1675 Westchester Avenue

Environmental Assessment Statement

CEQR No.: 17DCP154X

ULURP Nos.: N170378ZRX & 170377ZMX

Prepared for:
1675 JV Associates, LLC

Prepared by:
Philip Habib & Associates
in association with
Louis Berger

May 19, 2017

1675 Westchester Avenue

Environmental Assessment Statement

CEQR No.: 17DCP154X

Table of Contents

EAS Form

Attachment A……..Project Description

Attachment B……Supplemental Screening

Attachment C……Land Use, Zoning, & Public Policy

Attachment D……Community Facilities

Attachment E…… Open Space

Attachment F……..Shadows

Attachment G…… Urban Design & Visual Resources

Attachment H…….. Hazardous Materials

Attachment I……Air Quality

Attachment J……..Noise

Appendices:

Appendix 1.... Waterfront Revitalization Program Consistency Assessment Form

Appendix 2…. NYC Department of Buildings Complaint Record

Appendix 3…. City Agency Correspondence

Appendix 4…. MIH Zoning Text Amendment & Map

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* 1675 Westchester Avenue

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) 17DCP154X	BSA REFERENCE NUMBER (if applicable)
ULURP REFERENCE NUMBER (if applicable) N170378ZRX, 170377ZMX	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY New York City Department of City Planning			NAME OF APPLICANT 1675 JV Associates, LLC		
NAME OF LEAD AGENCY CONTACT PERSON Robert Dobruskin, AICP, Director, EARD			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Cara McAteer		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 902 Broadway, 13th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10010
TELEPHONE (212) 720-3423	EMAIL rdobrus@planning.nyc.gov		TELEPHONE (646) 388-8278	EMAIL cmcateer@phippsny.org	

5. *Project Description*

The applicant, 1675 JV Associates, LLC, seeks a zoning map amendment that would affect a portion of Bronx Block 3780 in the Bronx River neighborhood of Bronx Community District 9, and a related zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to establish the proposed rezoning area as a Mandatory Inclusionary Housing (MIH) area subject to the affordability requirements of Option 2 of the MIH program (collectively "the proposed actions"). The proposed zoning map amendment would change the zoning of an approximately 30,514 sf portion of Block 3780, comprising the majority of Lots 1 and 51 and a sliver of Lot 50, which occupies the southern portion of the block with frontage on Westchester Avenue between Metcalf and Fteley Avenues, from R6 to R8A. In addition, a C2-4 commercial overlay would be mapped to a depth of 100 feet along the north side of Westchester Avenue between Metcalf and Fteley Avenues.

The proposed actions would facilitate the development of an approximately 203,000 gross square foot (gsf) mixed-use building at 1675 Westchester Avenue (Lot 1- projected development site 1) containing affordable housing, community facility space, and local retail by the applicant. The proposed building would be built to the street line along Westchester and Metcalf Avenues, and would be rise 13-stories (approximately 132 feet) with a qualifying ground floor. However, for the purposes of a conservative Reasonable Worst Case Development Scenario (RWCDS) analysis, the analysis assumes that the proposed development could include up 14-stories (rising up to a height of approximately 145 feet tall) with a qualifying ground floor, based on the proposed zoning. The proposed development as a RWCDS would contain up to approximately 220 affordable housing units, approximately 7,570 gsf of ground floor local retail, and approximately 6,845 gsf of community facility space (assumed to be Use Group 4 medical office/ambulatory care for conservative RWCDS analysis purposes).

All of the residential units in the proposed building would be affordable to low- and moderate-income tenants, though the exact income mix has not yet been determined. It is conservatively assumed that the 220 units would be affordable to households earning at or below 80 percent of Area Median Income (AMI). In general, the applicant expects that the project will be financed with bonds issued by the City's Housing Development Corportation (HDC) and subsidies provided by both HDC and the NYC Department of Housing Preservation and Development (HPD). All funding would be subject to the necessary regulatory agreements. The Department of City Planning (DCP) will be conducting a coordinated

environmental review with HPD and HDC. As the proposed development is located in a Designated Transit Zone, no accessory parking would be required for the affordable housing units pursuant to ZR Section 25-251 ("Modification of Requirements for Income Restricted Housing Units, Affordable Independent Residences for Seniors or Other Government-Assisted Dwelling Units: Income Restricted Housing Units"). Pursuant to R8A regulations, no accessory parking space would be required for Use Group 4 ambulatory diagnostic or health care facilities. In addition, pursuant to C2-4 regulations, it is assumed that the ground floor retail would require one parking space per 1,000 sf for a total of 8 accessory spaces, which are expected to be waived pursuant to ZR Section 36-232. Therefore, no accessory parking would be provided for the proposed development. It is anticipated that the proposed development would be constructed and fully occupied by 2020.

The proposed actions would affect one additional property (Lot 51) on Block 3780, which is occupied by a single-story nonconforming commercial building with built FAR of 0.72 that could redeveloped as a result of the proposed actions, and therefore, is considered a projected development site (site 2) for RWCDS purposes (refer to Attachment A, "Project Description" for additional details).

Project Location

BOROUGH Bronx	COMMUNITY DISTRICT(S) 9	STREET ADDRESS 1675 Westchester Avenue and 1679 Westchester Avenue
TAX BLOCK(S) AND LOT(S) Block 3780, Lots 1, 50 and 51; sliver portion Block 3780, Lot 50		ZIP CODE 10472

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS

The proposed rezoning area comprises an approximately 30,514 sf portion of Block 3780, which has frontage on the north side of Westchester Avenue, east side of Metcalf Avenue and the west side of Fteley Avenue.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6 | ZONING SECTIONAL MAP NUMBER 3D

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): Area to be rezoned: 30,514 sf
Waterbody area (sq. ft) and type: 0 sf
Roads, buildings, and other paved surfaces (sq. ft.): Area to be rezoned: 28,164 sf
Other, describe (sq. ft.): Area to be rezoned: 2,350 sf of vacant/undeveloped land

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet):
203,001 gsf on the applicant's site; 38,348 gsf on projected development site 2

NUMBER OF BUILDINGS:
1 building on applicant's site; 1 building on projected development site 2

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.):
203,001 gsf on applicant's site and 38,348 gsf on projected development site 2

HEIGHT OF EACH BUILDING (ft.):
While the applicant is proposing a maximum building height of approximately 132', the RWCDS assumes a maximum building height of up to 145 ft. The building on projected development site 2 would have a maximum building height of 145 ft.

NUMBER OF STORIES OF EACH BUILDING:
While the applicant is proposing a building with 13 stories, the RWCDS assumes a building with up to 14-stories. The building on projected development site 2 would have up to 14-stories.

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: Lot 1: 28,872 sf (25,790 sf to be rezoned)
The total square feet not owned or controlled by the applicant: Lot 51: 4,865 sf (4,724 sf to be rezoned)

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 28,872 sq. ft. (width x length) VOLUME OF DISTURBANCE: TBD cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 28,872 sq. ft. (width x length)

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

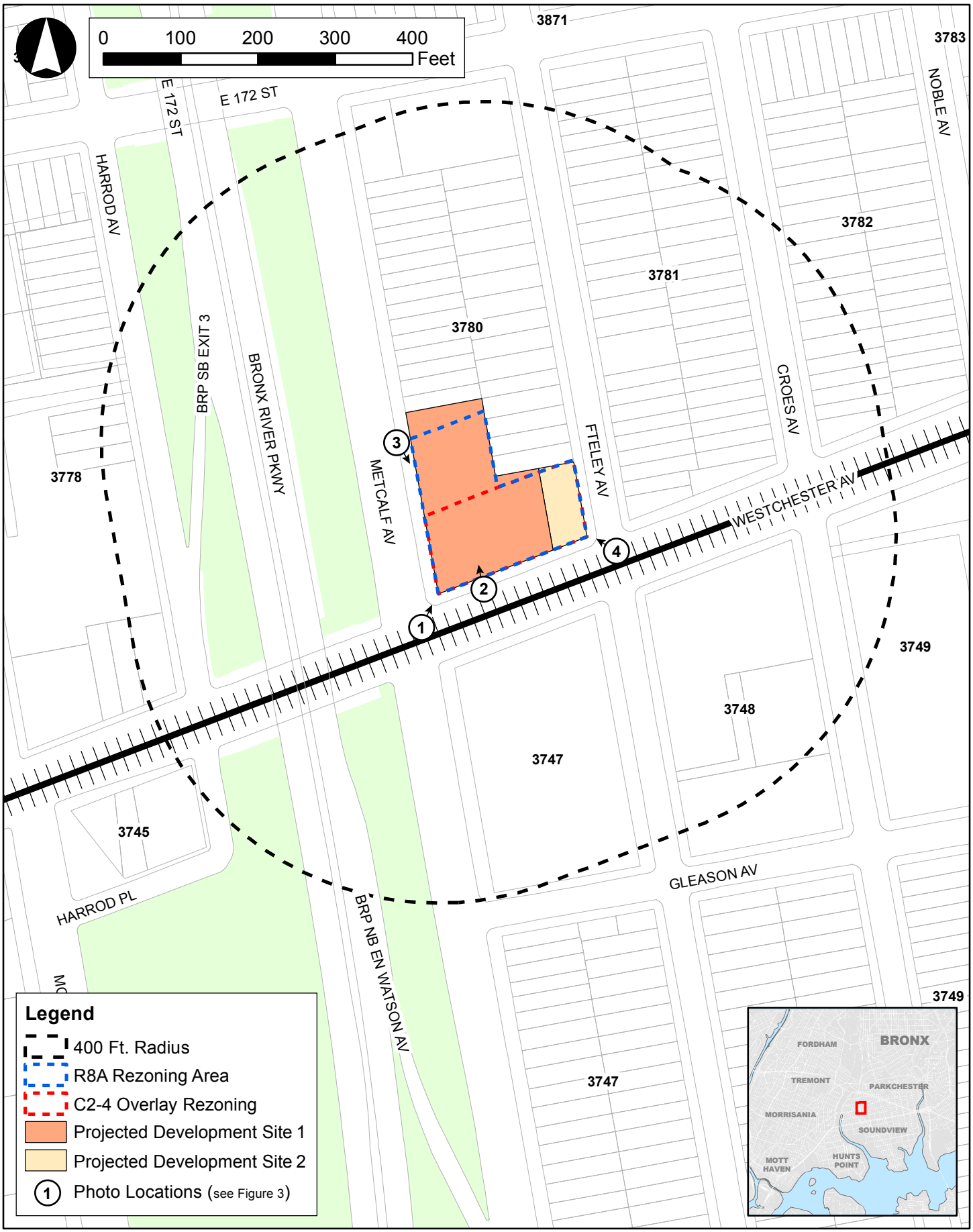
	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	223,102	11,401	6,846	0
Type (*e.g.,* retail, office, school)	254 units	local retail	Use Group 4 (RWCDS assumes medical office/ ambulatory care)	N.A.

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 707 NUMBER OF ADDITIONAL WORKERS: 65
Provide a brief explanation of how these numbers were determined:
The number of additional residents is based on the average household size of Bronx Community District 9 (2.78 persons/household from the 2010 Census). The number of additional workers is based on the rate of 3 workers/1,000 sf of retail/community facility space and 1 worker for every 25 DUs.

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

Has a No-Action scenario been defined for this project that differs from the existing condition? ☒ YES ☐ NO
If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:
In absence of the proposed actions, it is anticipated that projected development site 1, consisting of Block 3780, Lot 1,

Figure 1
Project Location





1675 Westchester Avenue EAS

Figure 2
Tax Map



1. Projected development site 1, looking north-east from the corner of Westchester Avenue and Metcalf Avenue.



2. Projected development site 1, looking north from a middle point along the Westchester Avenue frontage of Block 3780, Lot 1.

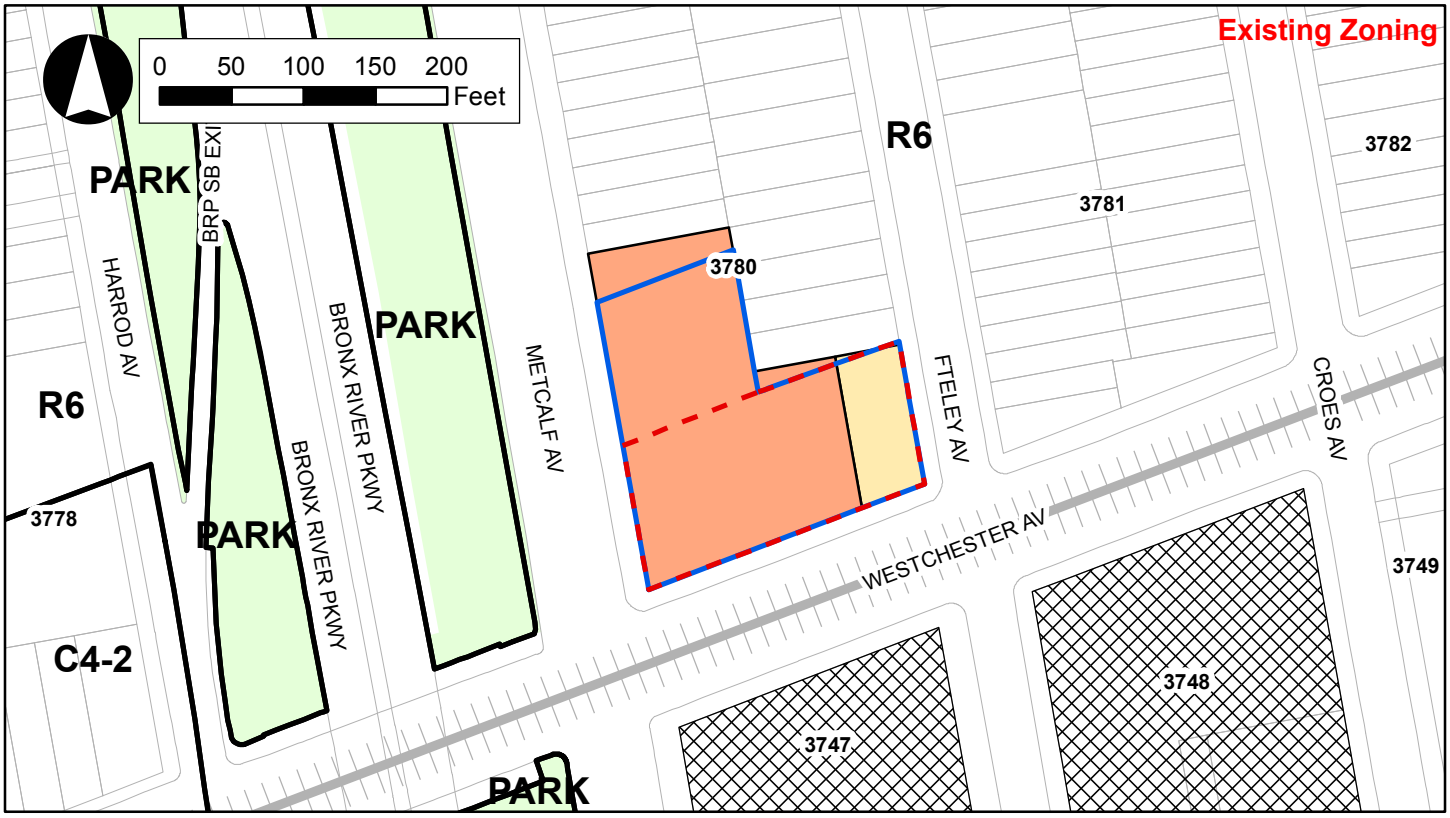


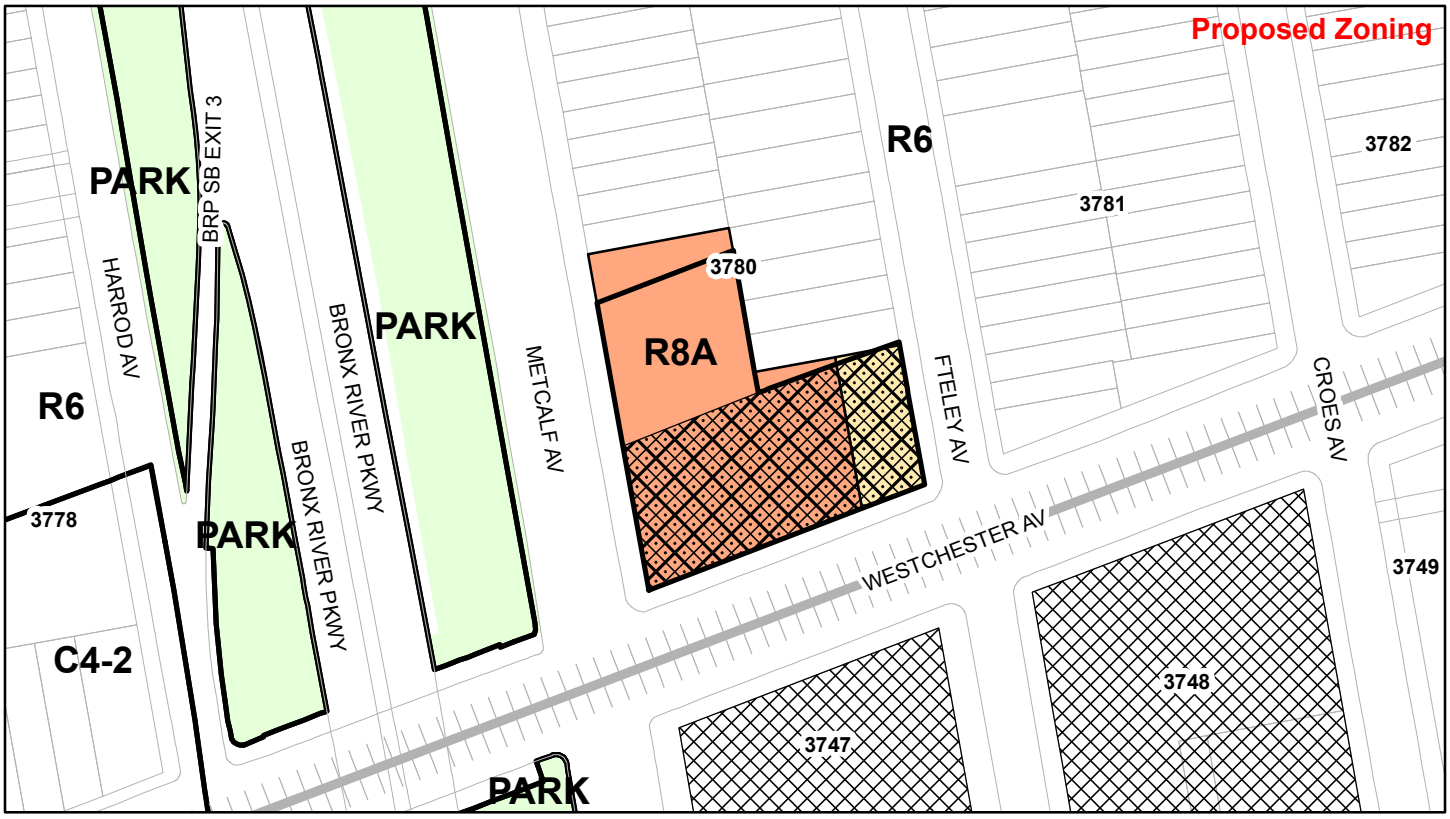
3. Projected development site 1, looking south-east along Metcalf Avenue from the northwestern corner of the site.



4. Projected development site 2, looking west from the intersection of Westchester Avenue and Fteley Avenue.

Zoning Map Change





Legend

- Projected Development Site 1
- Projected Development Site 2
- R8A Rezoning Area
- C2-4 Overlay Rezoning
- Zoning District
- Commercial Overlays
  - C1-2
  - C2-4

Land Use Map


0 100 200 300 400
Feet
E 172 ST
NOBLE AV
HARROD AV
BRP SB EXIT 3
BRONX RIVER PKWY
BRONX RIVER PKWY
FTELEY AV
METCALF AV
MORRISON AV
WESTCHESTER AV
HARROD PL
GLEASON AV
CROES AV
Legend
400 Ft. Radius
Projected Development Site 1
Projected Development Site 2
One & Two Family Buildings
Multi-Family Walkup Buildings
Multi-Family Elevator Buildings
Mixed Commercial/Residential Buildings
Commercial/Office Buildings
Industrial/Manufacturing
Transportation/Utility
Public Facilities & Institutions
Open Spaces
Parking Facilities
Vacant Land
No Others or No Data

would be redeveloped with a mixed-use residential and community facility (ambulatory care/medical offices) building, built in accordance with R6 exsiting zoning. The No-Build development would consist of a up to a 7-story, approximately 110,316 gsf building that would include 94 market-rate residential units (95,277 gsf) on its upper floors and approximately 15,039 gsf of Use Group 4 community faciltiy space, as well as with 47 accessory parking spaces for the residential uses. The approximately 4,865 sf Lot 51 (projected development site 2) would also be redeveloped in the No-Action with a 7-story residential building containing up to 16 market-rate residential units.

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2020

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 24

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

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

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. See Attachment C		
(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. Refer to Appendix 1		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of 200 or more residential units?	☐	☒
o Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
o Directly displace more than 500 residents?	☐	☒
o Directly displace more than 100 employees?	☐	☒
o Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
o **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☒	☐
o **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
o **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☒	☐
o **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
o If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
o If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐

	YES	NO
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(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. Refer to Appendix 3 for NYC Landmarks Preservation Commission (LPC) Environmental Review correspondence.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
o If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
o If "yes," complete the Jamaica Bay Watershed 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: According to a Phase I ESA prepared by Cider Environmental (dated February 2017), there are no recognized environmental conditionals (RECs) associated with the applicant-owned projected development site 1 (Block 3780, Lot 1), and no further investigation or remedial actions are required for the site. Refer to Attachment H, "Hazardous Materials" for further details.	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the	☐	☒

	YES	NO
amounts listed in Table 13-1 in Chapter 13?		
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 13,373		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 32,449,351,900		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☒
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
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) see Attachment I	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐

	YES	NO
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a 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. See Attachment B, "Supplemental Screening"		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☒	☐
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. see Attachment B, Supplemental Screening		

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
Cara McAteer	May 19, 2017

SIGNATURE 

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

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

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

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

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

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

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

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

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

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

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

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

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	New York City Department of City Planning
NAME	**DATE**
Olga Abinader	May 19, 2017

SIGNATURE

Olga Abinader

ATTACHMENT A

PROJECT DESCRIPTION

I. INTRODUCTION

The applicant, 1675 JV Associates, LLC, is seeking zoning map and text amendments from the New York City Planning Commission (CPC), in addition to public financing from the New York City Department of Housing Preservation and Development (HPD) and the New York City Housing Development Corporation (HDC), to facilitate the development of an approximately 203,000 gross square foot (gsf) mixed-use residential, community facility, and commercial building with up to 13-stories at 1675 Westchester Avenue (Bronx Block 3780, Lot 1- projected development site 1) in the Bronx River neighborhood of Bronx Community District (CD) 9 (proposed project). As a reasonable worst-case development scenario (RWCDS), the proposed development would include up to approximately 220 residential units, approximately 6,846 gsf of community facility space[1], and approximately 7,570 gsf of local retail. All residential units in the proposed building would be affordable to low-and moderate-income tenants, though the exact income mix has not yet been determined. It is conservatively assumed for analysis purposes that the 220 housing units would be affordable to households earning at or below 80 percent of Area Median Income (AMI). The proposed development would replace a vacant, single-story, approximately 12,275 sf building that formerly had accommodated a health center, which closed in 2012, and its associated at-grade accessory parking spaces, which currently occupy the approximately 28,872 sf projected development site 1.

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

II. BACKGROUND AND EXISTING CONDITIONS

The applicant is a joint venture of Phipps Houses and the Acacia Network. The Acacia Network acquired projected development site 1 in 2014, and it has since transferred ownership of the property to the applicant. Phipps Houses is the nation's oldest and one of its largest not-for-profit developers/owners and managers of affordable housing. Its mission is to create and sustain enduring communities through housing development, attentive property management, and residential- and community based human services in New York City neighborhoods. The Acacia Network has a long history of commitment to preserving the Latino community based on organizations that have been their communities' backbone

[1] The type of community facility has not yet been determined, but for conservative RWCDS analysis purposes, it is assumed that the approximately 6,846 sf of community facility space would be occupied by Use Group 4- medical office/ambulatory care facility.

since the late 1960s. In addition to developing affordable housing, Acacia provides a range of community services including services related to health care, culture, seniors, education, and housing.

Proposed Rezoning Area

The proposed zoning map change would affect approximately 25,790 sf of Lot 1 and approximately 4,724 sf of Lot 51 for a total of approximately 30,514 sf on Bronx Block 3780 in the Bronx River neighborhood of Bronx CD 9 (See Figure A-1).[2] The remaining 3,082 sf of Lot 1 and approximately 141 sf of Lot 51 would not be rezoned and would continue to be zoned R6.

Projected Development Site 1 (Applicant's Property)

The approximately 28,872-sf projected development site 1 at 1675 Westchester Avenue is comprised of one irregularly-shaped tax lot (Bronx Block 3780, Lot 1) owned by the applicant. Projected development site 1 is a corner lot with approximately 156 feet of frontage on Westchester Avenue to the south and 238 feet of frontage on Metcalf Avenue to the west. Both Westchester and Metcalf Avenues are considered wide streets.

As shown in Figure A-2, projected development site 1 is currently occupied by a vacant one-story, brick, approximately 12,275-sf building that formerly served as a health center (Use Group 4 community facility use), which closed in 2012. The building occupies the southeastern corner of the development site and is built to the street line along Westchester Avenue and setback from Metcalf Avenue. A large portion of the site accommodates a former surface parking lot accessible from a curb cut on Metcalf Avenue, and remainder of the site is occupied by a small open lawn at the intersection of Westchester and Metcalf Avenues. Projected development site 1 is currently inaccessible and is enclosed by chain-link fencing at its perimeter.

Projected development site 1 is currently zoned R6 (see Figure A-3). Existing uses on projected development site 1 have a built FAR of 0.38, which is underbuilt for the allowable FAR of up to 3.0 for residential uses built pursuant to Quality Housing program on a wide street outside of the Manhattan core, and up to 4.8 FAR for community facility uses (refer to Table A-1).

Additional Lot in the Rezoning Area- Projected Development Site 2

Lot 51 is located adjacent to and east of projected development site 1 at the corner of Westchester and Fteley Avenues (see Figure A-1). It is an approximately 4,865 sf rectangular-shaped, privately-owned corner lot with approximately 47 feet of frontage on Westchester Avenue to the south and approximately 100 feet of frontage on Fteley Avenue to the east. The site is currently developed with a single-story, approximately 3,525 sf legally non-conforming commercial building at 1677-1679 Westchester Avenue (1235 Fteley Avenue) that accommodates a dry cleaner and wine and liquor store. The single-story commercial building is constructed to the lot lines along both street frontages and has a built FAR of 0.72.

[2] It should be noted that a tiny sliver of Lot 50 on Block 3780, at its southeastern corner, would also be affected by the proposed zoning map changes, as the depth of Lot 51 on Block 3780 along Fteley Avenue is 99.66 feet.

Figure A-1
Project Location

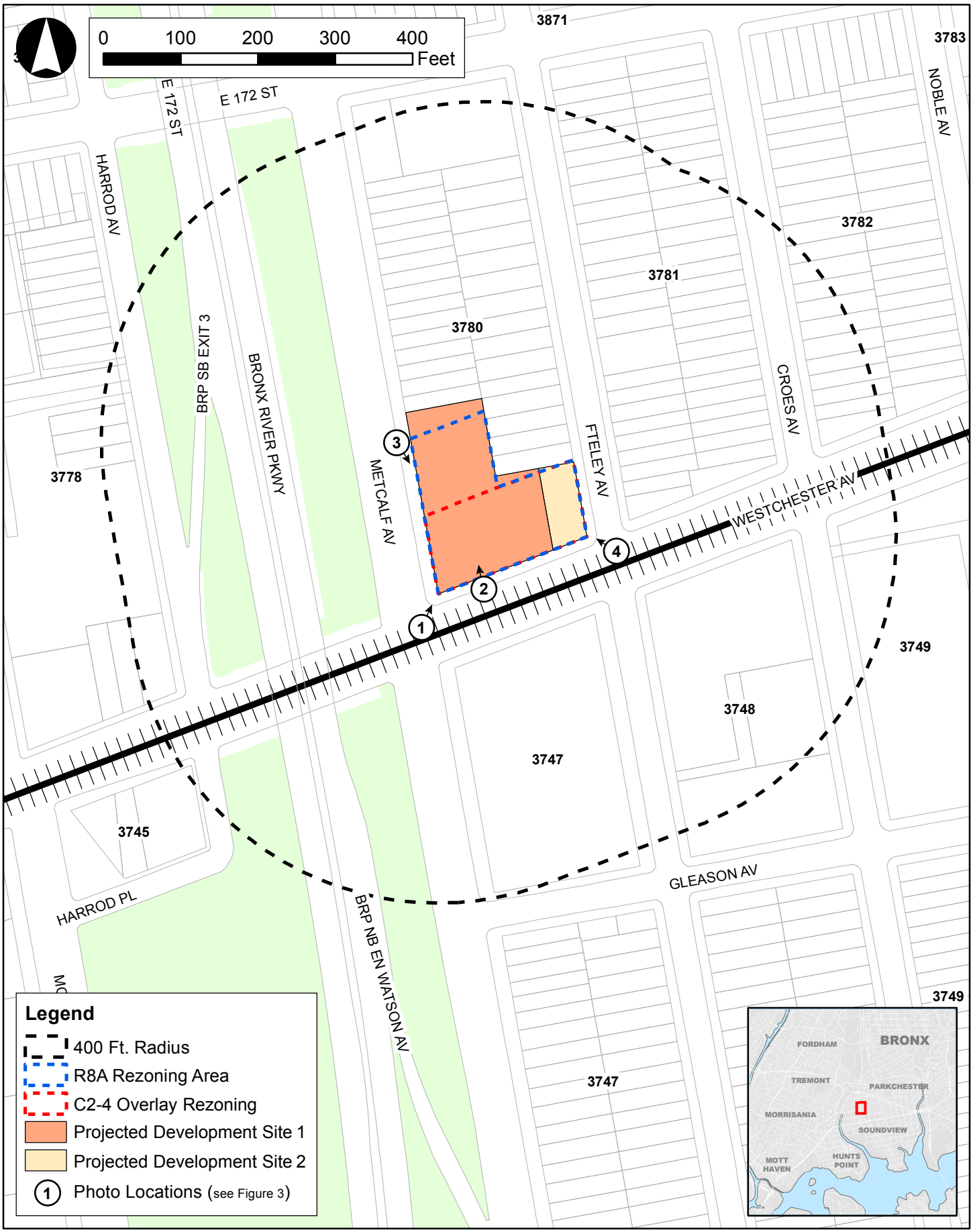
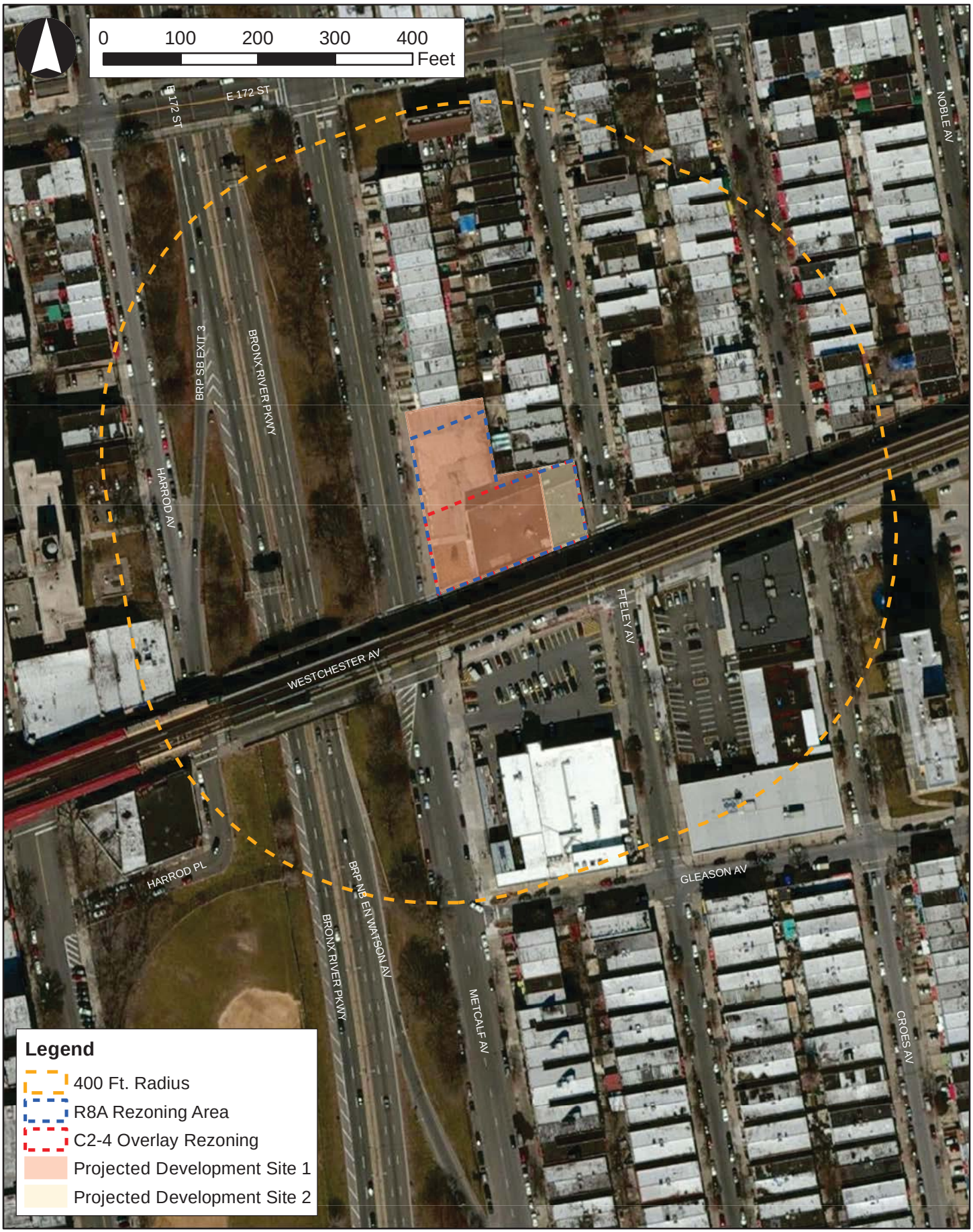
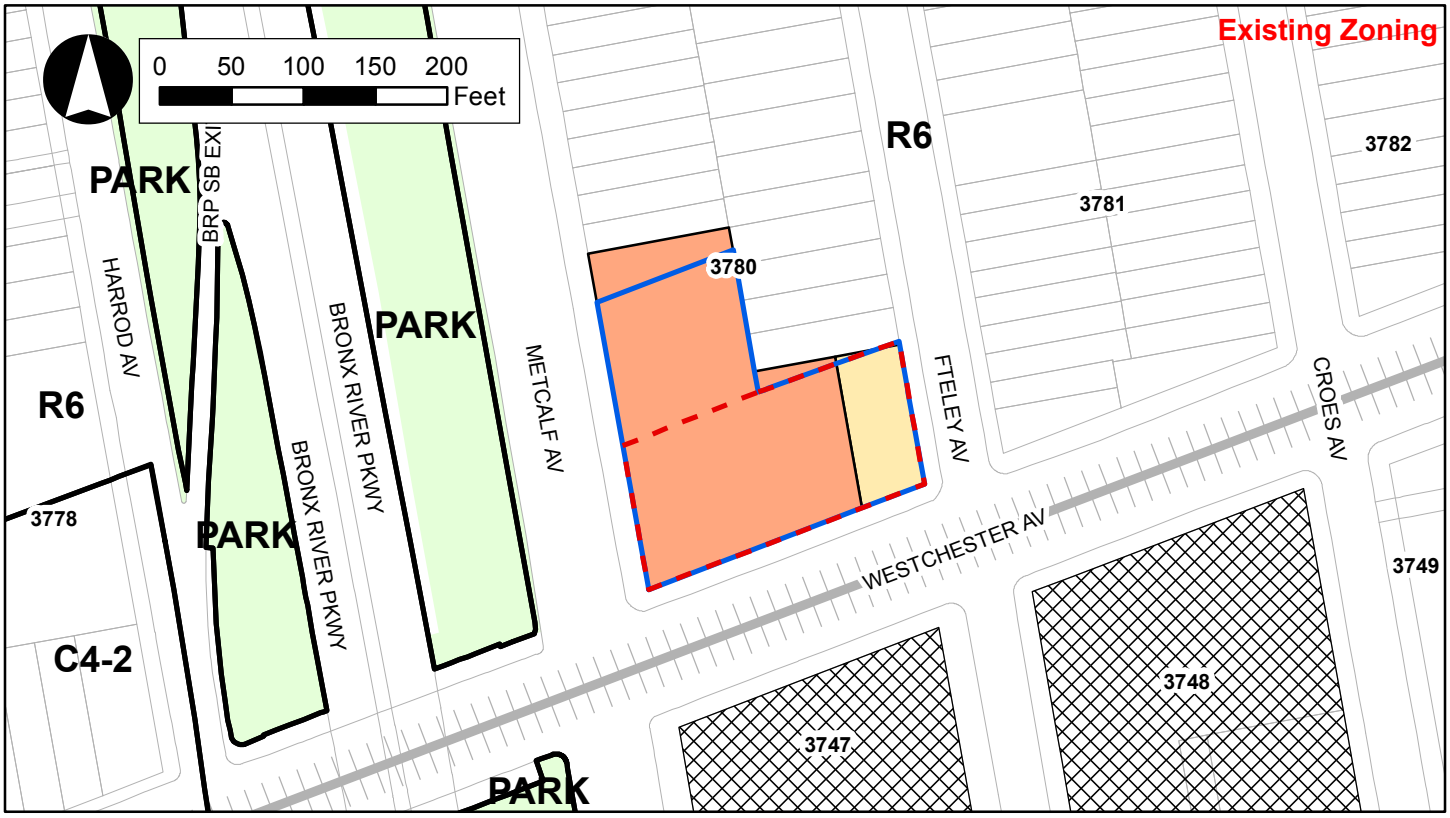
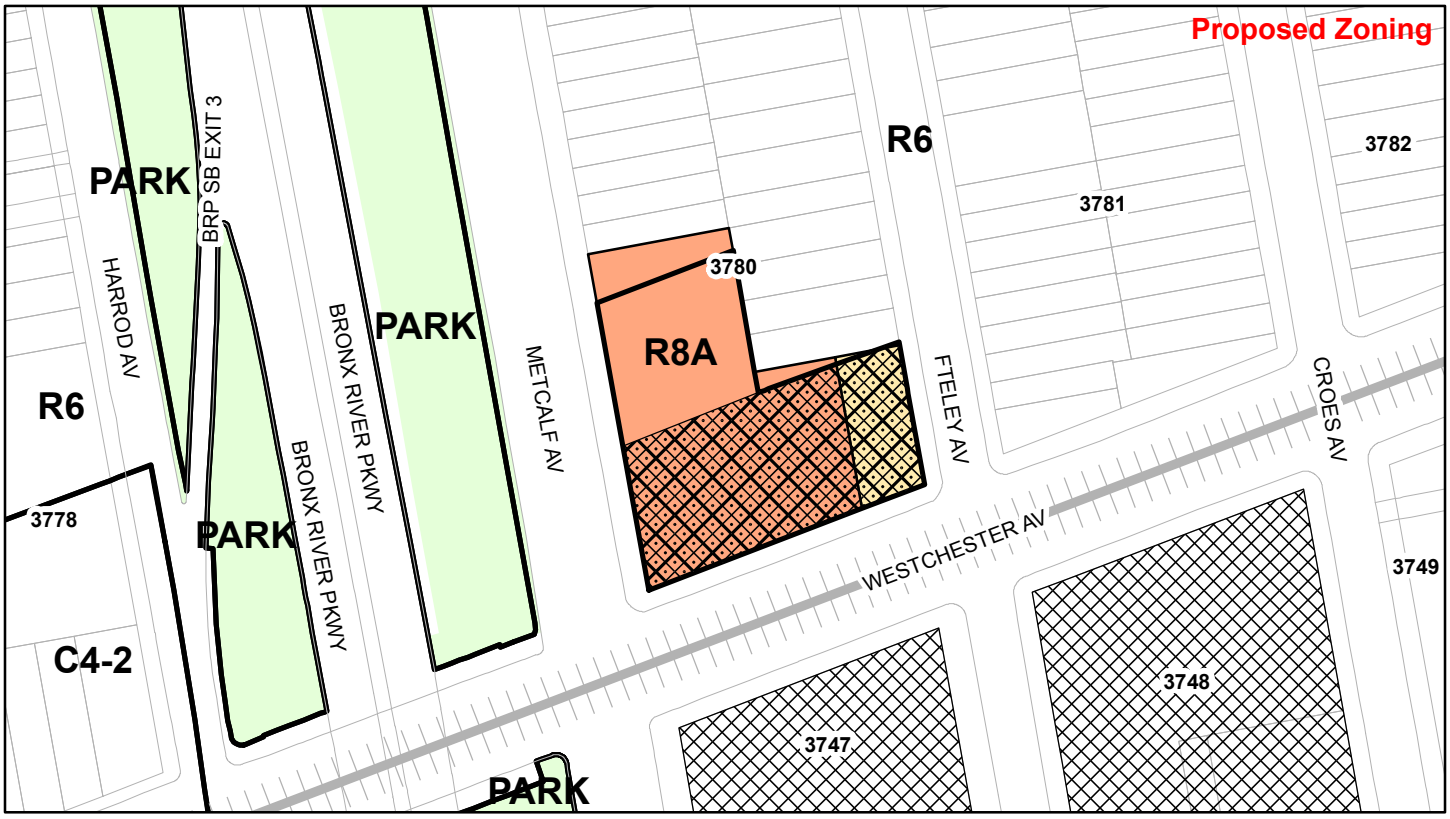


