** A zoning text amendment to Appendix F of the Zoning Resolution, "Mandatory Inclusionary Housing Areas," would establish an MIH Area that is coterminous with the Development Site.

The Proposed Actions would be compatible with the residential zoning in the area, including the area that will remain R6A around the project, the M1-4/R7A district to the east, the R5 residential district to the north, and the C4-5X district to the south that has a residential equivalent of R7X-2. The With-Action condition would also introduce a larger amount of affordable housing than the No-Action condition. In addition, under the With-Action condition, the Proposed Project would conform to the proposed zoning in full. Therefore, the Proposed Actions would not result in a significant adverse impact to zoning.

Public Policy

Housing New York: A Five-Borough, Ten-Year Plan

The Proposed Actions would be consistent with the Housing New York plan and would result in a 100 percent affordable development with up to 287 dwelling units, of which up to 86 dwelling units would be permanently affordable under MIH affordability Options 1 and 2. Therefore, the Proposed Actions would be supportive of this public policy goal.

One New York: The Plan for a Strong and Just City

The Proposed Actions would be consistent with OneNYC by increasing access to affordable, high-quality housing through the creation of new, 100 percent affordable housing units. Therefore, the Proposed Actions would be supportive of this public policy goal.

Conclusion

As described above, the Proposed Actions would result in the redevelopment of the Development Site as a residential building with a FAR of 5.6. The Proposed Project would be consistent with the land use pattern in the Study Area and provide a greater number of affordable housing units than in the No-Action condition. Overall, the project would activate a vacant building with residential uses beneficial to the residents of the area and city as a whole. Therefore, the Proposed Project would not result in any significant adverse impacts to land use, zoning, or public policy.

3

Community Facilities and Services

This section assesses the potential impacts of the Proposed Actions on community facilities and services. The *2020 City Environmental Quality Review (CEQR) Technical Manual* defines community facilities as public or publicly funded facilities including schools, libraries, childcare centers, health care facilities, and fire and police protection services.

Introduction

The Proposed Actions would facilitate the development of an approximately 267,324-gross-square-foot (gsf), residential building totaling up to 287 units, all of which would be affordable (the Proposed Project). As a result of mapping an MIH designated area over the Project Area, up to 86 dwelling units would comply with MIH affordability Options 1 or 2 and be affordable in perpetuity. However, the applicant intends for all 287 units to be affordable.

Methodology

The *CEQR Technical Manual* provides thresholds to make an initial determination of whether detailed studies are necessary to determine potential indirect impacts on public schools, libraries, childcare centers, health care facilities, and fire and police protection services. If a project exceeds these thresholds, the manual provides guidance on conducting a detailed analysis. The analysis thresholds are based on the number of residential units introduced by a project, and in the case of the analysis of childcare centers, is also based on the affordability level of these units.

As discussed in **Section 1, Project Description**, the future No-Action condition will include the development of a multi-family residential building consisting of 164- to-174 units, of which approximately 48 units would be affordable. The Proposed Actions would facilitate the development of a multi-family building containing up to 287 residential units, all of which the applicant intends to be affordable (up to 86 of these units would be permanently affordable under MIH Options 1 or 2). Therefore, for purposes of the analysis of community facilities, the With Action condition would result in an increment of 90 units over the No Action condition. For the analysis of childcare facilities, which distinguishes between market-rate and affordable units, the analysis considers the introduction of 216 units over the No Action condition.

Where appropriate, this analysis uses the City's CEQR App.

Preliminary Assessment

The *CEQR Technical Manual* provides thresholds to make an initial determination of whether detailed studies are necessary to determine potential indirect impacts on public schools, childcare centers, libraries, health care facilities, and fire and police protection services.

Schools

CEQR analyzes potential impacts on public schools operated and funded by the New York City Department of Education. This analysis generally relates only to public elementary and intermediate schools, which serve a local population, and rarely to high schools, which have a borough-wide or citywide population base. Schools are analyzed based on the potential for the project to cause overcrowding (i.e., a shortage of seats for an age group within the district).

For projects that introduce more than 50 primary/intermediate school students or 150 high school students, an analysis of public schools is warranted. The Proposed Project would introduce 90 units in comparison to the No Action condition. Based on SCA multipliers (provided in the City's CEQR App) of 0.22 primary students, 0.09 intermediate school students, and 0.13 high school students per residential unit for Bronx Community District 6, School District 9, the Proposed Project would introduce 20 primary, 8 intermediate, and 12 high school students. The number of students introduced by the Proposed Project would not meet or exceed the CEQR thresholds for further analysis for primary/intermediate schools or high schools; therefore, no significant adverse schools impacts would result.

Child Care

For projects that introduce more than 20 or more eligible children under age 6, a childcare centers analysis is warranted. In the Bronx, 141 affordable units is the number that triggers a detailed analysis of childcare centers, according to the CEQR App. The Proposed Actions would introduce 287 affordable units, which is an increment of 239 units over the No-Action condition. At a rate of 0.139 children under six years older per affordable housing unit, 33 children eligible for publicly funded childcare services would be generated as a result of the Proposed Project. As the threshold for analysis for childcare facilities is whether a project would introduce 20 or more eligible children under age 6, these calculations indicate the Proposed Actions would result in 10 children eligible for publicly funded childcare above

that threshold. Therefore, a detailed analysis of childcare centers is warranted. See "Detailed Child Care Analysis," below.

Libraries

If a Proposed Project would increase the average number of residential units served by library branches in the borough in which the project is located, the project may cause significant impacts on library services. The threshold in the Bronx is whether a project would introduce more than 682 total units, as provided in the *CEQR Technical Manual* and reflected in the CEQR App. With an additional 90 dwelling units proposed compared to the No-Action condition, the Proposed Project would be below the threshold for analysis, and no significant adverse impacts would result.

Health Care Facilities and Police and Fire Protection

The Proposed Project would not exceed the minimum number of units that would trigger detailed analyses of health care facilities, and police and fire protection services. According to CEQR guidelines, a project would need to introduce a sizeable new neighborhood (e.g., a project similar to the scale of Hunters' Point South in Long Island City, Queens, a project that assessed the potential impact of introducing 6,650 units and other uses) to trigger further analysis of police/fire services and health care facilities.

Detailed Child Care Analysis

Methodology

Since 2014, the City of New York has made investments to provide free, full-day early childhood education through Pre-K for All and 3-K for All, as part of a broader effort to create a continuum of education programs through childhood for all New York City children. In connection with these investments, all programs previously managed by the NYC Administration for Children's Services' (ACS) will shift to management by the NYC Department of Education (DOE). The data obtained for this analysis is conducted consistent with the *2020 CEQR Technical Manual* and is still provided by ACS.

Study Area

According to the *CEQR Technical Manual*, the Study Area for the analysis of childcare centers is typically defined as the area within 1.5 miles of the site. Although there are no locational requirements for enrollment in childcare centers and parents/guardians can choose a childcare center close to their employment rather than their residence, centers closest to the site are more likely to be subject to increased demand. Therefore, a 1.5-mile Study Area around the site was used for the analysis.

Data Sources

The existing conditions analysis presents the most recent capacity and enrollment data of existing publicly funded childcare centers within the Study Area. This information was provided by ACS's Division of Child Care and Head Start. The childcare enrollment in the

future No-Action condition is estimated by multiplying the number of new affordable housing units expected in the Study Area by the CEQR multiplier for estimating the number of children under the age of six eligible for publicly funded childcare services. For the Bronx, the multiplier estimates 0.139 children under six years old per affordable housing unit.

In the With-Action condition, the child-care eligible population introduced by the Proposed Project (which is also estimated using the *CEQR Technical Manual* childcare multiplier) is then added to the childcare enrollment calculated in the future No-Action condition. As stated previously, the Proposed Project would introduce 216 affordable units, all of which would be available at or below 80 percent of the AMI, which results in approximately 29 children under the age of six eligible for publicly funded childcare services.

Impact Criteria

According to the *CEQR Technical Manual*, a significant adverse impact may occur if a proposed development would result in both:

- A collective utilization rate of the childcare center/Head Start centers in the Study Area that is greater than 100 percent in the With-Action condition; and
- An increase of five percent or more in the collective utilization rate between the future No-Action and the future With-Action conditions.

Existing Conditions

There are 19 publicly funded childcare facilities within the Study Area, all in The Bronx. These childcare and Head Start centers have a total capacity of 1,541 seats and have 272 available slots (82 percent utilization). **Table 3-1** shows the current capacity and enrollment for these facilities. Family-based childcare facilities and informal care arrangement provide additional seats in the Study Area, but these seats are not included in the quantitative analysis.

Table 3-1 Publicly Funded Child Care Centers Serving the Study Area

ID	Program Name	Program Address	Borough	Capacity	Enrollment	Available Seats	Utilization Rate (%)
1	LOUIS A. FICKLING CHILD DEV CT	1240 WEBSTER AVENUE	BX	53	49	4	92%
2	BRONX EARLY CHILDHOOD CTR	1515 SOUTHERN BOULEVARD	BX	79	73	6	92%
3	WHEDCO EC DISCOVERY CTR	50 EAST 168 STREET	BX	111	110	1	99%
4	ALEENE LOGAN PRESCHOOL CTR	1450 WEBSTER AVENUE	BX	52	51	1	98%
5	TREMONT CROTONA DAY CARE CTR	1600 CROTONA PK. E	BX	104	74	30	71%
6	TREMONT MONTEREY DAYCARE II	1600 BATHGATE AVENUE	BX	55	50	5	91%
7	LABOR BATHGATE COMM CCC	1638 ANTHONY AVENUE	BX	67	52	15	78%
8	HIGHBRIDGE ADVISORY ECC#3	1399 OGDEN AVENUE	BX	64	64	0	100%
9	EAST TREMONT CC & DEV CTR	1811 CROTONA AVENUE	BX	56	45	11	80%
10	LA PENINSULA COM HEAD START	499 EAST 175 STREET	BX	68	33	35	49%
11	SOUTH BRONX HS. SITE II	141 FEATHERBED LANE	BX	66	64	2	97%
12	SHARON BAPTIST - CENTER IV	1925 BATHGATE AVENUE	BX	90	87	3	97%
13	TRABAJAMOS COMMUNITY HS 4	1997 BATHGATE AVENUE	BX	135	125	10	93%
14	SALVATION ARMY TREMONT	2121 WASHINGTON AVENUE	BX	69	43	26	62%
15	LSSNY - EARLY LIFE CTR 1	80 EAST 181 STREET	BX	159	130	29	82%
16	CONCOURSE HOUSE	2348 WEBSTER AVENUE	BX	42	41	1	98%
17	TRABAJAMOS COMMUNITY HS 5	2167 UNIVERSITY AVENUE	BX	37	37	0	100%
18	TOLENTINE-ZEISER DCC	2340 ANDREWS AVENUE	BX	151	126	25	83%
19	MARC ACADEMY & FAMILY CC	2863 WEBSTER AVENUE	BX	83	15	68	18%
Child Care Total:				**1541**	**1269**	**272**	**82%**

Source: ACS EarlyLearn Contractor Centers Capacity and Enrollment as of June 2018, obtained from the Department of City Planning

Future No-Action Condition

There are currently no planned changes for childcare programs or centers in the Study Area. It is anticipated that planned or proposed No-Action development projects in the child care Study Area will introduce approximately 1,276 new affordable housing units by the analysis year (see **Table 3-2**). Based on the CEQR generation rates for the projection of children eligible for publicly funded day care, No-Action developments would introduce approximately 177 children under the age of six who will be eligible for publicly funded

childcare services. An additional 7 children under the age of six who will be eligible for publicly funded childcare services would be introduced by the 48 affordable units developed on the Development Site in the No-Action condition (see **Chapter 1, Project Description**).

Table 3-2 No-Action Developments with Affordable Units

Address	Borough	Total Proposed Dwelling Units	Proposed Affordable Units	Multiplier*	Child-Care Eligible Children
1880 Bathgate Avenue	BX	190	183		25
2189 Morris Avenue	BX	49	43		6
988 East 180th Street	BX	163	162		23
2519 Creston Avenue	BX	189	169		23
1932 Bryant Avenue	BX	319	318	0.139	44
1880 Boston Road	BX	168	167		23
1325 Jerome Avenue	BX	255	71		10
4697 Third Avenue	BX	53	44		6
1973 Daly Avenue	BX	119	119		17
Total:		**1,505**	**1,276**		**177**

*Note: As provided in the *CEQR Technical Manual*

Sources: ZAP Planning, NYC Active Major Construction via Department of Buildings, NYC Dept. Housing Preservation and Development Housing New York Map

As described above, under existing conditions, publicly funded childcare centers within the 1.5-mile Study Area current operate with a surplus of 272 slots and a utilization of 82 percent. When the estimated 184 publicly funded childcare-eligible children are introduced by planned No-Action development projects, childcare centers in the Study Area would operate at 94 percent utilization with 88 seats available.

Future With-Action Condition

As stated above, the Proposed Project would introduce 33 childcare eligible children to an area that is anticipated to operate with a surplus of 88 seats. In the With-Action condition, childcare facilities in the Study Area would operate with a surplus of 55 seats and would operate under capacity at 96.4 percent utilization, an increase of 2.2% percent utilization over the No-Action condition.

The *CEQR Technical Manual* indicates that a significant adverse impact on child care centers would occur when: (1) the collective utilization rate of public schools or child care centers and Head Start Centers in the Study Area is greater than 100 percent in the With-Action condition, and (2) the Proposed Project would result in an increase of five percentage points or more in the collective utilization rate of child care and Head Start centers in the Study Area between the No-Action and the With-Action condition. The future With-Action condition would not have a collective utilization rate exceeding 100 percent and it would result in an increase of only 2.2 percentage points in the collective utilization rate (see **Table 3-3**). As such, the Proposed Project would not result in significant adverse impacts to childcare centers within the Study Area.

Table 3-3 Estimated Publicly Funded Child Care Center Enrollment, Capacity and Utilization

	Enrollment	Capacity	Available Slots	Utilization Rate (%)	Change in Utilization
Future No-Action Condition	1,453	1541	88	94.3%	N/A
Future With-Action Condition	1,486	1541	55	96.4%	.022

Conclusion

As discussed above, the Proposed Development would introduce 287 affordable dwelling units, an increase of 239 affordable units and 113 units overall over the No-Action condition. This increment would not exceed CEQR thresholds for analysis of public schools, libraries, police/fire services, and health care facilities. As such, further analysis of these areas was not warranted, and no significant adverse impacts would result.

Because the Proposed Project would introduce 239 affordable units, assumed to be affordable to households earning below 80 percent AMI, in comparison to a No-Action condition in which 126 market-rate and 48 affordable units would be developed, a detailed analysis of child care services was undertaken.

The *CEQR Technical Manual* indicates that a significant adverse impact on child care centers would occur when: (1) the collective utilization rate of child care centers and Head Start Centers in the Study Area is greater than 100 percent in the With-Action condition, and (2) the Proposed Project would result in an increase of five percentage points or more in the collective utilization rate of childcare and Head Start centers in the Study Area between the No-Action and the With-Action condition.

In the With-Action condition, childcare facilities in the Study Area would operate with a surplus of 55 seats and would operate under capacity at 96.4 percent utilization, an increase of 2.2% percent utilization over the No-Action condition. Since the future With-Action condition collective utilization rate would not exceed 100 percent and would result in an increase of less than five percentage points, the Proposed Project would not result in significant adverse impacts to childcare facilities.

4

Open Space

This section assesses the potential impacts of the Proposed Actions on open space. The *2020 City Environmental Quality Review (CEQR) Technical Manual* defines open space as publicly or privately owned land that is publicly accessible and available for leisure, play, or sport, or is set aside for the protection and/or enhancement of the natural environment.

Introduction

The Proposed Project would introduce new residents to the Development Site, creating new demands for open space in the area. Therefore, this section examines the potential direct and indirect impacts from the Proposed Project on open space resources.

Methodology

Direct Effects Analysis

Consistent with the *CEQR Technical Manual*, a direct effects analysis should be performed if a proposed project would directly affect open space conditions by causing the loss of public open space; changing the use of an open space so that it no longer serves the same user population; limiting public access to an open space; or increasing noise or air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of

a public open space. A proposed project can also directly affect an open space by enhancing its design or increasing its accessibility to the public. The Proposed Project would not result in the physical loss or direct displacement of publicly accessible open space or increase access to open space, and no direct effects analysis is warranted.

Indirect Analysis

An indirect effects analysis is performed where a project could add sufficient population, either residents or non-residents, such that capacity of the open space to serve the population would be noticeably diminished. The threshold for such an analysis is whether the project would introduce more than 200 residents or 500 workers to the area.[1]

Compared to the future No-Action condition, the Proposed Actions would add more than 200 residents, but fewer than 500 workers to the area. Therefore, following *CEQR Technical Manual* guidance, an indirect effects open space analysis was conducted for residential populations, consistent with the following methodology.

Study Area

As described in the *CEQR Technical Manual*, an open space Study Area is defined by the reasonable walking distance users would travel to reach open spaces and recreational areas—typically a half-mile for residential populations. All census tracts that have at least 50 percent of their area within the half-mile radius are entirely included in the residential Study Area, and all census tracts with less than 50 percent within the radii are entirely excluded.

Based on this methodology, the residential open space Study Area comprises 11 census tracts: Bronx County Census Tracts 165, 231, 233.02, 235.02, 369.01, 369.02, 373, 375.04, 379, 381, and 395 (see **Figure 4-1**).

[1] This is for areas identified as neither well-served nor under-served by existing open space resources. See page 7-4 of the *CEQR Technical Manual*.

Figure 4-1 Residential Open Study Area



Open Space User Populations

Existing Conditions

To identify residential user populations within the Study Area, data from the 2013-2017 American Community Survey were used to determine the number of residents located within the half-mile Study Area (see **Table 4-1**).

Table 4-1 Existing Population in the Residential Study Area

Census Tract	Residential Population
165	1,077
231	1,570
233.02	3,647
235.02	4,781
369.01	2,259
369.02	2,150
373	5,858
375.04	3,470
379	5,360
381	7,175
395	4,327
Total	**41,674**

Source: 2013-2017 ACS 5-year estimates

The Future No-Action Condition

Within the half-mile Study Area, nine developments (No-Action projects) are anticipated to be constructed by 2022, the Proposed Project build year (see **Table 4-2**). To estimate the population in the No-Action condition, the average household size for the census tract (2.56 people per household) was applied to the number of new housing units projected from the No-Action projects and added to the existing Study Area population[2] (see **Table 4-1**).

[2] Source: NYC DCP Population Fact Finder

Table 4-2 No-Action Projects in the Residential Study Area

No-Action Projects	Number of Dwelling Units
4215 Park Avenue	256
1893 Washington Avenue	66
1880 Bathgate Avenue	190
1969 Washington Avenue	49
4387 3rd Avenue	50
220 East 178th Street	52
246 Echo Place	90
2065 Ryer Avenue	66
2051 Ryer Avenue	86
Total	**905**

The Future With-Action Condition

The residential population introduced by the Proposed Project was estimated by multiplying the number of units (287 units) by the average household size for census tract 395 (2.56 people per household). The residential population introduced by the Proposed Project was added to the No-Action Study Area population to calculate the total residential population in the future with the Proposed Project (see **Table 4-1**).

Inventory of Open Space Resources

The *CEQR Technical Manual* defines public open space as open space that is publicly or privately owned and is accessible to the public on a regular basis, either constantly or for designated daily periods of time. Open spaces that are only available for limited users or are not available to the public on a regular or constant basis are not considered public open space but may be considered in a qualitative assessment of open space impacts.

Existing Conditions

Publicly accessible open space resources in the Study Area were inventoried through the latest available data obtained from the NYC Department of Parks and Recreation (DPR) and the New York City Geographic Information System (GIS). Open space is characterized as passive, active, or a mixture of active and passive. Active open space is used for exercise, sports, or active children's play. Examples include playgrounds, athletic fields or courts, pools, and greenways. Passive open spaces allow for activities such as strolling, reading, sunbathing, and people watching. Examples include plazas, walking paths, gardens, and certain lawns with restricted uses. Esplanades are an example of open space that may be used for active uses, such as running and biking, or passive uses, such as dog walking.

Playgrounds that are jointly owned by the DPR and the NYC Department of Education (DOE) are included in the inventory of open spaces. While public use of these playgrounds is prohibited during school hours, they are still included in the quantitative analysis as they serve the public in the after-school hours.

The inventory does not include the area's community gardens as these gardens are restricted with limited hours of accessibility.

No-Action Condition

There are no NYC Parks or private projects planned that will add new open space to the Study Area.

With-Action Condition

The Proposed Project would not provide publicly-accessible open spaces on the Development Site.

Adequacy of Open Space Resources

Comparison to City Guidelines

The adequacy of open space in the Study Area is based on ratios of usable open space acreage to the Study Area populations (the "open space ratios"). The *CEQR Technical Manual* outlines the following guidelines for residential assessments:

- The City attempts to achieve a ratio of 2.50 acres per 1,000 residents for large-scale proposals. Ideally, this would consist of 0.50 acres of passive space and 2.00 acres of active open space per 1,000 residents. However, these goals are often not feasible for many areas of the city and they do not constitute an impact threshold. Rather, it is a benchmark that represents how well an area is served by its open space.
- A ratio that meets the Citywide Community District median ratio of 1.50 acres of open space per 1,000 residents is also recommended.