Figure A-2
Project Location







Legend

- Projected Development Site 1
- Projected Development Site 2
- R8A Rezoning Area
- C2-4 Overlay Rezoning
- Zoning District
- Commercial Overlays
  - C1-2
  - C2-4

According to the 2016 Primary Land Use Tax Lot Output (PLUTO) database, provided by the NYC Department of City Planning (DCP), the existing building was constructed in 1964. Although the property does not have a certificate of occupancy available on the DOB web site, the building's commercial occupancy conforms to the NYC Department of Buildings (DOB) records for the property, as of 2014 (refer to Appendix 2). It should also be noted that the dry cleaning establishment has occupied this property since at least 1999, and obtained approval for two building permits from the DOB in 1999 and 2000 for general construction related to air duct work and to replace the building's boiler for the dry cleaning operation. Furthermore, the liquor store has had a license from the New York State Liquor Authority to sell alcoholic beverages at this location since at least 1999. Given that the property conforms to DOB records, it is assumed that the existing commercial uses at the property are legally non-conforming uses.

Surrounding Area and Context

The area to be rezoned is in the Bronx River section of the Bronx. Land uses near the rezoning area are predominantly residential, including both one- and two-family and multi-family residential buildings. Commercial uses are generally concentrated along Westchester Avenue. Community facility uses, including several religious institutions, a post office, a library, and a day care center are also scattered throughout the surrounding area (refer to Figure 5 in the EAS form).

As noted above, uses along Westchester Avenue are generally commercial and include a supermarket, located directly south of the area to be rezoned, and other local retail uses serving the surrounding residential community, such as pharmacies, restaurants, and bank branches. Many of these commercial buildings were recently constructed.

The remainder of the subject block is primarily residential except for its northern end along East 172nd street, which contains the Church of the Abiding Presence. Three-story attached residential row houses with narrow front yards and driveways and single stall garages extend along the east side of Metcalf Avenue. A mix of detached two-story single family homes and semi-attached two-and three-story multifamily apartments line the west side of Fteley Avenue.

Transportation infrastructure is also a dominating component of the surrounding area. Directly south of the rezoning area, the elevated MTA subway tracks run above Westchester Avenue, with the Morrison Avenue-Sound View (6) Station located two blocks west of the rezoning area. The 6 train provides local service between Pelham Bay Park/Bruckner Expressway station in the Bronx and Brooklyn Bridge-City Hall station in Lower Manhattan. The Bx4 and Bx4a MTA-NYCT bus routes also run along Westchester Avenue, which provide local service between The Hub and Westchester Square. To the west of the rezoning area is the Bronx River Parkway, an approximately 19-mile north-south parkway that extends through much of the Bronx and Westchester County. It serves as a limited-access commuter route in the Bronx, which has its southern terminus near the Bruckner Expressway and intersects with several major east-west roads in the Bronx. Near the rezoning area, the Bronx River Parkway is at a lower elevation and is flanked by open space, which is largely inaccessible to the public and enclosed by chain-link fencing. The northbound Bronx River Parkway has an entrance ramp from vehicles traveling northbound on Metcalf Avenue to the south of Westchester Avenue.

Zoning

As shown in Figure A-3, the rezoning area is located in an R6 residential zoning district. R6 zoning districts are widely mapped in built-up, medium-density areas in Brooklyn, Queens, and the Bronx. The character of R6 districts can range from neighborhoods with a diverse mix of housing types and heights to large scale "tower in the park" developments. New buildings in R6 districts may be developed under either height factor regulations or the optional Quality Housing regulations that often reflect the older, pre-1961 neighborhood streetscape. The allowable floor area ratio (FAR) in R6 districts range from 0.78 to 2.43 pursuant to height factor regulations (up to 3.0 FAR pursuant to Quality Housing regulations along a wide street outside of the Manhattan core). Building heights are governed by the sky exposure plane, which begins 60 feet above the street line. Off-street accessory parking is required for 70 percent of residential dwelling units (DUs) and may be waived if five or fewer accessory parking spaces are required.

The surrounding area is also primarily zoned R6. There is a C4-2 commercial district mapped to the west of the rezoning area. C4 districts are mapped in borough-level commercial centers, such as Steinway Street in Astoria, Queens and Fordham Road in the Bronx, that are located outside of the central business districts. In these areas, specialty and department stores, theaters and other commercial and office uses serve a larger region and generate more traffic than neighborhood shopping areas. Use Groups 5, 6, 8, 9, 10 and 12, which include most retail establishments, are permitted in C4 districts. Uses that would interrupt the desired continuous retail frontage, such as home maintenance and repair service stores listed in Use Group 7, are not allowed. C4-2 districts permit a maximum FAR of 3.4 for commercial uses and an FAR between 0.78 and 2.43 for residential uses (R6 equivalent). There are C1-2 commercial overlays are mapped along the south side of Westchester Avenue between Metcalf Avenue and Croes Avenue, directly to the south of the proposed rezoning area.

III. THE PROPOSED ACTIONS

ULURP Actions

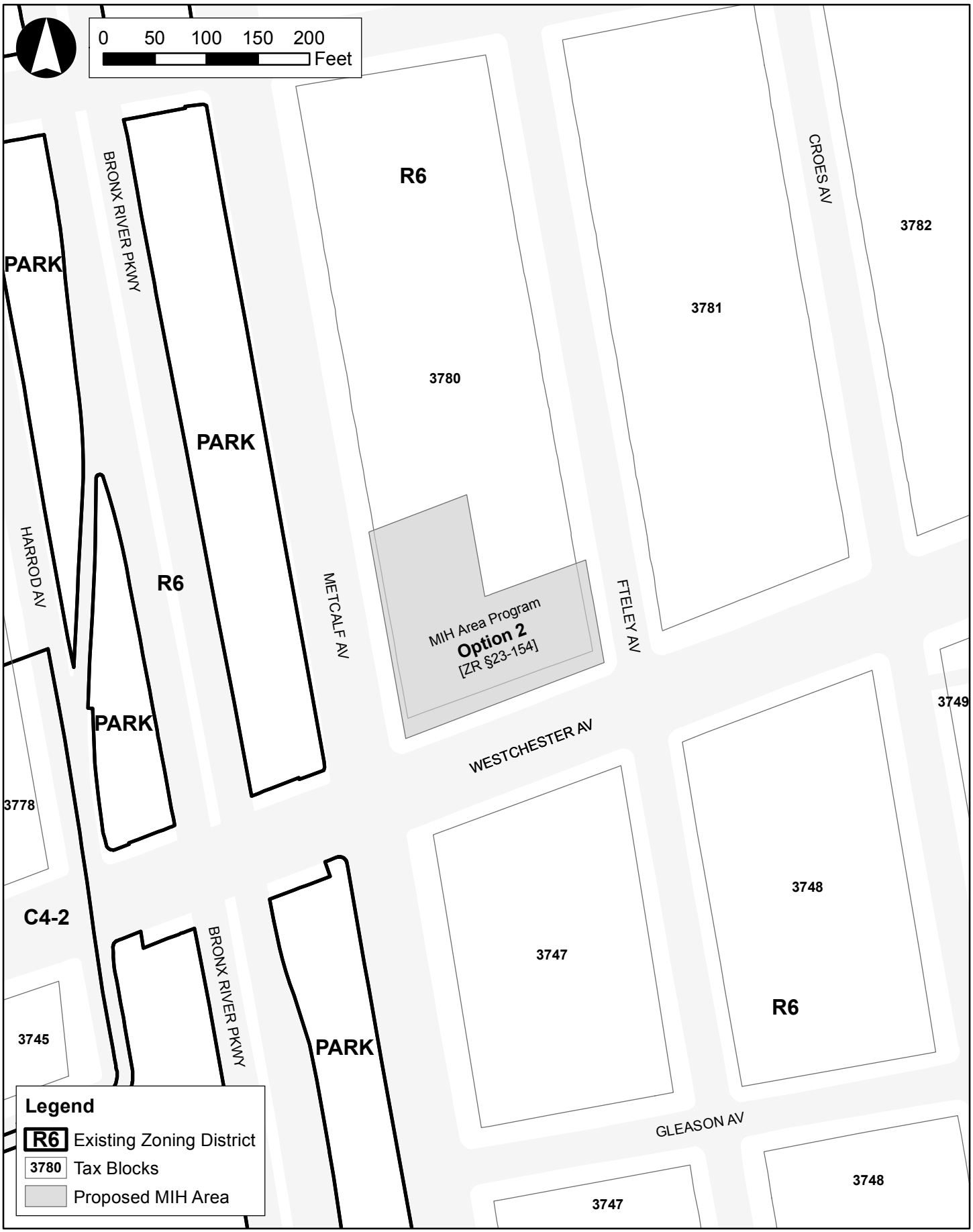
The proposed project requires the following discretionary land use actions:

- ***Zoning Text Amendment:*** The applicant is proposing a zoning text amendment to Appendix F of the *Zoning Resolution (ZR) of the City of New York* to establish the proposed rezoning area as a Mandatory Inclusionary Housing (MIH) designated area subject to the affordability requirements of Option 2 of the MIH program (see Figure A-4). Option 2 requires that at least 30 percent of the residential floor area be reserved for residents with incomes averaging 80 percent of AMI.

- ***Zoning Map Amendment:*** The applicant is proposing a zoning map amendment to rezone an approximate 30,514-sf portion of Block 3780, including portions of Lots 1 and 51, as well as a sliver of Lot 50 (the "proposed rezoning area"), occupying the southern portion of the block, from R6 to R8A and R8A/C2-4 zoning districts (refer to Figure A-3). As shown in Figure A-3, most Lot 51 (approximately 4,724 sf) would be included in the proposed rezoning area, and an

Figure A-4

Proposed Mandatory Inclusionary Housing (MIH) Area



approximately 25,790 sf portion of Lot 1 would be mapped within the R8A district.[3] The proposed rezoning area would be an L-shaped zoning district that would be mapped at a distance of 200 feet from Westchester Avenue along Metcalf Avenue and would extend parallel to Westchester Avenue for approximately 100 feet (see Figure A-3). On Fteley Avenue, the proposed R8A district would be mapped to a depth of 100 feet from Westchester Avenue, and the proposed R8A district boundary would extend perpendicular from Fteley Avenue for approximately 100 feet. The C2-4 commercial overlay would be mapped to a depth of 100 feet along the north side of Westchester Avenue between Metcalf and Fteley Avenues (see Figure A-3). It should be noted that a tiny sliver of Lot 50 on Block 3780, at its southeastern corner, would also be affected by the proposed zoning map changes, as the depth of Lot 51 on Block 3780 along Fteley Avenue is 99.66 feet. Table A-1 compares the use and bulk requirements under the existing and proposed zoning districts.

TABLE A-1: Comparison of Allowable Uses and Maximum FAR for the Existing and Proposed Zoning

	Existing Zoning	Proposed Zoning
Zoning District	**R6**	**R8A/C2-4**
Use Groups	UG 1-4	UG 1-9, and 14[1]
Maximum FAR		
Residential	0.78-2.43 (under Height Factor regulations) Quality Housing Program- 3.0 (on wide streets outside the Manhattan Core) & 2.2 (on narrow streets)	7.2[2]
Community Facility	4.8	6.5
Commercial	0.0	2.0[1]
Manufacturing	0.0	0.0

Source: *Zoning Resolution of the City of New York.*
Notes: [1]Commercial uses (Use Groups 5-9, and 14) would be permitted in the proposed C2-4 overlay to be mapped within 100 feet of the north side of Westchester Avenue between Metcalf and Fteley Avenues in the proposed R8A zoning district.
[2] The MIH area sets a new maximum permitted residential FAR that supersedes the FAR permitted by the underlying zoning district. With both the designation of the proposed rezoning area as an MIH area and its rezoning to R8A and R8A/C2-4 zoning districts, the maximum permitted residential FAR within the proposed rezoning area would be 7.2, and the maximum building height would be 140 feet (or up to 145 feet with qualifying ground floor).

The proposed zoning map and text amendments are discretionary public actions that are subject to both the Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR).

Additional Actions Not Subject to ULURP

In addition to the zoning map and text amendments described above, the applicant is seeking public financing from HPD and HDC, discretionary public actions that are subject to CEQR. It is anticipated that the public financing would be sought once the proposed zoning map and text amendments have been approved (expected June 2018), and would call for approved building permits from the New York City Department of Buildings (DOB). The anticipated public funding sources would also mandate the building uses planned for projected development site 1 (outlined in further detail below) and would satisfy the requirements of Option 2 of the MIH Program.

[3] The northern approximately 3,082 sf portion of Lot 1, located beyond 200 feet of Westchester Avenue, would retain its existing R6 zoning designation, and the northwestern corner of Lot 51 beyond 100 feet of Westchester Avenue, comprising approximately 141 sf, would retain its existing R6 zoning.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The proposed actions are intended to facilitate a new affordable housing development as well as local retail and community facility uses on projected development site 1. The proposed MIH R8A residential zoning district would increase the allowable residential FAR from 3.0 to 7.2, an increase of approximately 4.2, and the proposed C2-4 commercial overlay would permit commercial uses up to 2.0 FAR within 100 feet of Westchester Avenue. As a RWCDS, the proposed development is expected to provide up to approximately 220 units of affordable rental housing, along with an approximately 7,570 gsf of local retail and approximately 6,846 gsf of community facility use. This project would help to address the continuing need for affordable housing for a range of household income levels in the Bronx River neighborhood and the surrounding area. In addition, extending the MIH to projected development sites 1 and 2 would promote the creation of permanently affordable housing.

Westchester Avenue is a wide street that is underneath the elevated tracks of the IRT number 6 subway line and would be able to accommodate addition growth. Further, Metcalf Avenue bordering projected development site 1 to the west is also a wide street. The Bronx River Parkway, a limited-access north-south commuter route lined with open space, is also just to west of the proposed rezoning area.

The proposed C2-4 commercial overlay would activate the street and allow a consistent streetwall, retail continuity, and serve area residents. It would also bring into conformance the existing local retail uses occupying Lot 51 on Block 3780. In the immediate vicinity of the area to be rezoned, Westchester Avenue is largely a commercial corridor lined with many retail and other commercial uses. In addition, C1-2 commercial overlays are mapped along the south side of Westchester Avenue between Metcalf Avenue and Croes Avenue, directly south of the proposed rezoning area.

Projected development site 1 is currently underbuilt and does not support any active uses. According to the applicant, the proposed actions would support citywide goals, such as the *Housing New York* plan*,* by creating expanded opportunities for new development, in particular new affordable housing development. The proposed project would add a substantial number of affordable dwelling units to a community that anticipates population growth and has a need for such mixed-income housing.

The proposed zoning map and text amendment would create additional zoning capacity in a transit accessible area to support new housing creation and increase the number of affordable housing units available in New York City. The creation of new housing supply at various income levels is also expected to help alleviate the upward pressure on housing prices, and contribute to housing affordability in the neighborhood and larger City. The MIH program would promote and retain neighborhood economic diversity in the area and create a considerable amount of affordable housing near public transit with the Morrison Avenue-Sound View (6) Station located two blocks west of the proposed rezoning area and local bus routes traveling on Westchester Avenue near the directly affected area. With MIH Option 2, at least 30 percent of the proposed residential units would also be required to remain permanently affordable and ensure that the affordable units remain a resource for the community into the future, even as neighborhood economic conditions may change.

V. ANALYSIS FRAMEWORK

As described above, the applicant is proposing to rezone the southern approximately 30,514 sf of Bronx Block 3780, comprising portions of Lots 1 and 51, from R6 to R8A. A C2-4 commercial overlay would also be mapped at a depth of 100 feet along the north side of Westchester Avenue between Metcalf and Fteley Avenues. In addition, the applicant is requesting a zoning text amendment to Appendix F of the ZR to establish a Mandatory Inclusionary Housing (MIH) area consistent with the proposed R8A rezoning area. The proposed R8A zoning district would permit up to 7.2 FAR of residential uses under the MIH, up to 6.5 FAR of community facility uses, and the C2-4 commercial overlay would allow up to 2.0 FAR of commercial uses (refer to Table A-1). The proposed actions also include public financing approval for the proposed development at 1675 Westchester Avenue (Lot 1-projected development site 1).

Identification of Development Sites

According to the *CEQR Technical Manual* the following factors, commonly referred to as "soft site criteria," are generally considered when evaluating whether some amount of development would likely be constructed by the build year as a result of the proposed actions:

- The uses and bulk allowed: Lots located in areas where changes in use would be permitted and/or contain buildings built to substantially less than the maximum allowable floor area ratio (FAR) under the existing zoning are considered "soft" enough such that there would likely be sufficient incentive to develop in the future, depending on other factors specific to the area (e.g., the amount and type of recent as-of-right development in the area, recent real estate trends, site specific conditions that make development difficult, and issues relating to site control or site assemblage that may affect redevelopment potential); and

- Size of the development site: Lots must be large enough to be considered "soft." Generally, lots with a small lot size are not considered likely to be redeveloped, even if currently built to substantially less than the maximum allowable FAR. A small lot is often defined for this purpose as 5,000 square feet or less, but the lot size criteria is dependent on neighborhood specific trends, and common development sizes in the study area should be examined prior to establishing these criteria.

However, the following uses and types of buildings that meet the soft site criteria are typically excluded from development scenarios because they are unlikely to be redeveloped as a result of the proposed project:

- Full block and newly constructed buildings with utility uses, as these uses are often difficult to relocate;

- Lots where construction is actively occurring, or has recently been completed, as well as lots with recent alterations that would have required substantial capital investment, unless recently constructed or altered lots were built to less than or equal to half of the maximum allowable FAR under the proposed zoning;

- Lots whose location or irregular shape would preclude or greatly limit future as-of-right development. Generally, development on irregular lots does not produce marketable floor space;

- Long-standing institutional uses with no known development plans; or

- Residential buildings with six (6) or more units constructed before 1974. These buildings are likely to be rent-stabilized and difficult to legally demolish due to tenant re-location requirements.

Projected Development Site 1 (Applicant's Property)

Projected development site 1 at 1675 Westchester Avenue (Lot 1) currently has a built FAR of approximately 0.38, which is approximately 13 percent of the maximum residential FAR of 3.00 allowed by the current R6 zoning under Quality Housing, and approximately five percent of the maximum base FAR of 7.2 under the proposed R8A zoning. As described above, the applicant intends to redevelop the site, which comprises the majority of the area to be rezoned. Therefore, the applicant-owned site is considered a known development site (projected development site 1) for environmental analysis purposes.

Additional Lot being Rezoned- Projected Development Site 2

In addition to the applicant's property, the rezoning area also includes one privately-owned tax lot that is not controlled by the applicant (Lot 51). With the proposed actions, most Lot 51 would be rezoned R8A; the proposed C2-4 commercial overlay would be mapped to a depth of 100 feet along the north side of Westchester Avenue. As described above, this lot is currently occupied by a single-story commercial building, which has a lot area of 4,865 sf and approximately 3,525 sf of zoning floor area, for a built FAR of 0.72. This built FAR represents approximately 24 percent of the maximum existing residential FAR of roughly 3.0 for the lot, and about 10 percent of the maximum residential FAR of 7.2 under the proposed zoning. Although Lot 51 occupies less than 5,000 sf, it meets several other criteria for a "soft site," and it could be redeveloped as a result of the proposed actions, and therefore, is considered a projected development site (site 2) for RWCDS purposes.

In the future with the proposed actions, it is assumed that Lot 51 would be redeveloped with a predominantly residential building with ground floor retail that would have the maximum 7.2 FAR[4] and accommodate approximately 34 residential units and approximately 3,831 gsf of local ground floor retail. Option 2 of the MIH program would require that 30 percent of new these new housing be affordable to households at an average of 80 percent of AMI, with no unit targeted at a level exceeding 130 percent of AMI.

As such, for RWCDS purposes, two projected development sites have been identified in the directly affected area (i.e., rezoned area). Projected development site 1, which is under the applicant's control, along with one additional projected development site (site 2) on Lot 51, represent the RWCDS for analysis purposes. Table A-2a provides a comparison of the existing, No-Action, and With-Action conditions for the two identified projected development sites.

[4] Pursuant to ZR Section 77-211, the bulk regulations of the proposed R8A/C2-4 zoning district may apply to entire property (Lot 51) in the future with the proposed actions, as more than 50 percent of the lot area would be mapped within the proposed R8A/C2-4 zoning district and the greatest distance from the proposed zoning district boundary line to any lot line of the property in the R6 zoning district would be less than 25 feet.

TABLE A-2a
Comparison of Existing, No-Action, and With-Action Conditions (Lots 1 and 51 on Block 3780)

	Existing Condition		No-Action Condition		With-Action Condition		Increment
LAND USE							
Residential	□ YES	X NO	X YES	□ NO	X YES	□ NO	
If "yes," specify the following:							
Describe type of residential structure	N/A		110 rental apartments		254 rental apartments		144 rental apartments
No. of dwelling units	N/A		110 units		254 units		+144 units
No. of low- to moderate-income units	N/A		0 units		230 units		+230 units
Gross floor area (sf)	N/A		111,207 gsf		222,326 gsf		+111,119 gsf
Commercial	X YES	□ NO	□ YES	X NO	X YES	□ NO	
If "yes," specify the following:							
Type of use	Local retail		None		Local retail		
Gross floor area (sf)	3,525 gsf		0 gsf		11,401 gsf		+11,401 gsf
Manufacturing/Industrial	□ YES	X NO	□ YES	X NO	□ YES	X NO	
If "yes," specify the following:							
Type of use	N/A		N/A		N/A		N/A
Gross floor area (sf)	N/A		N/A		N/A		N/A
Open storage area (sf)	N/A		N/A		N/A		N/A
If any unenclosed activities, specify:	N/A		N/A		N/A		N/A
Community Facility	X YES	□ NO	X YES	□ NO	X YES	□ NO	
If "yes," specify the following:							
Type	Former medical office		Medical office		Medical Office		Medical office
Gross floor area (sf)	12,275 gsf		15,039 gsf		6,846 gsf		-8,193 gsf
Vacant Land	X YES	□ NO	□ YES	X NO	□ YES	X NO	N/A
If "yes," describe:	Former surface parking lot		N/A		N/A		N/A
Other Land Uses	□ YES	X NO	□ YES	X NO	□ YES	X NO	N/A
If "yes," describe:	N/A		N/A		N/A		N/A
PARKING							
Garages	□ YES	X NO	□ YES	X NO	□ YES	X NO	
If "yes," specify the following:							
No. of public spaces	N/A		N/A		N/A		N/A
No. of accessory spaces	N/A		N/A		N/A		N/A
Lots	X YES	□ NO	X YES	□ NO	□ YES	X NO	
If "yes," specify the following:							
No. of public spaces	0		0		0		0
No. of accessory spaces	former parking lot 44 spaces		47 spaces		0 spaces		-47 spaces

Build Year

To assess the potential effects of the proposed actions, a RWCDS for both the "future without the proposed actions (No-Action condition)" and "future with the proposed actions (With-Action condition)" will be analyzed. As noted above, the applicant anticipates closing on the requested public financing in June 2018, accounting for DCP Pre-Application and Pre-Certification review time and public review under ULURP (approximately seven months). As projected development site 1 does not require substantial building demolition activities prior to building construction, and the applicant has completed numerous buildings of a similar scale within 24-month construction schedules, it is anticipated that construction of the proposed development would be short-term (approximately 24-months) and that it

would be built and fully occupied by the end of 2020. In addition, as noted above, the requested public financing (anticipated closing in June 2018) would mandate a short-term construction schedule. Specifically, the applicant would face financial penalties from lenders and tax credit syndicators if the construction period were to continue beyond 2020. Accordingly, the RWCDS would use a 2020 Build Year for analysis purposes.

The future No-Action and With-Action scenarios identified the amount, type, and location of development that is expected to occur by 2020 without and with approval of the proposed actions. The incremental difference between the future No-Action and future With-Action scenarios is the basis for the impact category analyses of this Environmental Assessment Statement (EAS). Table A-2b provides a summary of the 2020 No-Action and With-Action conditions for the two projected development sites.

TABLE A-2b: Summary of 2020 No-Action and With-Action Conditions for the two Projected Development Sites on Block 3780

	No-Action	With-Action	Increment
Land Use			
Residential[2]	111,207 gsf (110 DU)	223,102 gsf (254 DU)	+111,895 gsf (+144 DU)
Community Facilities – Medical Office	15,039 gsf	6,846 gsf	-8,193 gsf
Local Retail	0 gsf	11,401 gsf	11,401 gsf
Population[1]			
Residents	306	706	+400
Workers	49	65	+16

Notes:

[1] Population estimates based on the following assumptions: 2.78 persons per household (based on 2010 Census data for Bronx CD 9), one residential employee per 25 DU, one employee per 333 gsf of retail space, and one employee per 333 sf of community facility space.

[2] Except for the With-Action condition for projected development site 1, the estimate of DUs is based on an average unit size of approximately 1,000 gsf per unit. Given that the applicant is proposing to provide residential development that is 100 percent affordable, the average unit size for projected development site 1 is based on approximately 850 gsf per unit in the With-Action condition.

Future without the Proposed Actions (No-Action Condition)

In the 2020 No-Action condition, the project area's existing R6 zoning would remain in place. Under the existing zoning, it is possible to redevelop the two projected development sites with a variety of uses including residential and community facility uses (UGs 1-4). As described above, the maximum permitted FAR of an R6 district in the No-Action scenario is 2.43 FAR for residential uses built pursuant to height factor regulations and up to 3.0 FAR on wide streets outside the Manhattan Core pursuant to the Quality Housing program. Community facilities are allowed up to 4.8 FAR. Commercial uses are not permitted in R6 zoning districts.

Projected Development Site 1 (Applicant's Property)

In absence of the proposed actions, it is anticipated that projected development site 1, consisting of Block 3780, Lot 1, would be developed in accordance with the existing R6 zoning district. It is anticipated that Lot 1 would be developed with up to a 7-story (approximately 75-foot-tall), approximately 110,316 gsf, mixed-use residential and community facility building (3.50 FAR) (see Table A-3). The No-Action building would be constructed pursuant to the Quality Housing Program, and would have a qualifying ground floor that would accommodate Use Group 4 community facility space (medical office/ambulatory care). As shown in Table A-3, the anticipated development would include

approximately 95,277 gsf of residential space (3.00 FAR; 94 dwelling units[5]) and approximately 15,039 gsf of Use Group 4 ambulatory care/medical office community facility space (0.50 FAR) on the ground floor.[6]

Residential buildings built pursuant to the Quality Housing Program in R6 zoning districts require accessory parking spaces for a minimum of 50 percent of residential dwelling units. Therefore, it is anticipated that 47 accessory parking spaces would be provide in the No-Action condition on projected development site 1. For the community facility component, pursuant to R6 regulations, it is assumed that ambulatory diagnostic or treatment health care facilities would require one parking space per 800 sf, for a total of 18 spaces, which are anticipated to be waived pursuant to ZR Section 25-33.

TABLE A-3: 2020 Future No-Action Scenario- Projected Development Sites on Block 3780

Lot	Lot Area	No-Action FAR[1]	Max. Residential		Max. Community Facility SF[2]	Max. Total Building SF	Max. Parking Spaces	Max. Building Height[4]
			SF[2]	DUs[3]				
1 (Site 1)	28,872	3.50	86,615 zsf (95,277 gsf)	94	14,323 zsf 15,039 gsf	100,938 zsf 110,316 gsf	47	75’
51 (Site 2)	4,865	2.98	14,482 zsf (15,930 gsf)	16	0 zsf 0 gsf	14,482 zsf 15,930 gsf	0	70’

Notes: The applicant-owned projected development site 1 is shaded in gray.

[1] The maximum allowable residential FAR in R6 district along a wide street outside of the Manhattan core is 3.00 pursuant to the Quality Housing Program (2.2 FAR along a narrow street). As noted above, Westchester and Metcalf Avenues are wide streets and Fteley Avenue is a narrow street. Pursuant to ZR Section 24-162, the maximum permitted FAR for community facility uses is 1.0 in R6 zoning district for zoning lots containing community facility and residential uses.

[2] For both the projected development sites, the estimate of maximum residential gsf is based on a standard rate of zsf plus ten percent (to account for common areas required by Quality Housing), and the maximum community facility gsf is based on a standard rate of zsf plus five percent.

[2] The estimate of DUs is based on an average unit size of approximately 1,000 gsf per unit.

Residential buildings built pursuant to the Quality Housing Program in R6 zoning districts require accessory parking spaces for a minimum of 50 percent of residential dwelling units. Therefore, it is anticipated that 47 accessory parking spaces would be provide in the No-Action condition on projected development site 1. For the community facility component, pursuant to R6 regulations, it is assumed that ambulatory diagnostic or treatment health care facilities would require one parking space per 800 sf, for a total of 18 spaces, which are anticipated to be waived pursuant to ZR Section 25-33.

Additional Lot being Rezoned- Projected Development Site 2

The approximately 4,865 sf Lot 51 (projected development site 2) is also anticipated to be redeveloped in the future without the proposed actions. In absence of the proposed actions, projected development site 2 would be developed with a 7-story (approximately 70-foot-tall), approximately 15,930 gsf residential building (2.98 FAR) pursuant to Quality Housing regulations (see Table A-3). Assuming an average unit size of approximately 1,000 gsf, it is anticipated that the residential building would contain approximately 16 dwelling units. It is anticipated that the required residential parking spaces would be waived pursuant to ZR Section 25-211(c), as Lot 51 comprises less than 5,000 sf.

[5] The estimate of DUs is based on an average unit size of approximately 1,000 gsf per unit.

[6] The approximate gross square feet of the No-Action development are conservatively calculated by assuming an increase of approximately five percent from the zoning square feet of the community facility space and an approximately 10 percent increase in the residential zoning square feet (to account for commons areas required by Quality Housing).

Future with the Proposed Actions (With-Action Scenario)

With the proposed zoning map change from R6 to R8A with a C2-4 commercial overlay mapped to a depth of 100 feet along the north side of Westchester Avenue, residential, community facility, and commercial uses would be permitted in the rezoning area (Use Groups 1-9, and 14). The proposed R8A (MIH) district would allow residential uses up to a maximum FAR of 7.2 pursuant to the MIH program, community facilities up to 6.5 FAR, and commercial uses up to 2.0 FAR in the C2-4 overlay. The northernmost 3,082 sf of projected development site 1 (Lot 1) and the northwestern corner of projected development site 2 (Lot 51), which would continue to be zoned R6, would allow residential development up to a 2.43 FAR pursuant to height factor regulations (up to 3.0 FAR on wide streets and 2.2 FAR on narrow streets pursuant to Quality Housing Program). Community facilities would be allowed up to 4.8 FAR.

In accordance with the City's MIH policy, under the proposed actions, the applicant is proposing compliance with MIH Option 2, which would require 30 percent of the residential floor area be designated as affordable housing units for residents with incomes averaging 80 percent of AMI and none of the units exceeding 130 percent of AMI.

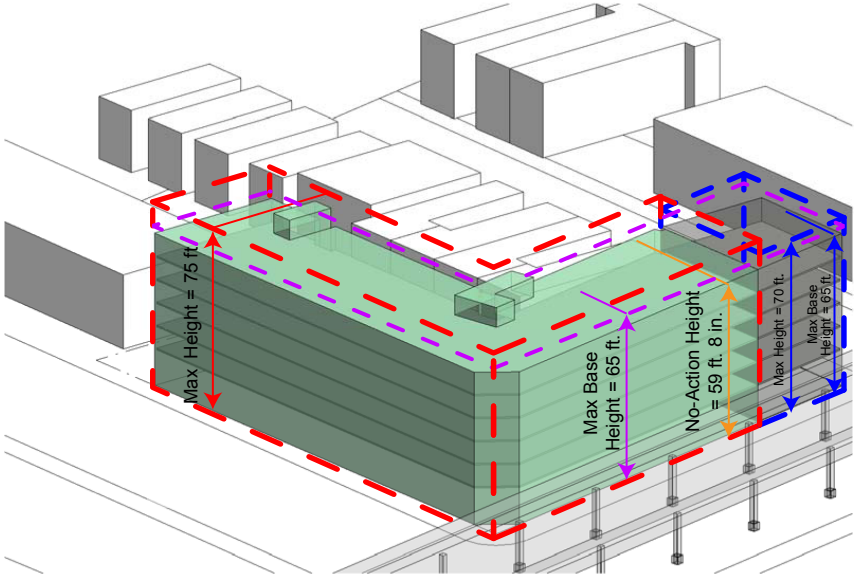
Projected Development Site 1 (Applicant's Property)

By 2020, under the With-Action condition, it is expected that the applicant would complete the proposed project, which would be facilitated by the proposed actions, as previously stated. In the future with the proposed actions, the applicant-owned projected development site 1 would be redeveloped in accordance with the proposed R8A and R8A/C2-4 zoning districts and MIH area. Although the proposed project would include up to 13-stories, the RWCDS assumes that projected development site 1 could be developed with up to a 14-story (approximately 145-foot tall) mixed-use-building with a qualifying ground floor for conservative CEQR analysis purposes. The RWCDS also assumes that proposed development would accommodate affordable housing, local retail, and Use Group 4 medical office/ambulatory care community facility use (see Table A-4 and Figure A-5).

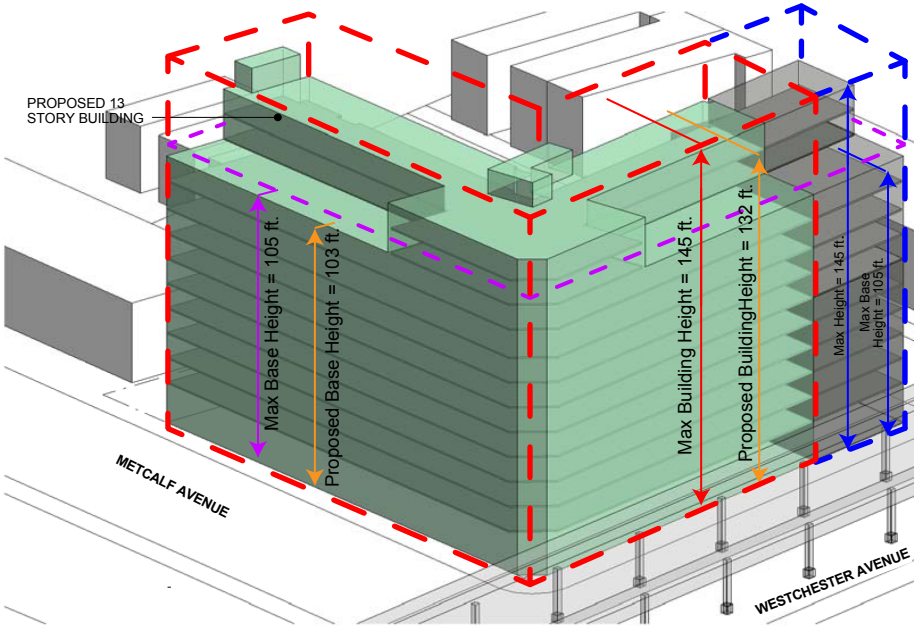
As the applicant intends to seek public financing, which would mandate the uses planned for this site and require that 100 percent of proposed residential units on the development site be affordable to low-and moderate-income tenants (targeted to households earning at or below 80 percent of AMI), the proposed development program for the applicant-owned site would represent the RWCDS for density based analyses. As such, the RWCDS would consist of an approximately 203,001 gsf mixed-use building (6.75 FAR) with approximately 7,570 gsf of commercial local retail space (0.26 FAR) and approximately 6,846 gsf of community facility space (0.24 FAR) on the ground floor, and up to approximately 220 affordable residential units (approximately 188,585 gsf; 6.25 FAR) on the building's upper floors (see Table A-4).[7] For conservative analysis purposes, it is assumed that community facility space would accommodate Use Group 4 ambulatory diagnostic or health care facilities.

As projected development site 1 is located within a Designated Transit Zone, no accessory parking would be required for the affordable housing units pursuant to ZR Section 25-251. For the community facility component, pursuant to R8A regulations, no accessory parking spaces would be required for Use Group 4 ambulatory diagnostic or health care facilities. In addition, for the commercial component, pursuant to C2-4 regulations, it is assumed that the ground floor general retail would require one parking space per

[7] Given that the applicant is proposing to provide residential development that is 100 percent affordable on projected development site 1, the average unit size is based on approximately 850 gsf per unit in the With-Action condition.



No-Action Condition



With-Action Condition

1,000 zsf, for a total of 8 accessory spaces, which are expected to be waived pursuant to ZR Section 36-232.

TABLE A-4: 2020 Future With-Action Scenario- Projected Development Sites on Block 3780

Lot	Lot Area	Proposed FAR[1]	Max. Residential		Max. Commercial SF[2]	Max. Community Facility SF[2]	Max. Total Building SF	Max. Parking Spaces	Max. Building Height
			SF[2]	DUs[3]					
1 (Site 1)	28,872	6.75[4]	180,518 zsf 188,585 gsf	220 (220 affordable)	7,570 zsf 7,570 gsf	6,846 zsf 6,846 gsf	203,001 gsf	0	145'
51 (Site 2)	4,865	7.2[5]	34,517 zsf (31,379 gsf)	34 (10 affordable)[6]	3,649 zsf 3,831 gsf	0 zsf 0 gsf	35,028 zsf 38,348 gsf	0	145'

Notes: The applicant-owned projected development site 1 is shaded in gray.

[1] The maximum allowable With-Action FAR in the proposed rezoning area increases to 7.2 for residential uses when utilizing the MIH Program. The maximum allowable FAR for the proposed C2-4 overlay is 2.0.

[2] For projected development site 2, the estimate of maximum residential gsf is based on a standard rate of zsf plus ten percent (to account for common areas required by Quality Housing), and the maximum commercial gsf are based on a standard rate of zsf plus five percent. Approximately 75 percent of the lot area of this site assumed to be occupied by retail.

[3] Thirty percent of the residential floor area would be affordable units pursuant to Option 2 of the MIH Program. The estimate of DUs for projected development site 2 is based on an average unit size of approximately 1,000 gsf per unit (as the majority of units were analyzed as market-rate units). Given that the applicant is proposing to provide residential development that is 100 percent affordable on projected development site 1, the average unit size is based on approximately 850 gsf per unit in the With-Action condition.

[4] As an approximately 3,082 sf portion of Lot 1 would continue to be zoned R6, which has a maximum 3.0 FAR for residential uses built pursuant to Quality Housing regulations along a wide street, the proposed FAR for projected development site 1 represents the maximum adjusted FAR.

[5] Pursuant to ZR Section 77-211, the bulk regulations of the proposed R8A/C2-4 zoning district may apply to entire property (Lot 51) in the future with the proposed actions, as more than 50 percent of the lot area would be mapped within the proposed R8A/C2-4 zoning district and the greatest distance from the proposed zoning district boundary line to any lot line of the property in the R6 zoning district would be less than 25 feet.

[6] As Option 2 requires that at least 30 percent of the residential floor area be reserved for residents with incomes averaging 80 percent of AMI, some of these MIH units would be affordable to household earning more than 80 percent of AMI. Therefore, for conservative CEQR analysis purposes,20 percent of the overall residential floor area (approximately 7 DUs) of projected development site 2 is assumed to be set aside for "affordable" residential units, which refers to the amount residential units that would accommodate households earning 80 percent (or below) of AMI.

Additional Lot being Rezoned- Projected Development Site 2

In the future With-Action condition, it is assumed that the projected development site 2 (Lot 51) could be redeveloped under the proposed R8A/C2-4 zoning with a new residential building with ground floor retail up to a maximum FAR of approximately 7.2. The proposed building would be approximately 38,348 gsf, including 34,517 gsf of residential (approximately 34 dwelling units, at least ten of which would be affordable pursuant to MIH guidelines)[8] and 3,831 gsf of commercial retail that would occupy a portion of the ground floor (see Table A-4). It is anticipated that the required residential parking spaces would be waived pursuant to ZR Section 25-211(c), as Lot 51 comprises less than 5,000 sf.

VI. REQUIRED APPROVALS

The applicant requires zoning text and map amendments, as well as public financing approval, to implement the proposed project. The proposed zoning map and text amendments are discretionary public actions that are subject to both the Uniform Land Use Review Procedure (ULURP) and CEQR; the requested public funding is a discretionary public action that is subject to CEQR.

[8] As Option 2 requires that at least 30 percent of the residential floor area be reserved for residents with incomes averaging 80 percent of AMI, some of these MIH units would be affordable to household earning more than 80 percent of AMI. Therefore, for conservative CEQR analysis purposes, 20 percent of the overall residential floor area (approximately 7 DUs) of projected development site 2 is assumed to be set aside for "affordable" residential units, which refers to the amount residential units that would accommodate households earning 80 percent (or below) of AMI.

The City's ULURP process, mandated by Sections 197-c and 197-d of the New York City Charter, is designed to allow public review of ULURP applications at four levels: the Community Board; the Borough President; the CPC; and the City Council. The procedure has mandated time limits for review at each stage to ensure a maximum review period of approximately seven months. The process begins with certification by CPC that the ULURP application is complete. The application is then referred to the relevant Community Board (in this case Bronx Community Board 9). The Community Board has up to 60 days to review and discuss the proposal, hold a public hearing, and adopt an advisory resolution on the ULURP application. The Bronx Borough President then has up to 30 days to review the application. The CPC then has up to 60 days, during which time a public hearing is held on the ULURP application. If CPC approved, the application is then forwarded to the City Council, which has 50 days to review the ULURP application.

The requested public financing would be closed in June 2018, subsequent to approval of the proposed zoning map and text amendments (the ULURP application) by the City Council. The sources for funding for the proposed project are expected to include funding from HPD and HDC and would call for approved building permits from DOB.

CEQR is a process by which agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment. The City of New York established CEQR regulations in accordance with the New York State Environmental Quality Review Act (SEQRA). In addition, the City has published a guidance manual for environmental review, the *CEQR Technical Manual*. CEQR rules guide environmental review through the following steps:

- *Establish a Lead Agency*. Under CEQR, the "lead agency" is the public entity responsible for conducting environmental review. The environmental review for the proposed actions is a coordinated review, with DCP serving as the lead agency for this project, and HPD and HDC are involved agencies under CEQR.

- *Environmental Review and Determination of Significance*. The lead agency will determine whether the proposed actions may have a significant impact on the environmental. To do so, an EAS must be prepared. This EAS will be reviewed by the lead agency, which will determine if the proposed actions and development would result in any significant adverse impacts on the environment.

ATTACHMENT B

SUPPLEMENTAL SCREENING

I. INTRODUCTION

This Environmental Assessment Statement (EAS) has been prepared in accordance with the guidelines and methodologies presented in the 2014 *City Environmental Quality Review* (CEQR) *Technical Manual*. For each technical area, thresholds are defined, which, if met or exceeded, require that a detailed technical analysis be undertaken. Using these guidelines, preliminary analyses were conducted for all aspects of the proposed actions to determine whether detailed analyses of any technical areas would be appropriate.

Part II of the EAS Form identifies those technical areas that warrant additional assessments. The technical areas that warranted a "Yes" answer in Part II of the EAS form were land use, zoning, and public policy; community facilities; open space; shadows; urban design and visual resources; hazardous materials; transportation; air quality; noise; public health; neighborhood character; and construction. As such, a supplemental screening assessment for each of the aforementioned analysis areas is provided in this attachment. All remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening, as they do not trigger initial CEQR thresholds and are unlikely to result in significant adverse impacts.

The supplemental screening assessment contained herein identified that detailed assessments are required in the areas of land use, zoning, and public policy; community facilities; open space; shadows; hazardous materials; urban design and visual resources; noise; and air quality. These analyses are provided in Attachments C through J and are summarized below. Table B-1 identifies for each CEQR technical area whether (a) the potential for impacts can be screened out based on the EAS From, Part II, Technical Analyses; (b) the potential for impacts can be screened out based on a supplemental screening provided herein per the *CEQR Technical Manual*; or (c) a more detailed assessment is required to make an impact determination.

II. LAND USE, ZONING, AND PUBLIC POLICY

A detailed assessment of land use and zoning is appropriate if a proposed action would result in a significant change in land use or would substantially affect regulations or policies governing land use. An assessment of zoning is typically performed in conjunction with a land use analysis when the action would change the zoning on the site or result in the loss of a particular use. As the proposed actions include zoning map and text amendments that would facilitate the construction of land uses and density of development that are not permitted under the development sites' existing zoning, a land use and zoning assessment was prepared in accordance with *CEQR Technical Manual* methodology and is provided in Attachment C, "Land Use, Zoning, and Public Policy."

TABLE B-1: Summary of CEQR Technical Areas Screening

Technical Area	Screened out per EAS Form	Screened out per Supplemental Screening	Detailed Analysis Required
Land Use, Zoning, & Public Policy			X
Socioeconomic Conditions	X		
Community Facilities			X
Open Space			X
Shadows			X
Historic & Cultural Resources		X	
Urban Design & Visual Resources			X
Natural Resources	X		
Hazardous Materials		X	
Water & Sewer Infrastructure	X		
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation			X
Air Quality			X
Greenhouse Gas Emissions	X		
Noise			X
Public Health		X	
Neighborhood Character		X	
Construction		X	

As shown in Attachment C, no significant adverse impacts on land use, zoning, or public policy, as defined by the guidelines for determining impact significant set forth in the *CEQR Technical Manual*, are anticipated in the 2020 future with the proposed actions in the primary and secondary study areas. The proposed actions would introduce new residential, community facility, and/or local retail uses on the two development sites that would be compatible with adjacent land uses, which are predominantly residential with commercial uses primarily concentrated along Westchester Avenue. The proposed actions would not directly displace any land uses so as to adversely affect surrounding land uses, nor would the proposed actions generate land uses that would be incompatible with land uses, zoning, or public policy in the secondary study area. The proposed actions would not create land uses or structures that would be incompatible with the underlying zoning, nor would the proposed actions cause a substantial number of existing structures to become nonconforming. The proposed actions would not result in land uses that conflict with public policies applicable to the primary or secondary study areas.

III. COMMUNITY FACILITIES AND SERVICES

Potential direct or indirect effects of a proposed action can trigger the need for analysis of community facilities. Direct effects occur if a project would "physically alter a community facility, whether by displacement or other physical change." Indirect effects occur if a project would add population to an area, which may potentially affect service delivery. While no community facilities would be directly displaced by the proposed actions and associated reasonable worst-case development scenario (RWCDS), the proposed actions would facilitate the development of 254 residential units (net of 144 DUs as compared to the No-Action conditions). The *CEQR Technical Manual* provides density thresholds, which are used to make an initial determination of whether detailed studies are necessary to determine potential indirect impacts. These density thresholds are summarized in Table B-2.

TABLE B-2: Preliminary Screening Analysis Criteria for Community Facilities

Community Facility	Threshold for Detailed Analysis	Minimum Number of Residential Units in the Bronx that Trigger Detailed Analyses
Public Elementary/Intermediate Schools	50 or more elementary/intermediate school students	90
Public High Schools	150 or more high school students	787
Libraries	More than five percent increase in ratio of residential units to libraries in the borough	682
Health Care Facilities (outpatient)	Introduction of sizeable new neighborhood	N/A
Child Care Centers (publicly funded)	More than 20 eligible children under age six based on number of low- to moderate-income units	141
Fire Protection	Introduction of sizeable new neighborhood	N/A
Police Protection	Introduction of sizeable new neighborhood	N/A

Source: *CEQR Technical Manual*

Public Schools

As the RWCDS would result in the incremental development of more than 90 DU, it is expected to generate more than 50 elementary and intermediate school students per *CEQR Technical Manual* criteria, and a detailed assessment of the potential impacts of the proposed actions on public schools is provided in Attachment D, "Community Facilities." As the RWCDS would not exceed the threshold for a detailed high school analysis, the public school analysis is focused solely on public elementary and intermediate schools. As presented in Attachment D, the proposed actions would not result in significant adverse impacts on community facilities. The 144 incremental DUs facilitated by the proposed actions are expected to generate 56 elementary school students and 23 intermediate school students in Sub-district 2 of Community School District (CSD) 12. While CSD 12, Sub-district 2 elementary and intermediate schools would operate over capacity in the future with the proposed actions (127.8 and 163.2 percent utilization rates, respectively), as under No-Action conditions, as the proposed actions would only increase the elementary and intermediate school utilization rates by 0.8 and 1.3 percentage points, respectively, no significant adverse school impacts would result, in accordance with *CEQR Technical Manual* impact criteria.

Child Care Facilities

The *CEQR Technical Manual* requires a detailed analysis of publicly-funded child care centers when a proposed action would produce substantial numbers of subsidized, low- to moderate-income affordable housing units that may therefore generate a sufficient number of eligible children to affect the availability of slots at group child care facilities. Typically, a proposed action that generates 20 or more eligible children under age six requires further analysis. As shown in Table B-2, above, based on *CEQR Technical Manual* multipliers, 141 affordable housing units in the Bronx would yield more than 20 children under age six eligible for publicly-funded child care.

As the proposed actions and associated RWCDS would facilitate the incremental development of 227 affordable DUs[1], a detailed child care analysis is warranted and is provided in Attachment D. As outlined

[1] For CEQR analysis purposes, "affordable" refers to residential units set aside for households earning 80 percent or below of the Area Median Income (AMI). As described in Attachment A, "Project Description," all 220 housing units on projected development site 1 would be affordable to households earning at or below 80 percent of AMI, and approximately 20 percent of the overall residential floor area (approximately 7 DUs) of projected development site 2 are assumed to be set aside for households earning 80 percent (or below) of AMI, for a total of 227 affordable housing units.

in Attachment D, the 227 DUs introduced in the rezoning area in the future with the proposed actions are expected to generate 32 publicly-funded child care-eligible students, increasing the study area child care facility utilization rate to 91.8 percent. As study area child care facilities would operate with available capacity in the 2020 future with the proposed actions, no significant adverse impacts would result pursuant to *CEQR Technical Manual* methodology.

Libraries, Health Care Facilities, and Fire and Police Protection

As the proposed actions would not result in the introduction of a sizeable new neighborhood and would not result in a more than five percent increase in the ratio of residential units to libraries in the Bronx (i.e., would result in the development of fewer than 682 DU), analyses of fire and police protection, health care facilities, and libraries are not warranted, and significant adverse impacts are not anticipated in these technical areas.

IV. OPEN SPACE

An open space assessment may be necessary if a proposed action could potentially have a direct or indirect effect on open space resources in the project area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed action would be sufficient to noticeably diminish the ability of an area's open space to serve the existing or future population. According to the guidelines established in the *CEQR Technical Manual*, if a project is not located within an area that is "underserved" or "well-served" by open space, a project that would generate fewer than 200 residents or 500 employees is typically not considered to have indirect effects on open space.

The RWCDS would generate a net 400 residents in the rezoning area, which would exceed the CEQR threshold of a net increase in 200 residents in area that is neither underserved nor well-served by open space, and therefore requires further assessment pursuant to *CEQR Technical Manual* guidelines.[2] As the number of incremental employees generated by the proposed actions and associated RWCDS would be 16, which is less than the *CEQR Technical Manual* analysis threshold of 500, an analysis of non-residential indirect open space impacts is not warranted and the analysis focuses solely on the potential for residential study area indirect open space impacts.

As shown in Attachment E, "Open Space," the proposed actions would not result in significant adverse open space impacts. While the residential open space study area would continue to have a shortfall of open space in the future with the proposed actions, the demand for open space generated by the proposed actions would not significantly exacerbate the existing deficiency, with a decrease in the open space ratio of less than one percent as a result of the proposed actions. In addition, the population added as a result of the proposed actions is not expected to noticeably affect utilization of the area's open spaces. Residents of the study area would also continue to use additional open space resources just beyond the defined study area not included in the quantitative assessment. Therefore, while the proposed actions would result in an incremental decrease in open space ratios in the future, given the level of decrease anticipated, the existing and the availability of additional open spaces conservatively not included in the quantitative analysis, the proposed actions would not result in a significant adverse

[2] Based on 100 percent occupancy and the average household size of 2.78 for Bronx Community District 9 (2010 U.S. Census).

impact on open space. In addition, the proposed actions would not have a direct effect on any study area open spaces due to construction or operation.

V. SHADOWS

As stated in the *CEQR Technical Manual*, a shadow assessment considers projects that result in new shadows long enough to reach a sunlight-sensitive resource. Therefore, a shadow assessment is generally required only if the project would either (a) result in new structures (or additions to existing structures, including the addition of rooftop mechanical equipment) of 50 feet or more; or (b) be located adjacent to, or across the street from, a sunlight-sensitive resource.

As outlined in Attachment A, "Project Description," under the RWCDS, both projected development sites would be developed with buildings that have a maximum height of 145 feet (the maximum permitted building height under the proposed R8A (MIH) zoning), approximately 70 to 75 feet taller than the maximum building heights of the No-Action buildings on projected development sites 1 and 2. As such, a detailed shadows analysis was conducted, which is provided in Attachment F, "Shadows." As outlined in Attachment F, the proposed actions and associated RWCDS would not result in significant adverse shadows impacts. While the proposed project would cast incremental shadows on a portion of the linear green space along the Bronx River Parkway, the detailed shadows analysis determined that the duration and coverage of incremental shadows on the open space would not be significant or adverse.

Project-generated incremental shadows would occur on all four CEQR analysis dates with shadow durations ranging from one hour 30 minutes on December 21 to up to three hours 43 minutes on June 21 during the morning near the onset of the analysis day. Incremental shadows would primarily be limited to portions of the Bronx River Parkway between East 172nd Street and Westchester Avenue, and would only affect small areas of this open space, which features grass, small shrubs and trees. As the green space along the parkway is inaccessible to the public, project-generated incremental shadows would not affect the utilization or enjoyment of this open space resource. The vegetation found along the Bronx River Parkway would continue to receive a minimum of four to six hours of direct sunlight throughout the growing season. Therefore, the proposed actions and associated RWCDS are not expected to result in significant adverse shadows impacts at any sunlight-sensitive resources.

VI. HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources are defined as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes properties that have been designated or are under consideration for designation as New York City Landmarks or Scenic Landmarks, or are eligible for such designation; properties within New York City Historic Districts; properties listed on the State and/or National Register of Historic Places; and National Historic Landmarks. An assessment of architectural and/or archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

According the *CEQR Technical Manual* guidelines, impacts on historic resources are considered on those sites affected by proposed actions and in the area surrounding identified development sites. The historic resources study area is therefore defined as the two development sites, as well as an approximately

400-foot radius around the two development sites. Archaeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance, as compared to No-Action conditions, which includes projected development sites 1 and 2 (Block 3780, Lots 1 and 51).

Based on letters provided by the New York City Landmarks Preservation Commission (LPC) on (included in Appendix 3), there are no architecturally or archaeologically sensitive resources in the rezoning area and no architecturally significant resources within 400 feet of the development sites. As such, a historic resources assessment is not warranted, and no significant adverse impacts would result.

VII. URBAN DESIGN AND VISUAL RESOURCES

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

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

As the proposed actions include zoning map and text amendments that would change the permitted bulk allowed in the rezoning area, a preliminary urban design analysis is required and is provided in Attachment G, "Urban Design and Visual Resources." As discussed therein, the proposed actions and associated RWCDS, while resulting in a notable change in the urban design of the study area, would not result in a significant adverse impact on the area's urban design and visual resources, as defined by the *CEQR Technical Manual*. Under the RWCDS, the proposed actions would facilitate the construction of two 145-foot tall predominantly residential buildings, with ground floor retail and/or community facility uses. The proposed actions would enliven the streetscape and complement the residential and community-oriented uses in the surrounding area. While the RWCDS building would be taller than adjacent structures, the building would be consistent with the surrounding neighborhood context in terms of use and lot placement, forming a consistent streetwall with the buildings lining the north side of Westchester Avenue. In addition, the proposed action and associated RWCDS would not notably alter views of study area visual resources.

VIII. HAZARDOUS MATERIALS

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

Manual, the potential for significant impacts from hazardous materials can occur when: (a) hazardous materials exist on a site and (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials. The proposed actions would redevelop the applicant–owned projected development site 1 (Bronx Block 3780, Lot 1) with residential, community facility, and local retail uses on a site that has had an underground storage tank (UST). In addition, the projected development site 2 (Block 3780, Lot 51), which is not owned or controlled by the applicant, is expected to be redeveloped as a result of the proposed zoning changes. As such, a hazardous materials assessment is warranted and is provided in Attachment H, "Hazardous Materials."

As discussed in Attachment H, the proposed actions would not result in any significant adverse hazardous materials impacts with the assignment of an (E) designation (E-425) on projected development sites 1 and 2 (Block 3780, Lots 1 and 51) as part of the proposed zoning map change.

IX. TRANSPORTATION

The objective of a transportation analysis is to determine whether a proposed action may have a potentially significant adverse impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists, and vehicles), on- and off-street parking or goods movement.

The *CEQR Technical Manual* identifies minimum incremental development densities that potentially require a transportation analysis. Development at less than the development densities shown in Table 16-1 of the *CEQR Technical Manual* generally result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, and 200 peak-hour pedestrian trips, where significant adverse impacts are considered unlikely. In Zone 2 (which includes the rezoning area) the development thresholds include an increment of 200 DUs for residential, 15,000 sf for local retail, and 25,000 sf for community facility. According to the *CEQR Technical Manual*, if an action would result in a mix of land uses, a Level 1 (Project Trip Generation) Screening Assessment should be prepared. In most areas of the city, including the rezoning area, if the proposed action is projected to result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, or 200 peak-hour pedestrian trips, it is unlikely that further analysis would be necessary. If these trip-generation screening thresholds are exceeded, a Level 2 (Project-generated Trip Assignment) Screening Assessment should be prepared to determine if the proposed action would generate or divert 50 peak-hour vehicle trips through any intersection, 200 peak-hour subway trips through a single station, 50 peak-hour bus trips on a single bus route in the peak direction, or 200 peak-hour pedestrian trips through a single pedestrian element. If any of these Level 2 screening thresholds are met or exceeded, detailed analysis for the respective mode is required.

Level 1 Screening

As the proposed actions would result in a mix of land uses, a Level 1 Screening Assessment was prepared. The transportation planning factors used to forecast travel demand for the land uses are summarized in Table B-3a. The trip generation rates, temporal distributions, modal splits, vehicle occupancies, and truck trip factor each of land use were primarily based on those cited in the *CEQR Technical Manual*, 2010-2014 five-year American Community Survey (ACS) journey-to-work data, and recently completed environmental reviews. Factors are shown for the weekday AM, midday, and PM and Saturday midday peak periods.

Table B-3b presents the person and vehicle trips, respectively, expected to be generated by the RWCDS. As presented in Table B-3b, the proposed project would generate approximately 186, 502, 362, and 385 person trips in the weekday AM, midday, and PM, and Saturday midday peak hours, respectively. As shown in the table, the proposed actions would not generate more than 50 peak-hour vehicle trips and would not generate more than 200 peak-hour subway/rail or bus transit riders; therefore, no additional analysis of vehicle and transit trips is warranted.

The proposed project would generate a net 66, 355, 195, and 230 walk-only trips in the weekday AM, midday, and PM, and Saturday midday peak hours, respectively (refer to Table B-3b). Accounting for walk trips en route to and from subway stations and bus stops, pedestrian trips associated with the RWCDS are expected to total 145, 439, 301, and 335 in the weekday AM, midday, PM and Saturday midday peak hours, respectively. As the number of incremental peak hour trips would exceed the *CEQR Technical Manual* analysis thresholds for pedestrians during the weekday midday and PM, and Saturday midday peak hours, Level 2 screening assessments were undertaken to identify specific locations and time periods that may require additional detailed pedestrian analyses.

Level 2 Screening for Pedestrian Trips

Project-generated pedestrian trips (including walk-only trips, and trips to/from transit) would exceed the CEQR Level 1 trip generation threshold during the weekday midday and PM, and Saturday midday peak hours. As such, Level 2 pedestrian trip assignments were prepared for these three peak hours, which are provided in Figure B-1. While the RWCDS is not expected to generate 200 or more pedestrian trips at any one pedestrian element during the weekday PM and Saturday midday peak hour, incremental pedestrian volumes during the weekday midday peak hour are expected to exceed 200 at one corner area (the northeast corner of Westchester Avenue and Metcalf Avenue) and one sidewalk location (the north side of Westchester Avenue between Metcalf and Fteley Avenues), as shown in Figure B-1. As the potential for significant adverse pedestrian impacts at these two pedestrian elements could not be ruled out based on the Level 2 screening assessment, a detailed pedestrian analysis is warranted and is provided below.

TABLE B-3a: Travel Demand Forecast Assumptions

Land Use:	Residential	Local Retail	Medical Office (Staff)	Medical Office (Visitors)
Size/Units:	144 DU	11,401 gsf	-8,193 gsf	-8,193 gsf
Trip Generation:	(1)	(1)	(5,6)	(5,6)
Weekday	8.075	205	10.0	33.6
Saturday	9.6	240	4.3	14.5
	per DU	per 1,000 sf	per 1,000 sf	per 1,000 sf
Temporal Distribution:	(1)	(1)	(5,6)	(5,6)
AM	10.0%	3.0%	24.0%	6.0%
MD	5.0%	19.0%	17.0%	9.0%
PM	11.0%	10.0%	24.0%	5.0%
Sat MD	8.0%	10.0%	17.0%	9.0%
	(2)	(4)	(7)	(6)
Modal Splits:	ALL PERIODS	ALL PERIODS	AM/PM/SAT MD	All Periods
Auto	23.9%	2.0%	75.0% 2.0%	25%
Taxi	1.9%	3.0%	0.0% 3.0%	25%
Subway	51.7%	6.0%	12.5% 6.0%	29%
Bus	19.0%	6.0%	12.5% 6.0%	11%
Walk	3.5%	83.0%	0.0% 83.0%	10%
	100.0%	100.0%	100.0% 100%	100%
	(3)	(4)	(5,6)	(5,6)
In/Out Splits:	In Out	In Out	In Out	In Out
AM	15% 85%	50% 50%	100% 0%	90% 10%
MD	50% 50%	50% 50%	50% 50%	50% 50%
PM	70% 30%	50% 50%	0% 100%	30% 70%
Sat MD	53% 47%	50% 50%	50% 50%	50% 50%
Vehicle Occupancy:	(2,3)	(3)	(6,7)	(6)
Auto	1.02	2.00	2.40	1.65
Taxi	1.40	2.00	1.40	1.20
Truck Trip Generation:	(1)	(1)	(5,6)	
Weekday	0.06	0.35	0.40	N/A
Saturday	0.02	0.04	0.00	N/A
	per DU	per 1,000 sf	per 1,000 sf	
	(1)	(1)	(5,6)	
AM	12.0%	8.0%	9.7%	N/A
MD	9.0%	11.0%	7.8%	N/A
PM	2.0%	2.0%	5.1%	N/A
Sat MD	9.0%	11.0%	0.0%	N/A
	In Out	In Out	In Out	In Out
All Peak Hours	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%

Notes :

(1) 2014 *CEQR Technical Manual*

(2) Estimated from 2010-2014 American Community Survey (ACS) Tenure Data for Bronx tracts 64.

(3) *West Harlem Rezoning FEIS*, August 2012.

(4) Triangle Plaza Hub EAS, January 2012.

(5) Based on data from *Jamaica Plan Rezoning FGEIS*, 2007.

(6) Based on data from *Saint Vincent's Campus Redevelopment FEIS*, 2012.

(7) Based on AASHTO CTPP Reverse Journey to Work 5-Year data for Bronx Census Tracts 64.

TABLE B-3b: Travel Demand Forecast Assumptions

Land Use:		Residential		Local Retail		Medical Office (Staff)		Medical Office (Visitors)		Total		
Size/Units:		144 DU		11,401 gsf		-8,193 gsf		-8,193 gsf				
Peak Hour Person Trips:												
	AM	116		70		-20		-17		186		
	MD	58		444		-14		-25		502		
	PM	128		234		-20		-14		362		
	Sat MD	111		274		-6		-11		385		
Person Trips:												
		In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM	Auto	4	25	1	1	-15	0	-4	0	-14	26	12
	Taxi	0	2	1	1	0	0	-4	0	-3	3	0
	Subway	9	52	2	2	-3	0	-4	0	4	54	58
	Bus	3	19	2	2	-3	0	-2	0	0	21	21
	Walk	1	3	30	30	1	1	-1	1	31	35	66
	Total	17	101	36	36	-20	1	-15	1	18	139	157
		In	Out	In	Out	In	Out	In	Out	In	Out	Total
MD	Auto	7	7	4	4	0	0	-3	-3	8	8	16
	Taxi	1	1	7	7	0	0	-3	-3	5	5	10
	Subway	15	15	13	13	0	0	-4	-4	24	24	48
	Bus	6	6	13	13	0	0	-1	-1	18	18	36
	Walk	0	1	184	184	-6	-6	-1	-1	177	178	355
	Total	29	30	221	221	-6	-6	-12	-12	232	233	465
		In	Out	In	Out	In	Out	In	Out	In	Out	Total
PM	Auto	21	9	2	2	0	-15	-1	-2	22	-6	16
	Taxi	2	1	4	4	0	0	-1	-2	5	3	8
	Subway	45	20	7	7	0	-3	-1	-3	51	21	72
	Bus	17	7	7	7	0	-3	0	-1	24	10	34
	Walk	4	1	96	97	-1	0	-1	-1	98	97	195
	Total	89	38	116	117	-1	-21	-4	-9	200	125	325
		In	Out	In	Out	In	Out	In	Out	In	Out	Total
Sat MD	Auto	14	12	3	3	-2	-2	-1	-1	14	12	26
	Taxi	1	1	4	4	0	0	-1	-1	4	4	8
	Subway	31	27	8	8	0	0	-2	-2	37	33	70
	Bus	11	10	8	8	0	0	-1	-1	18	17	35
	Walk	2	1	114	115	0	0	-1	-1	115	115	230
	Total	59	51	137	138	-2	-2	-6	-6	188	181	369
Vehicle Trips :												
		In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM	Auto	4	25	1	1	-6	0	-2	0	-3	26	23
	Taxi	0	1	1	1	0	0	-3	0	-2	2	0
	Taxi Balanced	1	1	2	2	0	0	-3	-3	0	0	0
	Truck	1	1	0	0	0	0	0	0	1	1	2
	Total	6	27	3	3	-6	0	-5	-3	-2	27	25
		In	Out	In	Out	In	Out	In	Out	In	Out	Total
MD	Auto	7	7	2	2	0	0	-2	-2	7	7	14
	Taxi	1	1	4	4	0	0	-3	-3	2	2	4
	Taxi Balanced	2	2	8	8	0	0	-6	-6	4	4	8
	Truck	0	0	0	0	0	0	0	0	0	0	0
	Total	9	9	10	10	0	0	-8	-8	11	11	22
		In	Out	In	Out	In	Out	In	Out	In	Out	Total
PM	Auto	21	9	1	1	0	-6	-1	-1	21	3	24
	Taxi	1	1	2	2	0	0	-1	-2	2	1	3
	Taxi Balanced	2	2	4	4	0	0	-3	-3	3	3	6
	Truck	0	0	0	0	0	0	0	0	0	0	0
	Total	23	11	5	5	0	-6	-4	-4	24	6	30
		In	Out	In	Out	In	Out	In	Out	In	Out	Total
Sat MD	Auto	14	12	2	2	-1	-1	-1	-1	14	12	26
	Taxi	1	1	2	2	0	0	-1	-1	2	2	4
	Taxi Balanced	2	2	4	4	0	0	-2	-2	4	4	8
	Truck	0	0	0	0	0	0	0	0	0	0	0
	Total	16	14	6	6	-1	-1	-3	-3	18	16	34

Total Vehicle Trips

	In	Out	Total
AM	-2	27	25
MD	11	11	22
PM	24	6	30
Sat MD	18	16	34



Figure B-1
MD/PM/SATMD Project Increment Pedestrian Trip Assignment

Detailed Pedestrian Analysis

Peak 15-minute pedestrian flow conditions during the weekday midday peak hour are analyzed using the *2000 Highway Capacity Manual* methodology and procedures outlined in the *CEQR Technical Manual.* Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volume, measuring the sidewalk or crosswalk width, determining the available pedestrian capacity, and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared to level of service (LOS) standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street crosswalks and corners is more complicated, as these spaces cannot be treated as corridors due to the time incurred waiting for traffic lights. To effectively evaluate these facilities, a "time-space" analysis methodology is employed, which takes into consideration the traffic light cycle at intersections.

LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. Table B-4 defines the LOS criteria for pedestrian crosswalk/corner area and sidewalk conditions, as based on the *Highway Capacity Manual* methodology.

TABLE B-4: Pedestrian Crosswalk/Corner Area and Sidewalk Levels of Service Descriptions

LOS	Crosswalk/Corner	Crosswalk/Corner Area Criteria (sf/ped)	Non-Platoon Sidewalk Criteria (sf/ped)	Platoon Sidewalk Criteria (sf/ped)
A	Unrestricted	> 60	> 60	> 530
B	Slightly Restricted	> 40 to 60	> 40 to 60	> 90 to 530
C	Restricted, but Fluid	> 24 to 40	> 24 to 40	> 40 to 90
D	Restricted, Necessary to Continuously Alter Walking Stride and Direction	> 15 to 24	> 15 to 24	> 23 to 40
E	Severely Restricted	> 8 to 15	> 8 to 15	> 11 to 23
F	Forward Progress Only by Shuffling; No Reverse Movement Possible	≤ 8	≤ 8	≤ 11

Source: *CEQR Technical Manual*
Notes:
Based on average conditions for 15 minutes
Sf/ped – square feet of area per pedestrian

The analysis of sidewalk conditions includes a "platoon" factor in the calculation of pedestrian flow to more accurately estimate the dynamics of walking. "Platooning" is the tendency of pedestrians to move in bunched groups, or "platoons," once they cross a street where cross traffic required them to wait. Platooning generally results in an LOS poorer than that determined for average flow rates.