Impact Assessment

The determination of significant adverse impacts is based on how a project would change the open space ratios in the Study Area, as well as qualitative factors not reflected in the quantitative assessment. According to the *CEQR Technical Manual*, if a proposed project would reduce an open space ratio and consequently result in overburdening existing facilities, or if it would substantially exacerbate an existing deficiency in open space, it may result in a significant impact on open space resources. In general, if (1) a Study Area's open space ratios fall below City guidelines, and (2) a proposed project would result in a decrease in the open space ratio of more than five percent, it could be considered a substantial change requiring additional analysis. However, in areas that have been determined to be extremely lacking in open space, a reduction as small as one percent may be considered significant warranting further analysis.

Preliminary Assessment

Existing Conditions

Study Area Population

The existing estimated residential population in the Study Area is shown in **Table 4-1.**

Study Area Open Space Resources

The Study Area includes a variety of parks and playgrounds that are accessible for use by the public, as outlined in **Table 4-3**.

Table 4-3 Existing Study Area Open Spaces

Map No.	Name	Owner/ Agency	Features and Amenities	Total Acres	Active (Acres)	Passive (Acres)
1	Tremont Park	NYC Parks	Baseball fields, handball courts, playgrounds, dog-friendly areas, spray showers, bathrooms, benches, trees, plantings	15.00	12.00	3.00
2	Stop & Go Playground	NYC Parks	Playgrounds	0.32	0.32	0
3	Cleopatra Playground	NYC Parks	Playgrounds, spray showers	0.62	0.62	0
4	O'Brien Oval	NYC Parks	Benches, trees, plantings	0.23	0	0.23
5	Richman (Echo) Park	NYC Parks	Baskeetball courts, handball courts, playgrounds, dog-friendly areas, spray showers, bathrooms, benches, trees, plantings	4.38	3.07	1.31
6	Bergen Triangle	NYC Parks	Benches	0.21	0	0.21
7	Bathgate Playground	NYC Parks	Playgrounds, chess tables, spray showers	2.50	1.75	0.75
8	Murphy Triangle	NYC Parks	Plantings, trees, benches	0.10	0	0.10
9	Quarry Ballfields	NYC Parks	Baseball fields, football fields, soccer fields, bathrooms	4.42	4.42	0
10	Belmont Playground	NYC Parks	Basketball courts, handball courts, fitness equipment, playgrounds, spray showers, bathrooms	2.21	2.21	0
11	Admiral Farragut Playground	NYC Parks	Playgrounds	1.36	0.95	0.41
12	Prospect Playground	NYC Parks	Basketball courts, handball courts, playgrounds	1.44	1.44	0
			Residential Study Area Total	**32.79**	**26.78**	**6.01**
			Percent of Study Area Open Space	**100%**	**81.67%**	**18.33%**

Source: NYC Department of Parks and Recreation

Adequacy of Open Spaces

Table 4-4 shows the adequacy of open space resources for the residential Study Area. The area has an overall open space ratio of approximately 0.79 acres per 1,000 residents, which is less than the City's guideline of 2.50 acres of open space per 1,000 residents and the

citywide average of 1.50 acres per 1,000 residents. The Study Area's current residential passive open space ratio is approximately 0.14 acres per 1,000 residents, which is below the City's goal of 0.50 acres per 1,000 residents. The area's residential active open space ratio is approximately 0.64 acres per 1,000 residents, which is below the City's guideline of 2.00 acres per 1,000 residents. Despite the low open space ratio in the area, the site is not located in an area identified as underserved as indicated by a map showing Underserved Areas in Bronx Community District 6 (see page 7-4 of the *CEQR Technical Manual).*

Table 4-4 Existing Conditions – Adequacy of Open Space Resources

Population	Open Space Acreage		Ratios*	DCP Guidelines
Residential (Half Mile) Study Area				
41,674	Active	26.78	0.6426	2.00
	Passive	6.01	0.1442	0.50
	Total	32.79	0.7868	2.50

*Acres per 1,000 people

No-Action Condition

As described in the "Methodology" section above, the No-Action condition accounts for population growth and changes expected to the inventory of open space resources. New development in the residential Study Area, would result in 1,079 residential units across ten developments, including the development of 174 units on the Development site in the future No-Action condition as described in **Chapter 1, Project Description**. These developments would increase the residential population by 2,762 for a total residential population of 44,436 in 2022, the projected build-year.[3]

Study Area Open Spaces

In the No-Action condition, no new publicly-accessible open spaces are planned for the Development Site or within the Study Area.

Adequacy of Open Spaces

In the No-Action condition, the open space ratios in the residential Study Area would decrease slightly (see **Table 4-5**). The total open space ratio would decrease from approximately 0.79 acres per 1,000 residents to approximately 0.74 acres and would remain below the guideline. The active open space ratio would also decrease slightly from 0.64 to 0.60 acres per 1,000 residents and the passive open space ratio would remain about the same at 0.14 acres per 1,000 residents. As with the Existing Condition, active open space ratios would remain below the DCP guideline of 2.00 acres, and passive open space ratios would remain below the guideline of 0.50 acres.

[3] No-Action construction calculated using ZAP Planning and the NYC Active Major Construction Map for New Building permits.

Table 4-5 No Action Condition – Adequacy of Open Space Resources

Population	Open Space Acreage		Ratios*	DCP Guidelines
Residential (Half Mile) Study Area				
44,436	Active	26.78	0.6027	2.00
	Passive	6.01	0.1353	0.50
	Total	32.79	0.7379	2.50

*Acres per 1,000 people

With-Action Condition

Study Area Population

In the With-Action condition, the Proposed Project would result in 287 units, which is estimated to introduce approximately 735 residents (an increment of 289 residents over the No-Action condition) and result in a total residential population of 44,726 in the half-mile Study Area.

Adequacy of Open Spaces

Under the With-Action condition, the open space ratio for the residential population would decrease only slightly from the No-Action condition open space ratio (see **Table 4-6**). The total open space ratio would be reduced from approximately 0.74 acres per 1,000 residents in the No-Action condition to approximately 0.73 acres per 1,000 residents in the With Action condition. This is a 0.0048 raw decrease in overall open space ratio and a 0.65 percent change. The active and passive open space ratios would also be reduced slightly, See **Table 4-6** below for ratios.

Table 4-6 With-Action Condition – Adequacy of Open Space Resources

Population	Open Space Acreage		Ratios*	DCP Guidelines
Residential (Half Mile) Study Area				
44,726	Active	26.78	0.5988	2.00
	Passive	6.01	0.1344	0.50
	Total	32.79	0.7331	2.50

*Acres per 1,000 people

As described previously, a proposed project could result in a significant adverse open space impact if it would reduce the open space ratio by more than five percent in areas that are currently below the City's median community district open space ratio of 1.50 acres per 1,000 residents. The Proposed Project would not result in a decrease of the open space ratio of more than five percent, and no significant adverse impact would result.

Conclusion

Under the With-Action condition, the total open space ratio for the residential population would decrease by 0.65 percent compared to the No-Action condition open space ratio: 0.74 to 0.73 acres per 1,000 residents, and the Study Area would continue to have open space ratios below the guideline of 2.50 acres per 1,000 residents and below the citywide median

of 1.50 acres per 1,000 residents. The active and passive open space ratios would also decrease slightly (see **Table 4-7**). The Proposed Project would not result in a greater than five percent decrease in the open space ratio, and therefore no significant adverse impact to open space resources would result.

Table 4-7 Change in Open Space Ratios

	No-Action	With-Action	Raw Change	Percent Change
Active	0.6027	0.5988	0.0039	0.65%
Passive	0.1353	0.1344	0.0009	0.64%
Total	0.7379	0.7331	0.0048	0.65%

5

Shadows

A shadow is defined in the *2020 CEQR Technical Manual* as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space, or feature. The purpose of this section is to assess whether new structures may cast shadows on sunlight sensitive publicly accessible resources or other resources of concern, such as natural resources, and to assess the significance of their impact.

Introduction

According to the *2020 CEQR Technical Manual*, a shadows assessment is warranted for proposed actions that would result in new structures (or additions to existing structures) greater than 50 feet in height or located adjacent to, or across the street from, a sunlight-sensitive resource. Such resources include publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources with sun-sensitive features.

As described in **Section 1, Project Description**, the Proposed Actions would result in the construction of an 11-story, 96.5-foot apartment building on the Development Site, which is located across the street from a potential resource of concerns (the El Batey De Doña Provi Garden). Absent approval of the Proposed Actions (the No-Action condition), the Development Site would be developed as-of-right and would have a maximum allowable height of 70-feet (or 75-feet if providing Quality Ground Floor). Therefore, the increment between the With-Action and No-Action conditions is at least 21-feet. Given the difference

in height between the No-Action and With-Action conditions and the location of the Development Site relative to the El Batey De Doña Provi Garden, a shadows assessment is warranted for the Proposed Actions.

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, and a preliminary screening assessment is conducted to ascertain whether shadows resulting from a project could reach any sunlight-sensitive resource at any time of year. If the preliminary assessment indicates that, in the absence of intervening buildings, shadows from a project could reach sunlight-sensitive resources on any of the representative analysis days, a detailed analysis is typically warranted.

Sunlight-Sensitive Resources

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, as follows:[1]

- **Public open space** (e.g., parks, beaches, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions of roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The uses and vegetation in an open space establish its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather-dependent features like wading pools and sand boxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include passive uses, such as sitting or sunning; active uses, such as playfields or paved courts; 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 façades); historic landscapes, such as scenic landmarks including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of

[1] According to the CEQR Technical Manual, City streets, sidewalks, and private open spaces (such as private residential front and back yards, stoops, and vacant lots) are not considered to be sunlight-sensitive resources.

direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.

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

Preliminary Assessment

The preliminary screening assessment consists of three tiers of analysis:

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

Detailed Assessment

If the Tier 3 screening indicates that, in the absence of intervening buildings, shadows from a Proposed Project would reach a sunlight-sensitive resource on any of the representative analysis days, a detailed shadow analysis would be warranted. Because existing buildings (or No-Action buildings) may already cast shadows on a sun-sensitive resource, a Proposed Project may not result in additional (incremental) shadows upon that resource. The detailed shadow analysis models a baseline condition (future No-Action) that is compared to the future condition resulting from a Proposed Project (future With-Action) to illustrate the shadows cast by the No-Action development and distinguish the additional (incremental) shadow cast by the project. The detailed shadows analysis uses a combination of Geographic Information Systems (GIS) 3D modeling and modeling in Sketchup, as well as GIS data provided publicly.

Determination of Significance

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

- **Vegetation**: a substantial reduction in sunlight available to a sunlight-sensitive feature of the resource to less than the minimum time necessary for its survival (when there was sufficient sunlight in the future without the project), or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum time necessary for its survival).
- **Historic and cultural resources**: a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.
- **Open space utilization**: a substantial reduction in the usability of open space as a result of increased shadow, with consideration given to anticipated new users and the open space's utilization rates throughout the affected time periods as well as to the inventory of available open space resources in the Study Area.
- **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.

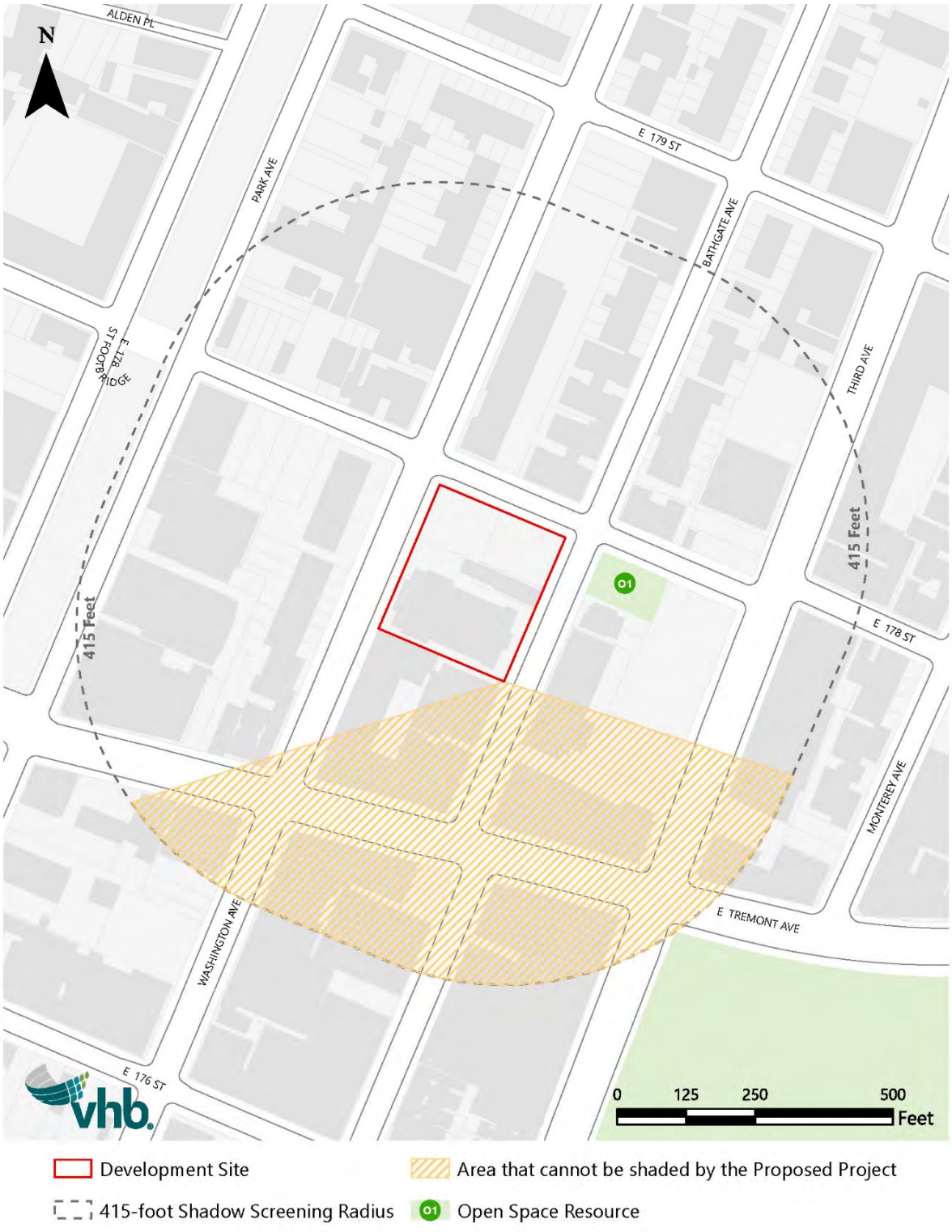
In general, a significant adverse shadow impact occurs when the incremental shadow added by a proposed action falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening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

Preliminary Assessment

Tier 1 and 2 Screening

The Proposed Development would consist of a building approximately 96.5-feet in height, including the bulkhead, which could cast a maximum shadow of approximately 415 feet. **Figure 5-1** shows the potential sunlight-sensitive resources identified in the Tier 1 and Tier 2 Screening Assessment. There is one publicly accessible open space resource that is within the Tier 1 and 2 shadow Study Area: El Batey De Doña Provi Garden (identified in the map as resource O1), which is located directly east across Bathgate Avenue from the Development Site. Therefore, a Tier 3 screening is warranted.

Figure 5-1 Tier 1 and Tier 2 Screening



Tier 3 Screening Assessment

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

In accordance with the *CEQR Technical Manual*, a model of the building in the With-Action condition was developed in a three-dimensional computer program (Sketchup). The model was geo-located and the surrounding terrain was imported to account for differences in topography. As noted above, the Tier 3 shadow screening shows the shadows that could be cast as a result of the Proposed Development but does not account for existing buildings which may already cast shadows on the identified resources. **Figure 5-2** to **Figure 5-9** below show Tier 3 screening results.

As illustrated in **Figure 5-2** and **Figure 5-3**, the El Batey De Doña Provi Garden (O1) is not projected to receive any Tier 3 shadows during the December 21 analysis day under the future No-Action and With-Action conditions. As illustrated in **Figure 5-5, Figure 5-7** and **Figure 5-9**, this resource could potentially receive new shadows from the Proposed Development during the March 21/September 21, May 6/August 6, and June 21 analysis days under the future With-Action condition. The potential conditions under the No-Action are provided for context in **Figure 5-4, Figure 5-6** and **Figure 5-8.** Based on the Tier 3 screening assessment, it was determined that a detailed analysis was warranted to quantify the potential extent and duration of incremental shadow on El Batey De Doña Provi Garden.

Figure 5-2 Tier 3 Screening – Dec 21 Analysis Day (No Action)

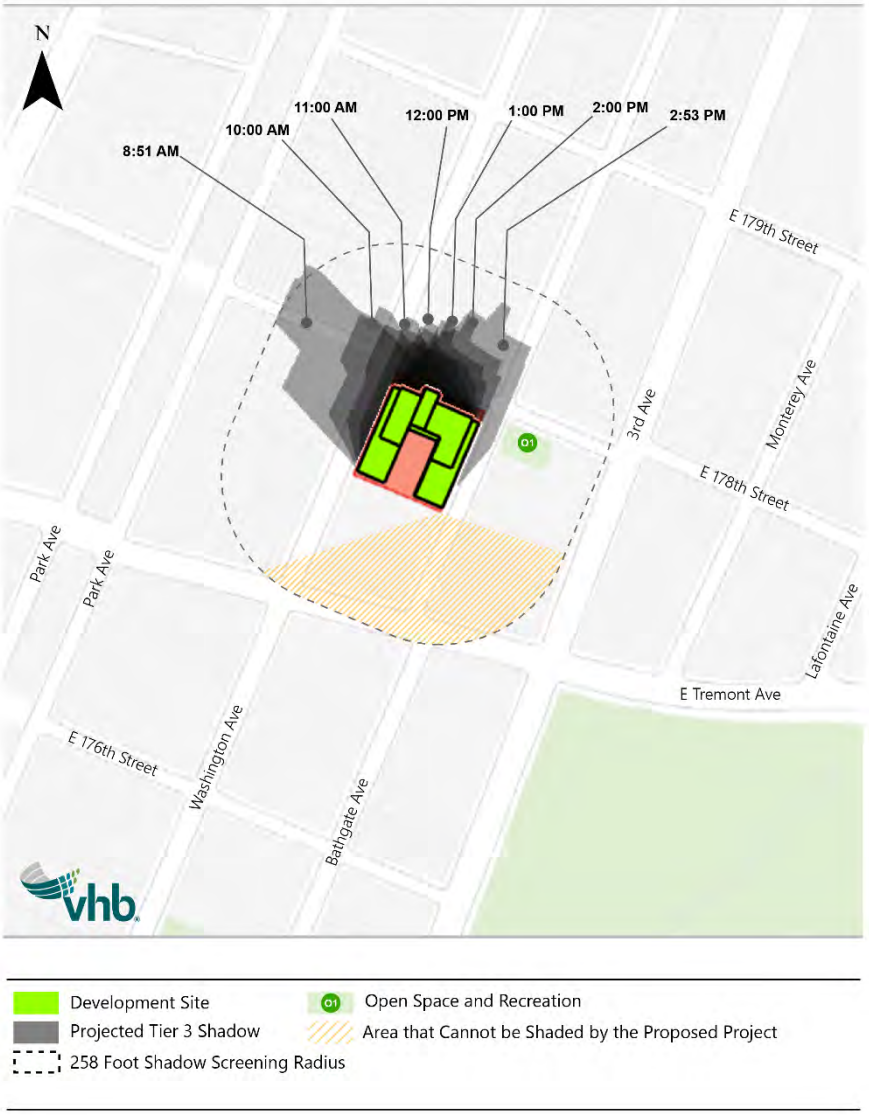


Figure 5-3 Tier 3 Screening – Dec 21 Analysis Day (With-Action)

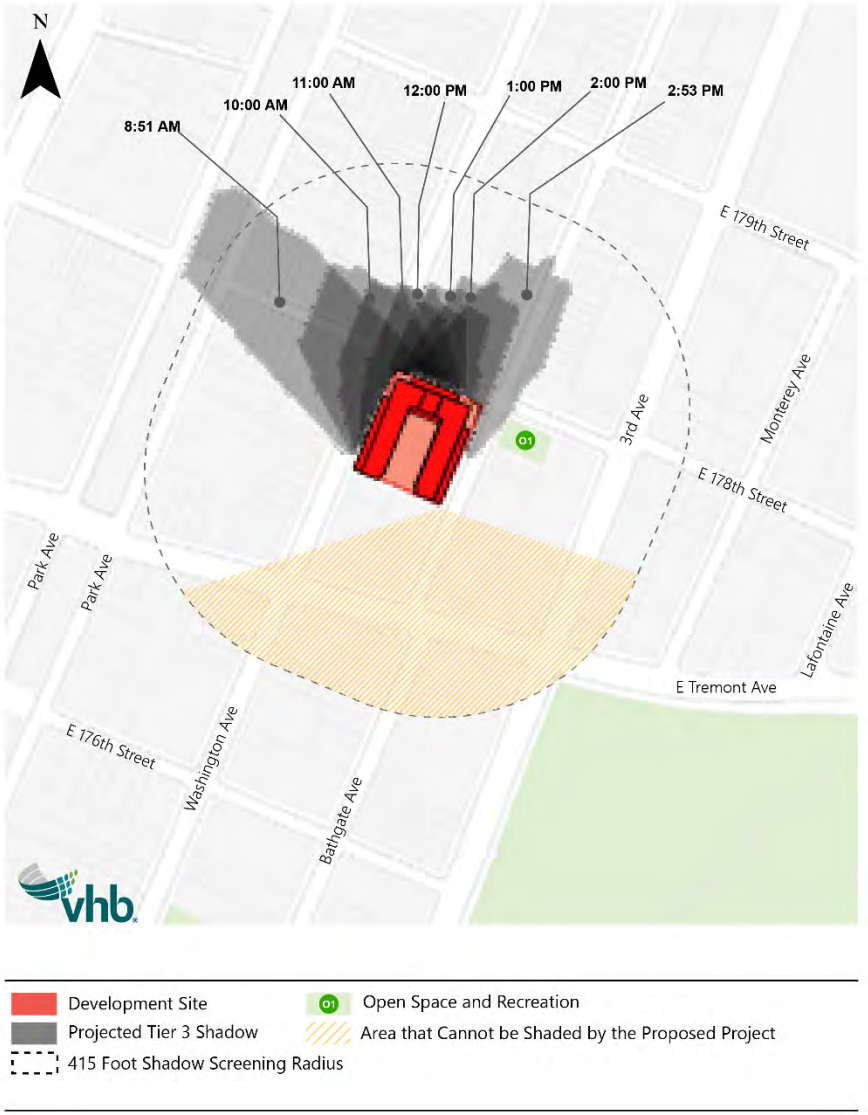
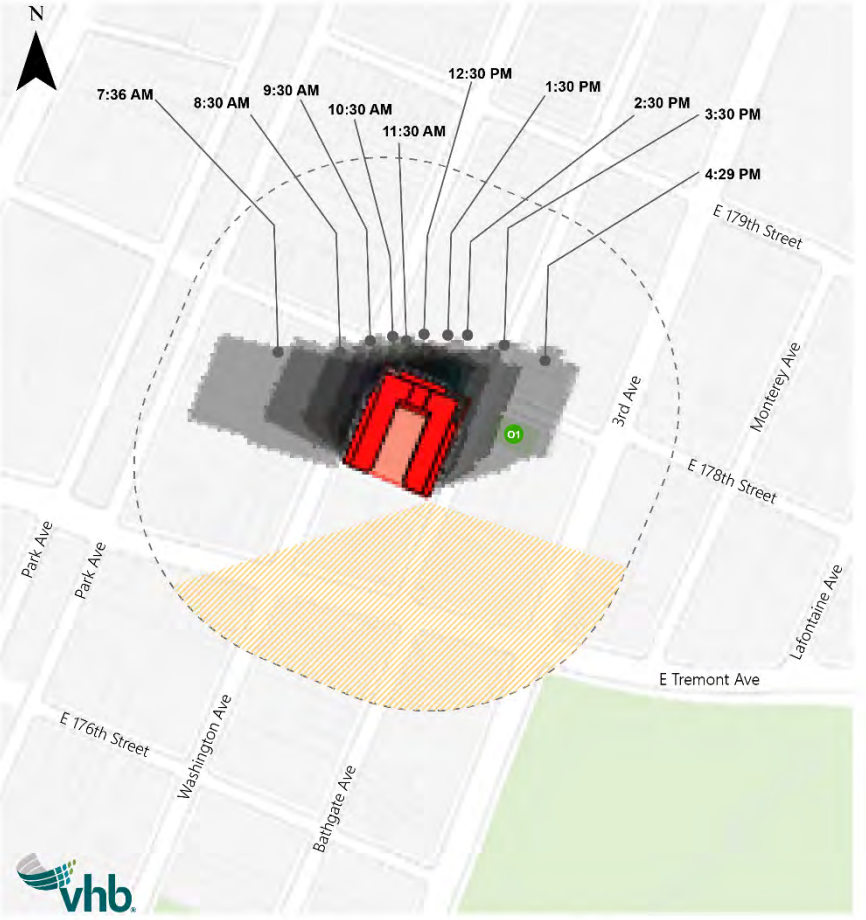


Figure 5-4 Tier 3 Screening – March 21 Analysis Day (No-Action)



Development Site
Projected Tier 3 Shadow
258 Foot Shadow Screening Radius
Open Space and Recreation
Area that Cannot be Shaded by the Proposed Project

Figure 5-5 Tier 3 Screening – March 21 Analysis Day (With Action)



Development Site
Projected Tier 3 Shadow
415 Foot Shadow Screening Radius
Open Space and Recreation
Area that Cannot be Shaded by the Proposed Project

Figure 5-6 Tier 3 Screening – May 6 Analysis Day (No-Action)

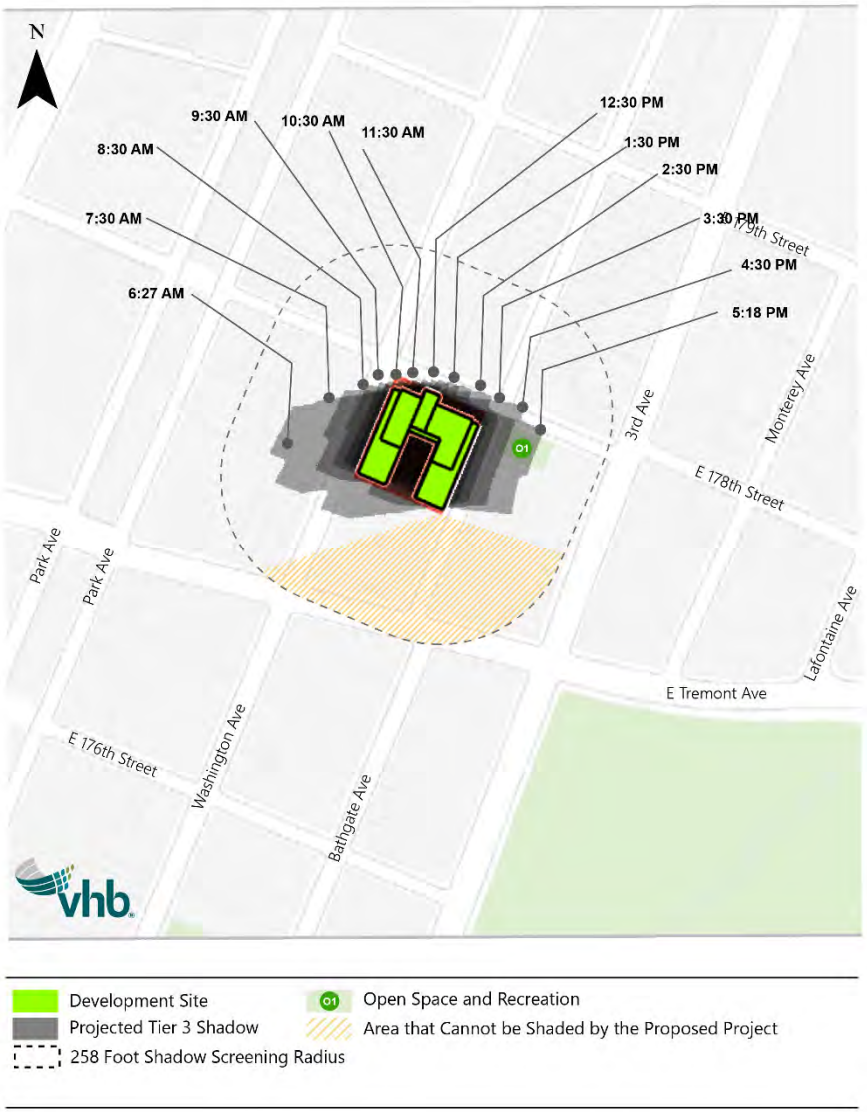


Figure 5-7 Tier 3 Screening – May 6 Analysis Day (With-Action)

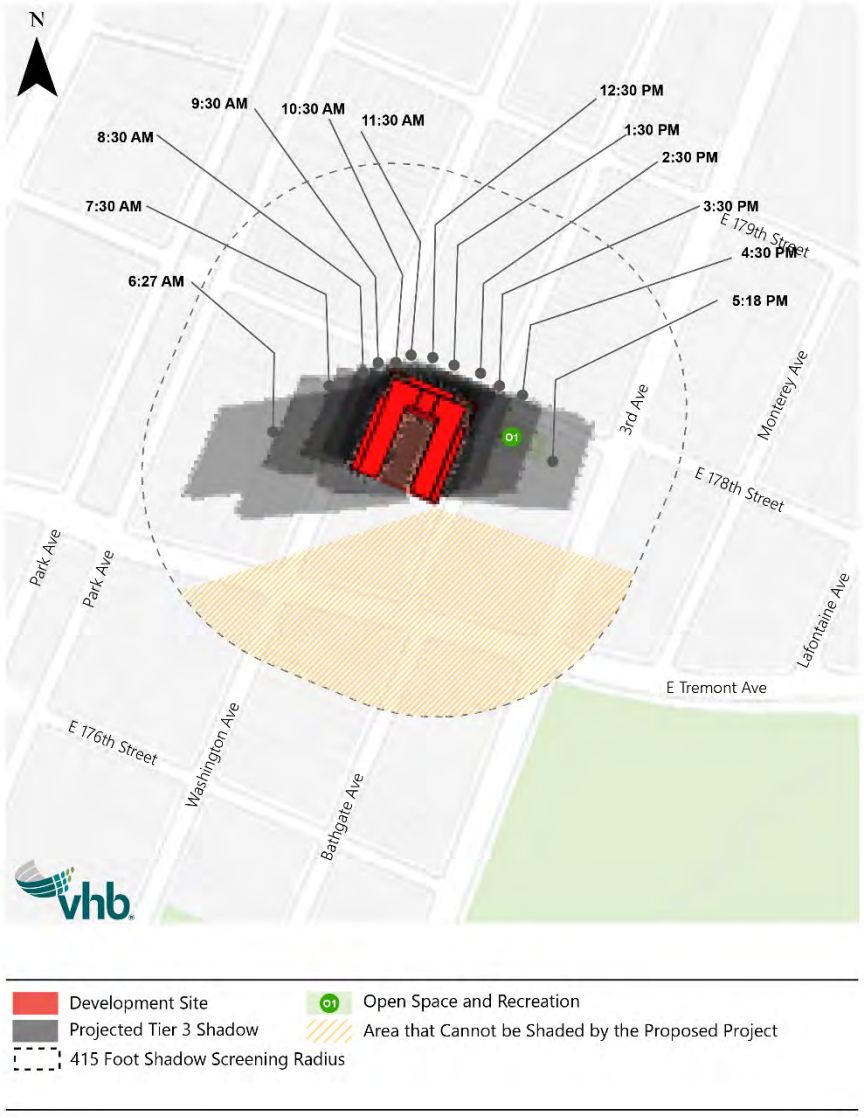
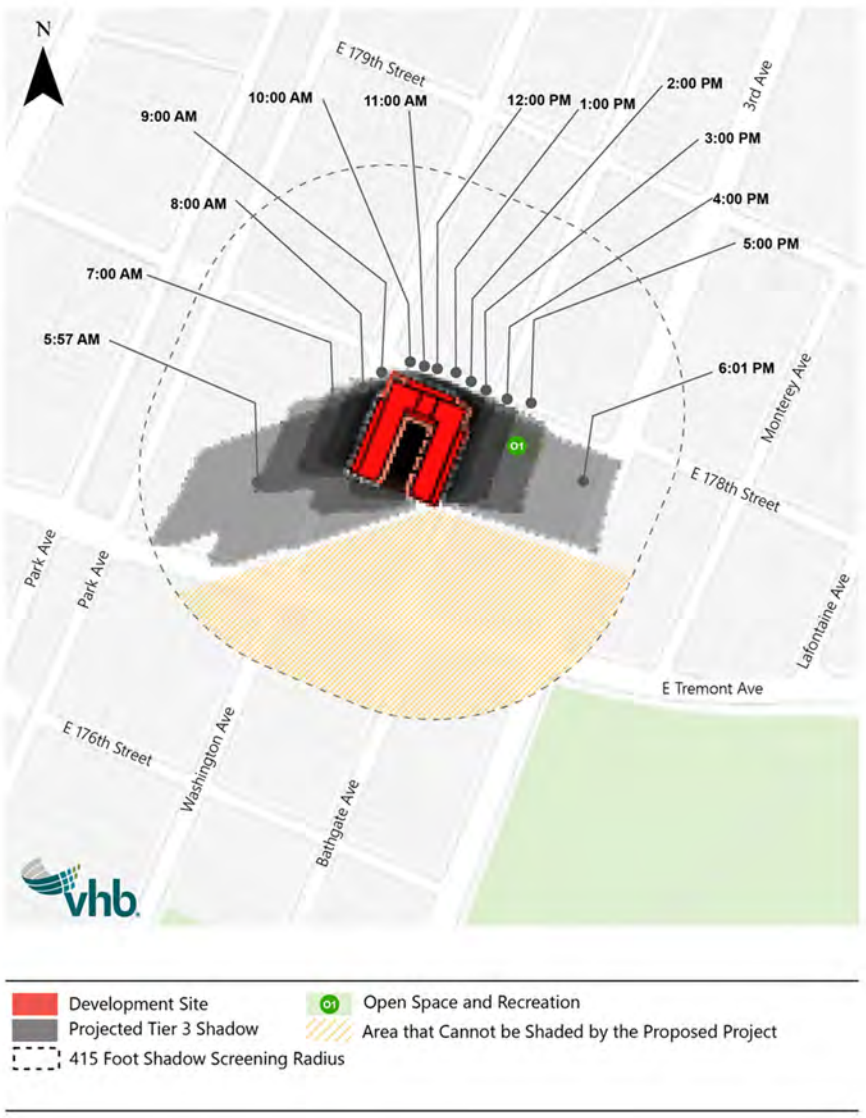


Figure 5-8 Tier 3 Screening – June 21 Analysis Day (No-Action)



Figure 5-9 Tier 3 Screening – June 21 Analysis Day (With-Action)



Detailed Assessment

No-Action Condition

As discussed in **Section 1, Project Description**, without the proposed rezoning, the Applicant would develop the site with an as-of-right building consistent with the regulations of the existing R6A district. The future No-Action condition is assumed to include the development of a 3.0 FAR, seven-story, multi-family residential building (156,395 zsf). The building would have a maximum allowable height of 70 feet (or 75 feet if providing Quality Ground Floor) after a maximum base height of 60 feet (65 feet if providing Quality Ground Floor). The future No-Action condition would be developed as-of-right within the current zoning regulations to the maximum permitted FAR and height at the Development Site, without the adoption of an Inclusionary Housing bonus.

With-Action Condition

As discussed in **Section 1, Project Description**, in the future with the Proposed Actions (the With-Action condition), the Development Site would be developed with a U-shaped, 11 story, and 96.5-foot-tall building to the roofline along all three sides (north, east, and west) of the U-shaped design. The building would step down to eight stories (67.5 feet) along the three street frontages while remaining 11 stories at the two street corners.

Modeling Results

The detailed shadow analysis compares the future condition resulting from the Proposed Actions (With-Action condition) to the baseline condition (No-Action condition) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the Proposed Project. Any new shadows projected to be cast onto the identified resources from the Proposed Project are considered "incremental shadows."

Table 5-1 provides the modeled incremental shadow entry/exit times for the El Batey De Doña Provi Garden (O1). The start times shown in the table represent the time that incremental shadow would enter any portion of the open space, and the end time represents the time that the incremental shadows leave the open space.

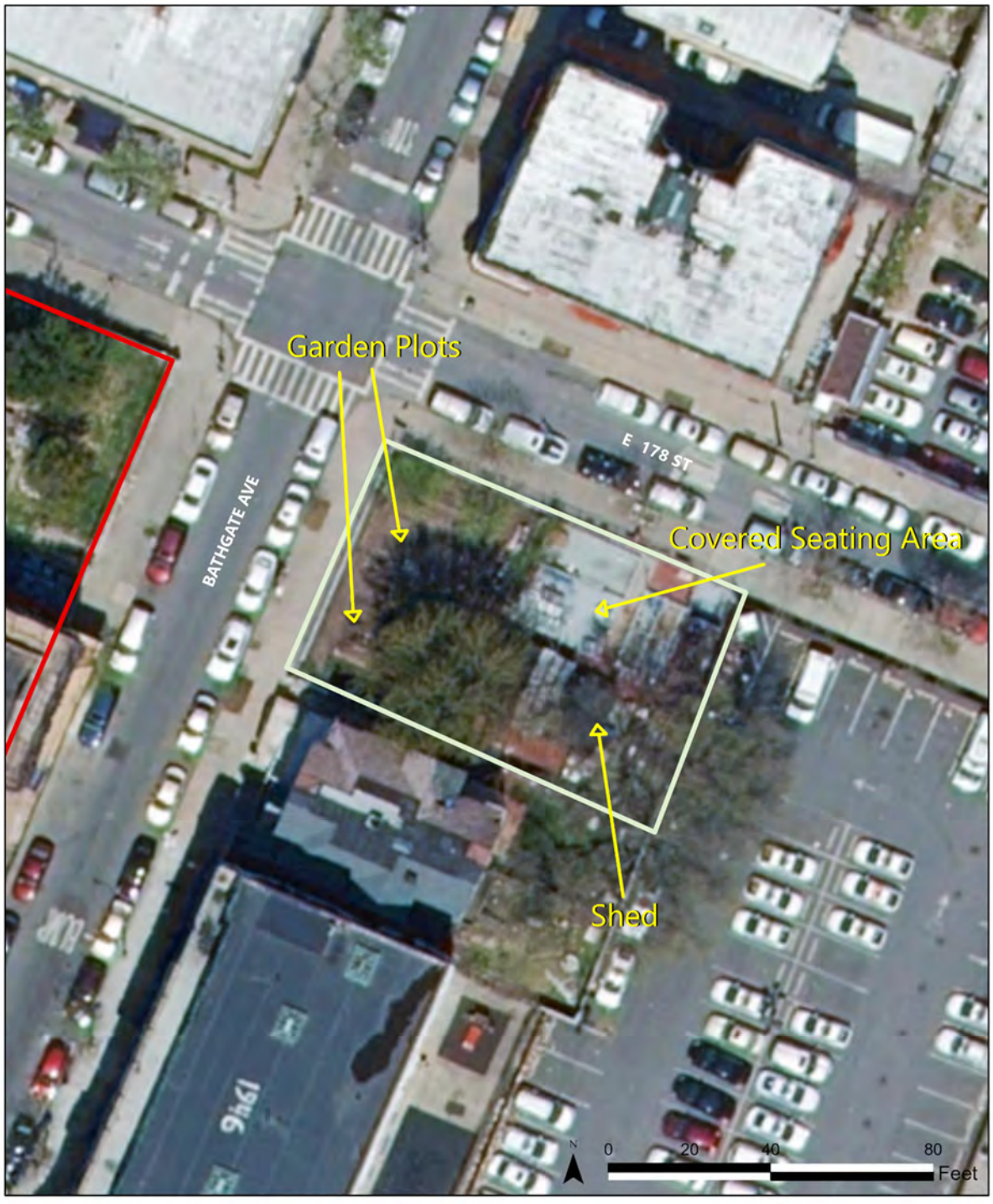
Table 5-1 Detailed Analysis Summary of Incremental Shadow Entry/Exit Times

	Analysis Day			
Resource	**Dec 21 8:51A-2:53P**	**March 21/Sept 21 7:36A-4:29P**	**May 6/Aug 6 6:27A-5:18P**	**June 21 5:57A-6:01P**
O1 – El Batey De Doña Provi Garden	-	2:55 – 4:29 PM, 1 hour, 34 minutes	2:55 – 5:14 PM, 2 hours, 19 minutes	3:00 – 5:59 PM, 2 hours, 59 minutes

The El Batey De Doña Provi Garden (O1) is a 5,595 square foot community garden located on the southeast corner of Bathgate Avenue and East 178th Street. There is no information available for when the garden is open to the public. It contains areas for passive recreation, including a garden, and other vegetation. This open space resource is directly east across Bathgate Avenue from the Development Site. The garden is divided into two roughly equal

square sections. The western half of the garden, directly across Bathgate Avenue from the Proposed Development, contains sunlight sensitive resources such as garden plots and trees. The eastern half of the garden contains a flexible seating area with tables and chairs that are shaded by shelters (see **Figure 5-10**). Incremental shadow from the Proposed Development would fall on the garden on three analysis days: March 21st/September 21st for 1 hour and 34 minutes, May 6th/August 6th for 2 hours and 19 minutes, and June 21st for 2 hours and 59 minutes.

Figure 5-10 El Batey De Doña Provi Garden Layout



March 21st/September 21st Analysis Day

As shown in **Figure 5-11** through **Figure 5-16**, incremental shading from the Proposed Development would reach the garden's west side at 2:55 PM on the March 21st/September 21st analysis day and last until 4:29 PM, a duration of 1 hour and 34 minutes. The incremental shadow would reach the western garden plots and a portion of the eastern seating area on the site. Sunlight would be entirely eliminated from the resource from 4:00 PM to 4:29 PM (a duration of 29 minutes). However, the majority of the garden would continue to receive direct sunlight from the start of the analysis period until shading from the Proposed Development reaches it at 2:55 PM, a period of approximately 7 hours and 19 minutes. Therefore, even though direct sunlight would be eliminated from the resource for 29 minutes, the garden would still receive ample sunlight, and there would be no adverse impact to the viability of vegetation or the users' enjoyment of the garden.