Significant Impact Criteria

Sidewalks

The *CEQR Technical Manual* impact criteria for a non-CBD location are used to identify significant adverse impacts due to the proposed actions. These criteria define a significant adverse sidewalk impact in a non-CBD area to have occurred under platoon conditions if the average pedestrian space under the No-Action condition is greater than 44.3 square feet per pedestrian (sf/ped), and the average pedestrian space under the With-Action condition is 40.0 sf/ped or less (LOS D or worse). If the average pedestrian

space under the With-Action condition is greater than 40.0 sf/ped (LOS C or better), the impact should not be considered significant. If the No-Action pedestrian space is between 6.4 and 44.3 sf/ped, a reduction in pedestrian space under the With-Action condition should be considered significant based on Table B-5, which shows a sliding scale that identifies what decrease in pedestrian space is considered a significant impact for a given pedestrian space value in the No-Action condition. If the reduction in pedestrian space is less than the value in Table B-5, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than 6.4 sf/ped, then a reduction in pedestrian space greater than or equal to 0.3 sf/ped, under the With-Action condition, should be considered significant.

Table B-5: Significant Impact Criteria for Sidewalks with Platooned Flow in a Non-CBD Location

No-Action Condition Pedestrian Flow (sf/ped)	With-Action Condition Pedestrian Flow Increment to be Considered a Significant Impact (sf/ped)
> 44.3	With-Action Condition ≤ 40.0
43.5 to 44.3	Reduction ≥ 4.3
42.5 to 43.4	Reduction ≥ 4.2
41.6 to 42.4	Reduction ≥ 4.1
40.6 to 41.5	Reduction ≥ 4.0
39.7 to 40.5	Reduction ≥ 3.9
38.7 to 39.6	Reduction ≥ 3.8
37.8 to 38.6	Reduction ≥ 3.7
36.8 to 37.7	Reduction ≥ 3.6
35.9 to 36.7	Reduction ≥ 3.5
34.9 to 35.8	Reduction ≥ 3.4
34.0 to 34.8	Reduction ≥ 3.3
33.0 to 33.9	Reduction ≥ 3.2
32.1 to 32.9	Reduction ≥ 3.1
31.1 to 32.0	Reduction ≥ 3.0
30.2 to 31.0	Reduction ≥ 2.9
29.2 to 30.1	Reduction ≥ 2.8
28.3 to 29.1	Reduction ≥ 2.7
27.3 to 28.2	Reduction ≥ 2.6
26.4 to 27.2	Reduction ≥ 2.5
25.4 to 26.3	Reduction ≥ 2.4
24.5 to 25.3	Reduction ≥ 2.3
23.5 to 24.4	Reduction ≥ 2.2
22.6 to 23.4	Reduction ≥ 2.1
21.6 to 22.5	Reduction ≥ 2.0
20.7 to 21.5	Reduction ≥ 1.9
19.7 to 20.6	Reduction ≥ 1.8
18.8 to 19.6	Reduction ≥ 1.7
17.8 to 18.7	Reduction ≥ 1.6
16.9 to 17.7	Reduction ≥ 1.5
15.9 to 16.8	Reduction ≥ 1.4
15.0 to 15.8	Reduction ≥ 1.3
14.0 to 14.9	Reduction ≥ 1.2
13.1 to 13.9	Reduction ≥ 1.1
12.1 to 13.0	Reduction ≥ 1.0
11.2 to 12.0	Reduction ≥ 0.9
10.2 to 11.1	Reduction ≥ 0.8
9.3 to 10.1	Reduction ≥ 0.7
8.3 to 9.2	Reduction ≥ 0.6
7.4 to 8.2	Reduction ≥ 0.5
6.4 to 7.3	Reduction ≥ 0.4
< 6.4	Reduction ≥ 0.3

Source: *CEQR Technical Manual*

Corner Areas and Crosswalks

For a non-CBD area, *CEQR Technical Manual* criteria define a significant adverse corner area or crosswalk impact to have occurred if the average pedestrian space under the No-Action condition is greater than 26.6 sf/ped and, under the With-Action condition, the average pedestrian space decreases to 24 sf/ped or less (LOS D or worse). If the pedestrian space under the With-Action condition is greater than 24 sf/ped (LOS C or better), the impact should not be considered significant. If the average pedestrian space under the No-Action condition is between 5.1 and 26.6 sf/ped, a decrease in pedestrian space under the With-Action condition should be considered significant based on Table B-6, which shows a sliding scale that identifies what decrease in pedestrian space is considered a significant impact for a given amount of pedestrian space in the No-Action condition. If the decrease in pedestrian space is less than the value in Table B-6, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than 5.1 sf/ped, then a decrease in pedestrian space greater than or equal to 0.2 sf/ped should be considered significant.

Table B-6: Significant Impact Criteria for Corners and Crosswalks in a Non-CBD Location

No-Action Condition Pedestrian Flow (sf/ped)	With-Action Condition Pedestrian Flow Increment to be Considered a Significant Impact (sf/ped)
> 26.6	With-Action Condition ≤ 24.0
25.8 to 26.6	Reduction ≥ 2.6
24.9 to 25.7	Reduction ≥ 2.5
24.0 to 24.8	Reduction ≥ 2.4
23.1 to 23,9	Reduction ≥ 2.3
22.2 to 23.0	Reduction ≥ 2.2
21.3 to 22.1	Reduction ≥ 2.1
20.4 to 21.2	Reduction ≥ 2.0
19.5 to 20.3	Reduction ≥ 1.9
18.6 to 19.4	Reduction ≥ 1.8
17.7 to 18.5	Reduction ≥ 1.7
16.8 to 17.6	Reduction ≥ 1.6
15.9 to 16.7	Reduction ≥ 1.5
15.0 to 15.8	Reduction ≥ 1.4
14.1 to 14.9	Reduction ≥ 1.3
13.2 to 14.0	Reduction ≥ 1.2
12.3 to 13.1	Reduction ≥ 1.1
11.4 to 12.2	Reduction ≥ 1.0
10.5 to 11.3	Reduction ≥ 0.9
9.6 to 10.4	Reduction ≥ 0.8
8.7 to 9.5	Reduction ≥ 0.7
7.8 to 8.6	Reduction ≥ 0.6
6.9 to 7.7	Reduction ≥ 0.5
6.0 to 6.8	Reduction ≥ 0.4
5.1 to 5.9	Reduction ≥ 0.3
< 5.1	Reduction ≥ 0.2

Source: *CEQR Technical Manual*

Existing Conditions

As shown in Figure B-1, one corner area and one sidewalk were identified where project-generated pedestrian trips are expected to exceed the 200-trip CEQR analysis threshold during the weekday midday hour and, therefore, have been selected for analysis. Existing peak 15-minute pedestrian flow volumes were collected by PHA on April 5, 2017 during the weekday midday along analyzed sidewalk

and corner areas that would experience peak hour project generated pedestrian volumes of 200 or greater as per the Level 2 Screening analysis. Existing peak hour volumes, average pedestrian space, and LOS at these pedestrian elements are presented in Tables B-7a and B-7b. As indicated in the tables, all analyzed pedestrian elements are currently operating at LOS A in both analyzed peak hours, due to very low existing pedestrian volumes in the area.

TABLE B-7a: Existing Sidewalk Conditions during Weekday Midday

Location	Sidewalk	Total Width (feet)	Effective Width (feet)	Peak Hour Volumes	Pedestrian Space (SFP)	Platoon-Adjusted LOS
				WK MD	WK MD	WK MD
Westchester Avenue btwn Metcalf Avenue & Fteley Avenue	North	15.3	8.8	153	652.2	A

Notes:

SFP - Square feet per pedestrian.

LOS - Level of Service.

TABLE B-7b:
Existing Corner Area Conditions during Weekday Midday

Location	Corner	Pedestrian Space (SFP)	LOS
		WK MD	WK MD
Metcalf Avenue & Westchester Avenue	NE	794.0	A

Notes:

SFP - Square feet per pedestrian.

LOS - Level of Service.

Future without the Proposed Actions

Estimates of 2020 No-Action peak hour pedestrian volumes on the analyzed pedestrian elements were developed by applying the annual background growth rates recommended in the *CERQ Technical Manual* to existing volumes. An annual compounded growth rate of 0.25 percent was applied for years 2017 (when pedestrian data were collected) through 2020.

Tables B-8a and B-8b show the forecasted No-Action peak hour pedestrian volumes, average pedestrian space, and LOS at the analyzed locations during the weekday midday peak hour. As shown in the tables, all analyzed pedestrian facilities are projected to continue to operate at LOS A in the weekday midday under No-Action conditions.

TABLE B-8a:
No-Action Sidewalk Conditions during Weekday Midday

Location	Sidewalk	Total Width (feet)	Effective Width (feet)	Peak Hour Volumes	Pedestrian Space (SFP)	Platoon-Adjusted LOS
				WK MD	WK MD	WK MD
Westchester Avenue btwn Metcalf Avenue & Fteley Avenue	North	15.3	8.8	181	551.2	A

Notes:
SFP - Square feet per pedestrian.
LOS - Level of Service.

TABLE B-8b:
No-Action Corner Area Conditions during Weekday Midday

Location	Corner	Pedestrian Space (SFP)	LOS
		WK MD	WK MD
Metcalf Avenue & Westchester Avenue	NE	702.7	A

Notes:
SFP - Square feet per pedestrian.
LOS - Level of Service.

Future with the Proposed Actions

As discussed previously, the RWCDS for the proposed actions would result in the development of 144 incremental residential units and approximately 11,401 gsf of retail, and net decrease of 8,193 gsf of community facility space as compared to the future without the proposed actions. The proposed actions would generate new pedestrian demand on the analyzed sidewalk and other pedestrian elements by 2020. This new demand would include trips made solely by walking, as well as pedestrian trips en route from public transit facilities.

Pedestrian trips generated by the RWCDS (including walk-only, and trips to/from transit) were assigned to the two projected development sites. The assignment of project increment pedestrian trips generated by the RWCDS during the weekday midday peak hour were shown earlier in Figure B-1. Based on the peak hour project-generated pedestrian trips presented in Figure B-1, peak hour incremental pedestrian volumes were developed. These pedestrian volumes were added to the projected No-Action volumes to generate With-Action pedestrian volumes. These volumes were then applied to the analyzed sidewalk and corner area.

Tables H-9a and H-9b show the forecasted With-Action peak hour pedestrian volumes, average pedestrian space, and LOS at the analyzed locations during the weekday midday peak hour. As shown in the tables, all analyzed pedestrian facilities are projected to operate at LOS B or better in both peak hours under With-Action conditions. As presented in Table H-9a, Westchester Avenue's north sidewalk (between Metcalf and Fteley Avenues) would deteriorate from LOS A under No-Action conditions to LOS B under With-Action conditions. As the No-Action average pedestrian space would exceed 44.3 sf per pedestrian in both peak hours, and the With-Action average pedestrian space would remain well above 40.0 sf per pedestrian (the *CEQR Technical Manual* significant impact criteria), this would not be

considered a significant adverse impact. The analyzed corner at Westchester and Metcalf Avenues would continue to operate at LOS A under With-Action conditions, as under No-Action conditions (refer to Table H-9b). Therefore, per *CEQR Technical Manual* criteria, the proposed actions would not result in significant adverse pedestrian impacts.

TABLE B-9a: With-Action Sidewalk Conditions during Weekday Midday

Location	Sidewalk	Total Width (feet)	Effective Width (feet)	Peak Hour Volumes	Pedestrian Space (SFP)	Platoon-Adjusted LOS
				WK MD	WK MD	WK MD
Westchester Avenue btwn Metcalf Avenue & Fteley Avenue	North	15.3	8.8	406	245.6	B

Notes:

SFP - Square feet per pedestrian.

LOS - Level of Service.

TABLE B-9b: With-Action Corner Area Conditions during Weekday Midday

Location	Corner	Pedestrian Space (SFP)	LOS
		WK MD	WK MD
Metcalf Avenue & Westchester Avenue	NE	355.7	A

Notes:

SFP - Square feet per pedestrian.

LOS - Level of Service.

X. AIR QUALITY

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

Mobile Sources

Mobile source impacts could occur with actions that increase or cause a redistribution of traffic, create any other mobile sources of pollutants or add new uses near mobile sources. The proposed rezoning area would be located within 200 feet of an atypical (e.g. not at-grade) source of vehicular pollutants, such as a highway or bridge with a total of more than two lanes and would introduce new development that would have operable windows, air intakes, or intake vents. The Bronx River Parkway is a multilane, limited access parkway for passenger cars that is located approximately 170 feet west of the rezoning area extending parallel along Metcalf Avenue. Therefore, per *CEQR Technical Manual* guidelines, a mobile source air quality analysis for the Bronx River Parkway on its potential impact on the RWCDS associated with the proposed actions is provided in Attachment I, "Air Quality." As discussed in detail in Attachment I, the mobile source emissions from the Bronx River Parkway would not result in a significant adverse air quality impact on the RWCDS associated with the proposed actions.

Stationary Sources

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

The RWCDS was analyzed for potential stationary source impacts, which is provided in Attachment I, "Air Quality." As discussed in detail in Attachment I, the stationary source air quality analysis determined that both projected development site 1 and 2 (Block 3780, Lots 1 and 51) would require (E) designations (E-425) that would specify the location of the boiler stack to be restricted to the highest tier of the proposed buildings and would require the use of natural gas for the respective HVAC systems. In addition, based on a review of area land uses, with the exception of the dry cleaner on projected development site 2, which would be redeveloped as a result of the proposed actions, there are no other industrial sources within 400 feet of the rezoning, therefore, no significant adverse industrial source air quality impacts are anticipated. As discussed therein, no significant adverse stationary air quality impacts are expected in the future with the proposed actions.

XI. NOISE

A noise analysis examines an action for its potential effects on sensitive noise receptors (which can be both indoors and outdoors), including the effects on the interior noise levels of residential, commercial, and certain community facility uses, such as hospitals, schools, and libraries. The principal types of noise sources affecting the City are mobile sources (primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with manufacturing operations or building HVAC systems) and construction noise (e.g., trucks, bulldozers, power tools, etc.). An initial impact screening would consider whether a proposed action would generated any mobile or stationary source noise, or would be located in an area with high ambient noise levels. As the proposed actions and associated RWCDS would not include an outdoor play area/playground, a detailed playground noise analysis is not warranted for the proposed actions.

As the proposed actions and associated RWCDS would introduce new sensitive uses, a detailed noise analysis was conducted in compliance with *CEQR Technical Manual* guidelines to determine whether traffic generated by the RWCDS would have the potential to result in significant noise impacts and determine the level of building attenuation necessary to ensure that the proposed and projected development's interior noise levels satisfy applicable interior noise criteria. As presented in Attachment J, "Noise," noise from the increased traffic volumes generated by the proposed action and associated RWCDS would not cause significant adverse noise impacts, as the noise levels increases would fall well below the applicable *CEQR Technical Manual* significant adverse impact threshold (3.0 dBA).

Based on the noise analysis presented herein in Attachment J, to ensure acceptable interior noise levels for the proposed residential, community facility, and/or commercial uses, 31 and 38 dBA of attenuation

is needed (the minimum required composite window/wall attenuation for future commercial uses would be 5 dBA lower than that of residential uses). The noise attenuation specifications would be mandated through the assignment of an (E) designation (E-425) to the applicant-owned projected development site 1 (Block 3780, Lot 1) and projected development site 2 (Block 3780, Lot 51). With implementation of this level of attenuation, as required per the (E) designation, the proposed actions would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines for residential uses, community facility, and commercial uses. Therefore, the proposed actions would not result in any significant adverse noise impacts related to building attenuation requirements.

XII. PUBLIC HEALTH

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

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

As detailed in the analyses provided in this EAS, the proposed actions would not result in significant adverse impacts in the areas of air quality, water quality, hazardous materials, or noise. Therefore, the proposed actions do not have the potential to result in significant adverse public health impacts, and no further assessment is warranted.

XII. NEIGHBORHOOD CHARACTER

A supplemental screening analysis is necessary to determine if a detailed neighborhood character analysis is warranted in accordance with *CEQR Technical Manual* methodology, because the proposed actions required analyses of land use, zoning, and public policy; open space; shadows; urban design and visual resources; transportation; and noise.

The proposed actions would not adversely affect any component of the surrounding area's neighborhood character. The proposed actions are intended to facilitate a new affordable housing development as well as local retail and community facility uses on projected development site 1. According to the applicant, the proposed actions would support citywide goals, by creating expanded opportunities for new development, in particular new affordable housing development. The proposed actions and associated RWCDS would add a substantial number of affordable dwelling units to a community that anticipates population growth and has a need for such mixed-income housing.

Moreover, the proposed actions are not expected to result in any significant adverse impacts on the technical areas relating to neighborhood character, including land use, socioeconomic conditions, open space, shadows, urban design and visual resources, historic and cultural resources, transportation, and noise. Therefore, the proposed actions would not result in a significant adverse impact to neighborhood character.

XIII. CONSTRUCTION

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

The proposed actions would result in temporary disruptions including construction related traffic, dust, noise, or mobile source emissions. However, these effects would be temporary, as the duration of construction activities for the proposed development are not expected to exceed 24 months and construction activity would be limited to the hours of 7:00 AM to 5:00 PM on weekdays. Construction on the applicant-owned site would last approximately 24-months and the building would be completed and occupied by the end of 2020. Completion of construction and occupation of projected development site 2 is also anticipated by the end of 2020.

It is anticipated that construction staging would primarily occur on the two projected development sites. Construction activities are not expected to adversely affect surrounding land uses. As required by City regulations, sidewalk protection bridges and full height plywood barriers would be installed to protect the public right of way. Periodic lane and sidewalk closures likely would be required to facilitate material delivery, construction debris removal, and related activities. Standard practices would be followed to ensure safe pedestrian and vehicular access to nearby buildings and along affected streets and sidewalks. During construction, access to all adjacent buildings, residences, and other uses would be maintained according to the regulations established by the NYC Department of Buildings (DOB). While the proposed development would result in temporary disruptions, these effects are not considered as significant or adverse. Therefore, no further analysis is warranted.

Most construction activity would take place Monday through Friday, although the delivery and installation of certain equipment could occur on weekend days. Hours of construction are regulated by DOB and apply in all areas of the City. In accordance with those regulations, almost all work would occur between 7 AM and 6 PM on weekdays, although some workers would arrive and begin to prepare work areas before 7 AM. Occasionally, Saturday or overtime hours could be required to complete time-sensitive tasks. Weekend work requires a permit from the DOB and, in certain instances, approval of a noise mitigation plan from DEP under the New York City Noise Code.

Construction activities may result in short-term disruption of both traffic and pedestrian movements in the vicinity of the two development sites. This would occur primarily due to the potential temporary loss of curbside lanes from the staging of equipment and the movement of materials to and from the

development sites. Most construction traffic would take place outside of the AM and PM traffic peak hours in vicinity of the development sites due to typical construction hours. Additionally, construction may at times result in temporary closings of sidewalks adjacent to the development sites in order to accommodate construction vehicles, equipment, and supplies. The construction site would be surrounded by construction fencing and barriers as required by DOB, which would limit the effects of construction on nearby land uses. While it is anticipated that some sidewalks immediately adjacent to construction sites would be closed to accommodate heavy loading areas for at least several months of the construction period for each site, detailed Maintenance and Protection of Traffic (MPT) plans for each construction site must be submitted for approval to the New York City Department of Transportation's (DOT's) Office of Construction Mitigation and Coordination (OCMC), the entity that insures critical arteries are not interrupted, especially in peak travel periods. Given the limited duration of any obstructions, these conditions would not result in significant adverse impacts on traffic and transportation conditions.

Noise associated with construction would be limited to typical construction activities and would be subject to compliance with the New York City Noise Code and the United States Environmental Protection Agency (EPA) noise emission standards for construction equipment. These controls and the temporary nature of construction activity would assure that there would be no significant adverse noise impacts associated with construction activity.

While construction of the two development sites would result in temporary disruption in some of the surrounding area, including noise, dust, and traffic associated with the delivery of materials and arrival of workers, the incremental effects of construction of the two developments, if any, would be negligible. Therefore, no impacts from construction are expected as a result of the proposed actions.

ATTACHMENT C

LAND USE, ZONING, AND PUBLIC POLICY

I. INTRODUCTION

1675 JV Associates, LLC (the "applicant") is seeking zoning map and text amendments from the New York City Planning Commission (CPC), in addition to public financing from the New York City Department of Housing Preservation and Development (HPD) and the New York City Housing Development Corporation (HDC) (the "proposed actions"), to facilitate the development of predominantly residential apartment building at 1675 Westchester Avenue in the Bronx River neighborhood of Bronx Community District (CD) 9. As presented in Attachment A, "Project Description," under the reasonable-worst case development scenario (RWCDS), the proposed actions would facilitate the incremental development of 144 dwelling units (DUs) (including a net increase of 227 affordable DUs[1]) and 11,401 gross square feet (gsf) of local retail, in addition to a net reduction of 8,193 gsf of medical office floor area and 47 accessory parking spaces on two projected development sites.

A detailed assessment of land use and zoning is appropriate if a proposed action would result in a significant change in land use or would substantially affect regulations or policies governing land use. An assessment of zoning is typically performed in conjunction with a land use analysis when the action would change the zoning on the site or result in the loss of a particular use. As the proposed actions includes zoning map and text amendments, a detailed assessment of land use, zoning, and public policy is warranted and is provided in this attachment. In addition, as the rezoning area is located within the New York City Coastal Zone, an assessment of the proposed actions' consistency with the Waterfront Revitalization Program (WRP) is warranted. The assessment considers the effects of the proposed actions on the land use study area, as well as the proposed actions' potential effects on zoning and public policy in the study area.

II. PRINCIPAL CONCLUSIONS

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidelines for determining impact significance set forth in the *CEQR Technical Manual*, are anticipated in the 2020 future with the proposed actions in the primary and secondary study areas. The proposed actions would result in changes to land use within the primary study area by introducing retail uses that would not be permitted in the rezoning area in the future without the proposed actions. In addition, community facility and residential uses, which would be present in the rezoning area under future conditions with and without the proposed actions, would be permitted at a greater density than would be allowed in the No-Action condition. These proposed local retail uses would be consistent with uses already present in the surrounding area. Notably, in the immediate vicinity of the rezoning area, Westchester Avenue is

[1]For CEQR analysis purposes, "affordable" refers to residential units set aside for households earning 80 percent or below of the Area Median Income (AMI). As described in Attachment A, "Project Description," all 220 housing units on projected development site 1 would be affordable to households earning at or below 80 percent of AMI, and approximately 20 percent of the overall residential floor area (approximately 7 DUs) of projected development site 2 are assumed to be set aside for households earning 80 percent (or below) of AMI, for a total of 227 affordable housing units.

largely a commercial corridor lined with a number of retail and other commercial uses. The proposed zoning map and text amendments would create additional zoning capacity in a transit-accessible area to support new housing creation and increase the number of affordable housing units available in New York City. While the proposed R8A (MIH) district would permit development at a density greater than permitted under existing or No-Action condition, the rezoning area's location along Westchester Avenue, a wide street with excellent public transit service provided by the IRT No. 6 subway line, is well-suited for additional development. In addition, the proposed C2-4 commercial overlay would activate the street and allow a consistent streetwall, retail continuity, and serve local residents. It would also bring into conformance the existing local retail uses occupying Lot 51 on Block 3780. As such, the proposed actions would not result in significant adverse impacts to zoning. Lastly, the proposed actions would not result in land uses that conflict with public policies applicable to the primary or secondary study areas.

III. METHODOLOGY

As mentioned above, the proposed actions include zoning map and text amendments, which would affect land use, zoning and public policy, as well as public financing approval. Land use, zoning, and public policy are addressed and analyzed for two geographical areas for the proposed actions. For the purpose of this assessment, the primary study area encompasses the rezoning area (comprising portions of Lots 1 and 51 of Bronx Block 3780[2]). The secondary study area encompasses areas that have the potential to experience indirect impacts as a result of the proposed actions. The secondary study area extends an approximate 400-foot radius from the boundary of the primary study area. The secondary study area is generally bound by East 172nd Street to the north, Croes Avenue to the east, Gleason Avenue to the south, and Harrod Avenue to the west. Both the primary and secondary study areas have been established in accordance with *CEQR Technical Manual* guidelines and can be seen in Figure C-1.

The analysis of land use, zoning, and public policy first provides a description of the existing land use, zoning, and public policy conditions in the study areas. Existing land uses in the primary and secondary study area were determined based on the New York City Primary Land Use Tax Lot Output (PLUTO) data files for 2016 and February 2017 field visits. New York City Zoning and Land Use (ZoLa), New York City Zoning maps, and the *Zoning Resolution of the City of New York* were consulted to describe existing zoning districts in the study areas. Relevant public policy documents, recognized by the New York City Department of City Planning (DCP) and other City agencies were utilized to describe existing public policies pertaining to the primary and secondary study areas.

Next, the analysis projects land use, zoning, and public policy conditions in the 2020 analysis year without the proposed actions. This is the "No-Action" or "future without the proposed actions" condition, which is developed by identifying proposed developments and other relevant changes anticipated to occur in the primary and secondary study areas within this time frame. The No-Action condition describes the baseline conditions in the study areas against which the proposed actions' incremental changes are measured. Finally, the analysis projects land use, zoning, and public policy conditions in 2020 with the completion of the RWCDS development. This is the "With-Action" or "future with the proposed actions" condition.

[2] As described in Attachment A, "Project Description," a tiny sliver of Lot 50 on Block 3780, at its southeastern corner, would also be affected by the proposed zoning map changes, as the depth of Lot 51 on Block 3780 along Fteley Avenue is 99.66 feet.

Figure C-1
Study Area Land Uses



IV. PRELIMINARY ASSESSMENT

Land Use and Zoning

A preliminary assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. However, under *CEQR Technical Manual* guidelines, if a detailed assessment is required in the technical areas of socioeconomic conditions, neighborhood character, transportation, air quality, noise, infrastructure, or hazardous materials, a detailed land use assessment is appropriate. This EAS provides detailed assessments of community facilities, open space, urban design, and noise. Therefore, a detailed assessment of land use and zoning is warranted and provided in Section V below.

Public Policy

According to the *CEQR Technical Manual*, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports that pertain to the study area. If the proposed action could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary.

The primary study area is not located in an urban renewal area, a designated Industrial Business Zone (IBZ), a Business Improvement District (BID), a designated historic district, or within an area defined by an adopted 197-a plan. As the primary and secondary study areas are located within the City's designated coastal zone (see Figure C-2), a detailed public policy assessment is warranted and is provided in Section V, "Detailed Assessment." In addition, another public policy applicable to the primary and secondary study area includes *Housing New York: A Five-Borough, Five-Borough Plan*, which is also discussed in Section V.

V. DETAILED ASSESSMENT

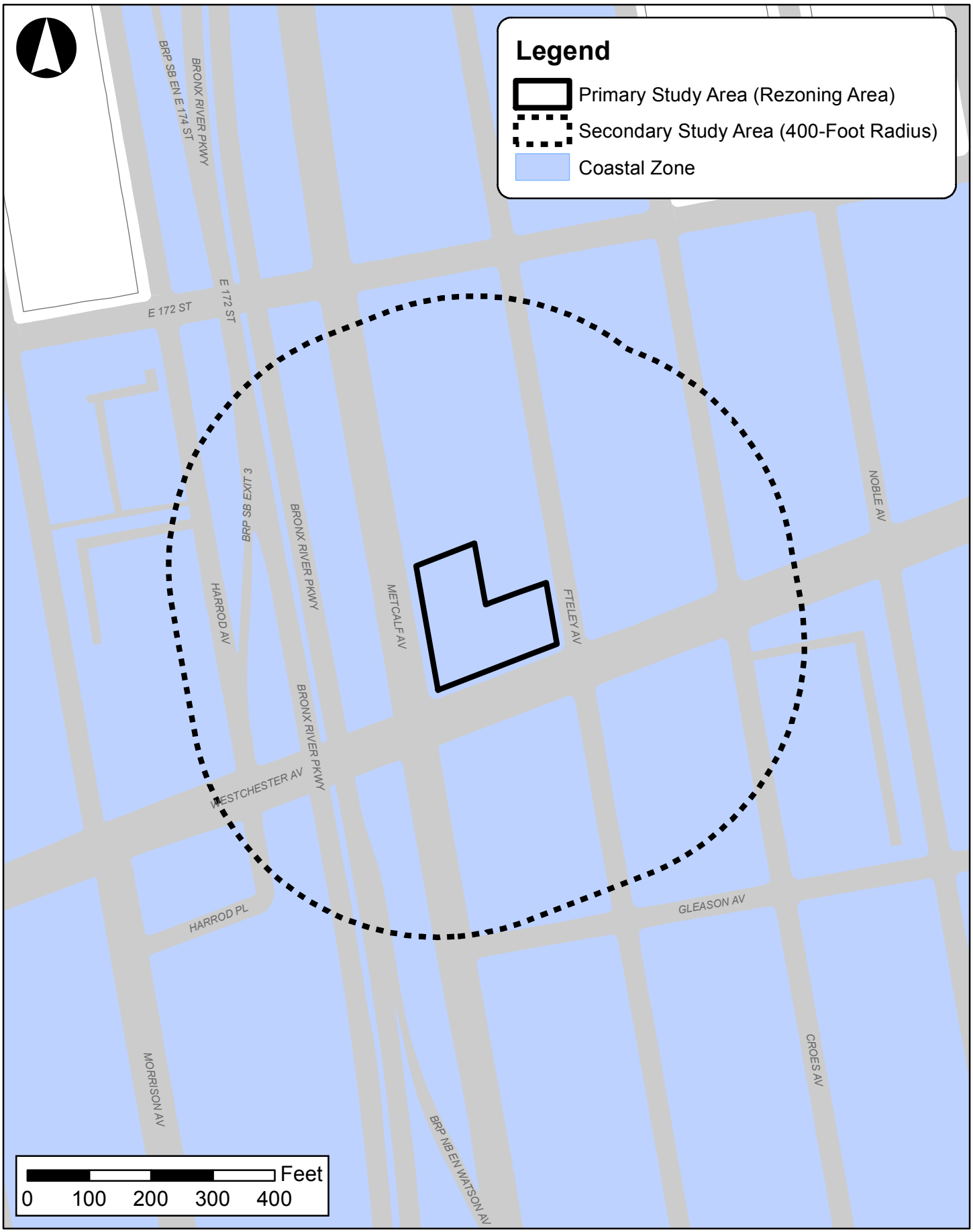
Existing Conditions

Land Use

Primary Study Area (Rezoning Area)

The approximately 30,514-sf rezoning area, which is coterminous with the primary study area, comprises 25,790 sf of the applicant-owned Bronx Block 3780, Lot 1 (projected development site 1), as well as approximately 4,724 sf of Bronx Block 3780, Lot 51 (projected development site 2), and a tiny sliver of Lot 50 of Bronx Block 3780 in the Bronx River neighborhood of Bronx CD 9. The rezoning area has frontage on Westchester Avenue to the south, Metcalf Avenue to the west, and Fteley Avenue to the east.

Coastal Zone Boundary Map



The applicant-owned projected development site 1 is currently occupied by a vacant building at the southeastern corner of the site, as well as unbuilt land. The one-story approximately 12,275-sf building formerly served as a health center (Use Group 4 community facility use), which closed in 2012. The unbuilt lot area includes a former surface parking lot and a small open lawn.

Projected development site 2, which abuts projected development site 1 to the east (with frontage on Westchester and Fteley Avenues) is currently developed with a single-story, approximately 3,525 sf commercial building that accommodates a dry cleaner and wine and liquor store.

Secondary Study Area

As shown in Figure C-1 and Table C-1, land uses in the secondary study area are predominantly residential, with a few mixed commercial, and institutional uses. There are no industrial, transportation/utility, open space[3], or parking facilities present in the secondary study area.

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

Land Use	Number of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential	76	89.4	170,714	54.8	222,070	75.7
One & Two-Family Residential	*35*	*41.2*	*82,052*	*26.3*	*93,128*	*31.7*
Multi-Family Walkup Buildings	*41*	*48.2*	*88,662*	*28.4*	*128,942*	*43.9*
Multi-Family Elevator Buildings	*0*	*0.0*	*0*	*0.0*	*0*	*0.0*
Mixed Commercial/Residential Buildings	1	1.2	1,914	0.6	2,800	1.0
Commercial/Office Buildings	3	3.5	98,568	31.6	41,027	14.0
Industrial/Manufacturing	0	0.0	0	0.0	0	0.0
Transportation/Utility	0	0.0	0	0.0	0	0.0
Public Facilities & Institutions	2	2.4	26,931	8.6	27,512	9.4
Open Space	0	0.0	0	0	0	0.0
Parking Facilities	0	0.0	0	0	0	0.0
Vacant Land	3	3.5	13,539	4.3	0	0.0
Total	*85*	*100.0*	*311,666*	*100.0*	*293,409*	*100.0*

Source: 2016 PLUTO data; February 2017 field visits.
Notes: Reflects land uses of tax lots with a minimum of 50 percent of their lot area located within the boundaries of the secondary study area. Does not include the primary study area lots (Lots 1 and 51).

Residential uses comprise a total of 89.4 percent of the secondary study area lots, and also represent the majority of the subarea's lot area and building area (54.8 percent and 75.7 percent, respectively). One- and two-family residential buildings are the most prevalent in terms of lot area and building area, while multi-family walkup buildings are present on a greater number of lots; there are no multi-family elevator buildings present in the secondary study area (refer to Table C-1). As presented in Figure C-1, one- and two-family residential buildings and multi-family walkup buildings are both found on the north side of Westchester Avenue, north and east of the primary study area. One mixed residential/commercial building is located immediately east of the rezoning area (at the northeast corner of Fteley and Westchester avenues). It should be noted that, while no lots with a minimum of 50 percent of their lot area in the secondary study area are occupied by multi-family elevator buildings,

[3] While there is open space along the Bronx River Parkway (to the west of the primary study area), this open space is not located within a tax lot and is, therefore, not included in Table C-1.

three lots that are partially located within the secondary study area (one on the south side of Westchester Avenue, east of Croes Avenue; and two on the west side of Harrod Avenue between Westchester Avenue and East 172nd Street) are occupied by multi-family elevator buildings; these buildings are not reflected in Table C-1.

As presented in Table C-1, commercial uses, while only representing 3.5 percent of the secondary study area lots, comprise 31.6 percent of the secondary study area lot area and 14.0 percent of the secondary study area building area; this discrepancy is due to the generally larger lot sizes of the commercial lots, as compared to the residential lots. All of the secondary study area commercial uses have frontage along Westchester Avenue (refer to Figure C-1). Existing commercial uses in the secondary study area commercial buildings include both chain retailers/supermarkets (CVS Pharmacy and Fine Fare Supermarket) and local retail establishments.

There are two institutional uses in the secondary study area: a religious institution located on the south side of East 172nd Street between Metcalf and Fteley avenues and a day care facility located on Croes Avenue between Westchester and Gleason avenues. An additional public facility (the U.S.P.S. Soundview Station) is located on the southeastern border of the secondary study area, but is not included in Table C-1, as less than 50 percent of the building's lot area is located within the study area.

As also presented in Table C-1, there are three vacant lots in the secondary study area, comprising a total of 3.5 percent of the secondary study area lots and 4.3 percent of the secondary study area lot area.

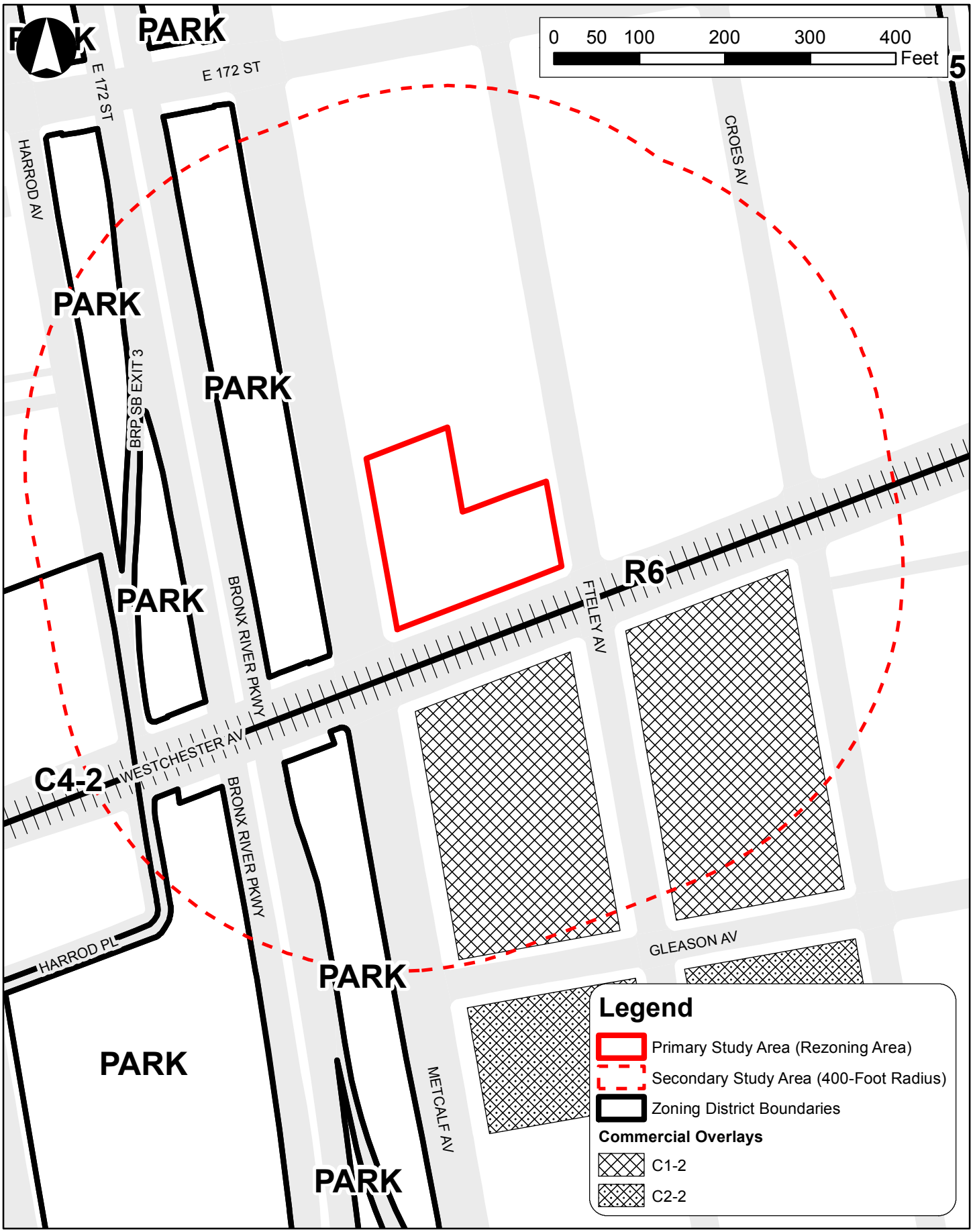
It should also be noted that, while none of the secondary study area lots are occupied by open space uses, a large percentage of land area to the west of the primary study area (between Metcalf and Harrod Avenues) is comprised of open space. Specifically, land along the Bronx River Parkway is undeveloped open space; however, this open space is inaccessible to the public and is not within a tax lot; as such, it is not reflected in Table C-1.

Zoning

Primary Study Area

As shown in Figure C-3, the rezoning area is currently zoned R6. R6 districts are widely mapped in built-up, medium-density areas and can range in character from neighborhoods with a diverse mix of building types and heights to large scale "tower in the park" developments. Developers in R6 districts can choose between two sets of bulk regulations: standard Height Factor regulations, which produce small multi-family buildings on small zoning lots and, on larger lots, tall buildings set back from the street; and optional Quality Housing regulations that produce high lot coverage buildings with height limits that often reflect the scale of older, pre-1961 apartment buildings in the neighborhood. Under Height Factor regulations, the maximum permitted residential floor area ratio (FAR) ranges from 0.78 (for a single story building) to 2.43 at a typical height of 13 stories; the open space ratio (OSR) ranges from 27.5 to 37.5. Residential buildings developed pursuant to R6 (Height Factor) regulations require off-street parking for 70 percent of a building's dwelling units and parking can be waived if five or fewer spaces are required. Under Quality Housing regulations, the maximum permitted FAR is 3.0 on wide streets outside of the Manhattan Core and 2.2 on narrow streets. Community facility uses are permitted up to 4.8 FAR in R6 districts under both Height Factor and Quality Housing regulations; commercial uses are not

Figure C-3
Existing Zoning



permitted as-of-right in R6 districts. Residential buildings developed pursuant to R6 (Quality Housing) regulations require off-street parking for 50 percent of a building's dwelling units and parking can be waived if five or fewer spaces are required.
As noted above, projected development site 2 is occupied by commercial uses, which are not permitted as-of-right in R6 residential districts. According to the 2016 PLUTO database, the existing building on projected development site 2 was constructed in 1964. Although the property does not have a certificate of occupancy available on the New York City Department of Buildings (DOB) website, the building's commercial occupancy conforms to the DOB records for the property, as of 2014. It should also be noted that the dry cleaning establishment has occupied this property since at least 1999 and obtained approval for two building permits from the DOB in 1999 and 2000 for general construction related to air duct work and to replace the building's boiler for the dry cleaning operation. Furthermore, the liquor store has had a license from the New York State Liquor Authority to sell alcoholic beverages at this location since at least 1999. Given that the property conforms to DOB records, it is assumed that the existing commercial uses at projected development site 2 are legally non-conforming uses (refer to Appendix 2).

The existing building on the applicant-owned projected development site 1 has a built FAR of 0.38, and the existing building on projected development site 2 has a built FAR of 0.72. As such, the two development sites are both underbuilt for the allowable FAR of up to 3.0 for residential uses built pursuant to the Quality Housing program on a wide street outside of the Manhattan core and 4.8 for community facility uses.

Secondary Study Area

As shown in Figure C-3, the R6 zoning district mapped in the primary study area encompasses the majority of the secondary study, as well. A C4-2 commercial district is mapped along the western border of the secondary study area, and C1-2 commercial overlays are mapped on two blocks south of Westchester Avenue. In addition, the open space located along the Bronx River Parkway is mapped with a Park zoning designation.

As noted above R6 zoning districts are widely mapped in built-up medium-density areas in Brooklyn, Queens, and Bronx. Under height factor regulations, the maximum permitted residential floor area ranges from 0.78 (for a single story building) to 2.43 at a typical height of 13 stories; the open space ratio (OSR) ranges from 27.5 to 37.5. Under Quality Housing regulations, the maximum permitted FAR is 3.0 on wide streets outside of the Manhattan Core and 2.2 on narrow streets. Community facility uses are permitted up to 4.8 FAR in R6 districts under both height factor and Quality Housing regulations. Commercial and manufacturing uses are not permitted in residential zoning districts.

However, as noted above, C1-2 commercial overlays are mapped on the entirety of Blocks 3747 (bounded by Westchester, Metcalf, Fteley, and Gleason avenues) and 3748 (bounded by Westchester, Croes, Fteley, and Gleason avenues). When mapped in R6 districts, C1-2 commercial overlays permit commercial uses up to 2.0 FAR. In mixed-use buildings, commercial uses are limited to one or two floors and must always be located below the residential use.

Lastly, as noted above, a C4-2 commercial district is mapped on the western edge of the primary study area (west of Harrod Avenue). C4 districts are mapped in regional commercial centers that are located outside of the central business districts. In these areas, specialty and department stores, theaters, and other commercial and office uses serve a larger region and generate more traffic than neighborhood

shopping areas. Use Groups 5, 6, 8, 9, 10, and 12, which include most retail establishments, are permitted in C4 districts. Uses that would interrupt the desired continuous retail frontage, such as home maintenance and repair services stores listed in Use Group 7, are not allowed. C4-2 commercial districts are R6 equivalent districts that permit commercial uses up to 3.4 FAR and residential uses up to 0.78-2.43 FAR. Community facility uses are also permitted in C4-2 districts up to 4.8 FAR.

Public Policy

As noted above, the primary study area is not located in an urban renewal area, a designated IBZ, a BID, a designated historic district, or within an area defined by an adopted 197-a plan. However, the entirety of the primary study area (as well as the secondary study area) is located within the New York City Coastal Zone. As such, a discussion of the WRP is provided below. Other public policies applicable to the primary study area include *Housing New York.*

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

Housing New York is the City's comprehensive housing development policy plan that seeks, as a primary goal, to build and preserve 200,000 units of high-quality affordable housing over the next decade. Framed by the policy goals and objectives in *Housing New York*, the City approved MIH program that requires, through zoning actions, a share of new housing to be permanently affordable. *Housing New York* was developed in conjunction with the HPD to create housing opportunities for New Yorkers with a range of incomes, while fostering vibrant and diverse neighborhoods.

The primary components of *Housing New York* include:

- Mandatory affordable housing, not voluntary. Production of affordable housing would be a condition of residential development when developers build in an area zoned for MIH, whether rezoned as part of a City neighborhood plan or a private rezoning application.
- Affordable housing would be permanent. There would be no expiration to the affordability requirement of apartments generated through MIH, making them a long-term, stable reservoir of affordable housing.

Housing New York, and the adopted (March 22, 2016) ZQA and MIH programs are aimed at promoting affordable and better quality housing in NYC. The primary goals of the ZQA and MIH programs are to: (1) support the creation of new affordable housing and senior care facilities, (2) help deploy public resources devoted to affordable housing more efficiently, and (3) encourage better residential buildings that are more in keeping with their surroundings and which help enliven the pedestrian environment.

Waterfront Revitalization Program

Projects that are located within the designated boundaries of New York City's Coastal Zone must be assessed for their consistency with the City's WRP. The federal Coastal Zone Management Act (CZMA) of 1972 was enacted to support and protect the distinctive character of the waterfront and to set forth standard policies for reviewing proposed development projects along coastlines. The program responded to City, State, and Federal concerns about the deterioration and inappropriate use of the waterfront. In accordance with the CZMA, New York State adopted its own Coastal Management Program (CMP), which provides for local implementation when a municipality adopts a local waterfront

revitalization program, as is the case in New York City. The New York City WRP is the City's principal coastal zone management tool. The WRP was originally adopted in 1982 and approved by the New York State Department of State (NYSDOS) for inclusion in the New York State CMP. The WRP encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. NYSDOS administers the program at the State level, and DCP administers it in the City. The WRP was revised and approved by the City Council in October 1999. In August 2002, NYSDOS and federal authorities (i.e., the U.S. Army Corps of Engineers [USACE] and the U.S. Fish and Wildlife Service [USFWS]) adopted the City's ten WRP policies for most of the properties located within its boundaries.

In October 2013, the City Council approved revisions to the WRP in order to proactively advance the long-term goals laid out in *Vision 2020: The New York City Comprehensive Waterfront Plan*, released in 2011. The changes solidify New York City's leadership in the area of sustainability and climate resilience planning as one of the first major cities in the U.S. to incorporate climate change considerations into its Coastal Zone Management Program. They also promote a range of ecological objectives and strategies, facilitate interagency review of permitting to preserve and enhance maritime infrastructure, and support a thriving, sustainable working waterfront. The New York State Secretary of State approved the revisions to the WRP on February 3, 2016. The U.S. Secretary of Commerce concurred with the State's request to incorporate the WRP into the New York State CMP.

In 2013, the New York City Panel on Climate Change (NPCC) released a report (*Climate Risk Information 2013: Observations, Climate Change Projections, and Maps*) outlining New York City-specific climate change projections to help respond to climate change and accomplish *PlaNYC* goals. The NPCC report predicted future City temperatures, precipitations, sea levels, and extreme event frequency for the 2020s and 2050s. While the projections will continue to be refined in the future, current projections are useful for present planning purposes and to facilitate decision-making in the present that can reduce existing and near-term risks without impeding the ability to take more informed adaptive actions in the future. Specifically, the NPCC report predicts that mean annual temperatures will increase by 2 to 3˚F and by 4 to 6.5˚F by the 2020s and 2050s, respectively; total annual precipitation will rise by 0 to 10 percent and 5 to 15 percent by the 2020s and 2050s, respectively; sea level will rise by 4 to 11 inches and 11 to 31 inches by the 2020s and 2050s, respectively; and by the 2050s, heat waves and heavy downpours are very likely to become more frequent, more intense, and longer in duration. Coastal flooding is also very likely to increase in frequency, extent, and elevation.

As illustrated in Figure C-2, "Coastal Zone Boundary Map," the entirety of the primary study area (as well the secondary study area) falls within the City's Coastal Zone. Therefore the proposed actions must be assessed for their consistency with the policies of the City's Local Waterfront Revitalization Program (LWRP).

The Future without the Proposed Actions (No-Action Condition)

Land Use

Primary Study Area (Rezoning Area)

As presented in Attachment A, "Project Description," in the 2020 future without the proposed actions, it is anticipated that both projected development site 1 and 2 would be redeveloped in accordance with

the existing R6 zoning district. Specifically, it is anticipated that the applicant-owned projected development site 1 would be developed with an approximately 110,316-gsf mixed-use residential and community facility building with a built FAR of 3.5. The No-Action building would be constructed pursuant to Quality Housing Program and would have a qualifying ground floor that would accommodate Use Group 4 community facility spaces. Projected development site 1's building would include approximately 95,277 gsf of residential space (3.0 FAR; 94 DUs) and approximately 15,039 gsf of Use Group 4 ambulatory care/medical office community facility space (0.50 FAR) on the ground floor. Residential buildings built pursuant to the Quality Housing Program in an R6 zoning district require accessory parking spaces for a minimum of 50 percent of DUs. Therefore, it is assumed that the No-Action development on projected development site 1 would provide 47 accessory parking spaces for the No-Action residential use. For the community facility component, pursuant to R6 regulations, ambulatory diagnostic or treatment health care facilities would require one parking space per 800 sf, for a total of 18 spaces, which are assumed to be waived pursuant to ZR Section 25-33.

Projected development site 2 is also expected to be developed in accordance with the existing R6 zoning in the 2020 No-Action condition. The No-Action development on this site would comprise and approximately 15,930 gsf residential building (2.98 FAR) pursuant to Quality Housing regulation, with approximately 16 DUs. It is assumed that the No-Action development on this site would not provide accessory parking, as parking could be waived pursuant to ZR Section 25-211(c).

Secondary Study Area

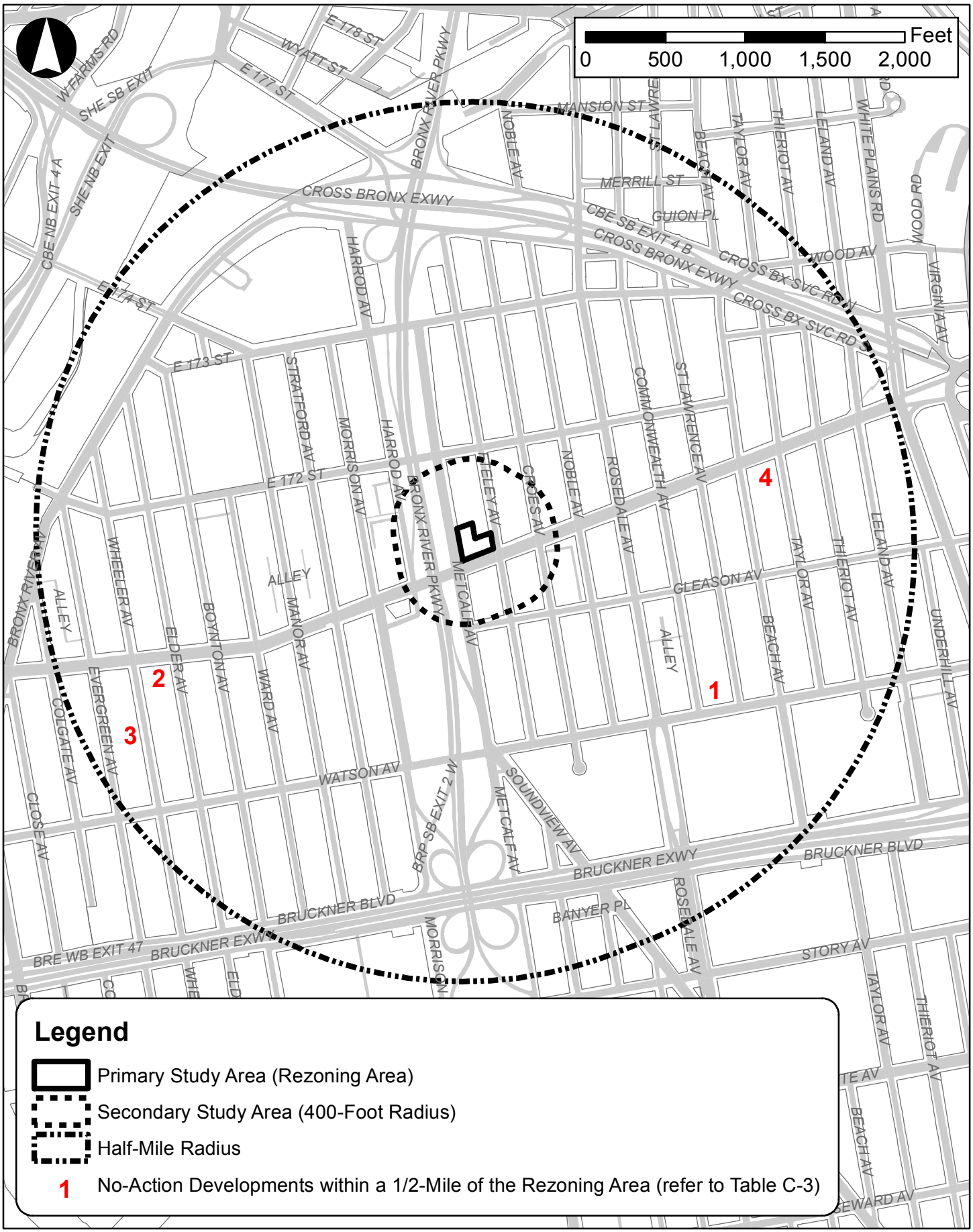
While there are no known or anticipated developments within the 400-foot radius secondary study area, for the purposes of other technical analyses that assess conditions in larger study area, developments anticipated within a ½-mile of the rezoning area are summarized in Table C-2 and shown graphically in Figure C-4. As presented in Table C-2, in the future without the proposed actions, it is anticipated that 359 DUs, 72 hotel rooms, 28,407 sf of community facility floor area, 20,880 sf of retail, and 93 accessory parking spaces would be developed within a ½-mile of the rezoning area.

TABLE C-2: No-Action Developments within a ½-Mile of the Rezoning Area

Map No.[1]	Name/Address	Anticipated Building Program
1	1755 Watson Avenue	286 affordable DUs; 10,407-sf church facility; 16,592 sf of retail; 56 accessory parking spaces
2	1164 Wheeler Avenue	72-room hotel
3	1144 Evergreen Avenue	73 DUs; 18,000 sf of medical office; 37 accessory parking spaces
4	1812 Westchester Avenue	4,288 sf of retail
	Total No-Action Development	359 DUs (including 286 affordable DUs); 72 hotel rooms; 28,407 sf of community facility uses; 20,880 sf of retail; 93 accessory parking spaces

Notes:
[1] Refer to Figure C-4.

Figure C-4
No-Action Developments



Legend

- Primary Study Area (Rezoning Area)
- Secondary Study Area (400-Foot Radius)
- Half-Mile Radius
- 1 No-Action Developments within a 1/2-Mile of the Rezoning Area (refer to Table C-3)

Zoning and Public Policy

No changes to zoning or public policy in the primary or secondary study areas are anticipated in the future with the proposed actions. As noted above, the No-Action developments anticipated on the two development sites (in the primary study area) would conform to R6 zoning regulations.

The Future with the Proposed Actions (With-Action Condition)

In the 2020 future with the proposed actions, the proposed actions, which include zoning map and text amendments, in addition to public financing approval, would be approved. As presented in Attachment A, "Project Description," under the RWCDS, the proposed actions would facilitate the incremental development of 144 DUs (including a net increase of 227 affordable DUs) and 11,401 gsf of local retail, in addition to a net reduction of 8,193 gsf of medical office floor area and 47 accessory parking spaces.

Land Use

Primary Study Area (Rezoning Area)

The proposed actions would result in changes to land use within the primary study area by introducing retail uses that would not be permitted in the rezoning area in the future without the proposed actions. In addition, community facility and residential uses, which would be present in the rezoning area under future conditions with and without the proposed actions, would be permitted at a greater density than would be allowed in the No-Action condition. These proposed local uses would be consistent with uses already present in the surrounding area. Notably, in the immediate vicinity of the rezoning area, Westchester Avenue is largely a commercial corridor lined with a number of retail and other commercial uses.

The proposed actions would not generate land uses that would be incompatible with surrounding uses, nor would they displace land uses in such a way as to adversely affect surrounding land uses. Therefore, the proposed actions would support land use trends, and no significant adverse land use impacts are expected.

Secondary Study Area

The secondary study area would not undergo any changes as a result of the proposed actions. The proposed actions would have no direct effect on zoning in the secondary study area. As noted above, the secondary study area is predominantly comprised of residential uses, as well as commercial uses and a few public facilities/institutions. Therefore, the proposed actions would not introduce any new land uses that would be compatible with their surroundings, and the proposed actions would not represent a significant adverse impact on land use in the secondary study area in accordance with the criteria set forth in the *CEQR Technical Manual.*

Zoning

Primary Study Area (Rezoning Area)

In the future with the proposed actions, the primary study area would be rezoned from R6 to R8A (MIH) with a C2-4 commercial overlay mapped to a depth of 100 feet on the north side of Westchester Avenue between Metcalf and Fteley Avenues (see Figures C-5 and C-6). As shown in Table C-3, the proposed R8A (MIH) zoning would increase the allowable maximum density to 7.2 FAR for residential uses and 6.5 for community facility uses; under the proposed zoning, commercial uses would be permitted up to 2.0 FAR within the proposed C2-4 commercial overlay area.

TABLE C-3: Comparison of Existing and Proposed Zoning

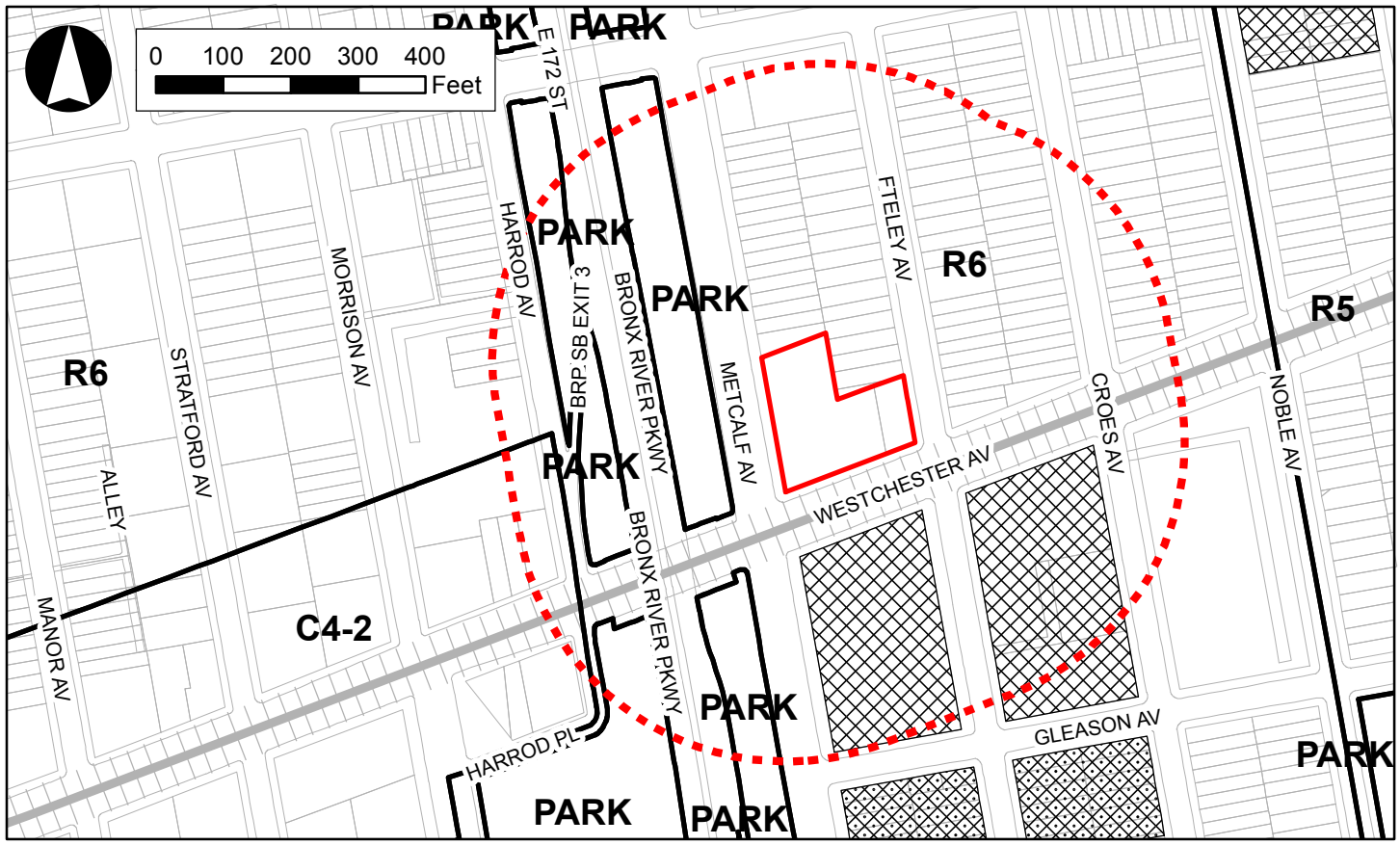
	Existing R6	Proposed R8/C2-4
Use Groups	1-4	1-9 and 14[1]
Maximum FAR		
Residential	0.78-2.43 (under Height Factor regulations) Quality Housing Program- 3.0 (on wide streets outside the Manhattan Core) & 2.2 (on narrow streets)	7.2[2]
Community Facility	4.8	6.5
Commercial	0.0	2.0[1]
Manufacturing	0.0	0.0

Source: *Zoning Resolution of the City of New York.*
Notes:
[1] Commercial uses (Use Groups 5-9, and 14) would be permitted in the proposed C2-4 overlay to be mapped within 100 feet of the north side of Westchester Avenue between Metcalf and Fteley avenues in the proposed R8A zoning district.
[2] The MIH area sets a new maximum permitted residential FAR that supersedes the FAR permitted by the underlying zoning district. With both the designation of the proposed rezoning area as an MIH area and its rezoning to R8A and R8A/C2-4 zoning districts, the maximum permitted residential FAR within the proposed rezoning area would be 7.2, and the maximum building height would be 140 feet (or up to 145 feet with qualifying ground floor).

The proposed zoning map and text amendment would create additional zoning capacity in a transit-accessible area to support new housing creation and increase the number of affordable housing units available in New York City. While the proposed R8A (MIH) district would permit development at a density greater than permitted under existing or No-Action condition, the rezoning area's location along Westchester Avenue, a wide street with excellent public transit service provided by the IRT No. 6 subway line, is well-suited for additional development. In addition, the proposed C2-4 would activate the street and allow a consistent streetwall, retail continuity, and serve local residents. It would also bring into conformance the existing local retail uses occupying projected development site 2 (Lot 51 on Block 3780). As such, the proposed actions would not result in significant adverse impacts to zoning in the primary study area.

Secondary Study Area

The secondary study area would not undergo any zoning changes as a result of the proposed actions. The proposed actions would have no direct effect on zoning in the secondary study area. The proposed zoning map and text amendments would be in keeping with the City's land use, zoning, and public policy objectives for the area. The proposed R8A (MIH) district would facilitate the development of affordable housing. The proposed C2-4 commercial overlay would permit retail development consistent with the



Existing

Proposed

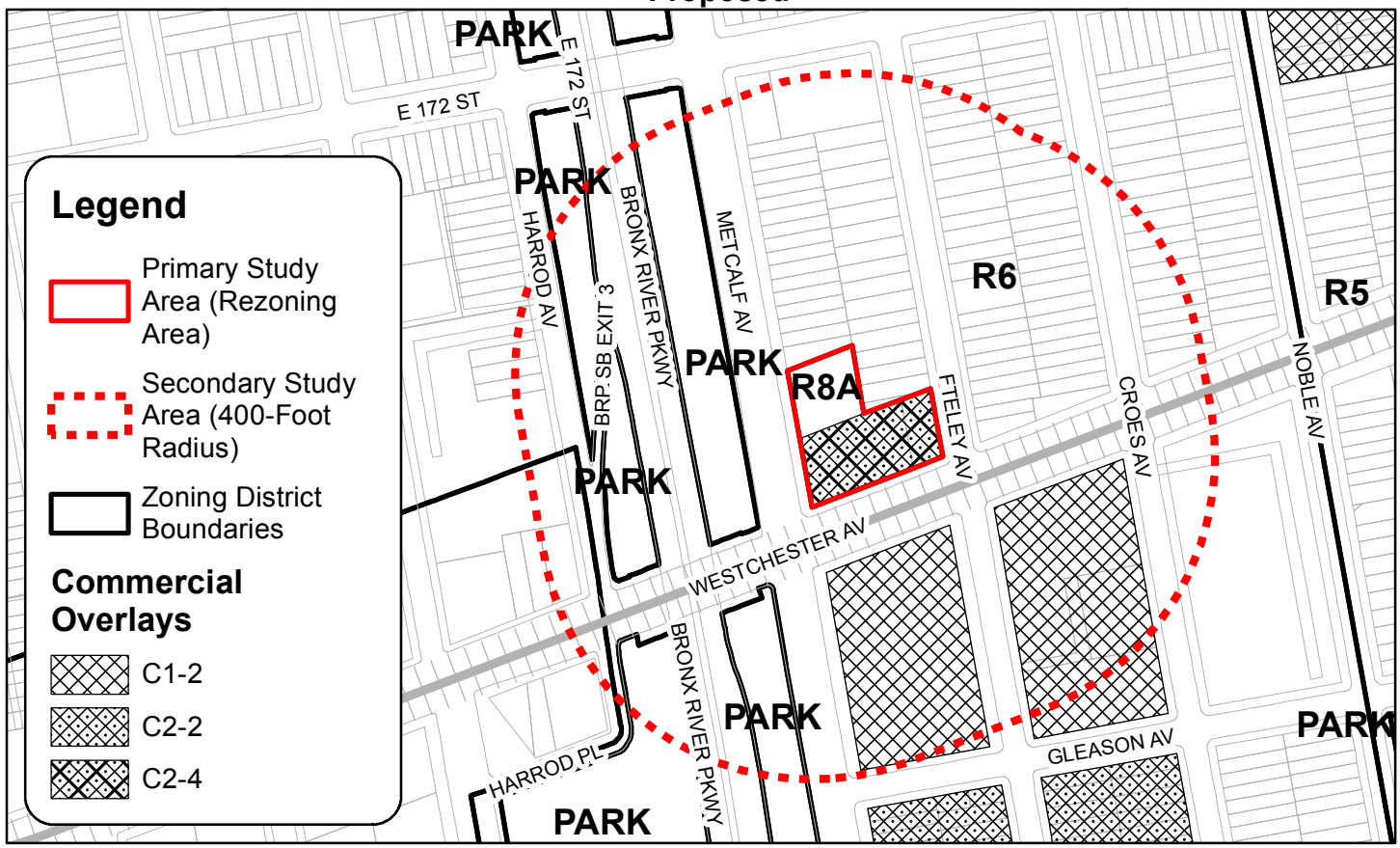
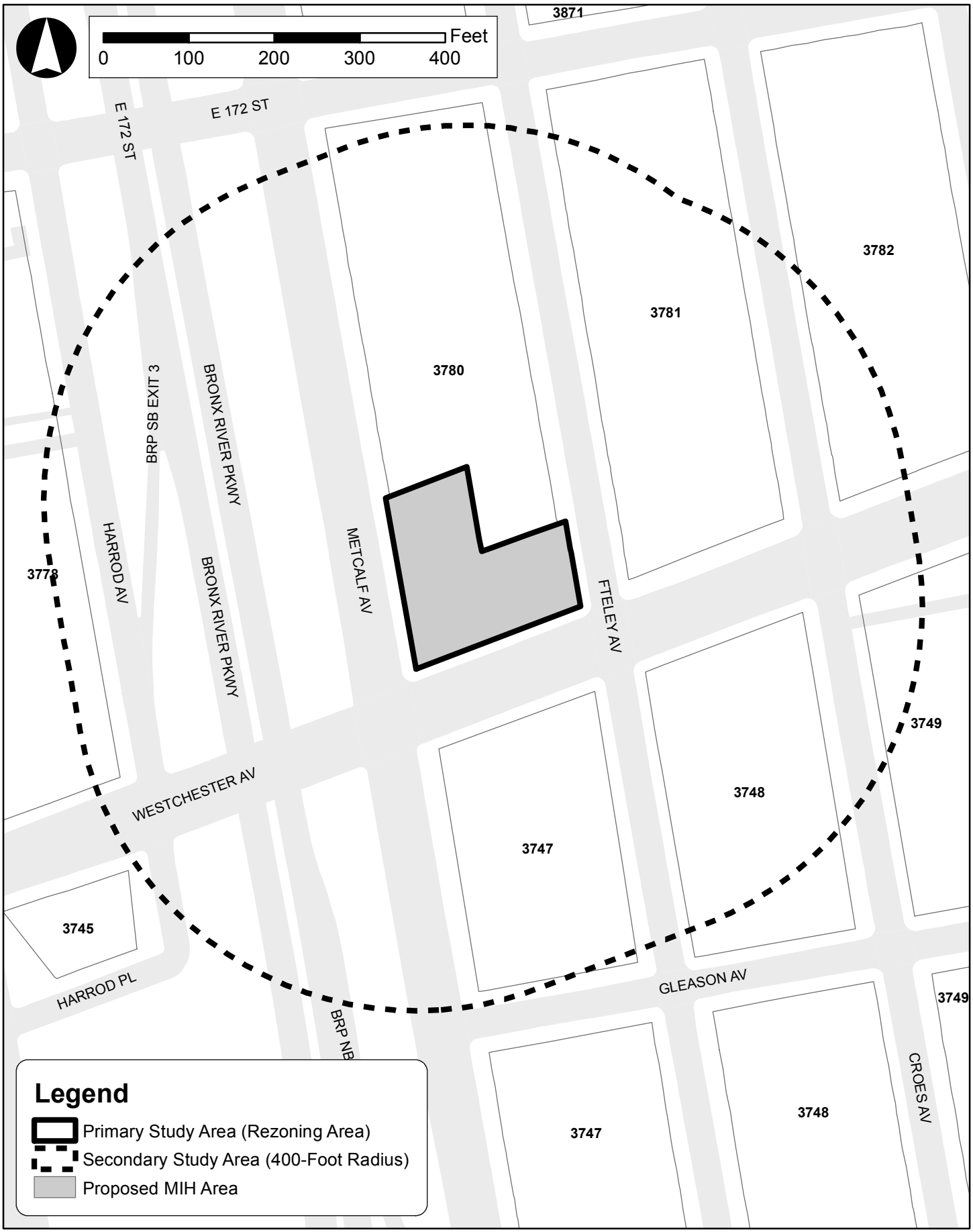


Figure C-6
Proposed Mandatory Inclusionary Housing (MIH) Area



land uses and zoning in the secondary study area. Notably, as outlined above, Westchester Avenue is largely a commercial corridor lined with a number of retail and other commercial uses. In addition, C1-2 commercial overlays are mapped along the south side of Westchester Avenue between Metcalf Avenue and Croes Avenue, directly south of the rezoning area. For these reasons, the proposed actions would not represent a significant adverse impact on zoning in the secondary study area, in accordance with the criteria set forth in the *CEQR Technical Manual.*

Public Policy

Housing New York

The proposed actions would support the policies and goals of *Housing New York* by establishing a MIH Area encompassing the area to be rezoned, which would require development in the With-Action Condition to include permanent affordable dwelling units. Pursuant to the MIH Option (2), at least 30 percent of residential floor area in the With-Action Condition would be allocated to affordable housing units for low, moderate, and middle-income families. The program, including the AMI breakdown, will be determined in conjunction with HPD and HDC.

The affordable dwelling units under the With-Action Condition would provide the area with a much needed mix of new affordable housing and market rate units and would support the City's efforts to increase the overall amount of affordable housing. Based on this information, the development under the With-Action Condition would be consistent with the policy goals and objectives of *Housing New York*.

Waterfront Revitalization Program

As noted above, the entirety of the primary and secondary study areas fall within the City's designated coastal zone (refer to Figure C-2). Therefore, the proposed actions must be assessed for their consistency with the policies of the WRP. The WRP includes policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form (CAF) (see Appendix 1) lists the WRP policies and indicates whether the proposed actions would promote or hinder each policy, or if that policy would not be applicable. This section provides additional information for the policies that have been checked "promote" or "hinder" in the WRP CAF.

Policy 1: Support and facilitate commercial and residential development in areas well-suited to such development.

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

The rezoning area is located in a well-established neighborhood with existing residential, commercial, and institutional uses. The proposed actions would facilitate the development of compatible residential, commercial, and community facility uses. The rezoning area is not is not located within a Significant Maritime and Industrial Area (SMIA), Special Natural Waterfront Area (SNWA), Priority Maritime Activity Zone (PMAZ), Recognized Ecological Complex (REC), or West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA), as defined in the WRP, and is therefore not located in a special area designation that may be affected by the development of new residential, commercial, or community facility uses.

For these reasons, the proposed actions would promote Policy 1.1 of the WRP and would facilitate commercial and residential development in an area well-suited to such development.

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

The proposed actions would facilitate the redevelopment in an area that is well-served by existing public facilities and infrastructure, and would therefore be consistent with Policy 1.3 of the WRP. Directly south of the rezoning area, the elevated Metropolitan Transportation Authority (MTA) subway tracks run above Westchester Avenue, with the Morrison Avenue-Sound View (No. 6) Station located two blocks west of the rezoning area. The No. 6 train provides local service between Pelham Bay Park/Bruckner Expressway station in the Bronx and Brooklyn Bridge-City Hall station in Lower Manhattan. The Bx4 and Bx4A MTA-New York City Transit Authority (NYCT) bus routes also run along Westchester Avenue, which provide local service between The Hub and Westchester Square. To the west of the rezoning area site is the Bronx River Parkway, an approximately 19-mile north-south parkway that extends through much of the Bronx and Westchester County. It serves as a limited-access commuter route in the Bronx, which has its southern terminus near the Bruckner Expressway and intersects with several major east-west roads in the Bronx. In addition, the rezoning area is in a combined sewer area, with existing sewer and water mains along the adjacent roadways, and the proposed developments would also be in close proximity to several public facilities.