May 6th/August 6th Analysis Day

On May 6th/August 6th, incremental shading would reach the garden's west side at 2:55 PM and would last until 5:14 PM, a duration of 2 hours and 19 minutes, (see **Figure 5-17** through **Figure 5-25**). The incremental shadow would reach the western garden plots and a portion of the eastern seating area on the site. Sunlight would be entirely eliminated from the resource from 4:26 PM to 5:18 PM (a duration of 52 minutes) However, on this analysis day, the garden receives nearly unobstructed sunlight from the start of the analysis period until shading from the Proposed Development begins at 2:55 PM, a period of approximately 8 hours and 28 minutes. Therefore, even though direct sunlight would be eliminated from the resource for 52 minutes, the garden would still receive ample sunlight on the analysis day, and there would be no adverse impact to the viability of vegetation or the users' enjoyment of the garden.

June 21st Analysis Day

On June 21st, incremental shading would reach the garden's west side at 3:00 PM and would last until 5:59 PM, a duration of 2 hours and 59 minutes (see **Figure 5-26** through **Figure 5-31**). The incremental shadow would reach the western garden plots and a portion of the eastern seating area on the site. Sunlight would be entirely eliminated from the resource from 4:46 PM to 6:01 PM (a duration of 1 hour and 15 minutes). However, on this analysis day, the garden receives nearly unobstructed sunlight from 7:00 AM until shading from the Proposed Development begins at 3:00 PM, a period of approximately 8 hours. Therefore, even though direct sunlight would be eliminated from the resource for 1 hour and 15 minutes, the garden would still receive ample sunlight on the analysis day, and there would be no adverse impact to the viability of vegetation or the users' enjoyment of the garden.

Summary

Overall, the garden would receive between 1 hour and 34 minutes and 2 hours and 59 minutes of incremental shadow on the three analysis days. However, the garden would still receive mostly unobstructed direct sunlight for periods ranging from 7 hours and 19 minutes to 8 hours and 28 minutes on each of these analysis days. This remaining sunlight throughout the day would be sufficient to ensure the viability of vegetation and the enjoyment of passive recreational spaces by users who have access to the garden. The

periods during which the garden would receive shading from the Proposed Development would not substantially affect the growing periods for the garden or the use and user's enjoyment of the garden's other amenities such as seating. Therefore, there would be no adverse impact to the garden as a result of shadows.

Conclusion

In conclusion, the Tier 1 through Tier 3 and detailed shadows analysis conducted for the Proposed Development determined that in the With-Action condition, project-generated incremental shadows would reach only one sunlight sensitive open space resource: El Batey De Doña Provi Garden. The location of incremental shadows in relation to sunlight sensitive features, the duration of incremental shadows, and sunlight conditions throughout the analysis day were considered in determining the significance of the project-generated shadows.

Overall, the one open space resource would continue to receive mostly uninterrupted sunlight for seven or more hours on the three analysis days during which it would receive shading from the Proposed Development. On the March 21st/September 21st analysis day, the majority of the garden would receive direct sunlight from the start of the analysis period until shading from the Proposed Development would reach it at 2:55 PM, a period of approximately 7 hours and 19 minutes. On the May 6th/August 6th analysis day, the garden would receive nearly unobstructed sunlight from the start of the analysis period until shading from the Proposed Development would reach it at 2:55 PM, a period of approximately 8 hours and 28 minutes. On the June 21st analysis day, the garden would receive nearly unobstructed sunlight from 7:00 AM until shading from the Proposed Development would reach it at 3:00 PM, a period of approximately 8 hours. Therefore, the garden would continue to have ample sunlight to support the viability of vegetation and the users' enjoyment of the garden. In conclusion, Proposed Actions would not result in significant adverse shadows impacts, and the El Batey De Doña Provi Garden would not experience significant adverse shadow impacts as a result of the Proposed Actions.

O1- El Batey de Doña Provi Garden

Figure 5-11 O1 – March 21/September 21 – 3:00 PM



Figure 5-12 O1 – March 21/September 21 – 3:15 PM



Figure 5-13 O1 – March 21/September 21 – 3:30 PM



Figure 5-14 O1 – March 21/September 21 – 3:45 PM



Figure 5-15 O1 – March 21/September 21 – 4:00 PM



Figure 5-16 O1 – March 21/September 21 – 4:15 PM



Figure 5-17 O1 – May 6/August 6 – 3:00 PM



Figure 5-18 O1 – May 6/August 6 – 3:15 PM



Figure 5-19 O1 – May 6/August 6 – 3:30 PM



Figure 5-20 O1 – May 6/August 6 – 3:45 PM



Figure 5-21 O1 – May 6/August 6 – 4:00 PM



Figure 5-22 O1 – May 6/August 6 – 4:15 PM



Figure 5-23 O1 – May 6/August 6 – 4:30 PM



Figure 5-24 O1 – May 6/August 6 – 4:45 PM



Figure 5-25 O1 – May 6/August 6 – 5:00 PM



Figure 5-26 O1 – June 21 – 3:05 PM



Figure 5-27 O1 – June 21 – 3:35 PM



Figure 5-28 O1 – June 21 – 4:05 PM



Figure 5-29 O1 – June 21 – 4:35 PM



Figure 5-30 O1 – June 21 – 5:05 PM



Figure 5-31 O1 – June 21 – 5:35 PM



6

Historic and Cultural Resources

Introduction

Historical and cultural resources are defined as improvements or landscape features that could be or have been determined to have a special character, historical, or asthetic interest or value. Historic or cultural resources comprise districts, buildings, structures, sites and objects of historical, aesthetic, cultural, and archaeological significance. According to the *2020 CEQR Technical Manual*, these resources include: properties that have been designated, or are under consideration for being designated, as New York City Landmarks or Scenic Landmarks, or are eligible for such designation; properties within New York City Historic Districts; properties listed in, or determined eligible for listing in, the State and/or National Register of Historic Places; and National Historic Landmarks.

This section assesses the potential for the Proposed Actions to affect architectural and archaeological resources located on the Project Area and in the surrounding area.

Methodology

The *CEQR Technical Manual* notes that environmental review for historic and cultural resources includes a survey and planning process that helps protect New York City cultural heritage from the potential impacts of projects undergoing CEQR. Historic and cultural resources include both archaeological and architectural resources.

Archaeological resources are physical remains, usually subsurface, of pre-contact, post-contact, and historic periods—such as burials, foundations, artifacts, wells, and privies. Archaeological resources are usually assessed for projects that would result in any in-ground disturbance. In-ground disturbance is any disturbance to an area not previously excavated, including new excavation deeper and/or wider than previous excavation on the same site.

Architectural resources include historically significant buildings, structures, objects, sites, and districts. Architectural resources include designated New York City landmarks, buildings within a designated New York City historic district, properties calendared for consideration by the New York City Landmarks Preservation Commission (LPC), properties listed on or determined to be eligible for listing on the State or National Register of Historic Places, National Historic Landmarks, and other properties that meet the eligibility criteria for such designations.

Generally, architectural resources should be surveyed and assessed if the Proposed Project would result in any of the following, whether or not any known historic resources are located near the site of the project:

- New construction, demolition, or significant physical alteration to any building, structure, or object;
- A change in scale, visual prominence, or visual context of any building, structure, object or landscape feature. Visual prominence is generally the way in which a building, structure, object, or landscape feature is viewed. For example, a building may be part of an open setting, such as a tower within a plaza, which is either conforming or non-conforming with the street wall in terms of its height, footprint, and/or setback. Visual context is the character of the surrounding built or natural environment. This may include the following: the architectural components of an area's buildings (e.g., height, scale, proportion, massing, fenestration, ground-floor configuration, style), streetscapes, skyline, landforms, vegetation, and openness to the sky;
- Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects;
- Additions to or significant removal, grading, or replanting of significant historic landscape features;
- Screening or elimination of publicly accessible views;
- Introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or on an historic structure if the features that make the structure significant depend on sunlight. For example, stained glass windows that cannot be seen without sunlight, or buildings containing design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements, such as deep window reveals and prominent rustication.

Assessment

Existing Conditions

Development Site

A review of the New York State Office of Parks, Recreation and Historic Preservation (NYS OPRHP) Cultural Information System (CRIS) and the NYC LPC online archaeological resources indicates that the Development Site does not fall within an area of archaeological sensitivity. In accordance with CEQR, a letter requesting environmental review and historic clearance was submitted to LPC for the Project Area. A findings statement issued by LPC on May 18, 2020, indicated that there are no properties with architectural or archaeological siginifcance

in the Project Area (see Appendix A). Therefore, no additional analysis is required for archaeological resources.

The southern portion of the Development Site was formerly improved by the St. Joseph Roman Catholic Church, which is currently undergoing demolition. A 55-foot-tall, one-story building constructed in 1898, it was set back from the lot line approximately eight feet and 20 feet on both sides, respectively.[1]

The central portion of the Development Site is currently vacant and was formerly improved with a four-story rectory (identified as an Academy and then Convent on historic maps) in 1901. Additional structures, which may have served as residences, were constructed north of the church and rectory. A six-story mixed use residential and commercial building in the shape of a horseshoe was constructed in the northwestern portion of the site in 1915. This configuration remained unchanged until 1981, when the horseshoe-shaped building and the residence south of it were demolished. According to aerial photographs, the dwellings in the northeast portion of the site, just north of the rectory, were demolished in 2013.[2] St. Joseph's Church was closed in 2015 and the parish merged with St. Simon Stock Church, also in the Tremont section. The Church and rectory were demolished in 2019.

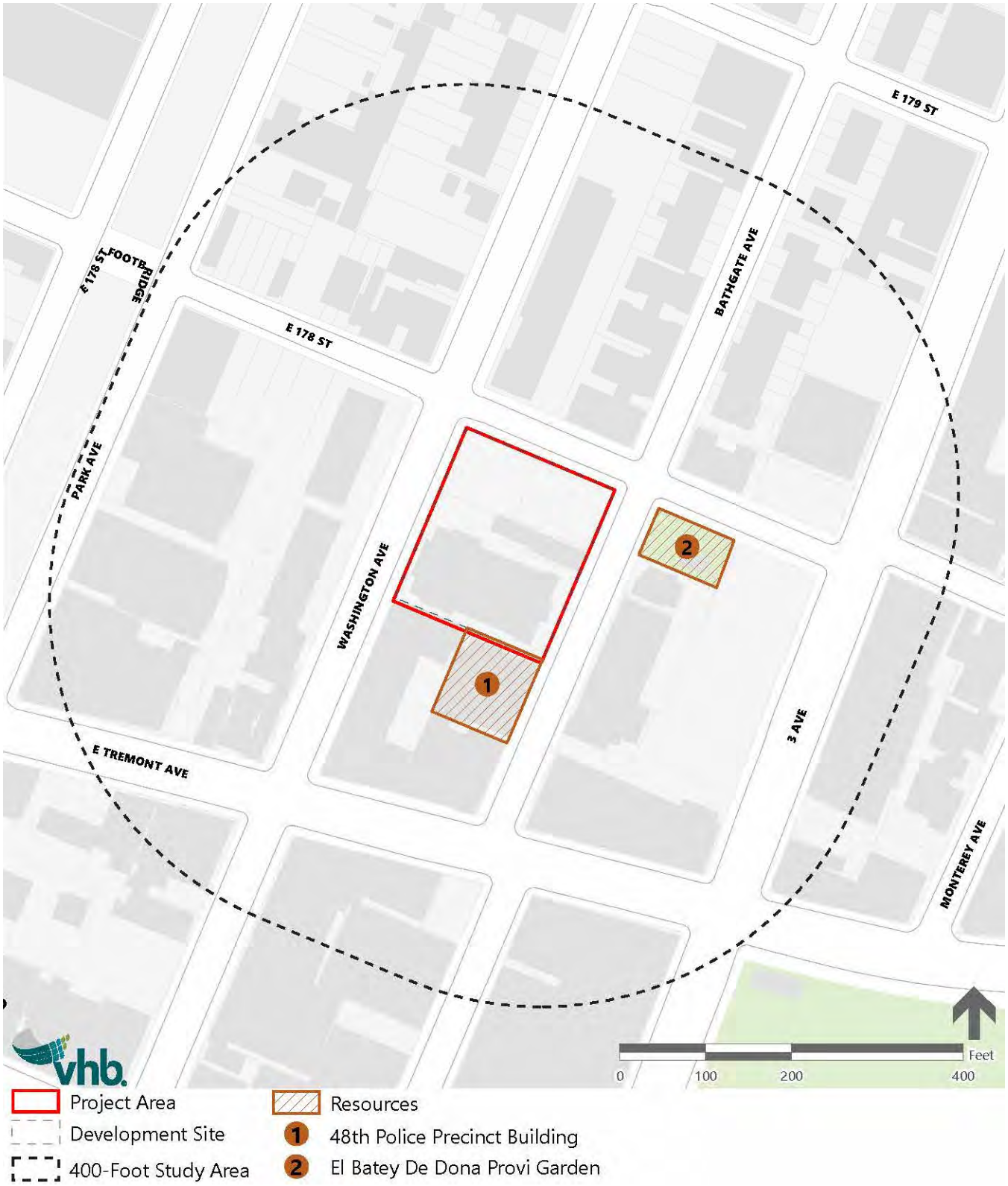
Study Area

A review of the NYS CRIS and the LPC online reports indicates that there are two identified architectural resources within a 400-foot Study Area details (see **Figure 6-1**). One resource, the 48th Police Precinct, is listed on the National Register of Historic Places (NR). The second resource, the El Batey De Dona Provi Garden, is identified in the CRIS as an undetermined resource. These resources are described in further detail below.

[1] Church of St. Joseph, available here http://www.nycago.org/Organs/Brx/html/StJosephRC.html, accessed on October 8, 2019.

[2] Phase I Environemental Site Assessment, Saint Joseph's Roman Catholic Church, prepared by VHB for Assoication of New York Catholic Homes, September 2019.

Figure 6-1 Development Site with 400-Foot Study Radius



48th Police Precinct Building

The NR-listed 48th Police Precinct Building (90NR00038; USN 00501.000716), located at 1925 Bathgate Avenue, is situated adjacent to the Development Site. Designed in 1900 by Horgan and Slattery and constructed in 1901, it is a free-standing, three-story, rectangular block constructed of yellow brick with stone trim and Italian Rennaissance Revival details (see **Photo 6-1**). The building was listed on the NRHP in 1983 under Criterion C as an excellent example of Italian Rennaissance Revival municipal architecture.[3] Since listing, the heavy, ornate cast iron cornice and underlying frieze were removed and replaced with flush concrete cladding, resulting in a loss of historic integrity. However, other stylistic details such as the rusticated first story, alternating pediment styles of the second story, and quoins are extant. The building is currently home to the Sharon Baptist Head Start, a day care and preschool facility.

Photo 6-1 NR-listed 48th Police Precinct Building, 1925 Bathgate Avenue



[3] National Register Nomination Form for the 48th Police Precinct Station, 1925 Bathgate Avenue, Bronx, New York. March 15, 1983. On file, NYS CRIS.

El Batey De Dona Provi Garden

The El Batey de Dona Provi Community Garden (USN 00501.002670) is located at 1952 Bathgate Avenue. Owned by the New York City Parks, the site functions as a community garden. The site is occupied by a single-story, square plan four wall structure covered with a gable roof (see **Photo 6-2**) constructed in 1988. The site is noted in the NYS CRIS with accompanying photographs, but no additional information is recorded and it was not evaluated for eligibility by OPRHP. The property is not a LPC-designated landmark or historic resource. It does not appear to be eligible for the State and/or National Registers.

Photo 6-2 El Batey De Dona Provi Garden, 1952 Bathgate Avenue



Source: NYS CRIS (photograph dated March 30, 2019)

Future No-Action Condition

Without the proposed rezoning, the Applicant would develop the site with an as-of-right building consistent with the regulations of the existing R6A district, since the existing buildings are currently being demolished. The Development Site would be developed to the maximum permitted FAR and height, without the adoption of an Inclusionary Housing bonus. The future No-Action condition is assumed to include the development of a 7-story, 187,474 gsf multi-family residential building consisting of 164-to-174 units. Approximately 48 units would be affordable. The building would have a maximum allowable height of 70 feet (or 75 feet if providing Qualifying Ground Floor) after a maximum base height of 60 feet (65 feet if providing Qualifying Ground Floor).

The No-Action condition would result in a visual effect to the National Register-listed 48th Police Precinct Building, by introducing a large-scale, seven-story modern residential building on the adjacent lot. However, this would not be an adverse impact, as the historic building was listed for its architectural features, and the setting around the historic property

has evolved dramatically since the building was constructed in the beginning of the 20th century.

Development under the No-Action condition would not affect the architectural features of the historic building, which has already been compromised by the removal of the characteristic cornice and frieze.

A Construction Protection Plan would be required to protect the historic property from vibration impacts during construction, and no physical impacts to the 48th Police Precinct building would occur. Large apartment blocks populate the neighboring city blocks, which are similar in massing and scale to the development anticipated under the No-Action condition, and the streetscapes comprise a variety of building uses and construction dates.

With-Action Condition

While the scale of development would be somewhat larger under the With-Action condition (11 stories and 96 feet in height) compared to the No-Action condition (7-stories), there would be no incremental in-ground disturbance between the No-Action and With-Action Condition and therefore, no potential impact to archaeological resources. Furthermore, there is no measurable difference in effect on architectural resources between the No-Action and With-Action condition, therefore, no adverse impacts are expected to architectural resources.

Physical impacts are not anticipated, and potential construction impacts would be monitored and avoided through a Construction Protection Plan (CPP). The CPP would address how the adjacent historic building would be protected during demolition and construction. The CPP would specifically address the implementation and monitoring of the structural work that would be required without causing damage to the adjacent historic building. The CPP would be prepared in coordination with a licensed professional engineer and would follow the guidelines set forth in Section 522 ("Construction Protection Plan") of the Historic and Cultural Resources section of the *CEQR Technical Manual*, including conformation to New York City Landmarks Preservation Commission Guidelines for Construction Adjacent to a Historic Landmark and Protection Programs for Landmark Buildings. The CPP would also comply with the procedures set forth in the New York City Department of Building's Technical Policy and Procedure Notices (TPPN) #10/88. The CPP would be submitted to LPC for review and approval prior to implementation. LPC would review and comment/approve within 30 days of receiving the CPP from the Applicant.

While the introduction of a new residential development of this scale would alter the setting of the 48th Police Precinct building, the existing setting is not historic and is not considered to be a character-defining feature of the historic property.

Therefore, there is no measurable difference in effects between the No-Action and With Action conditions, and effects under both conditions are not considered to be significantly adverse.

Conclusion

As described above, a review of the NYS OPRHP CRIS and LPC indicates that the Project Area does not fall within an area of archaeological sensitivity. No archaeological sites have been documented within the Project Area. Similarly, no historic architectural resources are

identified in the Project Area (see Appendix A). As such, it is expected that the Proposed Project would not adversely impact any known designated or potential historic or archaeological resources within the Development Site.

The Proposed Project would not significantly alter or affect the setting, visual relationship, or publicly accessible views of the identified historic resources within the Study Area, and therefore there would be no potential for a significant adverse impact related to historic and cultural resources.

7

Urban Design and Visual Resources

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

Introduction

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

Based on the *CEQR Technical Manual*, a preliminary assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. As described in **Section 1, Project Description**, the Applicant is proposing to construct a residential building of approximately 267,324 gross square feet (gsf), totaling up to 287 units, all of which would be affordable units. The Proposed Actions would permit a built floor area

beyond what would be permitted in the future No-Action condition. Therefore, a preliminary urban design and visual resources screening assessment was conducted.

Methodology

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

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

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

Within the 400-foot radius of the Development Site there are no points of public waterfront access, public parks, landmarks, or natural resources. There is a community garden within the study area, El Batey De Dona Provi, but it is not open to the public consistently and therefore does not warrant a visual resources assessment, Therefore, a preliminary assessment of visual resources is not warranted.

The following preliminary urban design assessment follows these guidelines and provides a characterization of existing conditions, a description of urban design under the future No-Action and With-Action conditions, and an analysis determining the extent to which physical changes resulting from the Proposed Actions would alter the pedestrian experience.

Study Area

The urban design and visual resources study area is typically defined as the area within 400 feet of the Development Site—which, for this project, is generally bounded by Third Avenue to the east and Park Avenue to the west, midblock between East 178th and East 179th to the north, and Tremont Avenue to the south (See **Figure 7-1**). This is the area in which the

Proposed Actions would be most likely to have effects in terms of urban design and visual resources.

Preliminary Assessment

Existing Conditions

Development Site

The Development Site is located at 1949 Bathgate Avenue and is comprised of Lots 10, 16, 22, and 23 of Bronx tax block 3043 in the neighborhood of Tremont. The Development Site is bounded by East 178th Street to the north, Bathgate Avenue to the east, Lots 8 and 30 of the same block to the south, and Washington Avenue to the west. The southern portion of the Development Site was improved with a 55-foot-tall, one-story church that was built in 1898 and is set back from the lot line approximately eight feet and 20 feet on both sides, respectively, and has side yards. The church building is currently undergoing demolition. The central portion of the Development Site, Lot 23, has approximately 25 feet of frontage on Bathgate Avenue and is currently vacant but formerly contained a four-story rectory built in 1922. The northern portion of the site, Lots 16 and 22, are currently vacant. The church has access from Washington and Bathgate Avenues.