Policy 6: Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

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

In 2013, the New York City Panel on Climate Change (NPCC) released a report (*Climate Risk Information 2013: Observations, Climate Change Projections, and Maps*) outlining New York City-specific climate change projections to help respond to climate change and accomplish *PlaNYC* goals. The 2013 NPCC report predicted future City temperatures, precipitations, sea levels, and extreme event frequency for the 2020s and 2050s. Subsequently, in January 2015, the Second NPCC (NPCC2) released an updated report that presented the full work of the NPCC2 from January 2013 to 2015 and include temperature, precipitation, sea level, and extreme event frequency predictions for the 2081 to 2100 time period. While the projections will continue to be refined in the future, current projections are useful for present planning purposes and to facilitate decision-making in the present that can reduce existing and near-term risks without impeding the ability to take more informed adaptive actions in the future. Specifically, the NPCC2 report predicts that mean annual temperatures will increase by 2.0 to 2.8˚F, 4.1 to 5.7˚F, 5.3 to 8.8˚F, and 5.8 to 10.3˚F by the 2020s, 2050s, 2080s, and 2100, respectively; total annual precipitation will rise by 1 to 8 percent, 4 to 11 percent, 5 to 13 percent, and -1 to +19 percent by the 2020s, 2050s, 2080s, and 2100, respectively; sea level will rise by 4 to 8 inches, 11 to 21 inches, 18 to 39 inches, and 22 to 50 inches by the 2020s, 2050s, 2080s, and 2100, respectively; heat waves and heavy downpours are also very likely to become more frequent, more intense, and longer in duration, with coastal flooding very likely to increase in frequency, extent, and elevation.

The primary study area, while located within the Coastal Zone, is not located within the currently applicable 100-year of 500-year floodplains. As presented in Figure C-7, while the entirety of the rezoning area is expected to fall within the projected 500-year floodplain by the 2050s, the primary study area is not expected to fall within the predicted 2020s or 2050s 100-year floodplains, as published by the NPCC. As such, the rezoning area is susceptible to minimal flooding risk, and will continue to be so in the future. In addition, the NPCC recommends that these maps not be used to judge site-specific risks and they are subject to change.

Policy 7: Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.

> *Policy 7.1: Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.*

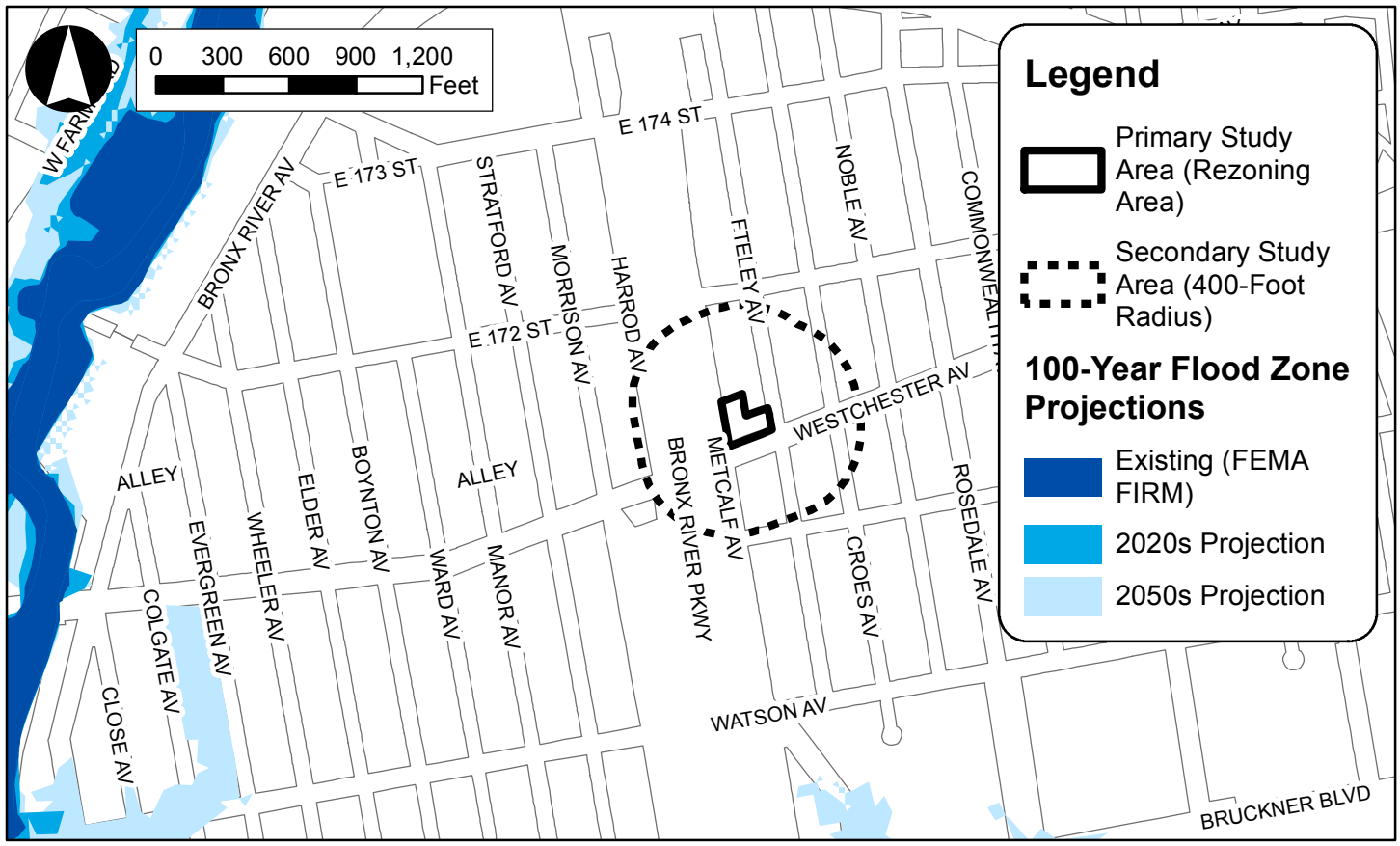
No new activities or processes using hazardous materials would be introduced to either projected development site (Block 3780, Lot 1 or Block 3780, Lot 51) due to the proposed actions.

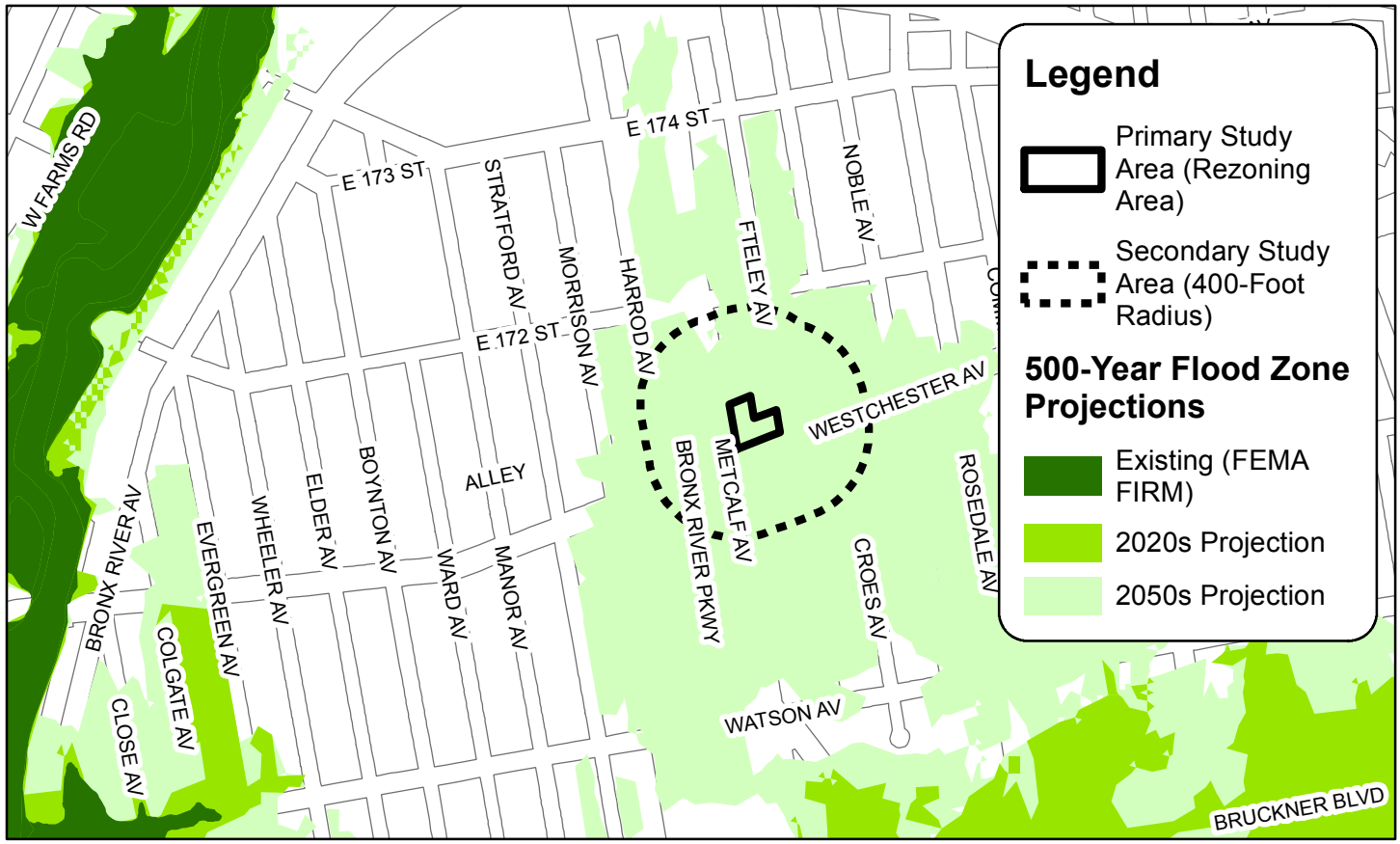
As described in Attachment H, "Hazardous Materials," NYSDEC spill 1407300 at projected development site 1 was formally closed on October 15, 2014, and the NYSDEC determined that no further investigation is warranted based upon the findings of the monitoring and sampling at the site. Per the Tank Closure Report prepared by Cider Environmental in December 2014, a 1,000-gallon inactive fuel oil Underground Storage Tank (UST) was removed from projected development site 1 in November 2014, and petroleum impacted soil was encountered and over excavation was performed. The Tank Closure Report concluded that the over excavation had been sufficient in removing the bulk of the source contamination, and that additional over-excavation was neither feasible nor cost-effective due to the presence of utility lines and the proximity to the existing building. Based on the UST removal activities, the Tank Closure Report recommended no further remedial actions at projected development site 1. In addition, a Phase I ESA was prepared by Cider Environmental on February 22, 2017 to follow-up on the remediation work that was completed at the site in 2014. According to the 2017 Phase I ESA, there are no recognized environmental conditions (RECs) associated with projected development site 1 (Block 3780, Lot 1). The 2017 Phase I also indicated that should any future excavation activities occur at projected development site 1, the presence of residual impacted material cannot be ruled out with regard to the previous NYSDEC spill and subsequent closure. The 2017 Phase I ESA further noted that any impacted soil would need to be properly excavated and disposed in accordance with applicable rules and regulations. As such, an (E) designation would be required for the site (Block 3780, Lot 1, E-425) to ensure that development of the site does not result in significant adverse impacts related to hazardous materials.

As described in Attachment H, given the presence of a drying cleaning establishment on projected development site 2, there is a potential that the site could have impacted subsurface soil and groundwater conditions. As part of the proposed action, a hazardous materials (E) designation will also be mapped on projected development site 2 (Lot 51 of Block 3780, E-425).

The (E) designations that would be assigned to Lots 1 and 51 on Block 3780 would require that further investigation be performed to determine the presence and nature of contaminants of concern and the proper remedial and/or health and safety measures that would be employed during construction. Through mapping an (E) designation on projected development sites 1 and 2 (where there is suspect

Figure C-7
NPCC Flood Projections





environmental concern), the potential for an adverse impact to human health and the environment resulting from the proposed actions would be reduced or avoided.

Therefore, the proposed actions and associated RWCDS would be consistent with this policy.

ATTACHMENT D

COMMUNITY FACILITIES

I. INTRODUCTION

The *City Environmental Quality Review* (CEQR) *Technical Manual* defines community facilities as public or publicly-funded facilities including schools, libraries, day care centers, health care facilities, and fire and police protection services. This attachment examines the potential effects of the proposed actions by 2020 on the capacity and provision of services by those community facilities.

A project can affect community facility services when it physically displaces or alters a community facility (direct effect) or causes a change in population that may affect the services delivered by a community facility (indirect effect), which could happen if a facility is already over utilized, or if a project is large enough to create a demand that could not be met by the existing facility/facilities. The CEQR analysis examines potential impacts on existing facilities and generally focuses in detail on those services that the City is obligated to provide to any member of the community. This analysis is not a needs assessment for new or additional services. Service providers like schools or libraries conduct their own needs assessments on a continuing basis.

As described in Attachment A, "Project Description," under the reasonable worst-case development scenario (RWCDS) for the proposed actions, a total of 254 units would be developed in the rezoning area, in addition to local retail and community facility uses. Compared to the No-Action condition, the proposed actions would result in the incremental development of 144 dwelling units (DUs), including a net increase of 227 affordable DUs.[1] It is anticipated that the 227 incremental affordable DUs would be affordable to households earning at or below 80 percent Area Median Income (AMI), i.e., the CEQR proxy for child care facility eligibility. No community facilities are located on either of the projected development sites (Lot 1 or Lot 51) in the rezoning area under existing conditions. Accordingly, as there would be no direct effects to existing community facilities resulting from the proposed actions, this analysis concentrates on the potential for indirect effects.

The analysis of community facilities has been conducted in accordance with the guidelines established in the *CEQR Technical Manual*. The demand for community services generally stems from the introduction of new residents to an area. In general, size, income characteristics, and the age distribution of a new population are factors that could affect the delivery of services. The *CEQR Technical Manual* provides guidelines or thresholds that can be used to make an initial determination of whether a detailed study is necessary to determine potential impacts.

As discussed in Attachment B, "Supplemental Screening," the RWCDS exceeds the *CEQR Technical Manual* analysis thresholds in the areas of public elementary and intermediate schools and child care facilities. Therefore, a detailed analysis of these services is provided below. The population anticipated to be

[1] For CEQR analysis purposes, "affordable" refers to residential units set aside for households earning 80 percent or below of the Area Median Income (AMI). As described in Attachment A, "Project Description," all 220 housing units on projected development site 1 would be affordable to households earning at or below 80 percent of AMI, and approximately 20 percent of the overall residential floor area (approximately 7 DUs) of projected development site 2 are assumed to be set aside for households earning 80 percent (or below) of AMI, for a total of 227 affordable housing units.

introduced as a result of the proposed actions would not exceed the *CEQR Technical Manual* thresholds requiring detailed analysis of other community facilities, including high schools, libraries, health care facilities, and fire and police protection services.

II. PRINCIPAL CONCLUSIONS

The proposed actions would not result in significant adverse impacts on community facilities. The 144 incremental DUs facilitated by the proposed actions are expected to generate 56 elementary school students and 23 intermediate school students in Sub-district 2 of Community School District (CSD) 12. While CSD 12, Sub-district 2 elementary and intermediate schools would operate over capacity in the future with the proposed actions (127.8 and 163.2 percent utilization rates, respectively), as under No-Action conditions, as the proposed actions would only increase the elementary and intermediate school utilization rates by 0.8 and 1.3 percentage points, respectively, no significant adverse school impacts would result, in accordance with *CEQR Technical Manual* impact criteria.

In regards to child care facilities, the 227 DUs introduced in the rezoning area in the future with the proposed actions are expected to generate 32 publicly-funded child care-eligible students, increasing the study area child care facility utilization rate to 91.8 percent. As study area child care facilities would operate with available capacity in the 2020 future with the proposed actions, no significant adverse impacts would result pursuant to *CEQR Technical Manual* methodology.

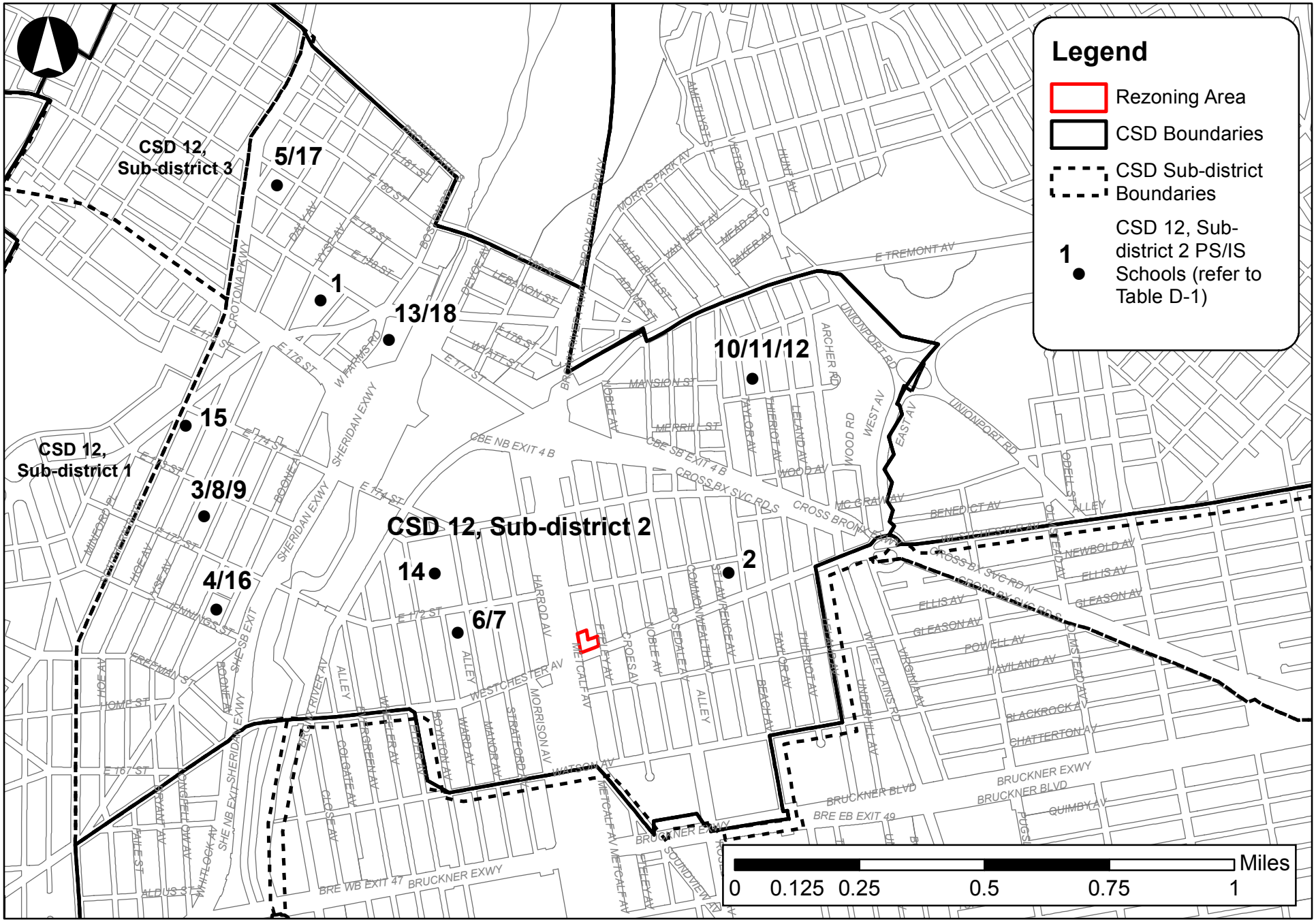
III. PUBLIC ELEMENTARY AND INTERMEDIATE SCHOOLS

Methodology

According to the guidelines presented in the *CEQR Technical Manual*, a school's analysis focuses on potential impacts on public schools operated by the New York City Department of Education (DOE). Therefore, private and parochial schools within the study area are not included in the analysis of schools presented in this attachment.

Based on the multipliers presented in Table 6-1a of the *CEQR Technical Manual*, the RWCDS's 144 incremental DUs would result in the introduction of approximately 79 new elementary and intermediate school students (56 elementary and 23 intermediate school students), which exceeds the threshold of 50 students for detailed analysis. The RWCDS would also generate an estimated 27 new high school students compared to No-Action conditions, which would not trigger the *CEQR Technical Manual* threshold of 150 students for detailed analysis of high schools. Therefore, the following school's analysis focuses on elementary and intermediate school levels only.

Pursuant to *CEQR Technical Manual* guidelines, this analysis assesses the potential effects of the proposed actions and associated RWCDS on elementary and intermediate schools located within the study area, defined as Sub-district 2 of CSD 12 (see Figure D-1). Children residing in the rezoning area would most likely attend the elementary and intermediate schools in this study area. The following school's analysis presents the most recent capacity, enrollment, and utilization rates for elementary and intermediate schools in the study area. Future No-Action conditions are then predicted based on enrollment projections



1675 Westchester Avenue EAS

Figure D-1
Study Area Elementary & Intermediate Schools

and anticipated development projects,[2] and the future utilization rate for school facilities is calculated by adding the estimated enrollment from anticipated residential developments in the school's study area to DOE's projected enrollment and then comparing that number with projected school capacity. DOE's most recent enrollment projections (Actual 2014, Projected 2015-2024) are posted on the New York City School Construction Authority's (SCA's) website.[3] In addition, any new school projects identified in the DOE 2015-2019 Five-Year Capital Plan (and/or subsequent amendments) are included if construction has begun. According to the *CEQR Technical Manual*, some schools may be included in the analysis if they are in the DOE's Five-Year Capital Plan but are not yet under construction if the lead agency, in consultation with the SCA, concurs that it is appropriate.

Impacts are identified if the proposed action would result in: (1) a collective utilization rate of the elementary and/or intermediate schools in the sub-district study area that is equal to or greater than 100 percent in the With-Action Condition; and (2) an increase of five percent or more in the collective utilization rate between the future No-Action and With-Action conditions.

Existing Conditions

Elementary Schools

As described above, elementary schools in New York City are located in geographically defined school districts. As shown in Figure D-1, the rezoning area is located within the boundaries of CSD 12, Sub-district 2. Analyzed schools located in CSD 12, Sub-district 2 serving elementary students can generally be defined by one of two categories: elementary or K-8 schools. Elementary schools (PS) serve pre-kindergarten or kindergarten through 5th grades and K-8 schools serve pre-kindergarten or kindergarten through 8th grades. For analysis purposes, the elementary and the PS component of K-8 schools have been combined.

As shown in Figure D-1 and Table D-1, there are 13 public schools located within Sub-district 2 of CSD 12 that serve elementary students, including 12 elementary schools and one school serving both elementary and intermediate levels. The zoned elementary school for the rezoning area is P.S. 47 – John Randolph, located at 1794 East 172nd Street.

Table D-1 provides the existing capacity, enrollment, and utilization figures for elementary schools within Sub-district 2 of CSD 12 during the 2015-2016 academic year. As shown in Table D-1, the 13 schools within CSD 12, Sub-district 2 that serve elementary levels had a target capacity of 6,666 seats and enrollment of 7,537 students, for a utilization of approximately 113.1 percent and a shortfall of 871 seats.

Intermediate Schools

Analyzed schools located in CSD 12, Sub-district 2 serving intermediate students can generally be defined by one of three categories: intermediate, secondary, and K-8 schools. Intermediate schools (IS) serve 6th through 8th grades; secondary schools serve 6th through 12th grades; and K-8 schools serve pre-kindergarten or kindergarten through 8th grades. For analysis purposes, the intermediate and IS components of K-8 schools and secondary schools have been combined.

[2] School Construction Authority, *Projected New Housing Starts as Used in 2015-2019 Enrollment Projection*.
[3] Enrollment projections by the Grier Partnership were used: http://www.nycsca.org.

Table D-1 shows the existing capacity, enrollment, and utilization figures for intermediate schools within CSD 12, Sub-district 2. As shown in Table D-1, in the 2015-2016 academic year there were six public schools within the study area that served intermediate students, including two intermediate schools, one school serving both elementary and intermediate levels, and three schools serving both intermediate and high school levels. The intermediate schools located most proximate to the rezoning area is Mott Hall V, which is located at 1551 East 172nd Street. There are no zoned middle schools for the rezoning area.

TABLE D-1: 2015-2016 Public Elementary and Intermediate School Enrollment, Capacity, and Utilization in CSD 12, Sub-district 2

Map No.[1]	Name	Address	Enrollment	Target Capacity	Available Seats	Utilization (%)
Elementary Schools						
1	P.S. 6 – West Farms	1000 East Tremont Avenue	596	837	241	71.2
2	P.S. 47 – John Randolph	1794 East 172nd Street	1,157	786	-371	147.2
3	P.S. 50 – Clara Barton[2]	1550 Vyse Avenue	58	115	57	50.4
4	P.S. 66 – School of Higher Expectations	1001 Jennings Street	709	711	2	99.7
5	P.S. 67 – Mohegan School[3]	2024 Mohegan Avenue	659	564	-95	116.8
6	P.S. 195[4]	1250 Ward Avenue	994	744	-250	133.6
7	P.S. 196[4]	1250 Ward Avenue	989	680	-309	145.4
8	Fairmont Neighborhood School	1550 Vyse Avenue	301	386	85	78.0
9	Samara Community School	1550 Vyse Avenue	125	40	-85	312.5
10	Archer Elementary School	1827 Archer Street	521	428	-93	121.7
11	P.S. 536	1827 Archer Street	438	396	-42	110.6
12	Bronx Little School	1827 Archer Street	342	250	-92	136.8
13	P.S. 214 (P.S. Component)[5]	1970 West Farms Road	648	729	81	88.9
Total Elementary Schools in Sub-district 2 of CSD 12			**7,537**	**6,666**	**-871**	**113.1**
Intermediate Schools						
13	P.S. 214 (I.S. Component)[5]	1970 West Farms Road	442	498	56	88.8
14	Mott Hall V (I.S. Component)[6]	1551 East 172nd Street	309	282	-27	109.6
15	East Bronx Academy for the Future (I.S. Component)[6]	1716 Southern Boulevard	254	191	-63	133.0
16	Fannie Lou Hamer Middle School	1001 Jennings Street	267	265	-2	100.8
17	Urban Assembly School of Wildlife Conservation (I.S. Component)[6]	2024 Mohegan Avenue	214	228	14	93.9
18	Emolior Academy	1970 West Farms Road	243	347	104	70.0
Total Intermediate Schools in Sub-district 2 of CSD 12			**1,729**	**1,811**	**82**	**95.5**

Notes:
[1] Map numbers correspond to Figure D-1.
[2] P.S. 50 – Clara Barton was fully phased-out as of the 2016-2017 academic year.
[3] Includes transportable school enrollment. Transportable school capacity excluded per SCA guidance.
[4] Includes transportable classroom building enrollment and capacity.
[5] P.S./I.S. breakdown provided by the SCA.
[6] I.S./H.S. breakdown provided by the SCA.
Source: New York City Department of Education, Enrollment-Capacity-Utilization Report, 2015-2016 School Year.

As shown in Table D-1, CSD 12, Sub-district 2 had a target capacity of 1,881 intermediate school seats in the 2015-2016 academic year and an enrollment of 1,729 students, for a total utilization of approximately 95.5 percent and 82 available seats.

The Future without the Proposed Actions (No-Action Condition)

In the 2020 future without the proposed actions, future utilization of public elementary and intermediate schools serving the study area would be affected by changes in enrollment mainly due to: (1) aging of the existing student body and new arrivals born in the area or moving to it; and (2) changes in capacity, or number of available seats, in the schools as a result of planned construction of new schools or building additions.

Capacity Changes

As outlined in the *CEQR Technical Manual*, No-Action school capacity changes considered in a community facilities analysis include information on proposed and adopted "Significant Changes in School Utilization" and the DOE's Five Year Capital Plan.

On January, 2013, the Panel for Educational Policy approved the phase-out of P.S. 50 – Clara Barton beginning in the 2013-2014 academic year. The school, which had a capacity of 115 seats in the 2015-2016 academic year, was fully phased out as of fall 2016. In conjunction with this phase-out, per the DOE's October 2013 *Amended Revised Educational Impact Statement: The Proposed Co-Location of a New District Elementary School (12X458) with Existing Schools P.S. 050 Clara Barton (12X050) and Fairmont Neighborhood School (12X314) in Building X050 Beginning in 2014-2015*, the Samara Community School and the Fairmont Neighborhood School, which were co-located with P.S. 50 – Clara Barton in the 2015-2016 academic year, will increase in capacity. Upon full implementation (in the 2019-2020 academic year), the Samara Community School's capacity will increase to 360 seats and the Fairmont Neighborhood School's capacity will increase to 396 seats. Combined, these changes are expected to result in an increase in CSD 12, Sub-district 2 elementary school capacity of 130 seats.

While two new elementary schools are planned for CSD 12, per the March 2016 amendment to the DOE's Five Year Capital Plan, as construction on the two facilities has not yet begun, the additional capacity that would be introduced in the future upon their completion is conservatively not included in the No-Action school's analysis.

No intermediate school capacity changes are anticipated within CSD 12, Sub-district 2 by 2020 in the future without the proposed actions.

Enrollment Changes

Estimates of future enrollment are derived from the latest available DOE enrollment projection data for CSD 12, Sub-district 2 for 2020 (Actual 2014, Projected 2015-2024), including pre-K and special education enrollment. In the 2020 future without the proposed actions, DOE projections show that demand for public elementary schools in CSD 12, Sub-district 2 is expected to increase by approximately 2.7 percent (to 7,739), whereas intermediate enrollment is forecasted to increase by approximately 48.5 percent (to 2,568). The enrollment projections focus on natural growth of the City's student population and other

population increases and do not account for new residential developments planned for the area (i.e., No-Action projects).

A considerable amount of new residential development is also planned in the study area by the analysis year of 2020. Using numbers derived from the SCA's Projected New Housing Starts for Sub-district 2 of CSD 12, approximately 888 new elementary school students and 364 new intermediate school students are expected to be added to the study area by the 2020 analysis year. As such, 2020 projected elementary and intermediate school enrollment in the future without the proposed actions would increase to 8,627 and 2,932 respectively.

Elementary Schools

As discussed above, in the 2020 future without the proposed actions, CSD 12, Sub-district 2 elementary school enrollment is expected to increase to 8,627, while capacity will increase to 6,796 seats. Based on these changes, elementary schools in Sub-district 2 of CSD 12 are expected to be operating above capacity (approximately 126.9 percent utilization), with a shortfall of 1,831 seats (see Table D-2).

TABLE D-2: 2020 No-Action Estimated Public Elementary and Intermediate School Enrollment, Capacity, and Utilization in CSD 12, Sub-district 2

	2020 Projected Enrollment[1]	Students Generated from Development in No-Action	Total Projected Enrollment in No-Action	Projected Capacity[2]	Seats Available	Utilization (%)
Elementary Schools	7,739	888	8,627	6,796	-1,821	126.9
Intermediate Schools	2,568	364	2,932	1,811	-1,121	161.9

Notes:
[1] DOE Enrollment Projections (Actual 2014, Projected 2015-2024).
[2] Reflects increase in elementary school capacity by approximately 130 seats.

Intermediate Schools

As shown in Table D-2, with no changes to CSD 12, Sub-district 2 intermediate school capacity anticipated in the 2020 future without the proposed actions and intermediate school enrollment expected to increase to 2,932, the utilization rate for intermediate schools in CSD 12, Sub-district 2 is expected to increase to approximately 161.9 percent, with a shortfall of 1,121 seats.

The Future with the Proposed Actions (With-Action Condition)

As described in Attachment A, "Project Description," under the RWCDS, the proposed actions would facilitate the incremental development of 144 residential units (including a net increase of 227 affordable DUs) in the rezoning area 2020. Based on *CEQR Technical Manual* student generation rates, the estimated school age population generated by these 144 residential units would include 56 elementary school students and 23 intermediate school students.

Elementary Schools

In the future with the proposed actions, elementary schools in Sub-district 2 of CSD 12 would continue to operate above capacity as under No-Action conditions. As shown in Table D-3, the addition of 56 elementary school students generated by the proposed actions would increase the utilization by

approximately 0.8 percentage points to 127.8 percent. The proposed actions would somewhat exacerbate the projected 2020 overcrowded conditions in elementary schools in Sub-district 2 of CSD 12. However, the *CEQR Technical Manual* states that if the impact assessment finds that if proposed actions would cause an increase in utilization of less than five percent in a sub-district, no significant adverse impact would occur. As the proposed actions would generate 56 elementary school students and would result in an increase of only 0.8 percentage points over the No-Action condition, no significant adverse impacts on elementary schools would result, per the criteria of the *CEQR Technical Manual*.

TABLE D-3: 2020 With-Action Estimated Public Elementary and Intermediate School Enrollment, Capacity, and Utilization for CSD 12, Sub-district 2

	2020 No-Action Total Projected Enrollment	New Students Generated by Proposed Actions	Total Future With-Action Projected Enrollment	Projected Capacity	Seats Available	Utilization (%)	Increase in Utilization (%) from No-Action condition
Elementary Schools	8,627	56	8,683	6,796	-1,887	127.8	+0.8
Intermediate Schools	2,932	23	2,955	1,811	-1,144	163.2	+1.3

Intermediate Schools

As shown in Table D-3, the addition of 23 intermediate school students to CSD 12, Sub-district 2 would increase intermediate school enrollment to 2,955 in the With-Action condition. As under No-Action conditions, CSD 12, Sub-district 2 intermediate schools would operate above capacity, with the proposed actions expected to increase the study area intermediate school utilization by 1.3 percentage points to 163.2 percent. There would be a shortfall of 1,144 seats in the future with the proposed actions.

The proposed actions would somewhat exacerbate the projected 2020 overcrowded conditions in intermediate schools in Sub-district 2 of CSD 12. However, the *CEQR Technical Manual* states that if the impact assessment finds that if proposed actions would cause an increase in utilization of less than five percent in a sub-district, no significant adverse impact would occur. As the proposed actions would generate 23 intermediate school students and would result in an increase of only 1.3 percentage points over the No-Action condition, no significant adverse impacts to intermediate schools would occur, per the criteria of the *CEQR Technical Manual*.

It is expected that the DOE will continue to monitor enrollment trends within CSD 12 and its sub-districts, as new housing units identified in the No-Action and With-Action conditions are developed and will plan for new capacity or administrative actions to accommodate new students accordingly. Measures utilized by the DOE to address increased school enrollment could include: relocating administrative functions to other sites, thereby freeing up space for classrooms; making space within the study area available to the DOE; restructuring or reprogramming existing school space within the district; or providing for new capacity by constructing a new school or an addition to an existing school.

III. PUBLICLY FUNDED CHILD CARE FACILITIES

Methodology

The New York City Administration for Children's Services (ACS) provides subsidized child care in center-based group child care, family-based child care, informal child care, and Head Start programs. Publicly financed child care services are available for income-eligible children up through the age of 12. The CEQR analysis focuses on services for children under age six, as eligible children aged six through 12 are expected to be in school for most of the day.

Families eligible for subsidized child care must meet financial and social eligibility criteria established by ACS. In general, children in families that have incomes at or below 200 percent of the federal poverty level, depending on family size, are financially eligible, although in some cases eligibility can go up to 275 percent. The family must also have an approved "reason for care," such as involvement in a child welfare case or participation in a "welfare-to-work" program. Head Start is a federally funded child care program that provides children with half-day and full-day early childhood education; program eligibility is limited to families with incomes at 130 percent or less than the federal poverty level.

The City's affordable housing market is pegged to AMI, rather than the federal poverty level. Since family incomes at or below 200 percent of the federal poverty level fall under 80 percent of AMI, for the purposes of CEQR analysis, the number of housing units expected to be subsidized and targeted for incomes of 80 percent AMI or below is used as a proxy for eligibility. This provides a conservative assessment of demand, since eligibility for subsidized child care is not defined strictly by income, but also takes into account family size and other reasons for care (e.g., low-income parent(s) in school; low-income parent(s) training for work; or low-income parent(s) who is/are ill or disabled).

Since there are no locational requirements for enrollment in child care centers, and some parents or guardians choose a child care center close to their place of employment rather than their residence, the service area of these facilities can be quite large and are not subject to strict delineation on a map. However, for the purposes of this child care center analysis, publicly funded group child care centers within approximately 1.5 miles of the rezoning area were identified, reflecting the fact that the centers closest to a given site are more likely to be subject to increased demand. ACS provided the most recent information regarding publicly funded group child care facilities within the study area, including their current capacity, enrollment, and number of available slots. Family child care and voucher slots were not included in the analysis, in accordance with the *CEQR Technical Manual.*

The child care center enrollment in the future without the proposed actions was estimated by multiplying the number of new low-income and low- and moderate-income housing units expected in the 1.5-mile child care study area by the appropriate multiplier from Table 6-1b of the *CEQR Technical Manual*. The estimate of new publicly funded child care-eligible children was added to the existing child care enrollment to estimate enrollment in the future without the proposed actions. The child care-eligible population introduced by the proposed actions was also estimated using the *CEQR Technical Manual* child care multipliers. The project-generated publicly funded child-care eligible population was then added to the No-Action child care enrollment to determine future With-Action enrollment. According to the *CEQR Technical Manual*, if a project would result in demand for slots greater than the remaining slots for child care centers and if that demand would constitute an increase of five percentage points or more in the collective capacity of child care centers serving the study area, a significant adverse impact may result.