The Project Area, in addition to the Development Site, also includes small portions (only four-feet deep) of Lot 8 and Lot 30. These two lots are largely in the C4-5X zoning district with the small four-foot slivers in the R6A district (see **EAS Figure 3.1**). Lot 8 is an interior lot fronting on Washington Avenue, and Lot 30 is an interior lot fronting on Bathgate Avenue. Lot 8 is improved with a four-story office building and Lot 30 is improved with a three-story parochial school. The building on Lot 30 is listed on the National Register of Historic Places but is not a New York City designated landmark.

Study Area

As described above, the Study Area is generally bounded by Third Avenue to the east and Park Avenue to the west, midblock between East 178th and East 179th to the north, and Tremont Avenue to the south. Study Area photographs can be found in **Photo 7-1** through **Photo 7-12** below, and their locations can be found in **Figure 7-1**.

Urban Design

The Study Area lies on a hill that slopes up from west to east. As shown in **Figure 7-1**, the Study Area is divided by a typical grid with regularly shaped blocks. Washington and Bathgate Avenues run north to south and the commercial corridor of East Tremont Avenue runs east to west. The MTA Metro North tracks and the Cross Bronx Expressway lie outside the Study Area to the west and south respectively. There are no natural features or open spaces in the Study Area, but Tremont Park lies just outside the Study Area to the southeast and contains walking paths, fields, a handball court, and two playgrounds.

Figure 7-1 Urban Design Photo Location Map



The Study Area is urban in character, with streets flanked by concrete sidewalks with some street tree coverage. Tremont Avenue and Third Avenue are the widest streets in the Study Area and have higher volumes of vehicular traffic. Tremont Avenue has a bike lane and stops for the Bx40 and Bx42 Tremont Avenue Crosstown MTA bus services (See **Photo 7-1**). Third Avenue has stops for the Bx15 3rd Avenue/125th Street MTA bus. The remaining streets in the area are one-way streets. Street furniture found within the Study Area includes signage, lampposts, and street trees. The Study Area's buildings are a diverse assortment or shapes and forms, ranging from one-story warehouses and shops, to attached single family homes, to taller apartment complexes and commercial buildings. All buildings in the area are under eight stories tall.

The northern portion of the Study Area contains mostly residential buildings built in the early and late 20th Century and contains a mix of elevator buildings, walk ups, and attached one- and two-family homes (See **Photo 7-2** through **Photo 7-4**). These buildings are faced with mostly brick, but some have wood paneling or stone. Some of the buildings are built up on large bases or retaining walls due to the hilly nature of the area (See **Photo 7-5**). One such retaining wall is located on the northern and eastern end of the Development Site and ranges from about seven to eleven feet tall and is constructed out of stone (See **Photo 7-6**). One other large residential use falls into the study are south of East Tremont Avenue and when complete will have a modern, eight story residential building (See **Photo 7-7**). Parts of the street and sidewalk are blocked off with sheds and temporary blockades around the building to facilitate construction.

On the eastern and western edges of the northern portion of the Study Area, the character becomes less residential and more industrial and parking/utility oriented in nature, with many warehouses and automotive oriented businesses (see **Photo 7-8** through **Photo 7-10**). These range from one- and two-story brick or concrete warehouses to large self-storage buildings, to parking lots and auto repair shops that are mostly paved over with a small shop and have lots framed by fences or iron gating. Many of these industrial lots appear inactive and some have leasing signs in their windows. One in the northeast corner of the Study Area also had a sign indicating a shopping center was coming soon, but a desktop search could not reveal its plans.

The main commercial corridor is located in the southern portion of the Study Area around the East Tremont Avenue and Third Avenue Corridors. The pattern of development here is comprised of one to six story buildings either comprised entirely of office or retail uses, some having residential uses on the upper floors (See **Photo 7-11** through **Photo 7-12**). There are buildings are mostly built with brick masonry or veneer, have large, colorful signage and display windows on the ground floor, and form a uniform street wall except for a few automotive and parking uses. This area is also populated with community facility uses, including a number of churches, two schools, and a YMCA with a learning center.

Photo 7-1 Looking west along East Tremont Ave, near Washington Avenue



Photo 7-2 View looking southwest on Washington Ave, near East 178th Street



Photo 7-3 View looking southwest on Bathgate Ave, near East 178th Street



Photo 7-4 View looking southwest on Washington Ave, across from the Development Site

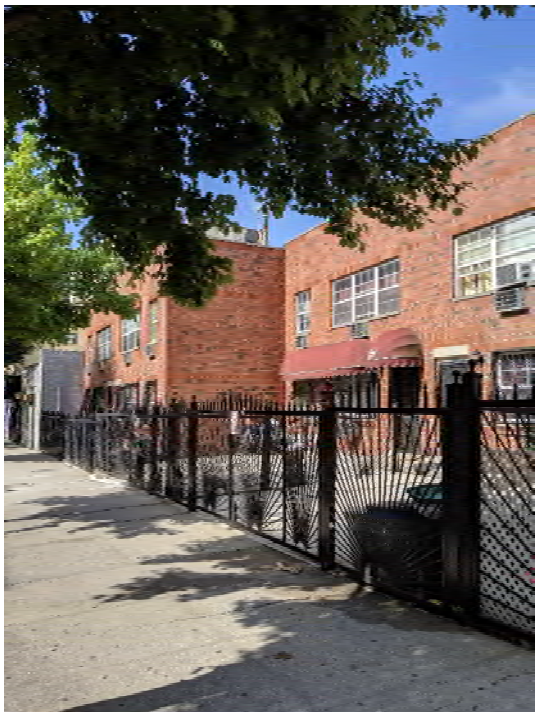


Photo 7-5 View looking east on Bathgate Ave, across from the Development Site



Photo 7-6 View looking East 178th Street, adjacent to the Development Site



Photo 7-7 View looking southwest on Bathgate Avenue, south of East Tremont Ave



Photo 7-8 View looking west on Third Ave, near East Tremont Ave

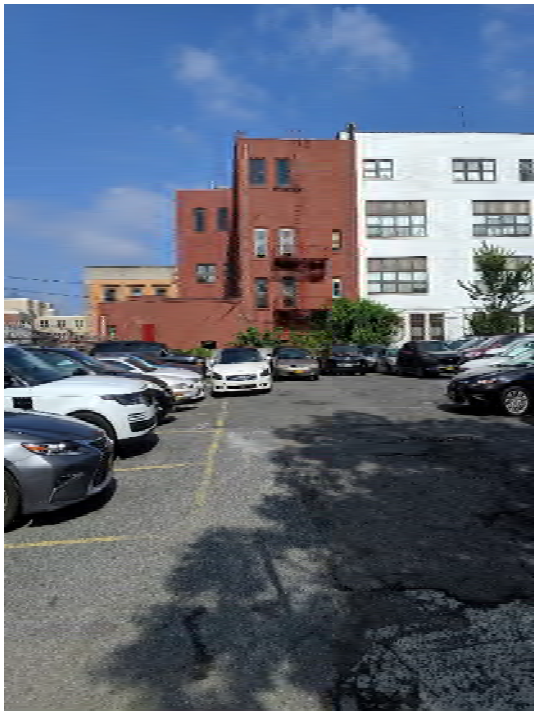


Photo 7-9 View looking south on Park Ave, near East 178th Street



Photo 7-10 View looking northeast on Park Ave, near East 178th Street

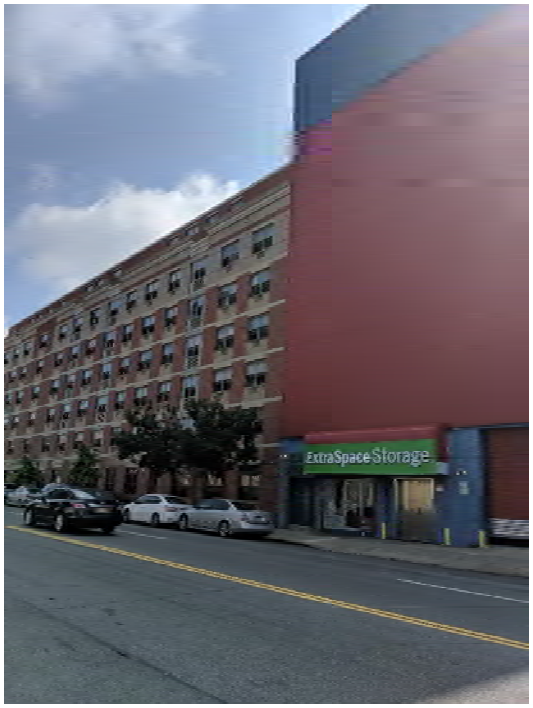


Photo 7-11 View looking west on East Tremont Avenue near Bathgate Avenue

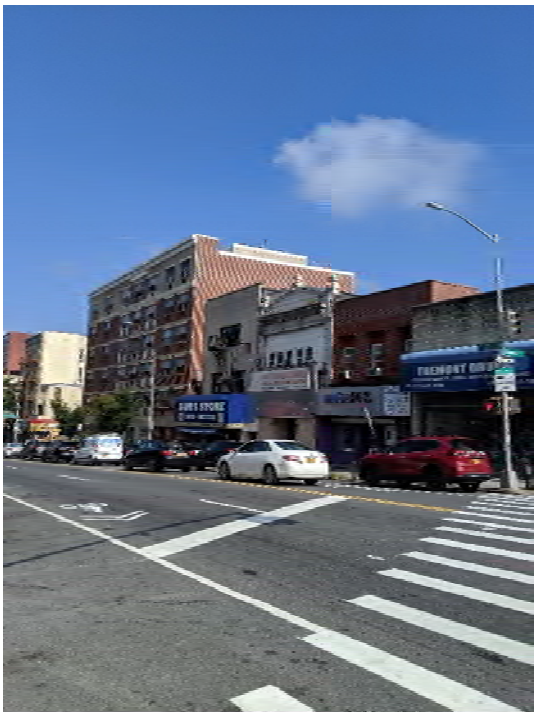


Photo 7-12 View looking southwest on Washington Avenue, across from the Development Site



No Action Condition

As described in **Section 1, Project Description**, absent the Proposed Actions (the future No-Action condition), the Development Site would be redeveloped with an as-of-right residential building consistent with the regulations of the existing R6A district, since the existing buildings are currently being demolished.

The future No-Action condition is assumed to include the development of a 3.0 FAR, seven-story, 187,474 gsf multi-family residential building (156,395 zsf) consisting of 164-to-174 units. Approximately 48 units would be affordable. The future No-Action condition would be developed as-of-right within the current zoning regulations to the maximum permitted FAR and height at the Development Site, without the adoption of an Inclusionary Housing bonus.

In keeping with the R6A district requirements, the building would have a maximum allowable height of 70 feet (or 75 feet if providing Quality Ground Floor) after a maximum base height of 60 feet (65 feet if providing Quality Ground Floor). It would have 158 feet of frontage on both Bathgate and Washington Avenues, and a main entrance on East 178th Street. An exterior terrace would be located in the center of the buildings.

As discussed in **Section 2.1, Land Use, Zoning, and Public Policy,** there are two anticipated developments within the study area expected to be completed by the 2023 analysis year. 1969 Washington Avenue, an eight-story, 49-unit residential building, is nearing completion north of the Development Site (See **Photo 7-2** above). 1888 Bathgate Avenue, a mixed use residential, commercial and community facility building with 190 units (149 affordable) is nearing completion south of the Development Site (See **Photo 7-7** above). Just outside the study area there are a few more similar developments under construction, a seven-story hotel building at 1893 Washington and a 12-story, 100 percent affordable, 256 unit building at 4215 Park Avenue. These developments will be governed by the current land use and zoning regulations.

The heights and uses of the proposed and under-construction buildings would be in keeping with trends in the surrounding study area of increased residential uses and high-density development. The architectural style of the new structures will be more modern, but in keeping with the masonry style of the buildings in the Tremont neighborhood. The No-Action development would be of a similar scale as existing and anticipated residential development in the study area.

With Action Condition

As described in **Section 1, Project Description**, in the future With-Action condition, the Development Site would be rezoned from R6A to R7D over the Project Area (Lots 10, 16, 22, and 23 and potions of Lots 8 and 30). The Project Area would also be mapped as a Mandatory Inclusionary Housing (MIH) Area. The Proposed Actions would facilitate the development of a residential building of approximately 267,324 gross square feet (gsf), totaling up to 287 units, all of which would be affordable units (the Proposed Project). As a result of the mapping of a MIH designated area over the Project Area, up to 86 dwelling units would comply with MIH affordability Options 1 or 2 and be affordable in perpetuity. This represents the future With-Action condition. Refer to **Figure 7-2** through **Figure 7-5** for a visualization of the future No-Action and With-Action conditions on the Development Site.

Figure 7-2 Building Massings: No-Action View from Corner of Washington Ave and East 178th Street Facing East



Figure 7-3 Building Massings: With-Action View from Corner of Washington Ave and East 178th Street Facing East



Figure 7-4 Building Massings: No-Action View from Corner of Bathgate Ave and East 178th Street Facing Southwest



Figure 7-5 Building Massings: With-Action View from Corner of Bathgate Ave and East 178th Street Facing Southwest



The building would be U-shaped, 11 stories, and 96.5 feet tall to the roofline along all three sides (north, east, and west) of the U-shaped design. The building would step down to eight stories (67.5 feet) along the three street frontages while remaining 11 stories at the two street corners. Exterior terraces would abut the building at the street corners and within the central portion of the U-shaped design. The ground level would feature residential apartments as well as exterior terraces in an interior courtyard. Residential apartments would be located on the upper floors, to be accessed from the main residential entrance on East 178th Street. The Proposed Project would have a total zoning floor area of 224,576 zoning square feet (zsf), with a FAR of 5.6. The Development Site is in a Transit Zone; therefore, no parking will be required nor will be provided.

Urban Design

The Proposed Actions would allow for greater density on the Development Site comparted to the No-Action condition. As in the No-Action condition, the Proposed Actions would not result in any changes to natural features, open spaces, or streets in the study area. In comparison to the No-Action condition, the With-Action condition would create a taller building on the Development Site, however, additional density on the site would facilitate the creation of a 100 percent affordable residential building, which is in keeping with trends towards increasing affordable residential development in the study area. It is also compatible with the residential uses in the study area, and comparable in height to other new developments just outside the study area. The Proposed Project will also include landscaped open space at the corners of the property, lending to an improved pedestrian experience when walking around or near the site. Therefore, the Proposed Actions are not anticipated to significantly affect the pedestrian's experience of the study area.

While the Proposed Actions would result in a larger and taller building on the Development Site, compared to the No-Action condition, the Proposed Actions would not significantly alter any urban design characteristics of the surrounding area. The height and uses of the proposed building would not be inconsistent with other new development in the surrounding area. Therefore, the Proposed Actions would not be anticipated to significantly affect any urban design features of the Development Site or study area, or the general urban design character of the neighborhood.

Conclusion

Overall, the With-Action condition would be compatible with the residential character of the surrounding area. The With-Action condition would be larger in scale than the No-Action condition (eleven stories and 287 units as opposed to seven stories and approximately 174 units), but the scale would be similar to buildings being developed within and just outside of the study area. It would also enable the creation of approximately 216 more affordable units than the No-Action condition. Therefore, the Proposed Actions would not result in a significant adverse impact on urban design, and no further analysis is necessary.

8

Hazardous Materials

The goal of this section is to determine whether the Proposed Actions 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.

Introduction

As described in the *2020 CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi-volatile organic compounds (VOCs and SVOCs), methane, polychlorinated biphenyls (PCBs), and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive or toxic).

The potential for significant impacts from hazardous materials can occur when:

- elevated levels of hazardous materials exist on a site and an action would increase pathways to their exposure;
- an action would introduce new activities or processes using hazardous materials; or
- the action would introduce a population to potential human or environmental exposure from off-site sources.

As indicated in the *CEQR Technical Manual*, the hazardous materials (E) Designation is an institutional control that may be placed on a site to establish a hazardous materials review

and approval framework. It provides a mechanism to ensure that testing for and remediation of hazardous materials, if necessary. (E) Designated parcels are administered under the New York City Mayor's Office of Environmental Remediation (OER).

This section presents the methods and findings of the hazardous materials assessment and identified potential for significant adverse impacts (as defined by the *CEQR Technical Manual*) with respect to workers, the community and/or the environment that could result during construction and after implementation of the Proposed Project.

Methodology

The potential for hazardous materials was evaluated in a Phase I Environmental Site Assessment (ESA) prepared by VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB), dated September 19, 2019. The Phase I ESA was prepared in accordance with the American Society for Testing and Materials (ASTM) Practice E1527-13, inclusive of the "All Appropriate Inquiry" requirement amended in the Federal Register on December 30, 2013. The United States Environmental Protection Agency (EPA) "All Appropriate Inquiry" requirement establishes specific regulatory requirements for conducting appropriate inquiries into the previous ownership, uses, and environmental conditions of a property for the purposes of qualifying for certain landowner liability protections under Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

The goal of a Phase I ESA process is to identify "Recognized Environmental Conditions" (RECs), which means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. Per the ASTM Standard, a Phase I ESA reviews a variety of information sources, including current and historic Sanborn Fire Insurance Maps and aerial photographs; state and federal environmental regulatory databases identifying listed sites; and local environmental records. The Phase I ESAs summarized herein also included reconnaissance of the Development Site and surrounding neighborhood and interviews with the building manager.

As stated in Practice E1527-13, there may be environmental issues or conditions at the site, which may be requested by the user to be addressed as part of the Phase I ESA, which are not covered within the scope of ASTM Practice E1527-13. These additional environmental issues (or non-scope considerations) could evaluate for the potential present of radon, lead-based paint (LBP), asbestos-containing materials (ACM), wetlands, and mold and water damage.

Preliminary Assessment

Existing Conditions

The Development Site consists of Bronx Block 3043, Lots 10, 16, 22 and 23 and is located on the northern portions of a block bound by Washington Avenue, East 178th Street, Bathgate Avenue and East Tremont Avenue in the Tremont neighborhood of the Bronx, Community

District 6. The southwestern portion of Lot 10 was improved with a 55-foot-tall, one-story vacant church—which was under demolition during the preparation of the Phase I ESA and still is currently. Lot 23 is currently vacant but formerly contained a 4-story rectory building that was recently demolished. The remainder of the Development Site is vacant. In addition to the Development Site, the Project Area also includes a four-foot sliver of two adjacent lots, Lot 8 and Lot 30, that are not controlled by the Applicant.

The Development Site is zoned R6A, as are the portions of two additional lots included in the Project Area. The adjacent Lot 8 is improved with a four-story office building and Lot 30 is improved with a three-story parochial school. The Project Area is situated along the mixed-use Third Avenue and Tremont Avenue corridors, adjacent to a primarily residential neighborhood to the north. The Project Area is in a Transit Zone, which is generally an area of the city within one-half mile of a subway station. The Development Site has been vacant since 2016.

Phase I Environmental Site Assessment

As indicated above, a Phase I ESA, dated September 19, 2019, was completed by VHB for the Development Site and includes all analyses as specified in ASTM Practice E1527-13.

Based upon information provided in the Phase I ESA including a history of the Development Site, the southern portions of the site were utilized for institutional purposes since at least 1896. The church building appeared by 1915; the rectory circa 1950. A mixed-use building present on central-west portions by 1901 was demolished by 1977. From at least 1915 to 1980, a six-story horseshoe-shaped building with a centrally located elevator was constructed on northwestern portions. There were two dwellings present on northeastern portions, with last being demolished in 2012.

The findings from the Phase I ESA as they relate to the Development Site can be summarized as follows:

- The Development Site is located at a topographic elevation that ranges from approximately 65-feet to 80-feet above mean sea level (amsl).
- Depth-to-groundwater was encountered at 11.7 to 15.9 feet below grade surface (bgs) at the nearest site with available groundwater data, located 0.10 mile south.
- Localized groundwater flow beneath the site was expected to flow to the south, toward the Harlem River.
- There are no public water supply wells within one mile of the Development Site. Potable water is provided to the surrounding properties by a municipal water source.
- There were no adjacent or surrounding New York State or federal database listings identified likely to represent an environmental concern to the Development Site.
- Two (2) steel 275-gallon and one (1) steel 1,000-gallon underground oil storage tanks (USTs) were removed in 2012. VHB identified remnant piping including a fill port.
- Lot 10 is registered with one (1) steel 3,000-gallon fuel oil aboveground fuel oil storage tank (AST) resting directly on soil, reportedly installed circa 1911.
- There were several plastic 55-gallon drums containing diesel/fuel oil identified by a demolition contractor. However, the drums were observed to be in good condition.

- No visual evidence of hazardous material disposal or industrial operations were identified during the Phase I ESA site reconnaissance.
- Sanitary wastes generated at the Development Site historically discharge into the New York City municipal sewer system. No on-site sanitary systems were identified.
- Stormwater generated at the site infiltrates into the unpaved ground or flows overland to discharge into curbside storm drains located on neighboring roadways.
- The northeastern Lot 22 is elevated with respect to the surrounding grade such that retaining walls are present surrounding the same. Urban fill may be present at the site.
- The building debris generated during demolition of the church was stockpiled within the building frame and was loaded into containers for off-site disposal.
- No dumping or surficial staining was identified within interior/exterior portions of the Development Site, and housekeeping practices were observed to be good.
- In accordance with application regulations, any ACM was abated from the entire building as part of demolition practices based on Client-provided documentation.

Based on the results of the site inspection, records review and interviews, it was determined that there were no RECs, historic recognized environmental conditions (HRECs) or controlled recognized environmental conditions (CRECs) identified for the Development Site. However, the Phase I ESA identified two environmental concerns, or Business Environmental Risks (BERs) related to the Development Site, which are summarized along with VHB's recommendations as follows:

- There is one (1) steel 3,000-gallon fuel oil AST registered to the property that reportedly was installed circa 1911, rested directly on soil and is listed as in-service as of submission of this Phase I ESA. No documentation of the AST condition has been provided to VHB for review and the site personnel present during site reconnaissance indicated that they were unaware of its location. It is unknown if the AST condition was assessed prior to the commencement of demolition activities, or whether the AST historically leaked and impacted the subsurface environment. Furthermore, no documentation of the conditions of former USTs at the time of removal has been provided. The potential presence of out-of-service oil tanks at the Development Site represents a BER. It is expected that all tanks, if encountered during demolition, will be removed in accordance with applicable regulations by the designated demolition contractor.
- Given the history of the Development Site, there is a potential for remnant structures (i.e, remnant foundations) and urban fill materials to be present on the subject properties. Potential presence of historical fill material of unknown origin is considered a BER. Historic fill materials, if encountered during redevelopment, should be removed and transported to a facility capable and permitted to handle such material during any potential redevelopment of the subject property.

Based upon a review of the Phase I ESA, the New York City Department of Environmental Protection (NYCDEP) issued correspondence to the lead agency dated December 9, 2020, indicating a Phase II ESA is required at the Development Site to adequately identify/characterize the surface and subsurface soils. NYCDEP indicated a Phase II ESA Work Plan should be prepared and submitted to NYCDEP for review and approval. Requirements indicated include an analysis of soil, groundwater and soil vapor at the Development Site in accordance with the *CEQR Technical Review Manual*. NYCDEP also

indicated a site-specific Health and Safety Plan (HASP) be prepared for the Phase II ESA field activities and should be submitted concurrently for review and approval. Based upon this requirement, a site-specific Phase II ESA Work Plan and HASP was prepared by VHB, dated January 17, 2020, and was submitted to the lead agency and associated reviewing agency (NYCDEP) for review and approval. The Phase II ESA Work Plan outlined proposed soil, groundwater and soil vapor sampling to be conducted at the Development Site in accordance with the requirements of the *CEQR Technical Manual*. Upon review, NYCDEP issued correspondence to the lead agency, dated February 21, 2020 approving the site-specific Phase II ESA Work Plan and associated HASP.

Future No-Action Condition

Absent the Proposed Actions (the future No-Action condition), the Development Site would remain within an R6A zoning district and would be redeveloped as a U-shaped seven-story multi-family residential building consisting of 164-to-174 units and designed with a landscaped inner courtyard. This would be done as-of-right within the current zoning regulations. The Development Site is in a Transit Zone; as such, no cellar-level parking would be provided.

Under the future No-Action condition, it is expected that any remnant tanks, if encountered during demolition, will be removed in accordance with applicable regulations by the designated demolition contractor and as part of site redevelopment. However, a hazardous materials (E) Designation would not be applied to the Development Site and regulatory oversight under OER would not be provided.

Future With-Action Condition

Under the future With-Action condition, a zoning map amendment to rezone the Project Area from an R6A zoning district to a R7D zoning district, which would facilitate the Proposed Project of the new 11-story multi-family residential building with U-shape design, a landscaped inner courtyard, no cellar-level parking, and up to 287 units. The Applicant intends for all 287 units to be affordable units.

To address potential contamination at the Development Site, the Proposed Actions would include an (E) Designation hazardous materials for the Development Site. As a result, compliance in association with hazardous materials would be conducted under the administration of OER prior to and during construction. The applicable text for the (E) Designation text to be applied to Projected Development Site 1 (E-602) would be as follows:

Task 1: Sampling Protocol

Prior to construction, the applicant submits to OER, for review and approval, a Phase II Investigation protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.

No sampling should begin until written approval of a protocol is received from OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum-based contamination and non-petroleum-based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any)

is necessary after review of the sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2: Remediation Determination and Protocol

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

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

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

In addition to the requirements mandated under the (E) Designation program, regulatory requirements pertaining to building materials containing ACM, LBP and/or polychlorinated biphenyls (PCBs) would be addressed under standard demolition procedures. With the implementation of the above measures, the With-Action condition would not result in any significant adverse impacts with respect to hazardous materials.

Conclusion

To reduce the potential for exposure to future site occupants, under the Proposed Actions, any potential impacts on the Development Site would be further investigated prior to future redevelopment as required by an (E) Designation for hazardous materials.

To reduce the potential for exposure to future occupants, workers, the community and/or the environment that could result during construction and after implementation of the Proposed Project, any potential remedial action that may be required would also be administered as part of the (E) Designation protocols under the regulatory oversight of OER.

In addition to the requirements mandated under the (E) Designation program, regulatory requirements pertaining to building materials containing ACM, LBP and/or PCBs would be addressed under standard demolition procedures. With the implementation of these measures, no significant adverse impacts related to hazardous materials would result from the Proposed Actions.

9

Air Quality

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

Introduction

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

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

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

  - Emissions from a project's heating, ventilation, and air conditioning (HVAC) system
  - Emissions from a project's cogeneration facility
  - Emissions from a project's enclosed parking garage
- Potential impacts on the Proposed Project from either manufacturing/processing facilities or large/major sources that are located near the Development Site

Additionally, the Proposed Project would not introduce new parking spaces. Therefore, a parking facility analysis is not warranted.

Lastly, no large/major sources were identified near the Development Site, and an assessment of these sources and their potential to affect the Proposed Project is not warranted.

Therefore, this analysis focuses on the following:

- An assessment of the potential for impacts from mobile sources introduced by the Proposed Project.
- An assessment of the potential for the project's HVAC systems to affect uses in the surrounding area ("project on existing")
- An assessment of the potential for manufacturing/processing facilities that are located near the Development Site to affect the project

Pollutants of Concern

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

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

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

Nitrogen oxides (NO_X), the most significant of which are nitric oxide (NO) and nitrogen dioxide (NO_2), can occur when combustion temperatures are extremely high (such as in engines) and atmospheric nitrogen gas combines with oxygen gas. NO is relatively harmless to humans but quickly converts to NO_2. Nitrogen dioxide has been found to be

a lung irritant and can lead to respiratory illnesses. Nitrogen oxides, along with VOCs, are also precursors to ozone formation.

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

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

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

Impact Criteria

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

National Ambient Air Quality Standards

The Clean Air Act (CAA) requires the EPA to set standards on the pollutants that are considered harmful to public health and the environment. The NAAQS were implemented as a result of the CAA, amended in 1990 (see **Table 9-1**). The NAAQS applies to six principal ("criteria") pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter 10 (PM_{10}), particulate matter 2.5 ($PM_{2.5}$), sulfur dioxide (SO_2), and ozone.

Table 9-1 National Ambient Air Quality Standards

Pollutant	Primary/ Secondary	Averaging Level	Level	Form
Carbon Monoxide (CO)	Primary	8 hours	9 ppm	Not to be exceeded more than once per year
		1 hour	35 ppm	
Lead (Pb)	Primary and secondary	Rolling 3-month average	0.15 µg/m^3 [(1)]	Not to be exceeded
Nitrogen Dioxide (NO_2)	Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Primary and secondary	1 year	53 ppb [(2)]	Annual mean
Ozone (O_3)	Primary and secondary	8 hours	0.070 ppm [(3)]	Annual fourth-highest daily maximum concentration, averaged over 3 years
Particulate Matter ($PM_{2.5}$)	Primary	1 year	12.0 µg/m^3	Annual mean, averaged over 3 years
	Secondary	1 year	15.0 µg/m^3	Annual mean, averaged over 3 years
	Primary and secondary	24 hours	35 µg/m^3	98th percentile, averaged over 3 years
Particulate Matter (PM_{10})	Primary and secondary	24 hours	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO_2)	Primary	1 hour	75 ppb[(4)]	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

Notes:

[(1)] In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m3 as a calendar quarter average) also remain in effect.

[(2)] The level of the annual NO2 standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

[(3)] Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O3 standards additionally remain in effect in some areas. Revocation of the previous (2008) O3 standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.

[(4)] The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO2 standards or is not meeting the requirements of a SIP call under the previous SO2 standards (40 CFR 50.4(3)). A SIP call is a USEPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

Source: EPA NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table, accessed May 2020

Non-criteria Pollutant Thresholds

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

The NYSDEC DAR-1 guidance document presents guideline concentrations in micrograms per cubic meter ($\mu g/m^3$) for the one-hour and annual average time periods for various air toxic compounds[1]. According to the DAR-1 guidance, residual risk of carcinogenic emissions is evaluated through the excess cancer risks per one million people associated with the carcinogenic pollutants. If the total cancer risk of all the carcinogenic toxic pollutants combined is less than one-in-one million, the residual risk is deemed acceptable, and no significant adverse air quality impacts are predicted to occur due to these pollutant releases. Additionally, the risk of non-carcinogenic toxic air emissions is evaluated through the hazard index, which is based on annual exposure limits. If the combined ratio of pollutant concentration divided by its annual exposure threshold for each of the toxic pollutants is found to be less than 2.0, the residual risk is acceptable and no significant adverse air quality impacts are predicted to occur due to these pollutant releases.

CO *De Minimis* Criteria

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

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

$PM_{2.5}$ *De Minimis* Criteria

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

- Predicted increase of more than half the difference between the background concentration and the 24-hour standard;
- Annual average $PM_{2.5}$ concentration increments which are predicted to be greater than 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is

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

predicted for stationary sources; or at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations); or

› Annual average $PM_{2.5}$ concentration increments which are predicted to be greater than 0.3 µg/m^3 at a discrete receptor location (elevated or ground level).

Background Concentrations

Background concentrations are ambient pollution levels associated with existing stationary, mobile, and other area emission sources. NYSDEC maintains an air quality monitoring network and produces annual air quality reports that include monitoring data for CO, NO_x, PM_{10}, $PM_{2.5}$, and SO_2. The latest available pollutant concentrations from NYSDEC monitoring sites located closest to the Development Site were used to develop background levels. If the pollutant concentration from the nearest monitoring station is not available, the next closest monitoring station is selected, and so forth. **Table 9-2** summarizes the background concentrations for each of the pollutants.

Table 9-2 Background Concentrations

Pollutant	Averaging Time	Monitoring Location	Background Concentration
Carbon Monoxide	1-Hour[1]	Botanical Gardens	2.01 ppm
	8-Hour[1]	Botanical Gardens	1.20 ppm
Nitrogen Dioxide	1-Hour[2]	Botanical Gardens	103.8 µg/m^3
	Annual[3]	Botanical Gardens	29.8 µg/m^3
Particulate Matter (PM_{10})	24-Hour[4]	IS 52	28 µg/m^3
Particulate Matter ($PM_{2.5}$)	24-Hour[5]	Botanical Gardens	19.9 µg/m^3
Sulfur Dioxide	1-Hour[6]	Botanical Gardens	16.3 µg/m^3

Notes:

[1] 1-hour CO and 8-hour CO background concentrations are based on the highest second max value from the latest five years of available monitoring data from NYSDEC (2014-2018)

[2] 1-hour NO_2 background concentration is based on three-year average (2016-2018) of the 98th percentile of daily maximum 1-hour concentrations from available monitoring data from NYSDEC.

[3] Annual NO_2 background concentration is based on the maximum annual average from the latest five years of available monitoring data from NYSDEC (2014-2018).

[4] 24-hour PM_{10} is based on the highest second max value from the latest three years of available monitoring data from NYSDEC (2016-2018).

[5] The 24-hour $PM_{2.5}$ background concentration is based on maximum 98th percentile concentration averaged over three years of data from NYSDEC (2016-2018).

[6] 1-hour SO_2 background concentration is based on maximum 99th percentile concentration averaged over the latest three years of available monitoring data from NYSDEC (2016-2018).

Source: NYSDEC Ambient Air Quality Report, 2018, http://www.dec.ny.gov/chemical/8536.html, https://www.dec.ny.gov/docs/air_pdf/2018airqualreport.pdf.

$PM_{2.5}$ impacts are assessed on an incremental basis and compared with the $PM_{2.5}$ *de minimis* criteria, without considering the annual background. Therefore, the annual $PM_{2.5}$ background is not presented in the table. The 24-hour CEQR threshold for this project is 7.6 µg/m^3.

Methodology

Mobile Source Screening Analysis

A screening analysis of mobile source emissions of CO and PM on ambient pollutant levels in the study area was conducted per *CEQR Technical Manual* guidance using the preliminary trip generation analysis output from DCP's CEQR App. For the project's study area, as described in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*, the threshold for conducting an analysis of CO emissions corresponds to 170 project-generated vehicles at a given intersection in the peak hour. The need for conducting an analysis of PM emissions is based on road type and the number of project-generated peak hour heavy-duty diesel vehicles (or its equivalency in vehicular $PM_{2.5}$ emissions) as determined using the worksheet provided on page 17-12 of the *CEQR Technical Manual*.

HVAC Analysis

As described in Section 1, Project Description, the proposed development would result in one new building. It is assumed that the building would have a single boiler stack used for its HVAC system. Thus, an air quality analysis is warranted to assess the potential for emissions from the HVAC systems to significantly impact existing buildings.

CEQR Graphical Screening (HVAC Screening Analysis)

As described in Section 220 and Section 321 in Chapter 17 of the *CEQR Technical Manual*, for single-building projects that would use fossil fuels (i.e., fuel oil or natural gas) for HVAC systems, a preliminary stationary source screening analysis is typically warranted to evaluate the potential for HVAC systems emissions from the Proposed Project to impact existing buildings. The *CEQR Technical Manual* provides screening nomographs based on fuel type, stack height, minimum distance from the source to the nearest receptor buildings with similar or greater heights, and floor area resulting from development of the Proposed Project. There are three different curves representing three different stack heights (30 feet, 100 feet, and 165 feet) on the figures, and the height closest to but not higher than the proposed stack height should be selected. Based on the development size, if the distance from the development site to the nearest building of similar or greater height is less than the minimum required distance determined, there is the potential for a significant air quality impact from the project's boilers, and further analysis needs to be conducted using the USEPA's AERMOD model.

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

Industrial Source Analysis

As described in Section 220 and Section 321 in Chapter 17 of the *CEQR Technical* Manual, an air quality assessment is required to evaluate the potential impacts of air toxics emissions from ventilation exhaust systems of manufacturing or processing facilities within a 400-foot radius of a Development Site when a project would result in new sensitive uses (particularly residences, schools, hospitals, or parks). If any sources are identified, a screening analysis is performed based on Table 17-3 in Chapter 17 of the

CEQR Technical Manual. The screening table provides the maximum 1-hour, 8-hour, 24-hour and annual average modeled values based on a generic emission rate of 1 gram per second of a pollutant from a 20-foot-tall point source for the distances between 30 feet and 400 feet from the receptor of same height. Potential impacts predicted from the industrial source of concern based on the screen table are compared with the short-term guideline concentrations (SGCs) and annual guideline concentration (AGCs) recommended in NYSDEC's DAR-1 AGC/SGC Tables. If a proposed project fails the above screening analysis, or the screening analysis methodology is not applicable to the project, further refined analysis using EPA's AERMOD model is warranted to determine any potential for significant adverse impacts.

Assessment

Mobile Source Screening Analysis

A screening analysis was conducted for the intersections near the project site. According to the DCP CEQR App, a project increment of 90 units would result in a maximum of 14 vehicle trips during the PM peak hour. Thus, the number of incremental vehicular trips for the intersections near the project site would be lower than the CEQR Technical Manual CO-based screening threshold of 170 vehicles per hour, and the $PM_{2.5}$-based screening threshold of 23 truck equivalents for arterial roads. Therefore, a quantified assessment of on-street mobile source emissions from CO and PM is not warranted, and the Proposed Project would not result in significant adverse air quality impacts from mobile sources.

HVAC Analysis

The Proposed Project would consist of one 11-story, 96.5-foot tall residential building totaling approximately 267,324 gsf.

The building would have a roof height of approximately 96.5 feet above grade level. Consistent with *CEQR Technical Manual* guidelines, it is assumed that the stack would rise three feet above the roof for a total height of approximately 100 feet above grade.

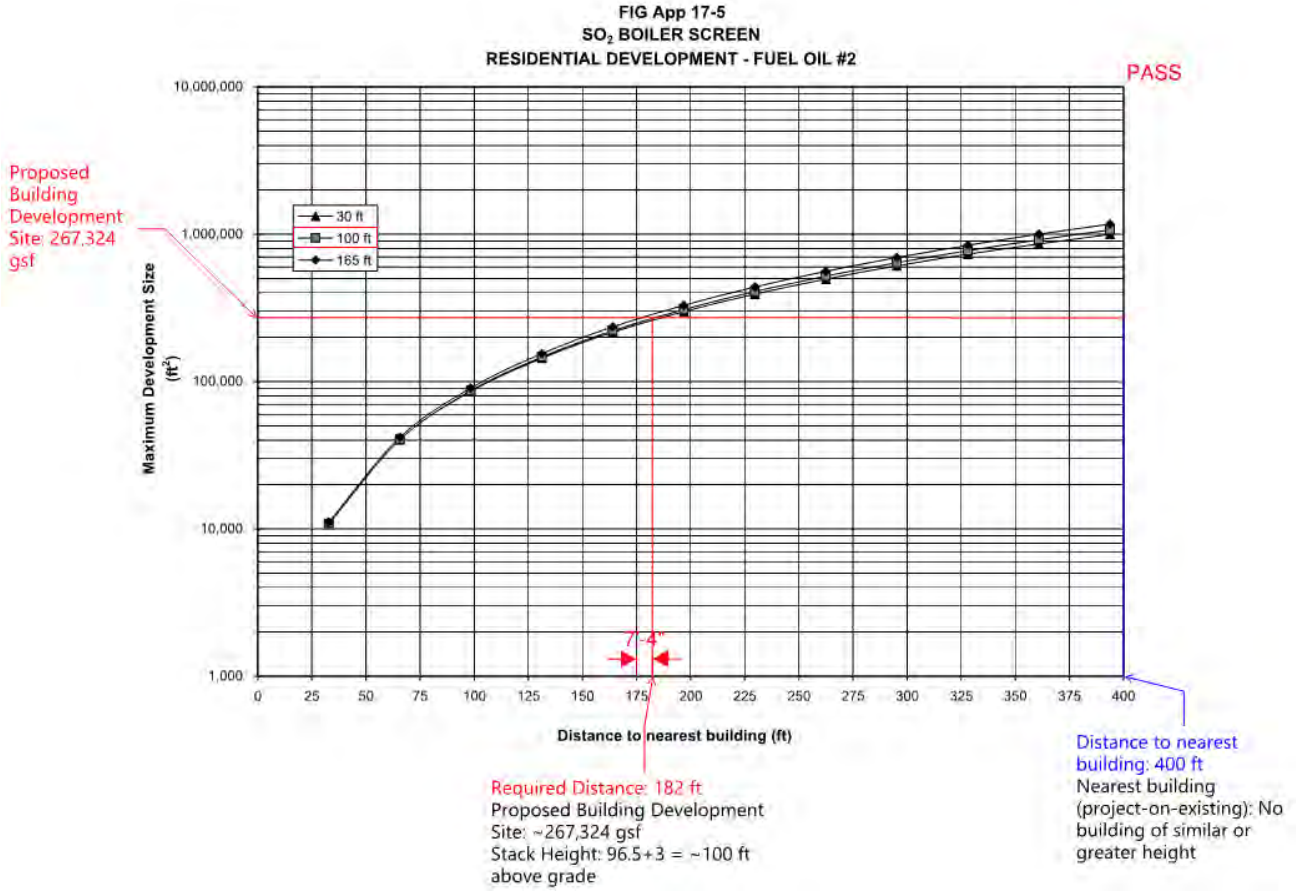
A survey of existing residential land uses and other sensitive receptor sites within a 400-foot radius of the Proposed Project indicated that the tallest building(s) within 400 feet of the Development Site would be the Proposed Project. The building's absolute stack elevation is approximately 167 feet.[2]

A screening analysis was performed for the Proposed Project assuming a height of 100 feet above grade and a total development size of 267,324 square feet. Based on the proposed height and square footage, the minimum screening distance necessary to avoid potential adverse air quality impacts was determined to be approximately 182 feet assuming no. 2 fuel oil (see **Figure 9-1**). Since there were no buildings of equal or greater height other than the Proposed Project, the minimum source to receptor distance was determined to be 400 feet, and the screening distance requirement for no.

[2] Absolute stack elevation is a sum of the proposed building height above grade, the ground elevation, and 3 feet of stack height.

2 fuel oil is met. Thus, there would be no significant adverse stationary source impacts related to the Proposed Project's HVAC system, and no further analysis is necessary.

Figure 9-1 **No. 2 Fuel Oil HVAC Screening – Proposed Building**



To ensure that there are no significant adverse impacts from HVAC system of the Proposed Actions, certain restrictions would be required through the mapping of an (E) Designation for air quality regarding the HVAC systems and stack.