Existing Conditions

As indicated in Table D-4 and Figure D-2, there are 19 publicly funded child care centers within the study area with a combined capacity of 1,523 slots and 197 available slots (87.1 percent utilization). Table D-4 shows the current capacity and enrollment for each of these facilities. As noted above, while family-based child care facilities and informal care arrangements provide additional slots in the study area, these slots are not included in the quantitative analysis per CEQR guidelines.

TABLE D-4: Study Area Child Care Facilities—Existing Conditions

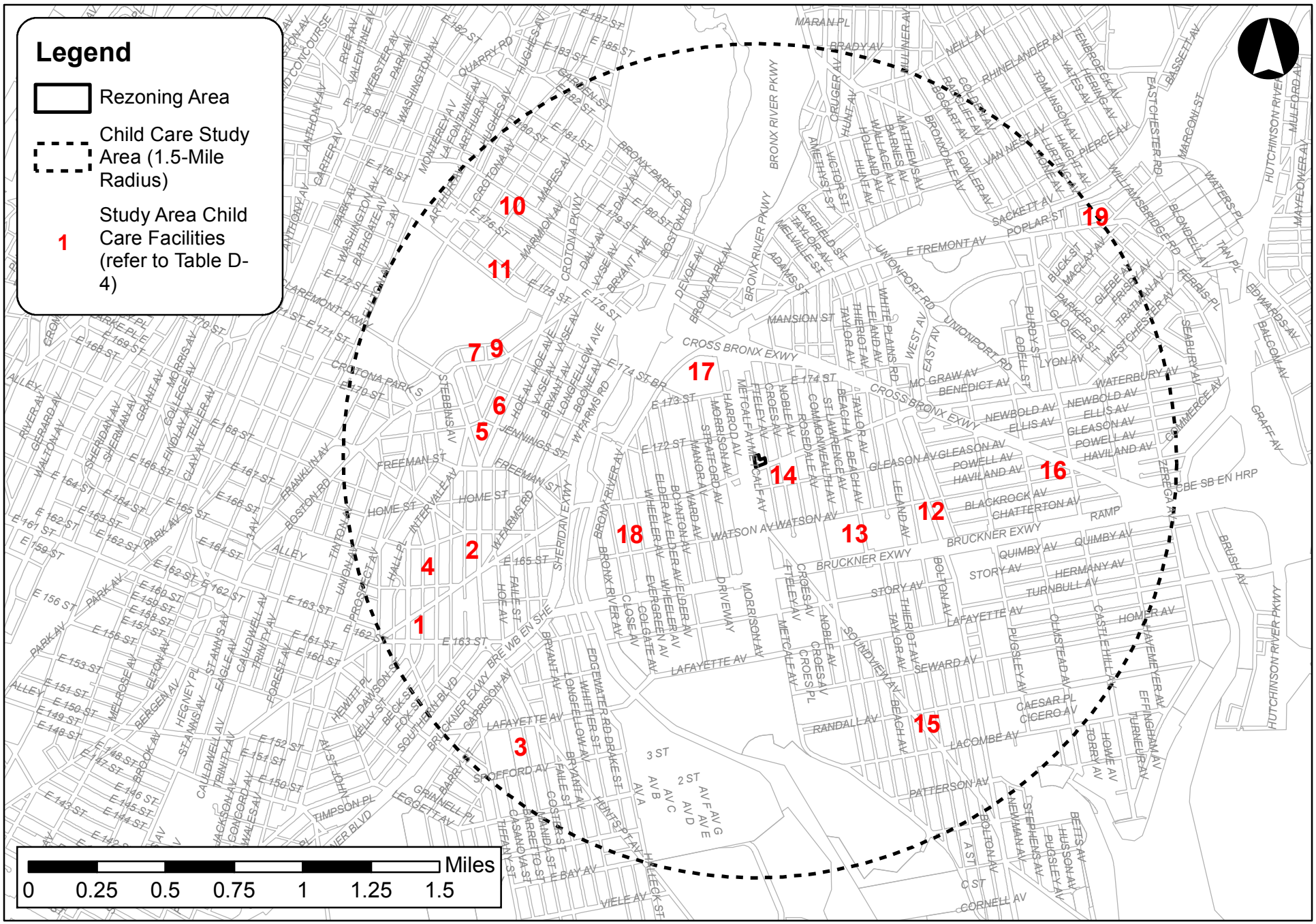
Map No.[1]	Facility Name	Address	Capacity	Enrollment	Utilization (%)	Available Slots
1	Brightside Academy, Inc.	960 Intervale Ave.	30	28	93.3	2
2	Brightside Academy, Inc.	1093 Southern Blvd.	43	38	88.4	5
3	La Peninsula Community Organization, Inc.	711 Manida St.	123	116	94.3	7
4	La Peninsula Community Organization, Inc.	1054 Intervale Ave.	106	99	93.4	7
5	Brightside Academy, Inc.	1334 Louis Nine Blvd.	66	65	98.5	1
6	Children's Aid Society, Inc.	1515 Southern Blvd.	79	74	93.7	5
7	Children's Aid Society, Inc.	1550 Crotona Park E.	34	34	100.0	0
8	La Peninsula Community Organization, Inc.	1717 Fulton Ave.	100	87	87.0	13
9	Tremont Crotona Day Care Center	1600 Crotona Park E.	135	88	65.2	47
10	Children's Aid Society, Inc.	1919 Prospect Ave.	54	54	100.0	0
11	HELP Day Care Corporation	785 Crotona Park N.	28	27	96.4	1
12	Birch Family Services, Inc.	1880 Watson Ave.	87	74	85.1	13
13	Bronxdale Tenants League Day Care Center, Inc.	1065 Beach Ave.	60	46	76.7	14
14	Bronxdale Tenants League Day Care Center, Inc.	1211 Croes Ave.	169	138	81.7	31
15	Leake and Watts Services, Inc.	575 Soundview Ave.	82	71	86.6	11
16	Lutheran Social Services of New York	2125 Watson Ave.	107	97	90.7	10
17	Tremont Crotona Day Care Center	1555 E. 174th St.	60	53	88.3	7
18	Tremont Crotona Day Care Center	1113 Colgate Ave.	74	54	73.0	20
19	Westchester Tremont Day Care Center, Inc.	2547 E. Tremont Ave.	86	83	96.5	3
		Study Area Totals	***1,523***	***1,326***	***87.1***	***197***

Source: ACS, June 2016.
Notes:
[1] Refer to Figure D-2.

The Future without the Proposed Actions (No-Action Condition)

As described in Attachment C, "Land Use, Zoning, and Public Policy," 286 new affordable housing units are anticipated in the surrounding area by 2020 (refer to Table C-2 in Attachment C, "Land Use, Zoning, and Public Policy"). Based on the *CEQR Technical Manual* generation rates, these incremental 286 affordable housing units are expected to generate 40 additional publicly funded child care-eligible children under age six to the study area, increasing the total child care center enrollment to 1,366. No changes to child care center capacity are anticipated in the 2020 No-Action condition.

As presented in Table D-5, the future No-Action utilization rate is expected to increase by 2.6 percentage points to 89.7 percent and, therefore, there would be available capacity, with 157 available slots.



1675 Westchester Avenue EAS

Figure D-2
Study Area Child Care Facilities

TABLE D-5: Comparison of Budget Capacity, Enrollment, Available Slots, and Percent Utilized for the 2016 Existing Conditions and the 2020 Future No-Action Conditions

	Budget Capacity	Enrollment	Available Slots	Utilization (%)
Existing Conditions	1,523	1,326	197	87.1
No-Action Increment[1]	0	+40	-40	+2.6
2020 No-Action Condition	1,523	1,366	157	89.7

Source: *CEQR Technical Manual*, Table 6-1b.
Notes:
[1] Reflects No-Action developments presented in Table C-2 of Attachment C, "Land Use, Zoning, and Public Policy."

The Future with the Proposed Actions (With-Action Condition)

As discussed above, the *CEQR Technical Manual* requires a detailed analysis of child care centers when a proposed action would produce substantial numbers of subsidized low- to moderate-income family housing units that may therefore generate a sufficient number of eligible children to affect the availability of slots at area publicly funded child care centers. By 2020, the RWCDS would introduce a net increment of 227 affordable housing units in the rezoning area.

Based on Table 6-1b of the *CEQR Technical Manual*, these additional 227 affordable units would generate 32 children under age six eligible for publicly funded child care services (see Table D-6), increasing the study area child care enrollment to 1,398. As presented in Table D-7, the collective utilization rate of study area child care centers would increase to 91.8 percent in the 2020 With-Action condition (with 125 available slots), an approximately 2.1 percent increase from the No-Action utilization rate.

TABLE D-6: Projected Number of Publicly Funded Child Care Pupils Generated by the RWCDS

Affordable Units	Generation Ratio per Unit (Children ≤ Age 6)	Number of Children≤ Age 6 Generated
227	0.139	32

Source: *CEQR Technical Manual*, Table 6-1b.

TABLE D-7: Comparison of Budget Capacity, Enrollment, Available Slots, and Percent Utilized for the 2020 Future No-Action and With-Action Conditions

	Budget Capacity	Enrollment	Available Slots	Utilization (%)
2020 No-Action Condition	1,523	1,366	157	89.7
With-Action Increment	0	32	-32	+2.1
2020 With-Action Condition	1,523	1,398	125	91.8

Source: *CEQR Technical Manual*, Table 6-1b.

According to the *CEQR Technical Manual*, a significant adverse child care center impact could result if proposed actions result in: (1) a collective utilization rate greater than 100 percent in the With-Action condition; and (2) the demand constitutes an increase of five percent or more in the collective capacity of child care centers serving the study area over the No-Action condition. As shown in Table D-7, study area child care facilities would continue to operate below capacity in the 2020 With-Action condition, and the proposed actions would only result in a 2.1 percent increase in the utilization rate. Therefore, no significant adverse child care center impacts would result.

ATTACHMENT E

OPEN SPACE

I. INTRODUCTION

An open space assessment may be necessary if a proposed action could potentially have a direct or indirect effect on open space resources in the project area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed action would be sufficient to noticeably diminish the ability of an area's open space to serve the existing or future population. According to the guidelines established in the 2014 *CEQR Technical Manual,* if a project site is located in an area considered neither well-served nor underserved by open space, an analysis of indirect effects on open space is warranted if a proposed action would add more than 200 residents and/or 500 employees. The rezoning area is located in an area considered to be neither well-served nor underserved by open space.

As discussed in detail in Attachment A, "Project Description," the reasonable worst-case development scenario (RWCDS) for the proposed actions would result in the development of 144 incremental residential units and approximately 11,401 gsf of retail, and net decrease of 8,193 gsf of community facility space as compared to the future without the proposed actions. This amount of new development would add of approximately 400 new residents and an estimated 16 workers to the area (net).[1]

Although the proposed actions would not have a direct effect on existing open space resources in the area, it is expected to introduce approximately 400 new residents (net), exceeding the *CEQR Technical Manual* threshold for open space analysis in an area considered neither well-served nor underserved by open space. A quantitative assessment was conducted to determine whether the proposed actions would significantly reduce the amount of open space available for the area's residential population. As the proposed actions would not result in 500 or more workers, the analysis of open space will focus exclusively on the open space needs of the study area's residential population.

II. PRINCIPAL CONCLUSIONS

According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users; or (b) it would reduce the open space ratio and consequently overburden existing facilities or further exacerbate deficiency in open space. The *CEQR Technical Manual* also states that "if the area exhibits a low open space ratio indicating a shortfall of open space, even a small decrease in the ratio as a result of the action may cause an adverse effect." A five percent or greater decrease in the open space ratio is considered to be "substantial", and a decrease of less than one percent is generally considered to be insignificant unless open space resources are extremely limited. The open space study area analyzed in this attachment is

[1] Based on the average household size of 2.78 persons/household in Bronx Community District 9 (2010 Census). Worker estimates are based on one residential employee per 25 DU, one employee per 333 gsf of retail space, and one employee per 333 sf of community facility space.

located in an area that is not considered underserved or well-served by open space as defined in the *CEQR Technical Manual Appendix: Open Space Maps*.

In New York City, local open space ratios vary widely, and the median ratio at the Citywide Community District level is 1.5 acres of open space per 1,000 residents. Typically, for the assessment of indirect effects, citywide local norms have been calculated for comparison and analysis. As a planning goal, a ratio of 2.5 acres per 1,000 residents represents an area well-served by open spaces, and is consequently used as an optimal benchmark for residential populations in large-scale plans and proposals. Ideally, this would comprise 0.50 acres of passive space and 2.0 acres of active open space per 1,000 residents.

According to the *CEQR Technical Manual*, a preliminary open space assessment may be useful when the open space assessment can be targeted to a particular user group, or if it is not clear whether a full, detailed open space analysis is necessary. If the preliminary open space assessment concludes that the open space ratio would increase or remain substantially the same in the With-Action condition compared to the existing condition, no further analysis of open space is needed (unless direct, qualitative changes to an open space may occur because of the project). Decreases in the open space ratio would generally warrant a more detailed analysis under the following conditions:

- If the decrease in the open space ratio approaches or exceeds five percent, it is generally considered to be a substantial change warranting more detailed analysis.
  - The closer the ratio is to 2.5 acres per 1,000 residents, or when the open space in the area exceeds this ratio, a greater percentage of change (more than five percent) may be tolerated.
- If the study area exhibits a low open space ratio (e.g., below the citywide average of 1.5 acres per 1,000 residents or 0.15 acres of passive space per 1,000 nonresidential users), indicating a shortfall. According to the *CEQR Technical Manual,* detailed analysis of open space effects on residents is generally unnecessary if the open space ratio decreases by less than one percent.

As discussed in detail below, the preliminary open space assessment shows that the proposed actions and associated RWCDS would decrease the open space ratio by 0.84 percent in the study area, which would be well below the CEQR threshold of five percent for a detailed analysis. As shown in Table E-4, the open space ratio would remain substantially the same in the With-Action as compared to the No-Action condition. In addition, as noted above, the proposed actions would not result in any direct displacement or alteration of existing public spaces in the study area. Therefore, the proposed actions would not result in a significant adverse open space impact.

III. OPEN SPACE STUDY AREA AND METHODOLOGY

The analysis of open space resources has been conducted in accordance with the guidelines established in the *CEQR Technical Manual*. Using CEQR methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio. In addition, qualitative factors are considered in making an assessment of the proposed action's effects on open space resources.

In accordance with the guidelines established in the *CEQR Technical Manual,* the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential projects.

Open Space Study Area

Pursuant to CEQR guidelines, the residential open space study area includes all census tracts that have at least 50 percent of their area located within half-mile of the proposed rezoning area and all open spaces within it that are publicly accessible. As described above, residents typically walk up to a half-mile for recreational spaces. While there are some additional nearby public open spaces located outside the study area boundary that likely are utilized by some study area residents, for conservative analysis purposes, only those open spaces in the study area are used in the quantitative analysis. The nearby open spaces located beyond the study area boundary were not included in the quantitative analysis but were described qualitatively.

As shown in Figure E-1, the open space study area includes the following twelve Bronx census tracts: 44, 48, 50.01, 50.02, 54, 56, 62, 64, 68, 70, 76, and 218.

Analysis Framework

Direct Effects Analysis

According to the *CEQR Technical Manual*, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As there are no publicly-accessible open spaces within the rezoning area, the proposed actions would not have any direct effect and no further analysis is warranted.

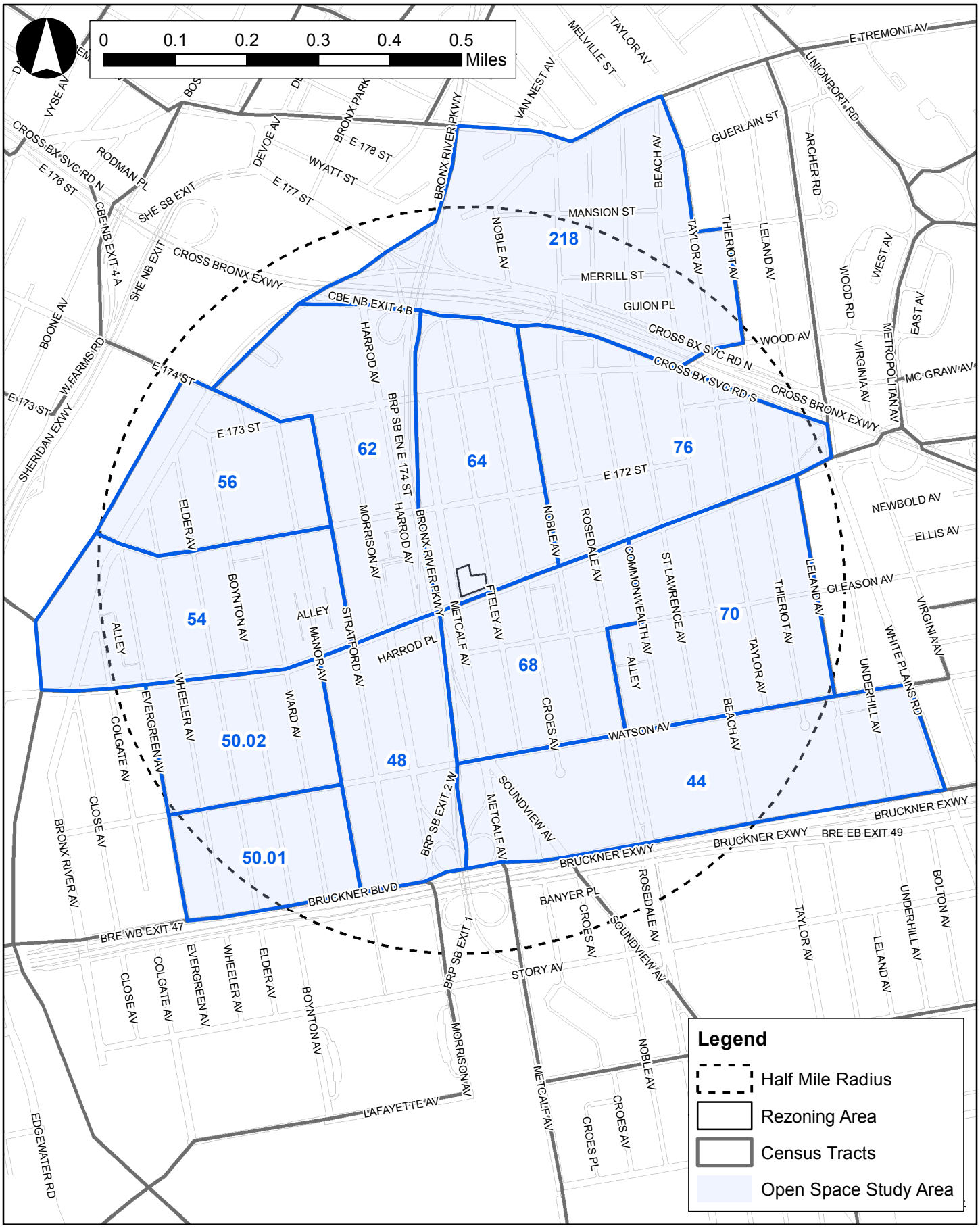
Indirect Effects Analysis

Indirect effects occur to an area's open spaces when a proposed action would add enough population, either workers or residents, to noticeably diminish the ability of an area's open space to serve the existing or future population. The *CEQR Technical Manual* methodology suggests conducting an initial quantitative assessment to determine whether more detailed analyses are appropriate.

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that can affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this attachment includes:

- Characteristics of the open space users: residents. To determine the number of residents in the study area, 2010-2014 five-year ACS census data have been compiled for census tracts comprising the open space study area along with population projections of large residential developments

Open Space Study Area



completed since the 2010-2014 5-year ACS census data. In addition, a 0.25 percent per year (2014-2016) background growth rate is applied to the 2014 population to account for general increases in population and smaller developments not identified individually.

- An inventory of all publicly accessible passive and active recreational facilities in the open space study area.
- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with certain guidelines. The New York Department of City Planning (DCP) generally recommends a comparison to the median ratio for community districts in New York City, which is 1.5 acres of open space per 1,000 residents.
- An evaluation of qualitative factors affecting open space use.
- A final determination of the adequacy of open space in the open space study area.

IV. PRELIMINARY ASSESSMENT

According to the *CEQR Technical Manual*, an initial quantitative open space assessment may be useful to determine if a detailed open space analysis is necessary, or whether the open space assessment can be targeted to a particular user group. This initial assessment calculates an open space ratio by relating the existing residential population to the total open space in the study area. It then compares that ratio with the open space ratio in the future with and without the proposed action. If there is a decrease in the open space ratio that would approach or exceed five percent, a detailed analysis is warranted.

Pursuant to the guidelines of the *CEQR Technical Manual,* a preliminary open space assessment was conducted which provides a comparison of the total existing open space ratios and in the future with and without the proposed actions.

Existing Conditions

Demographic Characteristics of the Study Area

To determine the residential population served by existing open space resources, 2010-2014 five-year ACS census data were compiled for the census tracts comprising the half-mile study area and updated to 2016. With an inventory of available open space resources and the number of potential users, open space ratios were calculated and compared with existing citywide averages and planning goals set forth by DCP. Table E-1 shows the 2010-2014 five-year ACS census total population figures for each census tract in the study area, as well as for the study area as a whole. As shown in Table E-1 below, the census data indicate that the study area had a total residential population of approximately 60,181 people in 2014. Factoring in a yearly background growth factor of approximately 0.25 percent, the residential population of the study area totals approximately 60,482 people in 2016.

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under CEQR guidelines, whereas private open space is not accessible to the general public on a regular basis, and is therefore only considered qualitatively. Field surveys and secondary sources were used to

determine the number, acreage, and type of publicly accessible open space resources in the residential study area.

TABLE E-1: 2016 Existing Study Area Population

Census Tract	Residential Population
44	444,830
48	4,024
50.01	5,040
50.02	5,791
54	6,334
56	2,391
62	7,682
64	3,565
68	2,976
70	4,646
76	5,853
218	7,049
Residential Total in 2014 *Source: U.S. Census*	60,181
Background Growth (0.5%-year growth since 2014)	301
Residential Total in 2016	**60,482**

An open space is determined to be active or passive by the uses which the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways and picnicking areas. However, some passive spaces can be used for both passive and active recreation; such as a green lawn or riverfront walkway, which can also be used for ball playing, jogging or rollerblading.

Inventory of Publicly-Accessible Open Space

Within the defined study area, all publicly-accessible open spaces were inventoried and identified by their location, size, owner, type, equipment, and hours of operation. The information used for this analysis was gathered from the New York City Department of Parks and Recreation's (DPR) website; and from the New York City Oasis database and other secondary sources of information including previous CEQR environmental reviews. Figure E-2 maps their location in the study area.

As shown in Figure E-2, publicly-accessible open space and recreational resources within the half-mile study area are included in the quantitative analysis. These resources comprise a total of approximately 14.68 acres, with approximately 1.31 acres of passive open space and 13.37 acres of active open space (refer to Table E-2). The closest public open spaces to the area to be rezoned are the Bronx River Parkway Ballfields and the Watson Gleason Playground (#2 and #6 in Figure E-2).

Quantitative Analysis of Open Space Adequacy

The following analysis of the adequacy of open space resources within the study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents.

Open Space Resources



TABLE E-2: Inventory of Existing Study Area Public Open Spaces

Map No.	Name	Address/ Location	Owner	Features	Hours of Access	Total Acres	Active		Passive	
							#	%	#	%
1	174th Street (Bronx River Houses) Playground	E. 174th Street bet. Bronx River Parkway and E. 173rd Street	DPR / NYC Housing Authority	Basketball Courts, Bathrooms, Eateries, Fitness Equipment, Outdoor Pools, Playgrounds, Spray Showers	Dawn to Dusk	1.0	0.90	90%	0.1	10%
2	Bronx River Parkway Ball Fields	Watson and Morrison Avenues	DPR	Baseball Fields, Basketball Courts, Bathrooms, Playgrounds, Spray Shower	Dawn to Dusk	5.6	5.4	96%	0.2	4%
3	Noble Playground	Noble Avenue bet. Bronx River Avenue and E. 177th Street	DPR	Baseball Fields, Basketball Courts, Bathrooms, Benches, Fitness Equipment, Playgrounds, Spray Showers	Dawn to Dusk	3.2	3.0	94%	0.2	6%
4	St. Lawrence Triangle	S/B Cross Bronx Elwy Service Rd, St Lawrence Avenue, E. 174th Street	DPR	Benches, Trees	24/7	0.10	0.00	0%	0.10	100%
5	Taylor Ave / McGraw Ave Triangle		DPR	Benches, trees	24/7	0.10	0.00	0%	0.10	100%
6	Watson Gleason Playground	Gleason Ave., Watson Ave. bet. Noble Ave., and Rosedale Ave.	DPR	Basketball Courts, Bathrooms, Eateries, Handball Courts, Playgrounds, Spray Showers	Dawn to Dusk	3.3	3.0	91%	0.3	9%
7	Metcalf Playground	E. 174th Street, Freely Avenue, Bronx River Parkway	DPR	Playgrounds, spray shower, benches, trees	Dawn to Dusk	0.65	0.50	77%	0.15	23%
8	P.S. 195 Playground	Manor Ave. bet. E. 172nd St. & Westchester Ave.	DOE	Benches and hard court play area	Weekends: 8am to Dusk; weekdays school close to Dusk	0.35	0.32	91%	0.03	9%
9	P.S. 47 Playground	1794 E. 172nd St.	DOE	Play equipment, seating, turf field, running track, basketball court, garden, seating, trees, garden	Weekends: 8am to Dusk; weekdays school close to Dusk	0.28	0.25	90%	0.03	10%
					TOTAL	**14.68**	**13.37**	**91%**	**1.31**	**9%**
A	Soundview Park	Bronx River, Bronx River Ave. bet. Lafayette Ave., Surf Dr.	DPR	Baseball Fields, Basketball Courts, Handball Courts, Cricket Fields, Playgrounds, Soccer Fields, Bicycle and Greenways, Football Field, Kayak/Canoe Launch, Running Track, Spray Showers, Fitness Equipment, Walking Paths, and Benches	Dawn to Dusk	205.3	102.6	50%	102.6	50%

As 1.5 acres of total open space per 1,000 residents is the median community district ratio in New York City, it generally represents adequate open space conditions and is used as the CEQR standard for this project. As an optimal planning goal, the City tries to achieve an overall residential open space ratio (OSR) of 2.5 acres per 1,000-population (80 percent active and 20 percent passive) for large-scale plans and proposals. However, this goal is often not feasible for many areas of the City (especially higher density areas), but serves as a benchmark that represents an area that is well served by open spaces.

In calculating the open space ratio per 1,000-user population for the study area, all of the resources listed in quantitative portion of Table E-2 were included. Table E-3 below shows that with an existing 2016 study area residential population of approximately 60,482 people, the existing total open space ratio in the study area is approximately 0.243 acres of open space per 1,000 residents. The study area has 0.022 acres of passive open space per 1,000 residents, and 0.221 acres of active open space per 1,000 residents.

TABLE E-3: Analysis of Adequacy of Open Space Resources in the Study Area under 2016 Existing Conditions

Study Area	**2016 Existing Conditions**
Residential Population	**60,482**
Passive Open Space Acreage	1.31
Active Open Space Acreage	13.37
Total Open Space Acreage	14.68
Open Space Ratios	
Passive	0.022
Active	0.221
Total	**0.243**

Based on the previously mentioned DCP guidelines, the half-mile study area is located within an area that is considered neither well-served nor underserved by open space, but the study area exhibits a low open space ratio, compared to the city-wide median ratio of 1.5 acres per 1,000 persons and the planning goal of 2.5 acres per 1,000 persons (0.5 acres of passive space and 2.0 acres of active space).

Qualitative Analysis of Open Space Adequacy

Although the open space study area demonstrates a low open space ratio, there are a number of mitigating factors that improve the overall availability of open space in the study area. Most notably, Soundview Park, located just outside the study area beginning at Lafayette Avenue and Metcalfe Avenue, offers 205.31 acres of publicly accessible open space (A on Figure E-2). Soundview Park offers a variety of passive and active open space resources such as baseball fields, basketball courts, handball courts, cricket fields, playgrounds, soccer fields, bicycle and greenways, football field, kayak/canoe launch, running track, spray showers, fitness equipment, walking paths, and benches.

Future without the Proposed Actions

Rezoning Area and Study Area Population

In absence of the proposed actions, it is anticipated that both projected development site 1 and 2 in the rezoning area would be redeveloped in accordance with the existing R6 zoning district. The applicant-owned projected development site 1 would be developed with an approximately 110,316-gsf mixed-use

residential and community facility building, which would introduce 94 dwelling units, and projected development site 2 is expected to be developed with approximately 15,930 gsf residential building accommodating 16 DUs. These two developments would introduce a total of 306 residents. [2]

In addition, as summarized in Table C-2 and shown graphically in Figure C-4 in Attachment C, "Land Use, Zoning, and Public Policy, there are a couple of No-Action developments located within a ½-mile radius of the rezoning area that would introduce 359 DUs. Assuming these units would be 100 percent occupied and have an average household size of 2.78, these No-Action developments would add 998 residents to the study area. As a result, the total study area residential population in the 2020 No-Action conditions would increase from 60,482 to 61,786.

Open Space Resources

No new publicly accessible open space resources are anticipated to be added to the study area in the future without the proposed actions.

No-Action Open Space Ratio

In the No-Action condition, as under existing conditions, the total, passive, and active open space ratios would be less than the City' open space planning goals of 2.5 acres of open space per 1,000 residents (including 0.5 acres of passive open space and two acres of active open space). The total open space ratio in the future without the proposed actions would be 0.238 acres per 1,000 residents, this represents a decrease of 0.005 acres of open space per 1,000 residents (a -2.1 percent change) over existing conditions (see Table E-4). The active open space ratio in the future with the proposed actions would be 0.021 acres per 1,000 residents, this represents a decrease of 0.001 acres of open space per 1,000 residents over existing conditions. The passive open space ratio would be 0.216 acres per 1,000 residents in the future with the proposed actions, this represents a decrease of 0.005 acres of open space per 1,000 residents over existing conditions.

Future with the Proposed Actions

This section describes the open space conditions that would result from the reasonable worst-case development scenario (RWCDS) associated with the proposed actions by 2020. It evaluates the potential for the proposed actions to result in significant adverse impacts to open space resources directly and indirectly based on a comparison of the No-Action condition (described above) to the With-Action condition.

Rezoning Area and Study Area Population

According to the *CEQR Technical Manual*, for a preliminary assessment, the population expected with the proposed actions should be added to the No-Action population within the study area to determine the open space ratio in the future with the proposed actions. The proposed actions and associated RWCDS would result in 144 incremental dwelling units which would introduce approximately 400 new residents to the study area in the future with the proposed actions. As a result, the total study area population in the 2020 With-Action conditions would increase from 61,786 to 62,186.

[2] Based on the average household size of 2.78 persons/household in Bronx Community District 9 (2010 Census).

Open Space Resources

The proposed actions and associated RWCDS would not result in the creation of any publicly accessible open space resources in the future with the proposed actions.

It should be noted that the proposed development on the applicant-owned projected development site 1 would include private accessory open space areas pursuant to Quality Housing requirements for resident use only. This open space would be passive open space including landscaped seating areas and paths.

With-Action Open Space Ratio

The total open space ratio in the future with the proposed actions would be 0.236 acres per 1,000 residents, this represents a decrease of 0.002 acres of open space per 1,000 residents (a -0.84 percent change) over No-Action conditions (see Table E-4). The active open space ratio in the future with the proposed actions would be 0.215 acres per 1,000 residents, this represents a decrease of 0.001 acres of open space per 1,000 residents (a -0.46 percent change) as compared to the No-Action condition. The passive open space ratio would be 0.021 acres per 1,000 residents in the future with the proposed actions, which would not change from No-Action conditions. In the future with the proposed actions, the open space ratio remains below the recommended planning goal of 2.5 acres of open space per 1,000 residents and the city-wide median of 1.5 acres of open space per resident.

TABLE E-4: 2020 Future with the Proposed Actions: Open Space Ratios Summary

		Open Space Acreage			Open Space Ratio per 1,000 people		
Study Area Residential Population		**Total**	**Active**	**Passive**	**Total**	**Active**	**Passive**
Existing (2016)	60,482	14.68	13.37	1.31	0.243	0.221	0.022
No-Action	61,786	14.68	13.37	1.31	0.238	0.216	0.021
With-Action	62,186	14.68	13.37	1.31	0.236	0.215	0.021
Percent Change No-Action to With-Action	+ 0.65%	0.0%	0.0%	0.0%	-0.84%	-0.46%	0.00%
				OPEN SPACE GUIDELINE	2.5	2.0	0.5

Assessment

The preliminary open space analysis shows that the proposed actions would decrease the overall open space ratio by 0.84 percent in the study area, which would be well below the CEQR impact threshold of five percent. As discussed above, if the preliminary open space assessment concludes that the open space ratio would increase or remain substantially the same in the With-Action condition compared to the No-Action condition, no further analysis of open space is needed. Because the rezoning area is not located in an area underserved by open space and the open space ratio in the study area would remain substantially the same as a result of the proposed project, no further analysis of open space is necessary. Additionally, as noted above, the proposed actions would not result in any direct displacement or alteration of existing public spaces in the study area. Therefore, the proposed actions would not result in a significant adverse open space impact.

ATTACHMENT F

SHADOWS

1675 Westchester Avenue EAS
ATTACHMENT F: SHADOWS

I. INTRODUCTION

According to the 2014 *City Environmental Quality Review* (CEQR) *Technical Manual*, an adverse shadows impact is considered to occur when an incremental shadow from a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource, or threatens the viability of vegetation or other resources. Pursuant to *CEQR Technical Manual* guidelines, sunlight-sensitive resources of concern are those resources that depend on sunlight, or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Sunlight-sensitive resources can include publicly accessible open spaces, architectural resources, natural resources, and Greenstreets. In general, shadows on City streets, sidewalks, buildings, or project-generated open spaces, as well as shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under *CEQR Technical Manual* impact criteria.

This attachment assesses the potential for the proposed actions and associated reasonable worst-case development scenario (RWCDS) to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the *CEQR Technical Manual*, a shadows assessment is required if a proposed action would result in structures (or additions to existing structures) of 50 feet or more, and/or be located adjacent to, or across the street from, a sunlight sensitive resource. As described in Attachment A, "Project Description," the proposed actions and associated RWCDS would facilitate the construction of two buildings with maximum heights of approximately 145 feet, approximately 70 to 75 feet taller than the maximum buildings heights of the No-Action buildings on the two projected development sites. Therefore, a detailed shadows analysis was prepared to determine the potential for the RWCDS buildings to result in significant adverse shadow impacts on sunlight-sensitive resources.

II. PRINCIPAL CONCLUSIONS

The proposed actions and associated RWCDS would not result in significant adverse shadows impacts. While the projected development would cast incremental shadows on a portion of the linear green space along the Bronx River Parkway in the vicinity of the rezoning area, the detailed shadows analysis determined that the duration and coverage of incremental shadows on this open space would not be significant or adverse.

Project-generated incremental shadows would occur on all four analysis dates with a maximum shadow duration of 3 hours 43 minutes. Incremental shadows would occur in the morning near the onset of the analysis day and would primarily be limited to portions of the Bronx River Parkway between East 172nd Street and Westchester Avenue, affecting small areas of this open space, which features grass, small shrubs and trees. As the green space along the parkway is inaccessible to the public, project-generated incremental shadows would not affect the utilization or enjoyment of this open space resource. The vegetation found along the Bronx River Parkway would continue to receive a minimum of four to six

hours of direct sunlight throughout the growing season. Therefore, the proposed actions and associated RWCDS are not expected to result in significant adverse shadows impacts at any sunlight-sensitive resources.

III. METHODOLOGY

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

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

- *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in an open space establishes its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement.

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

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

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

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

- *Vegetation:* a substantial reduction in sunlight available to sunlight-sensitive features of the resource to less than the minimum time necessary for its survival (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum time necessary for its survival).

- *Historic and cultural resources:* a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.

- *Open space utilization:* a substantial reduction in the usability of open space as a result of increased shadow, including information regarding anticipated new users and the open

space's utilization rates throughout the affected time periods.

- *For any sunlight-sensitive feature of a resource:* complete elimination of all direct sunlight on the sunlight- sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

In general, a significant adverse 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 natural resources.

IV. PRELIMINARY SCREENING

Tier 1 Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow that a structure would cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height and occurs on December 21st (the winter solstice). The RWCDS building height of 145 feet for both projected development sites was used to determine the longest shadow study area (Tier 1 assessment).[1] Within this longest shadow study area, there are two resources that are potentially sunlight-sensitive resources including: the Bronx River Parkway Ballfields; and the linear green space along the Bronx River Parkway (refer to Figure F-1). Therefore, further screening was warranted in order to determine whether any resources could be affected by project-generated shadows.