The (E) Designation text (E-602) would be as follows:

Block 3043, Lots 10, 16, 22 and 23 (Projected Development Site): *Any new residential development on the above-referenced property must ensure the heating, ventilating, and air conditioning (HVAC) system and hot water equipment stack is located at the building's highest tier and at least 100 feet above grade to avoid any potential significant adverse air quality impacts.*

Industrial Source Analysis

To assess potential air quality impacts on the Proposed Project from existing industrial sources that emit toxic air contaminants and determine if there are active permits associated with those sources, an investigation was conducted of existing land uses within a 400-foot radius of the development site.

As a first step, land use maps and available aerial photos from Google were reviewed to identify surrounding land uses that could have New York City Department of Environmental Protection (NYCDEP) issued industrial permits (i.e., sites classified as Industrial/Manufacturing, Transportation/Utility, or Public Facilities/Institutions). **Table 9-3** shows the list of the existing land uses.

Table 9-3 Industrial Source Within 400 Feet of the Development Site

Address	Block	Lot	Land Use*	Lot Owner Name*	DEP CATS
4228 PARK AVENUE	3034	12	Industrial/Manufacturing	DJN ENTERPRISES	No record found
4197 3 AVENUE	2924	25	Industrial/Manufacturing	WILFRED RLTY CORP	No record found
4242 PARK AVENUE	3034	18	Industrial/Manufacturing	4242 PARK AVENUE, INC	No record found
4234 PARK AVENUE	3034	15	Transportation/Utility	DJN ENTERPRISES	PA019476, cancelled
1888 BATHGATE AVENUE	2924	10	Industrial/Manufacturing	IMD REALTY CORP	No record found
4263 3 AVENUE	3044	88	Industrial/Manufacturing	GILIC REALTY CORP.	No record found
4278 PARK AVENUE	3035	10	Transportation/Utility	TRIPLE R. STABLE, LL	CA197581, cancelled
					PA020475, cancelled
					PA030075, cancelled
					PA030275, cancelled
					PA032075, cancelled
					PA055582, cancelled
					PA043086, cancelled
					PA013275, cancelled
					PA018475, cancelled
					PA018675, cancelled
					PA020375, cancelled
					PA030175, cancelled
					PA030375, cancelled

Table 9-3 Industrial Source Within 400 Feet of the Development Site

Address	Block	Lot	Land Use*	Lot Owner Name*	DEP CATS
					PA018375, cancelled
					PA020575, cancelled
					No permit record; spray booth
					No permit record; paint spraying at auto repair shop (Kami Auto Repair)
453 EAST TREMONT AVENUE	3034	52	Industrial/Manufacturing	ATHENA PROPERTIES LLC	PA229073, cancelled
4270 3 AVENUE	3061	3	Industrial/Manufacturing	THIRD AVENUE SELF STO	No record found
4244 PARK AVENUE	3034	19	--	PARK AVE HOLDING CORP	**No permit record; paint spraying at auto body shop (Riverside Auto Body)**
					No permit record; paint spraying at auto repair shop (Felix Auto Repair and Collision)

Once the potential facilities were identified, an additional review was undertaken to assess whether the potential facilities have associated permits; the following sources were reviewed: NYCDEP's Clean Air Tracking System (NYCDEP CATS), New York City's Open Accessible Space Information System Cooperative (OASIS) database, available aerial photos provided by Google and Bing, and internet websites. As shown in **Table 9-3**, there were no expired or active industrial permits identified from the NYCDEP CATS online database. Additionally, no permit records were found for three auto repair shops within 400 feet of the Development Site:

- "Riverside Auto Body," located approximately 286 feet away from the proposed building
- "Felix Auto Repair and Collision," located approximately 286 feet away from the proposed building

- "Kami Auto Repair," located approximately 303 feet away from the proposed building

A call to the facilities on September 18, 2019 and September 27, 2019 confirmed that onsite activities include paint spraying.

An industrial source screening analysis was conducted following the screening procedures outlined in the *2020 CEQR Technical Manual*, Subsection 322.1. Since no permit was issued and no realistic operation data was available for "Riverside Auto Body" at 4246 Park Avenue, "Felix Auto Repair and Collision" at 4246 Park Avenue, "Kami Auto Repair" at 4280 Park Avenue, generic analyses were conducted using reasonably conservative assumptions regarding paint usage, types of pollutants, and emission rates breakdown for each type of pollutant from a typical auto body spray booth.

Air pollutants could be emitted into the atmosphere from solids and solvents (Volatile Organic Compounds [VOCs]) in automobile paint. During the spraying of the paint, solids generate emissions of particulates, while solvents are evaporated and released into atmosphere as gases, generating emissions of air toxics.

Particulate Matter

Per DEP guidance, solids in the paint being exhausted into the atmosphere as particles need to be considered as particulate matter ($PM_{2.5}$ and PM_{10}). As such, $PM_{2.5}$ and PM_{10} emission rates need to be estimated using emission rate of solids based on transfer efficiency of spray booth operation and particle control efficiency, if applicable. According to Section 4.2.2.8, "Automobile and Light Duty Truck Surface Coating Operations", from EPA AP-42, the transfer efficiency (i.e., the fraction of the solids in the total coating consumed that remains on the painted automobile parts), varies with the type of application technique. It ranges from 30-to-50 percent for typical air-atomized spraying and can increase to 60-to-95 percent for electrostatic spraying. Due to lack of information on the type of application technique for the paint spraying at the three auto body shops to be analyzed, a transfer efficiency of 40 percent was assumed, which means about 60 percent of the solids will be released into atmosphere.

Additionally, to estimate $PM_{2.5}$ and PM_{10} emission rates from the solids content, EPA AP-42, Appendix B1, "Particle Size Distribution Data and Sized Emissions Factors for Selected Sources", was used to assume the percentage of $PM_{2.5}$ and PM_{10} fractions in total particulate matter based on cumulative particle size distribution for surface-coating operations via spray booths. It indicated that 28.6 percent of the total mass of particulate matter emitted from spray booth operations is $PM_{2.5}$ and 46.7% of the total mass of particulate matter is PM_{10} (Table 4.2.2.8 in Appendix B1, EPA AP-42).

VOCs

In accordance with DCP guidance, if a permit for spray booth operations contains only emission rates for a whole group of VOCs but no emission rates for individual VOC-based solvents, which would enable comparison to NYSDEC DAR-1 guideline values, an air toxics analysis should conservatively assume that 100% of the solvents contained in a paint would be released into the atmosphere. Therefore, emission rates of the solvents should be calculated by multiplying hourly paint usage rates, in pounds per hour (lb/hr), by the weight percentage of each ingredient in the paint.

When there is no adequate permit information or Material Safety Data Sheet (MSDS) regarding the composition of a paint's ingredients and their weight percentages, in accordance with DCP guidance, a generic report from an auto spray paint booth was conservatively used for typical composition of VOC emissions.

"Riverside Auto Body" at 4246 Park Avenue, "Felix Auto Repair and Collision" at 4246 Park Avenue, "Kami Auto Repair" at 4280 Park Avenue

As described above, the three non-permitted auto repair shops provide auto painting services. It was assumed that the facilities will use half a gallon of paint per day, similar to the generic report. The following assumptions were made to calculate the hourly and annual emission rates of solids and solvents:

- The facility operates four hours per day, and 250 days per year;
- A gallon of auto paint could weigh from six to fifteen (15) pounds, depending on the ingredients. For the purpose of this analysis, a typical weight of ten (10) pounds was used;
- The paint contains 50% solids and 50% VOCs;
- A transfer efficiency of 40% was assumed for solids, which means 60% of the solids will be released into atmosphere;
- 28.6% of the total mass of particulate matter emitted from spray booth operations is $PM_{2.5}$ and 46.7% of the total mass of particulate matter is PM_{10};
- VOC-based emission rates will be estimated based on the hourly emission rates of solvents; and the weight percentage of each ingredient as shown in the generic report.

The emission rates for different pollutants at each facility are presented in **Table 9-4**.

Table 9-4 Industrial Source Emission Rates

Facility Name(s)	Facility Type	Permit #	Distance (ft)	Chemical Name	CAS	Short-term ER (g/s)	Annual ER (g/s)
Kami Auto Repair, Riverside Auto Body, Felix Auto Repair and Collision	Auto body with spray painting	No DEP Permit	303, 286, 286	Solids ($PM_{2.5}$)	NY075-02-5	0.00225	0.00154
				Solids (PM_{10})	NY079-00-0	0.00368	0.00252
				Acetone	00067-64-1	0.03386	0.00387
				Aliphatic Hydrocarbon	64742-89-8	-	0.00090
				Aromatic Petroleum distillates	64742-94-5	-	0.00045
				Butane	00106-97-8	0.00866	-
				Ethanol	00064-17-5	-	0.00018
				Ethyl 3-Ethoxypropionate	00763-69-9	0.00709	0.00081
				Ethylbenzene	00100-41-4	-	0.00045
				Methyl Ethyl Ketone	00078-93-3	0.00630	0.00072
				N-Butyl Acetate	00123-86-4	0.00394	0.00045
				Propane	00074-98-6	-	0.00099
				Stoddard Solvent	08052-41-3	-	0.00090
				Toluene	00108-88-3	0.00787	0.00090
				Xylene	01330-20-7	0.00787	0.00090

The levels of air pollutants at the Development Site from these emission sources were estimated, depending on the distance between the source and the proposed building, using Table 17-3 of the *2020 CEQR Technical Manual*. Estimated pollutant concentrations were compared to the corresponding short-term guideline concentrations (SGCs) and annual guideline concentrations (AGCs) as stated in NYSDEC's Control of Toxic Ambient Air Contaminants (DAR-1) AGC/SGC Tables. Additionally, the estimated $PM_{2.5}$ and PM_{10} concentrations were compared to the NAAQS with background concentrations added.

The results are presented in **Table 9-5**, which indicate that predicted short-term and annual concentrations of all pollutants from each unpermitted facility did not exceed the AGC/SGC thresholds or NAAQS. As such, a more refined analysis was not warranted.

Table 9-5 Industrial Source Analysis Results

Address	Facility Name	Distance (ft)	Chemical Name	CAS	Short-term Conc. (µg/m³)	SGC (µg/m³)	Annual Conc. (µg/m³)	AGC (µg/m³)
4278 Park Ave	Kami Auto Repair	303	Solids ($PM_{2.5}$)[1,2]	NY075-02-5	21.63	35	8.23	12
			Solids (PM_{10})[1,3]	NY079-00-0	30.83	150	-	-
			Acetone	00067-64-1	60.16	180,000	0.34	30,000
			Aliphatic Hydrocarbon	64742-89-8	-	-	0.08	3,200
			Aromatic Petroleum distillates	64742-94-5	-	-	0.04	100
			Butane	00106-97-8	15.39	238,000	-	-
			Ethanol	00064-17-5	-	-	0.02	45,000
			Ethyl 3-Ethoxypropionate	00763-69-9	12.59	140	0.07	64
			Ethylbenzene	00100-41-4	-	-	0.04	1,000
			Methyl Ethyl Ketone	00078-93-3	11.19	13,000	0.06	5,000
			N-Butyl Acetate	00123-86-4	7.00	95,000	0.04	17,000
			Propane	00074-98-6	-	-	0.09	43,000
			Stoddard Solvent	08052-41-3	-	-	0.08	900
			Toluene	00108-88-3	13.99	37,000	0.08	5,000
			Xylene	01330-20-7	13.99	22,000	0.08	100
4244 Park Ave	Riverside Auto Body	286	Solids ($PM_{2.5}$)[1,2]	NY075-02-5	21.82	35	8.25	12
			Solids (PM_{10})[1,3]	NY079-00-0	31.14	150	-	-
			Acetone	00067-64-1	66.57	180,000	0.38	30,000
			Aliphatic Hydrocarbon	64742-89-8	-	-	0.09	3,200
			Aromatic Petroleum distillates	64742-94-5	-	-	0.04	100
			Butane	00106-97-8	17.03	238,000	-	-
			Ethanol	00064-17-5	-	-	0.02	45,000
			Ethyl 3-Ethoxypropionate	00763-69-9	13.93	140	0.08	64
			Ethylbenzene	00100-41-4	-	-	0.04	1,000
			Methyl Ethyl Ketone	00078-93-3	12.39	13,000	0.07	5,000
			N-Butyl Acetate	00123-86-4	7.74	95,000	0.04	17,000
			Propane	00074-98-6	-	-	0.10	43,000
			Stoddard Solvent	08052-41-3	-	-	0.09	900
			Toluene	00108-88-3	15.48	37,000	0.09	5,000
			Xylene	01330-20-7	15.48	22,000	0.09	100
4244 Park Ave	Felix Auto Repair and Collision	286	Solids ($PM_{2.5}$)[1,2]	NY075-02-5	21.82	35	8.25	12
			Solids (PM_{10})[1,3]	NY079-00-0	31.14	150	-	-
			Acetone	00067-64-1	66.57	180,000	0.38	30,000
			Aliphatic Hydrocarbon	64742-89-8	-	-	0.09	3,200

Table 9-5 Industrial Source Analysis Results

Address	Facility Name	Distance (ft)	Chemical Name	CAS	Short-term Conc. (µg/m³)	SGC (µg/m³)	Annual Conc. (µg/m³)	AGC (µg/m³)
			Aromatic Petroleum distillates	64742-94-5	-	-	0.04	100
			Butane	00106-97-8	17.03	238,000	-	-
			Ethanol	00064-17-5	-	-	0.02	45,000
			Ethyl 3-Ethoxypropionate	00763-69-9	13.93	140	0.08	64
			Ethylbenzene	00100-41-4	-	-	0.04	1,000
			Methyl Ethyl Ketone	00078-93-3	12.39	13,000	0.07	5,000
			N-Butyl Acetate	00123-86-4	7.74	95,000	0.04	17,000
			Propane	00074-98-6	-	-	0.10	43,000
			Stoddard Solvent	08052-41-3	-	-	0.09	900
			Toluene	00108-88-3	15.48	37,000	0.09	5,000
			Xylene	01330-20-7	15.48	22,000	0.09	100

Notes:

[1] 28.6% of emissions of solids are assumed to be $PM_{2.5}$ and 46.7% of emissions of the solids from spray booth are assumed to be PM_{10} from the paint, based on Table 4.2.2.8, Appendix B.1, "Particle Size Distribution Data and Sized Emission Factors for Selected Sources", in EPA AP-42.

[2] The 24-hour $PM_{2.5}$ concentration from each emission source includes a background concentration of 19.9 µg/m³, and the annual $PM_{2.5}$ concentration from each emission source includes a background concentration of 8.1 µg/m³. As per DAR-1 guidance, $PM_{2.5}$ concentrations were compared against the NAAQS.

[3] The 24-hour PM_{10} concentration from each emission source includes a background concentration of 28 µg/m³. As per DAR-1 guidance, PM_{10} concentrations were compared against the NAAQS.

Cancer and Hazard Risk Assessment

Potential cumulative impacts were evaluated, based on procedures outlined in the DAR-1 guidance for risk characterization to determine the combined effects of multiple air toxic contaminants. Cancer risk is established for carcinogenic pollutants and hazard index risk is established for non-carcinogenic pollutants. Air toxics emissions from the identified industrial sources stated above don't include carcinogenic pollutants; therefore, the cumulative hazard risk assessment was conducted for non-carcinogenic pollutants. The acceptable risk level is less than 2.0 for non-carcinogenic compounds.

The results of the assessment of annual cumulative non-carcinogenic effects on the Proposed Project are presented in **Table 9-6**.

As shown in the table, the total hazard index value for annual impacts would not exceed the threshold of 2. Therefore, based on the cumulative analysis, development resulting from the Proposed Project would not experience significant adverse air quality impacts from existing air toxics emissions.

Table 9-6 Risk Assessment

Chemical Name	CAS	Total Annual Concentration (µg/m³)	AGC (µg/m³)	Non-Carcinogen Hazard Index
Acetone	00067-64-1	1.09	30,000	0.00004
Aliphatic Hydrocarbon	64742-89-8	0.25	3,200	0.00008
Aromatic Petroleum distillates	64742-94-5	0.13	100	0.00126
Butane	00106-97-8	-	-	-
Ethanol	00064-17-5	0.05	45,000	0.00000
Ethyl 3-Ethoxypropionate	00763-69-9	0.23	64	0.00356
Ethylbenzene	00100-41-4	0.13	1,000	0.00013
Methyl Ethyl Ketone	00078-93-3	0.20	5,000	0.00004
N-Butyl Acetate	00123-86-4	0.13	17,000	0.00001
Propane	00074-98-6	0.28	43,000	0.00001
Stoddard Solvent	08052-41-3	0.25	900	0.00028
Toluene	00108-88-3	0.25	5,000	0.00005
Xylene	01330-20-7	0.25	100	0.00253
		Total Hazard Index[3]		0.00798

Conclusion

The number of incremental trips generated by the Proposed Project would be lower than screening thresholds addressed in the *CEQR Technical Manual*. Therefore, traffic from the Proposed Project would not result in a significant adverse impact on mobile source air quality.

The proposed building would be the tallest building within a 400-foot radius of the project site. To ensure that there are no significant adverse impacts from HVAC system of the Proposed Actions, certain restrictions would be required through the mapping of an (E) Designation for air quality regarding the HVAC systems and stack.

Lastly, no significant adverse impacts are expected from existing industrial sources within a 400-foot radius of the development site.

Therefore, it was concluded that there would be no significant adverse air quality impacts as a result of the Proposed Project.

10

Noise

The goal of this section is to determine whether the Proposed Project may increase noise exposure at existing sensitive receptors and whether new receptors would be introduced into an acceptable ambient noise environment.

Introduction

As described in **Section 1**, **Project Desription**, the Proposed Actions would facilitate the development of a residential building of approximately 267,324 gross square feet (gsf), totaling up to 287 units, all of which would be affordable units.

Therefore, the Proposed Project would introduce new noise-sensitive receptors to the Development Site. The purpose of the noise assessment under *City Environmental Quality Review (CEQR)* is to determine if:

- The Proposed Project would significantly increase sound levels from mobile and stationary sources at existing noise receptors adjacent to the Development Site, including commercial, schools, places of worship, and office spaces; and
- New noise receptors introduced at the Development Site would be in an acceptable ambient sound level environment.

Per the *2020 CEQR Technical Manual*, a noise analysis is appropriate if an action would generate mobile or stationary sources of noise or would be located in an area with high ambient noise levels. Mobile sources include vehicular traffic; stationary sources include

rooftop equipment such as emergency generators, cooling towers, and other mechanical equipment.

Noise assessment includes the following:

- Background on metrics used to describe noise;
- The methodology and criteria used to assess potential impacts;
- An assessment of the potential for the Proposed Project to significantly affect existing receptors due to the introduction of new mobile or stationary sources;
- Results from ambient sound level monitoring; and
- An evaluation of the ambient sound levels at new receptor locations.

Noise Background

Noise is defined as unwanted or excessive sound. Sound becomes unwanted when it interferes with normal activities such as sleep, work, or recreation. How people perceive sound depends on several measurable physical characteristics. These factors include:

- **Level:** Sound level is based on the amplitude of sound pressure fluctuations and is often equated to perceived loudness.
- **Frequency:** Sounds are comprised of acoustic energy distributed over a variety of frequencies. Acoustic frequencies, commonly referred to as tone or pitch, are typically measured in Hertz (Hz). Pure tones have energy concentrated in a narrow frequency range and can be more audible to humans than broadband sounds. Sound levels are most often measured on a logarithmic scale of decibels (dB). The decibel scale compresses the audible acoustic pressure levels which can vary from the threshold of hearing (0 dB) to the threshold of pain (120 dB). Because sound levels are measured in dB, the addition of two sound levels is not linear. Adding two equal sound levels results in a 3 dB increase in the overall level. Research indicates the following general relationships between sound level and human perception:
  - A 3-dB increase is a doubling of acoustic energy and is the threshold of perceptibility to the average person.
  - A 10-dB increase is a tenfold increase in acoustic energy and is perceived as a doubling in loudness to the average person.

Audible sound is comprised of acoustic energy over a range of frequencies typically from 20 to 20,000 Hz. The human ear does not perceive sound levels at each frequency as equally loud. To compensate for this phenomenon in perception, a frequency filter known as A-weighting (dBA) is used to evaluate environmental noise levels. **Table 10-1** presents a list of common outdoor and indoor sound levels.

Table 10-1 Common Indoor and Outdoor Sound Levels

Outdoor Sound Levels	Sound Pressure µPa		Sound Level dBA	Indoor Sound Levels
	6,324,555	-	110	Rock Band at 5 m
Jet Over-Flight at 300 m		-	105	
	2,000,000	-	100	Inside New York Subway Train
Gas Lawn Mower at 1 m		-	95	
	632,456	-	90	Food Blender at 1 m
Diesel Truck at 15 m		-	85	
Noisy Urban Area—Daytime	200,000	-	80	Garbage Disposal at 1 m
		-	75	Shouting at 1 m
Gas Lawn Mower at 30 m	63,246	-	70	Vacuum Cleaner at 3 m
Suburban Commercial Area		-	65	Normal Speech at 1 m
	20,000	-	60	
Quiet Urban Area—Daytime		-	55	Quiet Conversation at 1 m
	6,325	-	50	Dishwasher Next Room
Quiet Urban Area—Nighttime		-	45	
	2,000	-	40	Empty Theater or Library
Quiet Suburb—Nighttime		-	35	
	632	-	30	Quiet Bedroom at Night
Quiet Rural Area—Nighttime		-	25	Empty Concert Hall
Rustling Leaves	200	-	20	
		-	15	Broadcast and Recording Studios
	63	-	10	
		-	5	
Reference Pressure Level	20	-	0	Threshold of Hearing

µPA MicroPascals describe pressure. The pressure level is what sound level monitors measure.
dBA A-weighted decibels describe pressure logarithmically with respect to 20 µPa (the reference pressure level).
Source: Highway Noise Fundamentals, Federal Highway Administration, September 1980.

Because sound levels change over time, a variety of sound level metrics can be used to describe environmental noise. The following is a list of sound level descriptors that are used in the noise analysis:

- L_{10} is the sound level which is exceeded for 10 percent of the time during a given time period. Therefore, it represents the higher end of the range of sound levels. The unit is commonly used in the *2020 CEQR Technical Manual* to evaluate acceptable thresholds for noise exposure for new receptors that would be introduced by a proposed project.
- L_{eq} is the energy-average A-weighted sound level. The L_{eq} is a single value that is equivalent in sound energy to the fluctuating levels over a period of time. Therefore, the L_{eq} considers how loud noise events are during the period, how long they last, and how many times they occur. L_{eq} is commonly used to describe environmental noise and relates well to human annoyance. In accordance with the *2020 CEQR Technical Manual*, the L_{eq} sound level is used to assess the potential for significant increases in noise due to

a proposed project at existing receptors in the Study Area and to assess noise exposure for new receptors.

Assessment Methodology

This noise analysis considers two receptor types when evaluating noise for the Proposed Project; existing and new receptor(s). Since the Proposed Project would introduce new residences, these are considered "new receptors."

The analysis also considers "existing receptors" which are the current noise-sensitive uses, including the surrounding residences, schools and places of worship. The following describes the results of the noise assessment for these two types of receptors.

Noise Assessment for Existing Receptors

Noise impact at existing nearby sensitive receptors is assessed according to the relative increase between No-Action and With-Action sound levels. Noise impact is assessed according to the increase in the L_{eq} sound level in accordance with the *2020 CEQR Technical Manual*. If mobile or stationary sources associated with the Proposed Project would increase L_{eq} sound levels by 3 dB or more and absolute levels would exceed 65 dBA L_{eq}, the Proposed Project would cause a significant adverse impact prior to mitigation. Additionally, if No-Action condition noise levels are 60 dBA L_{eq} or less, a 5-dB increase would be considered a significant adverse noise impact.

Mobile Sources

Since the With-Action scenario would not generate sufficient vehicular traffic to exceed the threshold for a detailed transportation analysis (according to Table 16-1 in the *CEQR Technical Manual*) and with the relatively moderate to high number of vehicles in the immediate area, the Proposed Project would not result in a doubling of noise passenger car equivalents (PCEs), which would be necessary to cause a 3-dBA increase in noise levels. Therefore, the Proposed Actions would not cause a significant adverse vehicular noise impact.

Stationary Sources

The Proposed Project is not anticipated to include any substantial stationary source noise generators, such as unenclosed cooling or ventilation equipment, loudspeaker systems, stationary diesel engines, car washes, or other similar types of uses. The design and specifications for the mechanical equipment, such as heating, ventilation, and air conditioning, are not known at this time. As the project design advances, mechanical equipment would be selected that incorporates sufficient noise reduction to comply with applicable noise regulations and standards, including the standards contained in the revised New York City Noise Control Code. This would ensure that mechanical equipment does not result in any significant increases in noise levels by itself or cumulatively with other project noise sources.

Noise Assessment for New Receptors

With-Action noise conditions at new sensitive receptors that would be introduced by the Proposed Project are evaluated according to absolute exterior sound level. The noise exposure guidelines for acceptable ambient conditions depend on the type of land use; for residential buildings, the goal is to maintain interior noise levels of 45 dBA or lower. With-Action exterior sound levels are evaluated to determine if receptors would be in an acceptable ambient sound level environment. It is generally assumed that without specific information on a building's window and wall construction, the outdoor-to-indoor noise reduction of the building is 25 decibels. Therefore, exterior ambient sound levels exceeding 70 dBA (L_{10}) at residential receptors during the daytime (7 AM to 10 PM) are considered to be Marginally Unacceptable. Exterior sound levels exceeding 80 dBA (L_{10}) are considered Clearly Unacceptable. If there would be Marginally Unacceptable or Clearly Unacceptable ambient noise conditions, there is a need to provide window/wall sound attenuation that is sufficient to reduce interior sound levels to acceptable levels.

Since the Proposed Project would introduce residential space to the Development Site, the highest L_{10} or L_{eq} sound level is used to evaluate whether the Proposed Project would introduce new receptors into an acceptable noise environment. The analysis presents the results of ambient noise monitoring that was conducted at the Development Site and the assessment of whether new receptors would be in a high ambient noise environment.

Noise Exposure Guidelines

The *2020 CEQR Technical Manual* provides noise exposure guidelines for assessing ambient noise conditions at new residential receptors, as shown in **Table 10-2**.

Table 10-2 Noise Exposure Guidelines for use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable External Exposure	Marginally Acceptable External Exposure	Marginally Unacceptable External Exposure	Clearly Unacceptable External Exposure
Commercial, or Office	All Times	$L_{10} \leq 65$ dBA	$65 < L_{10} \leq 70$ dBA	$70 < L_{10} \leq 80$ dBA	$L_{10} > 80$ dBA
Residence, Hotel or Motel	7 AM to 10 PM				
Residence. Hotel or Motel	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
Community Facility		Same as residential day	Same as residential day	Same as residential day	Same as residential day

Source: Table 19-2, *2020 CEQR Technical Manual.*

Existing Sound Levels

Noise monitoring was conducted at three sites on Thursday, May 2, 2019 in accordance with the *CEQR Technical Manual* as shown in **Figure 10-1**. Noise monitors were placed with a

minimum of four feet between the microphone and nearby reflecting surfaces. With roadway activity dominating the overall noise environment, 20-minute noise measurements were conducted during morning peak periods (8 – 9:30 AM), midday period (12 – 1:30 PM) and evening peak period (5 – 6:30 PM). Measurements were conducted using a Type I sound level meter at ground level.

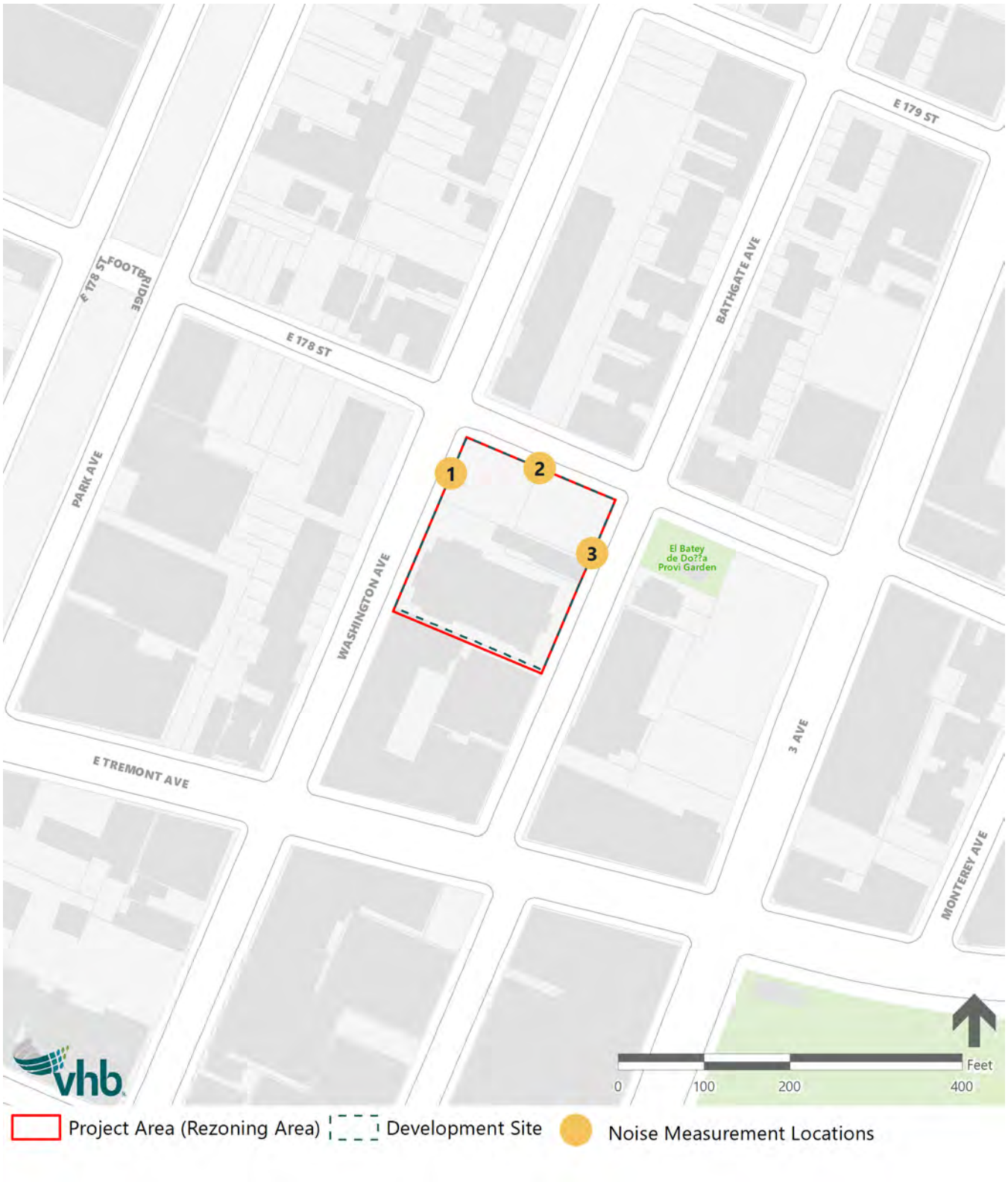
Table 10-3 summarizes the measurement results. The measured L_{eq} levels ranged from 61.8 dBA to 69.0 dBA and the L_{10} levels ranged from 63.8 to 69.7 dBA.

Table 10-3 Ambient Sound Level Measurements

Site	Monitoring Location	Period	Duration	L_{eq}	L_{min}	L_{max}	L_1	L_{10}	L_{50}	L_{90}
1	Washington Avenue	Morning	20 Min	67.1	55.0	79.1	74.3	69.7	65.9	62.3
		Midday	20 Min	65.4	49.6	87.1	78.6	65.5	56.9	52.5
		Evening	20 Min	69.0	51.8	94.5	77.7	68.3	59.6	54.5
2	178th Street	Morning	20 Min	64.3	53.5	85.0	74.8	67.1	59.5	56.2
		Midday	20 Min	62.8	49.9	80.6	72.3	65.2	58.4	52.8
		Evening	20 Min	68.6	51.6	97.8	75.1	65.3	57.5	54.1
3	Bathgate Avenue	Morning	20 Min	61.8	51.0	84.5	71.9	63.8	56.4	53.3
		Midday	20 Min	65.6	57.9	86.8	73.5	69.6	62.8	59.1
		Evening	20 Min	63.1	52.2	75.9	73.0	67.4	58.5	54.8

Source: Measurements conducted by VHB on May 2, 2019.

Figure 10-1 Noise Monitoring Locations



Acceptability Assessment

The *2020 CEQR Technical Manual* provides noise exposure guidelines for assessing ambient sound levels, as shown in **Table 10-2**. Based on these noise exposure guidelines, noise impact has been assessed to determine the level of acceptability for new sensitive receptors at the Development Site. **Table 10-4** summarizes the max of the L_{10} and L_{eq} sound levels at each measurement location. The table indicates whether the existing sound levels are considered to be acceptable according to the *2020 CEQR Technical Manual*.

Table 10-4 Existing Sound Level Acceptability

Site	Monitoring Location	Period	Max of L_{10} or L_{eq}	Acceptability
1	Washington Avenue	Morning	69.7	Marginally Acceptable
		Midday	65.5	Marginally Acceptable
		Evening	69.0	Marginally Acceptable
2	178th Street	Morning	67.1	Marginally Acceptable
		Midday	65.2	Marginally Acceptable
		Evening	68.6	Marginally Acceptable
3	Bathgate Avenue	Morning	63.8	Acceptable
		Midday	69.6	Marginally Acceptable
		Evening	67.4	Marginally Acceptable

Source: VHB, 2019.

According to the noise exposure guidelines in the *CEQR Technical Manual*, existing L_{10} sound levels are Marginally Acceptable or Acceptable at all measurement locations during all measurement periods. The highest measured L_{10} sound level was 69.7 dBA during the morning peak period on Washington Avenue. Based on the finding of Marginally Acceptable and Acceptable sound levels, it is not necessary to specify outdoor-to-indoor sound attenuation of the window/wall to provide an acceptable indoor noise conditions and the Proposed Actions would not result in any significant adverse impacts.

Conclusion

A noise assessment was conducted to determine whether the Proposed Project would significantly increase sound levels from mobile and stationary sources at existing noise receptors adjacent to the Development Site, and if new noise receptors that would be introduced by the Proposed Project would be in an acceptable ambient sound level environment.

As the Proposed Project does not exceed the detailed transportation analysis thresholds, it would not result in a doubling of noise passenger car equivalents (PCEs), which would be necessary to cause a 3-dBA increase in noise levels. Therefore, the Proposed Project would not result in a significant adverse vehicular noise impact, and the existing noise measurements results are representative of the With-Action vehicular noise conditions.

The Proposed Project is not anticipated to include any substantial stationary source noise generators. The design and specifications for the building's mechanical equipment would incorporate sufficient noise reduction devices that would comply with applicable noise

regulations and standards, including the standards contained in the revised New York City Noise Control Code.

Based on a maximum L_{10} sound level of 69.7 dBA, it is not necessary to specify outdoor-to-indoor sound attenuation of the window/wall to provide an acceptable indoor noise conditions. As such, no significant adverse impacts related to noise are expected and no further analysis is warranted.

Appendix A: Agency Correspondence

Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-X
Project: ST. JOSEPH HOUSING
Date Received: 5/14/2020

Properties with no Architectural or Archaeological significance:

1) 1932 WASHINGTON AVENUE, BBL: 2030430008
2) 1940 WASHINGTON AVENUE, BBL: 2030430010
3) WASHINGTON AVENUE, BBL: 2030430016
4) 1951 BATHGATE AVENUE, BBL: 2030430022
5) 1949 BATHGATE AVENUE, BBL: 2030430023
6) 1925 BATHGATE AVENUE, BBL: 2030430030

Comments: S/NR LISTED 48TH PRECINCT POLICE STATION WITHIN RADIUS

Gina Santucci 5/18/2020

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 34962_FSO_DNP_05182020.docx

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

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

December 9, 2019

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

Re: St. Joseph's – 1949 Bathgate Avenue
Block 3043, Lots p/o 8, 10, 16, 22, 23 and p/o 30
CEQR # 77DCP609X

Dear Mr. McClean:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the November 2019 Environmental Assessment Statement and the September 2019 Phase I Environmental Site Assessment (Phase I) prepared by Vanasse Hangen Brustlin, on behalf of Bathgate 178th Housing Development Fund Corporation (applicant), for the above referenced project located between East 178th Street and East Tremont Avenue in the Tremont neighborhood of Bronx Community District 6. It is our understanding that the applicant is seeking:

1. A zoning map amendment from the New York City Department of City Planning (DCP) to rezone Block 3043, Lots p/o 8, 10, 16, 22, 23 and p/o 30 from a R6A zoning district to a R7D zoning district.
2. A zoning text amendment to Appendix F of the New York City Zoning Resolution to designate the project area as a Mandatory Inclusionary Housing Area.

The proposed actions would facilitate the construction of a new 11-story, 267,324 gross square feet, residential building containing 254 - 264 dwelling units on vacant applicant-owned lots 10, 16, 22 and 23 (Development Site). It should be noted that the remainder of the project area, non-applicant owned Lots p/o 8 and p/o 30, is currently improved with two multi-story buildings and are not proposed for development.

Block 3043, Lots 10, 16, 22 and 23

The September 2019 Phase I report revealed that historical on-site and surrounding area land uses consists of residential, commercial and institutional uses including schools, churches, a police station, a livery stable, a funeral home, auto repair shops, a park, a lumber storage facility, iron works, a post office, a merchant's market, Sally's Auto Sales, a deli and grocery, as well as several residential buildings. Regulatory databases such as the New York State Department of Environmental Conservation SPILLS, Leaking Underground Storage Tank, Leaking Storage Tanks (LTANKS), Resource Conservation and Recovery Act Generators, and Petroleum Bulk Storage (PBS) Underground Storage Tanks (USTs) and PBS Aboveground Storage Tanks (ASTs) identified several sites in close proximity to the project site. The SPILLS database reported 29 SPILLS within a 1/8-mile radius of the project site

and the LTANKS database reported 38 LTANKS within a 1/2-mile radius of the project site. The PBS USTs and the PBS ASTs databases reported 16 USTs and 71 ASTs within a 1/4-mile radius of the project site. The Phase I also reported two Historical Cleaners and three Historical Auto Stations within a 1/8-mile radius of the project site.

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

Development Site: Block 3043, Lots 10, 16, 22 and 23 (Site under the control or ownership of the applicant)

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

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

Future correspondence and submittals related to this project should include the following CEQR # **77DCP609X**. If you have any questions, you may contact Ms. Cassandra Scantlebury at (718) 595-6756.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

cc: R. Weissbard
T. Estesen
C. Scantlebury
M. Wimbish
R. Lucas
O. Abinader – DCP

NYC Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

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

February 21, 2020

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

Re: St. Joseph's – 1949 Bathgate Avenue
Block 3043, Lots p/o 8, 10, 16, 22, 23 and p/o 30
CEQR # 77DCP609X

Dear Mr. McClean:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the January 2020 Phase II Environmental Site Assessment Work Plan (Phase II Work Plan) and the September 2019 Health and Safety Plan (HASP) prepared by Vanasse Hangen Brustlin, on behalf of Bathgate 178th Housing Development Fund Corporation (applicant), for the above referenced project located between East 178th Street and East Tremont Avenue in the Tremont neighborhood of Bronx Community District 6. It is our understanding that the applicant is seeking:

1. A zoning map amendment from the New York City Department of City Planning (DCP) to rezone Block 3043, Lots p/o 8, 10, 16, 22, 23 and p/o 30 from a R6A zoning district to a R7D zoning district.
2. A zoning text amendment to Appendix F of the New York City Zoning Resolution to designate the project area as a Mandatory Inclusionary Housing Area.

The proposed actions would facilitate the construction of a new 11-story, 267,324 gross square feet, residential building containing 254 - 264 dwelling units on vacant applicant-owned lots 10, 16, 22 and 23 (Development Site). It should be noted that the remainder of the project area, non-applicant owned Lots p/o 8 and p/o 30, is currently improved with two multi-story buildings and are not proposed for development.

The January 2020 Phase II Work Plan proposes to install six soil borings, three temporary groundwater monitoring wells and three soil vapor probes at the project site. Two soil samples will be collected from each soil boring. One soil sample will be collected from 0-2 feet below grade surface or just below the existing grass mat, pavement or building slab and the second soil sample will be collected from the base of the proposed excavation depth (12 feet below street level), at refusal or at the saturation zone, whichever is encountered first. Soil and groundwater samples will be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via United States Environmental Protection Agency (EPA) Method 8260, TCL semi-volatile organic compounds (SVOCs) via EPA Method 8270, pesticides via EPA Method 8081, polychlorinated biphenyls (PCBs) via EPA Method 8082 and Target

Analyte List metals via EPA Methods 6010 and 7471 (filtered and unfiltered for groundwater samples). Three soil vapor samples will also be collected and analyzed for VOCs via EPA Method TO-15.

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

Phase II Work Plan

- DCP should instruct the applicant that the proposed soil, groundwater and soil vapor sampling locations should be individually labeled on Figure 3. (e.g. SB-1, GW-1, SV-1, etc.).

HASP

- DCP should instruct the applicant that in addition to chemicals associated with heavy equipment operation during site work activities, information fact sheets or Safety Data Sheets for potential chemicals of concern (VOCs, SVOCs, pesticides, PCBs, and heavy metals) should be included.

DEP finds the January 2020 Phase II Work Plan and HASP for the proposed investigation acceptable, as long as the aforementioned information is incorporated into the Phase II Work Plan and HASP. DCP should inform the applicant that upon completion of the investigation activities, the applicant should submit a detailed Phase II report for DEP review and approval. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data and conclusions, comparison of soil, groundwater, and soil vapor analytical results (i.e., New York State Department of Environmental Conservation (NYSDEC) 6 NYCRR Part 375, NYSDEC Water Quality Regulations, and New York State Department of Health's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York), updated site plans depicting sample locations, boring logs, and remedial recommendations, if warranted.

Future correspondence and submittals related to this project should include the following CEQR # **77DCP609X**. If you have any questions, you may contact Ms. Cassandra Scantlebury at (718) 595-6756.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

cc: R. Weissbard
T. Estesen
C. Scantlebury
M. Wimbish
R. Lucas
O. Abinader – DCP