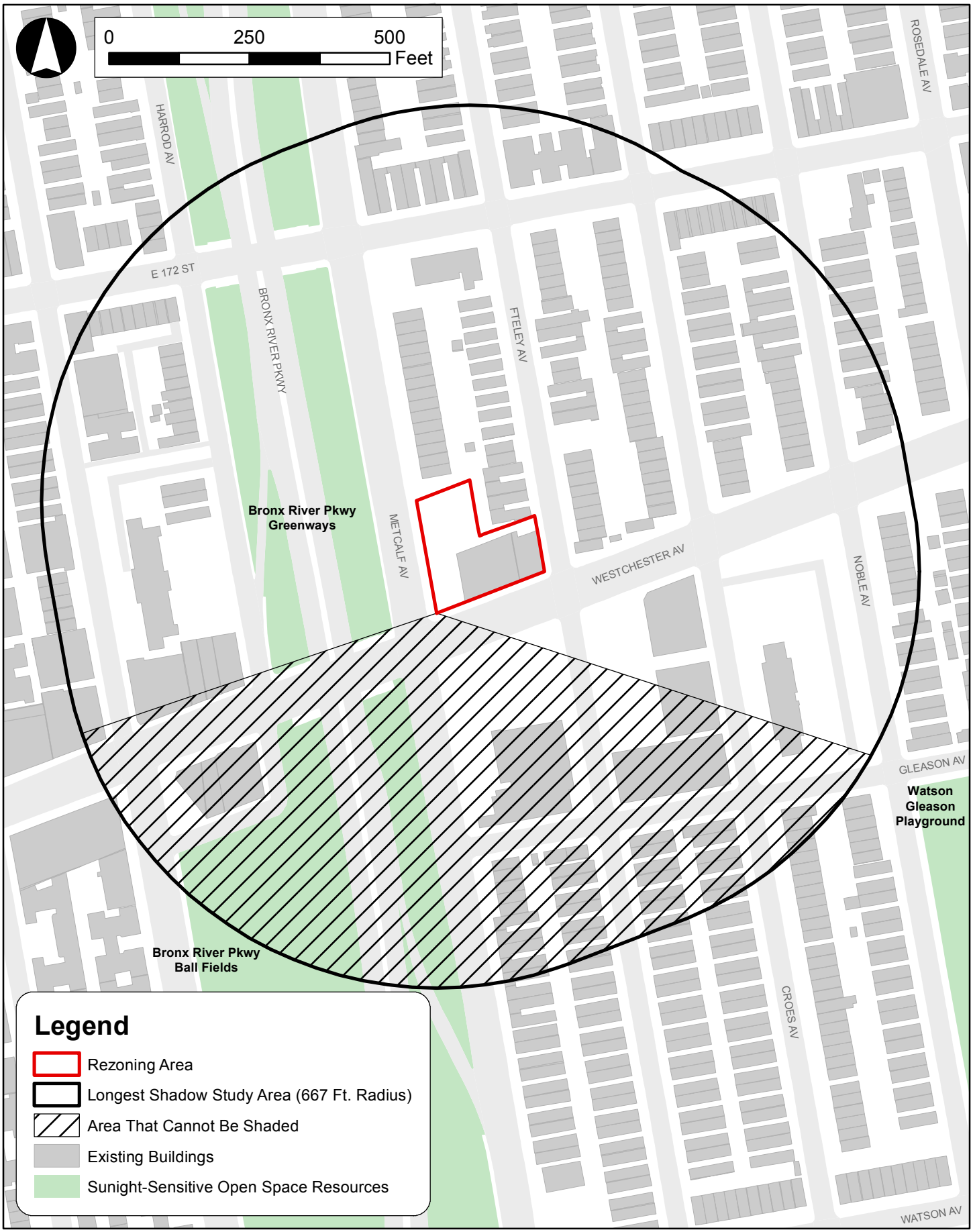
Tier 2 Screening Assessment

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

Figure F-1 provides a base map illustrating the results of the Tier 1 and Tier 2 screening assessments (i.e., the portion of the longest shadow study area lying within -108 degrees from the true north and +108 degrees from true north as measured from southernmost portions of the development sites). As shown in Figure F-1, based on the Tier 2 Screening Assessment, it cannot be ruled out that the RWCDS buildings would not cast shadows on the linear green space of the Bronx River Parkway.

[1] As noted in Attachment A, "Project Description," while the applicant is proposing a building with 13-stories, pursuant to the adopted Zoning for Quality and Affordability (ZQA) text, the maximum building height in R8A districts is 145 with a qualifying ground floor, the RWCDS for the proposed project assumes that the building and one additional projected development site (site 2) would rise to a maximum height of 145 feet. The mechanical bulkhead of the two projected development sites are expected to rise approximately 10 feet above the roofline.

Figure F-1
Tier 1 and 2 Shadows Assessment



Tier 3 Screening Assessment

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

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

Figure F-2a and F-2b illustrates the range of project-generated shadows that could occur in the absence of existing buildings on the four representative analysis days. The Tier 3 analysis shows that the green space along the Bronx River Parkway could receive project-generated shadows on all four representative analysis days. As the potential for project-generated shadows on the open space of the Bronx River Parkway could not be ruled out based on the Tier 3 screening assessment, a detailed shadow analysis was prepared to determine the extent and duration of project-generated incremental shadows on this open space resource on each representative analysis day.

V. DETAILED ASSESSMENT

The purpose of the detailed analysis is to determine the extent and duration of new incremental shadows that fall on sunlight-sensitive resources as a result of the proposed actions and associated RWCDS, and to assess their effects. A baseline or future condition without the proposed actions (i.e., No-Action condition) is established, containing anticipated development on the two projected development sites, existing buildings and sunlight-sensitive resources and any future developments planned in the area, to illustrate the baseline shadows from buildings and other structures in the study area defined in the preliminary assessment. The future condition with the proposed actions (i.e., With-Action condition) and its shadows can then be compared to the baseline condition with shadows from the future No-Action condition, to determine the incremental shadows that would result from the proposed actions.

Resources of Concern

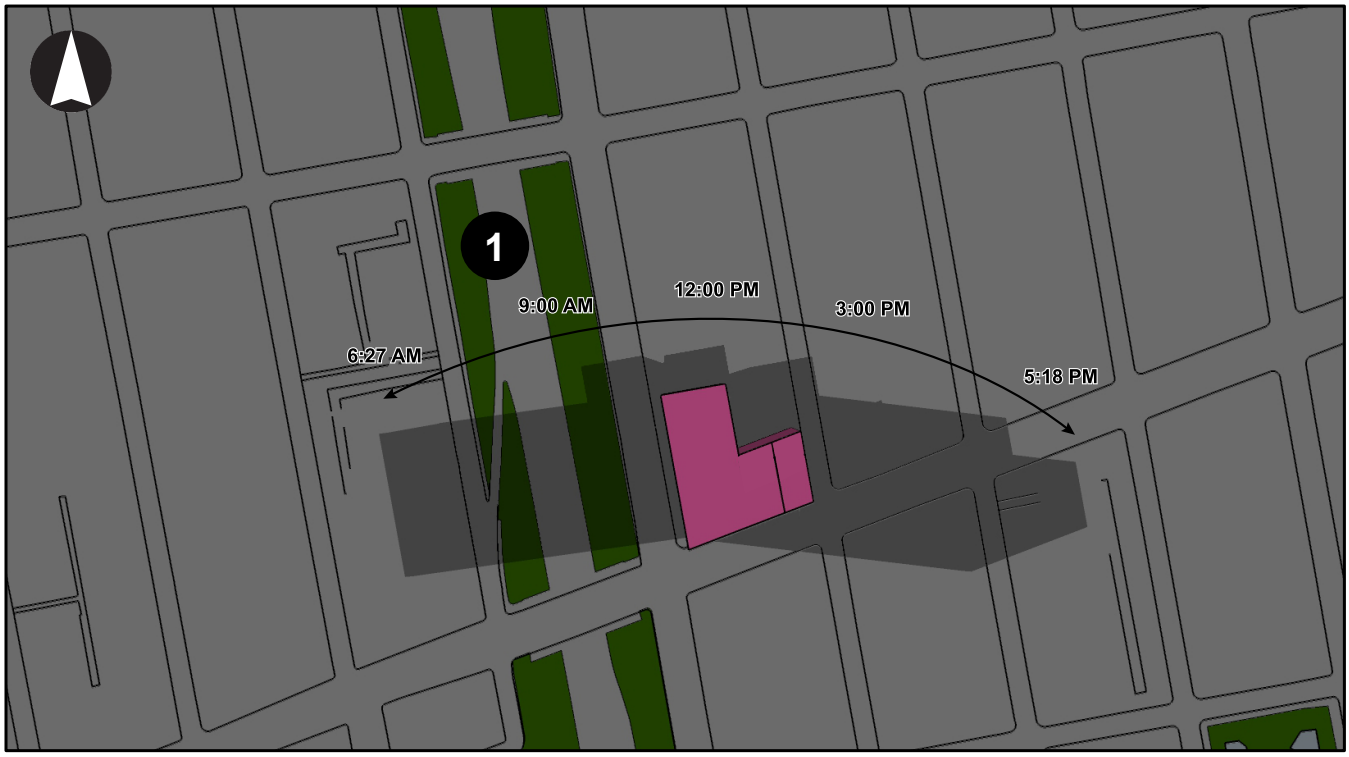
Bronx River Parkway

The linear open space along the Bronx River Parkway is mapped park as shown on the City's zoning maps. Although this open space is not part of the Greenstreets program nor is it accessible to the public, it consists of a planted area within the unused portions of a roadbed, and features trees and other growing plants dependent on sunlight. Therefore, pursuant to the *CEQR Technical Manual*, the Bronx River Parkway is considered a sunlight-sensitive resource and required a detailed assessment.

Figure F-2a
Tier 3 Screening



MARCH 21/SEPTEMBER 21

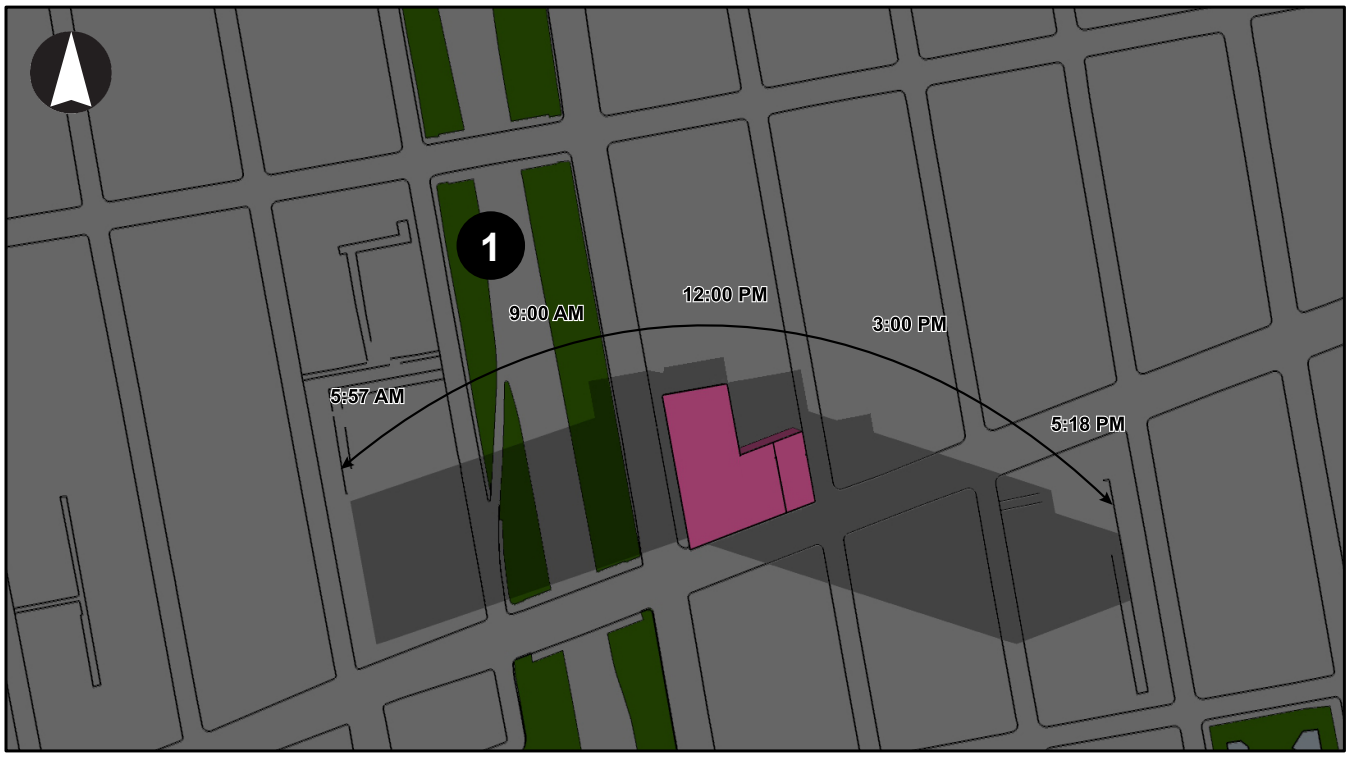


MAY 6/AUGUST 6

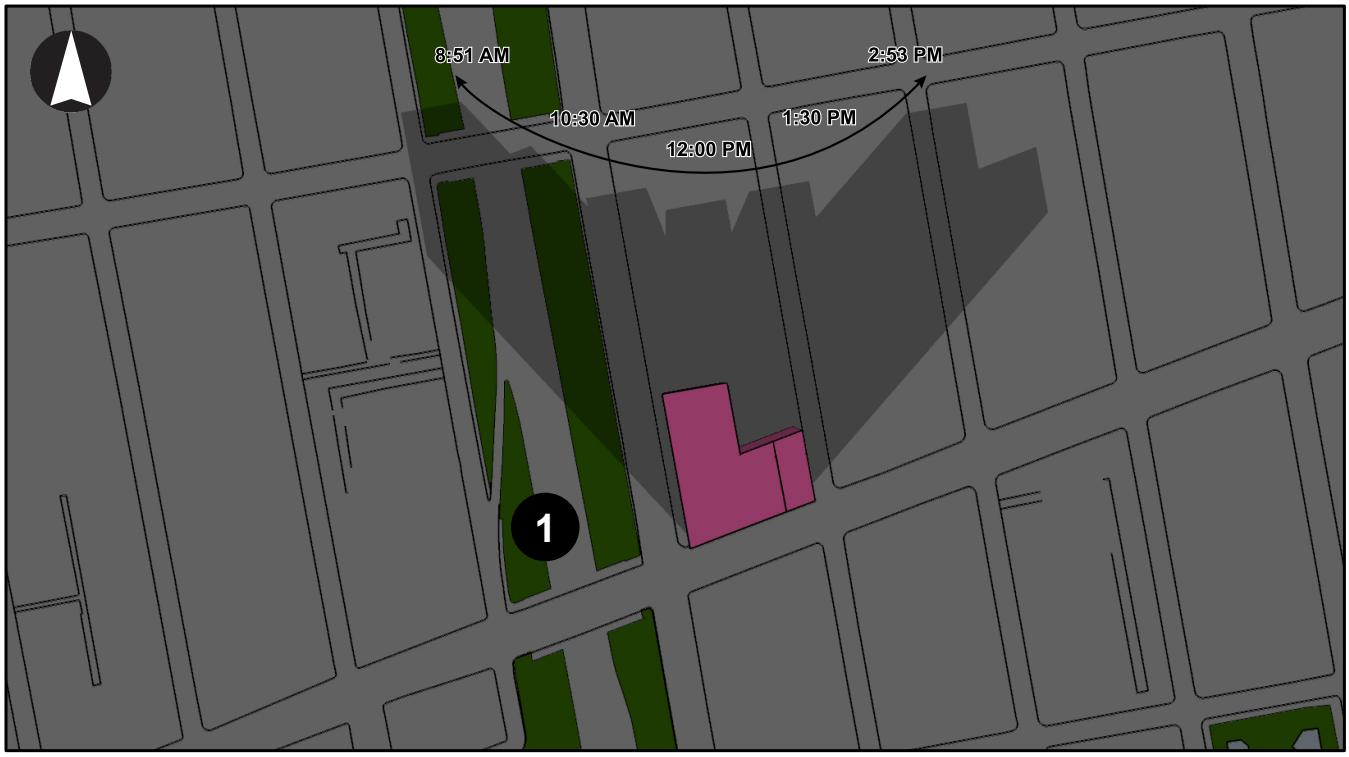
Projected Development | **1 Open Space** | **Incremental Shadow**

Note: Resources keyed to Table F-1

Figure F-2b
Tier 3 Screening



June 21



December 21

Projected Development | **1 Open Space** | **Incremental Shadow**

Note: Resources keyed to Table F-1

Shadows Analysis

Per *CEQR Technical Manual* guidelines, shadow analyses were performed for the open space along the Bronx River Parkway on four representative days of the year: March 21st/September 21st, the equinoxes; May 6th, the midpoint between the summer solstice and the equinox (and equivalent to August 6th); June 21st, the summer solstice and the longest day of the year; and December 21st, the winter solstice and shortest day of the year. These four representative days indicate the range of shadows over the course of the year. CEQR guidelines define the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. As discussed above, the results of the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions (see Table F-1).

As shown in Table F-1, incremental project-generated shadows would reach the linear open space along the Bronx River Parkway in the early morning on all four representative analysis days. As shadows are in constant motion, Figures F-3 through F-6, provided at the end of this attachment, show representative shadow views for the Bronx River Parkway on each of the four representative analysis days at particular moments in time. The RWCDS shadow increment is highlighted in red on each of the figures.

Table F-1
Duration of Shadows on Sunlight Sensitive Resources (Increment Compared to No-Action)

Resource	Analysis Day	March 21/Sept. 21	May 6/August 6	June 21	December 21
		7:36 AM – 4:29 PM	6:27 AM – 5:18 PM	5:57 AM – 6:01 PM	8:51 AM – 2:53 PM
Linear Open Space along the Bronx River Parkway	Shadow enter-exit time	7:36 – 10:07 AM	6:27 – 9:42 AM	5:57 – 9:40 AM	8:51 – 10:21 AM
	Incremental shadow duration	2 hours 31 minutes	3 hours 15 minutes	3 hours 43 minutes	1 hour 30 minutes

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

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

March 21st/September 21st

On March 21st/September 21st the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. March is considered the beginning of the growing season in New York City, and September 21st, which has the same shadow patterns as March 21st, is also within the growing season. On the March 21st/September 21st analysis day, incremental shadows from the RWCDS would reach the open space along the Bronx River Parkway.

The RWCDS would cast incremental shadows on the Bronx River Parkway beginning at the onset of the analysis day (7:36 AM) and continuing until 10:07 AM, for a duration of approximately 2 hour and 31 minutes. After 10:07 AM, the open space would not experience any incremental shadow coverage as a result of the RWCDS. As indicated in Figure F-3, incremental shadows would primarily be limited to portions of the Bronx River Parkway between East 172nd Street and Westchester Avenue and would only

Figure F-3a
Bronx River Parkway Median
Incremental Shadows on March 21/September 21



7:45 AM



8:30 AM

Projected Development Open Space Incremental Shadow

Figure F-3b
Bronx River Parkway Median
Incremental Shadows on March 21/September 21



9:30 AM

Projected Development

Open Space

Incremental Shadow

Figure F-4a
Bronx River Parkway Median
Incremental Shadows on May 6/August 6



7:00 AM



8:00 AM

Projected Development Open Space Incremental Shadow

Figure F-4b
Bronx River Parkway Median
Incremental Shadows on May 6/August 6



9:00 AM

Projected Development | Open Space | Incremental Shadow

Figure F-5a
Bronx River Parkway Median
Incremental Shadows on June 21



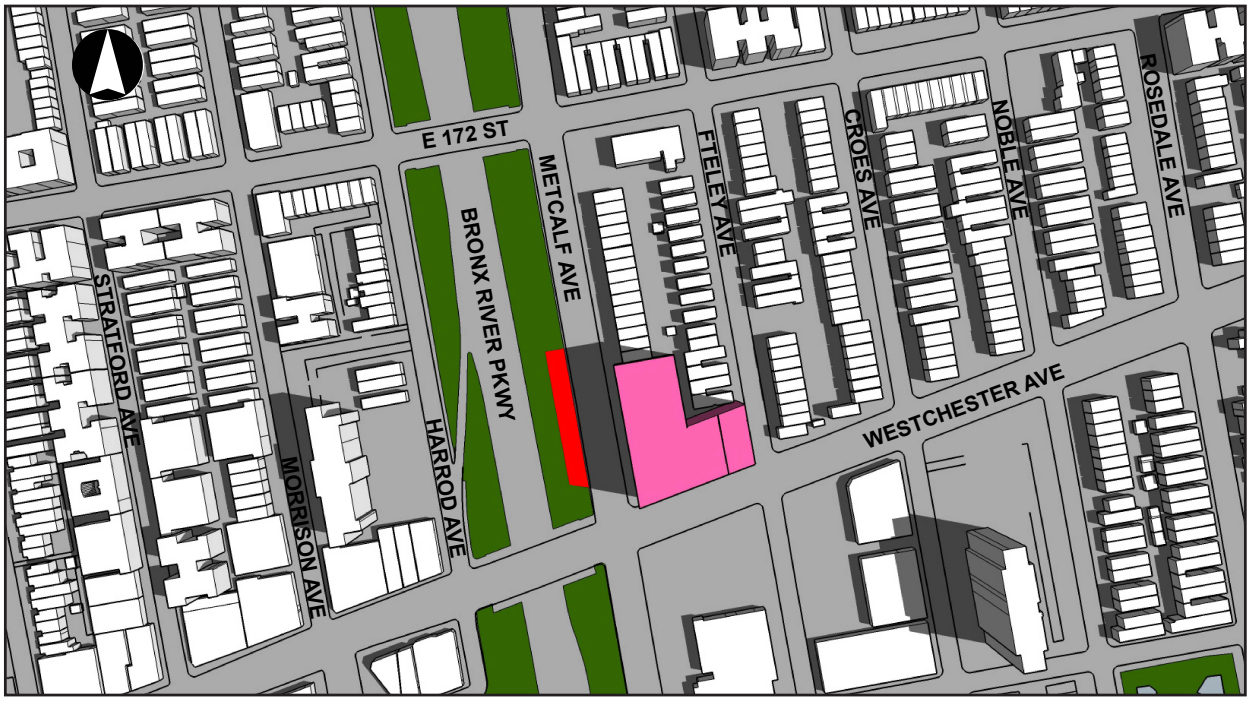
6:00 AM



7:30 AM

Projected Development Open Space Incremental Shadow

Figure F-5b
Bronx River Parkway Median
Incremental Shadows on June 21



9:00 AM

Projected Development
Open Space
Incremental Shadow

Figure F-6
Bronx River Parkway Median
Incremental Shadows on December 21



9:00 AM



10:00 AM

Projected Development Open Space Incremental Shadow

affect small areas of this open space which feature grass and trees. As shown in Figure F-3, during this time, the majority of the Bronx River Parkway would continue to receive direct sunlight.

May 6th/August 6th

On May 6th/August 6th the time period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. On the midpoint between the equinoxes and the solstices, incremental shadows from the RWCDS would reach the open space of the Bronx River Parkway.

The proposed development would cast incremental shadows on the Bronx River Parkway beginning at the onset of the analysis day (6:27 AM), for a duration of approximately 3 hours and 15 minutes. After 9:42 AM the open space would not experience any incremental shadow coverage as a result of the proposed development. As indicated in Figure F-4, incremental shadows would primarily be limited to portions of the Bronx River Parkway between East 172nd Street and Westchester Avenue and would only affect small areas of this open space, which features grass and trees. As shown in Figure F-4, during this time, the majority of the Bronx River Parkway would continue to receive direct sunlight.

June 21st

On June 21st the time period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. On the summer solstice, which is the day of the year with the longest period of daylight, the sun is most directly overhead and generally shadows are shortest and move across the widest angular range from west to east. On this date the proposed development would cast incremental shadows on the open spaces along the Bronx River Parkway.

The proposed development would cast incremental shadows on the Bronx River Parkway beginning at the onset of the analysis day (5:57 AM) and would continue until 9:40 AM for a duration of approximately 3 hours and 43 minutes. After 9:40 AM the open space would not experience any incremental shadow coverage as a result of the proposed development. As indicated in Figure F-5, incremental shadows would primarily be limited to portions of the Bronx River Parkway between East 172nd Street and Westchester Avenue and would only affect small areas of the open space, which features grass and trees. As shown in Figure F-5, during this time, the majority of the Bronx River Parkway would continue to receive direct sunlight.

December 21st

On the winter solstice, December 21st, the day of the year with the shortest period of daylight, the sun is low in the sky and shadows are at their longest but move rapidly. On this date the proposed development would cast incremental shadows on the open spaces found along the Bronx River Parkway.

The proposed development would cast incremental shadows on the Bronx River Parkway beginning at the onset of the analysis day (8:51 AM) and would continue until 10:21 AM for a duration of approximately 1 hour and 30 minutes. After 10:21 AM, the open space would not experience any incremental shadow coverage as a result of the projected developments. As indicated in Figure F-6, incremental shadows would primarily be limited to portions of the Bronx River Parkway between East 172nd Street and Westchester Avenue, as well as a small portion just north of East 172nd Street during the early morning period, and would only affect small areas of the open space which feature grass and trees.

As shown in Figure F-6, during this time, the majority of the Bronx River Parkway would continue to receive direct sunlight.

Assessment

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

For open spaces, the uses and features of the space indicate its sensitivity to shadows. Shadows occurring during the cold-weather months of interest generally do not affect the growing season of outdoor vegetation; however, their effects on other uses and activities should be assessed. Therefore, this sensitivity is assessed for both (1) warm-weather-dependent features like wading pools and sand boxes, or vegetation that could be affected by a loss of sunlight during the growing season; and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants and plots in community gardens. Generally, 4 to 6 hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Consequently, the assessment of an open space's sensitivity to increased shadow focuses on identifying the existing conditions of its facilities, plantings, and uses, and the sunlight requirements for each.

Bronx River Parkway

The RWCDS would cast incremental shadows on the open space of the Bronx River Parkway on each of the representative analysis days, ranging from 1 hour and 30 minutes on December 21st to a maximum of 3 hours and 43 minutes on June 21st. As shown in Figures F-3 to F-6, the incremental shadows would be limited in extent and duration and would move northward and eastward through the mornings, primarily falling on small portions of the green space between East 172nd Street and Westchester Avenue during the early morning period.

On all analysis days, project-generated incremental shadows would exit the open spaces along the Bronx River Parkway by 10:21 AM, allowing the entirety of these open spaces to receive adequate direct sunlight (at least the 4 to 6 hour minimum during the growing season specified in the *CEQR Technical Manual*) throughout the late morning and afternoon. As a result, vegetation would not be adversely affected.

As shown in Figure F-3 to F-5, with the exception of the December 21st analysis data, shadow coverage would primarily be limited to portions of the Bronx River Parkway between East 172nd Street and Westchester Avenue. As this open space is enclosed by fencing and inaccessible to the public, incremental shadows would not have an adverse effect on the utilization or enjoyment of this open space resource. This sunlight-sensitive resource is very large in size extending the length the Bronx River Parkway in the Bronx and the project's incremental shadows would affect a very small portion, relative to the whole and would not eliminate most or all of the sunlight on the Bronx River Parkway. Therefore, no significant adverse shadow impacts on the Bronx River Parkway are anticipated.

ATTACHMENT G

URBAN DESIGN & VISUAL RESOURCES

I. INTRODUCTION

This attachment considers the potential effects of the proposed actions and associated reasonable worst-case development scenario (RWCDS) on urban design and visual resources. As defined in the 2014 *City Environmental Quality Review* (CEQR) *Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements such as streets, buildings, visual resources, open space, natural resources, wind, and sunlight play an important role in the pedestrian experience. As presented in Attachment A, "Project Description," under the RWCDS, the proposed actions would facilitate the incremental development of 144 dwelling units (DUs) (including a net increase of 227 affordable DUs[1]) and 11,401 gross square feet (gsf) of local retail, in addition to a net reduction of 8,193 gsf of medical office floor area and 47 accessory parking spaces.

In accordance with *CEQR Technical Manual* guidelines, the assessment focuses on the components of the proposed actions that may have the potential to alter the arrangement, appearance, and functionality of the built environment. The effect of the proposed actions represents the incremental effect on conditions resulting from the net change in development between No-Action and With-Action conditions.

II. PRINCIPAL CONCLUSIONS

The proposed actions and associated RWCDS, while resulting in a notable change in the urban design of the study area, would not result in a significant adverse impact on the area's urban design and visual resources, as defined by the *CEQR Technical Manual*. Under the RWCDS, the proposed actions would facilitate the construction of two 145-foot tall predominantly residential buildings, with ground floor retail and/or community facility uses on two development sites. The proposed actions would enliven the streetscape and complement the existing residential and community-oriented uses in the surrounding area. While the RWCDS buildings would be taller than adjacent structures, the buildings would be consistent with the surrounding neighborhood context in terms of use and lot placement, forming a consistent streetwall with the buildings lining the north side of Westchester Avenue. In addition, the RWCDS would not notably alter views of study area visual resources.

[1] For CEQR analysis purposes, "affordable" refers to residential units set aside for households earning 80 percent or below of the Area Median Income (AMI). As described in Attachment A, "Project Description," all 220 housing units on projected development site 1 would be affordable to households earning at or below 80 percent of AMI, and approximately 20 percent of the overall residential floor area (approximately 7 DUs) of projected development site 2 are assumed to be set aside for households earning 80 percent (or below) of AMI, for a total of 227 affordable housing units.

III. METHODOLOGY

Pursuant to the *CEQR Technical Manual*, an assessment of urban design is appropriate when a project may have effects on one or more of the elements that contribute to the pedestrian experience of public space. The assessment focuses on the components of a proposed action or project that may have the potential to alter the arrangement, appearance, and functionality of the built environment.

As described in the *CEQR Technical Manual*, a preliminary urban design analysis is appropriate when there is potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning. A preliminary analysis provides a "snapshot" of the project, comparing existing and future conditions with and without the proposed actions. The following analysis examines each of the elements that play an important role in the pedestrian experience, including street hierarchy and streetscape (including the arrangement and orientation of streets); building scale, form and arrangement; and natural features, open space, and topography. Per criteria of Section 230 of the *CEQR Technical Manual*, a wind condition analysis is not warranted for the proposed actions. The study area is not located in a high wind location (such as along west and northwest-facing waterfronts) and the RWCDS would not be of a "substantial size" that would have the potential to alter wind conditions. The following preliminary analysis also considers the effects of the proposed actions and associated RWCDS on the area's visual resources, which are generally considered to be important public view corridors, vistas, or natural or built features. Visual resources can include waterfront views, public parks, landmark structures or districts, or natural features, such as rivers or geologic formations.

Based on *CEQR Technical Manual* guidelines, the study area for urban design is the area where the project may influence land use patterns and the built environment. The urban design study areas consists of both a primary study area (where urban design effects of the proposed actions are direct) and a secondary study area. For the purpose of this assessment, the primary study area encompasses the rezoning area. Consistent with the analysis of land use, zoning, and public policy, the secondary study area for the urban design assessment has been defined as an area within approximately 400 feet of the rezoning area (see Figure G-1).

The analysis is based on field visits, aerial views, photographs, and other graphic images of the study area and surrounding area. Zoning calculations, including floor area calculations, building heights and lot coverage information are also provided.

IV. PRELIMINARY ASSESSMENT

Existing Conditions

Urban Design

Primary Study Area (Rezoning Area)

The approximately 30,514-sf rezoning area, which is coterminous with the primary study area, comprises 25,790 sf of the applicant-owned Bronx Block 3780, Lot 1 (projected development site 1), as well as approximately 4,724 sf of Bronx Block 3780, Lot 51 (projected development site 2) in the Bronx

Urban Design Study Area



River neighborhood of Bronx CD 9.[2] The rezoning area has frontage on Westchester Avenue to the south, Metcalf Avenue to the west, and Fteley Avenue to the east.

Projected Development Site 1 (Block 3780, Lot 1)

The applicant-owned Block 3780, Lot 1 site is a corner lot with approximately 156 feet of frontage on Westchester Avenue to the south and 238 feet of frontage on Metcalf Avenue to the west. Both Westchester and Metcalf avenues are considered wide streets. As shown in photographs 2 to 4 of Figure G-2, projected development site 1 is currently occupied by a vacant one-story, brick, approximately 12,275-sf (0.38 FAR) building that formerly served as a health center, which closed in 2012. The building occupies the southeastern corner of the site and is built to the street line along Westchester Avenue and setback from Metcalf Avenue. There are no windows along the exiting building's Westchester Avenue, and only one industrial metal door is located at the easternmost edge of the building's Westchester Avenue frontage. Visual interest along the building's Westchester Avenue frontage is limited to graffiti tags, which is painted along the entirety of the bottom half of the building's Westchester Avenue frontage; a sign for the former health center that occupied the building is located on the western end of the building's Westchester Avenue frontage (refer to Figure G-2). Small metal utilitarian lighting fixtures also line the roofline of the building, projecting out from the building's façade. Similar façade features are found along the building's western (Metcalf Avenue frontage).

As shown in photograph 4 in Figure G-2, the remainder of projected development site 1 accommodates a former surface parking lot accessible from a curb cut on Metcalf Avenue, with a small portion of the lot occupied by an open lawn (at the intersection of Westchester and Metcalf avenues). The paved former parking lot is in disrepair, with cracks and vegetation present throughout; one lamp post is located along the parking lot's Metcalf Avenue frontage. A single tree is planted in the center of the open lawn area at the intersection of Westchester and Metcalf avenues.

Projected development site 1 is currently inaccessible and is enclosed by chain-link fencing at its perimeter. Streetscape features along the lot's Westchester Avenue and Metcalf Avenue frontages are limited to street trees at various stages of development and standard cobra-head streetlights and parking regulation/street signage. It should be noted that street trees are only present along the site's Metcalf Avenue frontage and the westernmost portion of the site's Westchester Avenue frontage.

Projected Development Site 2 (Block 3780, Lot 51)

Projected development site 2 (Lot 51), which abuts projected development site 1 to the east, is an approximately 4,865 sf rectangular-shaped, privately-owned corner lot with approximately 47 feet of frontage on Westchester Avenue to the south and approximately 100 feet of frontage on Fteley Avenue to the east. Projected development site 2 is currently developed with a single-story, approximately 3,525 sf (0.72 FAR) legally non-conforming commercial building at 1677-1679 Westchester Avenue (1235 Fteley Avenue) that accommodates a dry cleaner and wine and liquor store. The single-story commercial building is constructed to the lot lines along both street frontages. As shown in photograph 1 of Figure G-2, the existing building on projected development site 2 is characterized by a much more active, fenestrated façade associated with the retail establishments occupying the building. The building's Fteley Avenue frontage, while less fenestrated that the building's southern (Westchester Avenue)

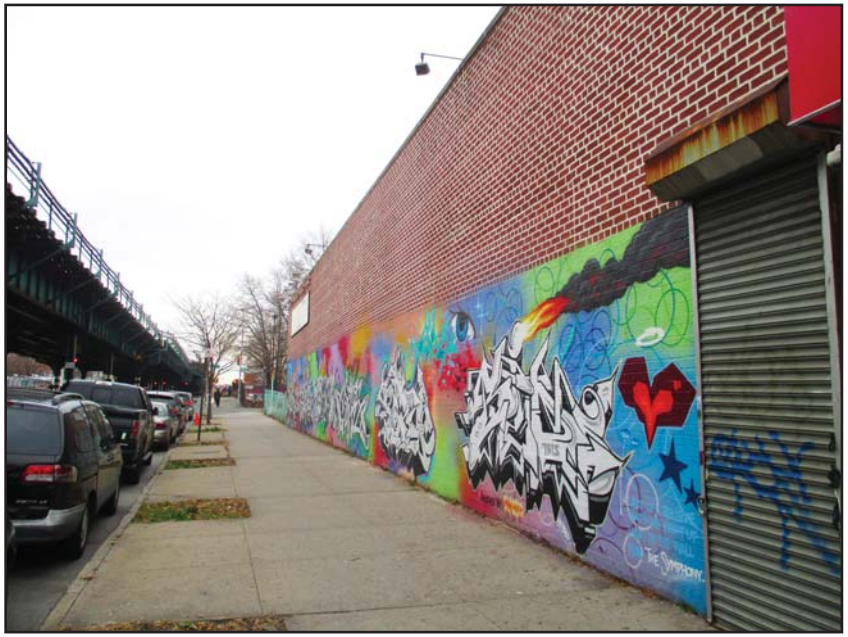
[2] As described in Attachment A, "Project Description," a tiny sliver of Lot 50 on Block 3780, at its southeastern corner, would also be affected by the proposed zoning map changes, as the depth of Lot 51 on Block 3780 along Fteley Avenue is 99.66 feet.



1. View looking northwest from corner of Fteley and Westchester Avenues, with projected development site 2 (Lot 51) in foreground.



2. View looking northeast from corner of Metcalf and Westchester Avenues to the applicant-owned projected development site 1 (Lot 1).



3. View west along Westchester Avenue of projected development site 1.



4. View looking south from interior of projected development site 1.

1675 Westchester Avenue EAS

Figure G-2
Primary Study Area Urban Design

frontage, is improved with a mural that occupies the entirety of the façade. Streetscape elements along the projected development site 2's street frontage are limited to standard street signage and lighting, a fire hydrant, and bollards. One street tree is planted at the northern border of the site's Fteley Avenue frontage.

Secondary Study Area

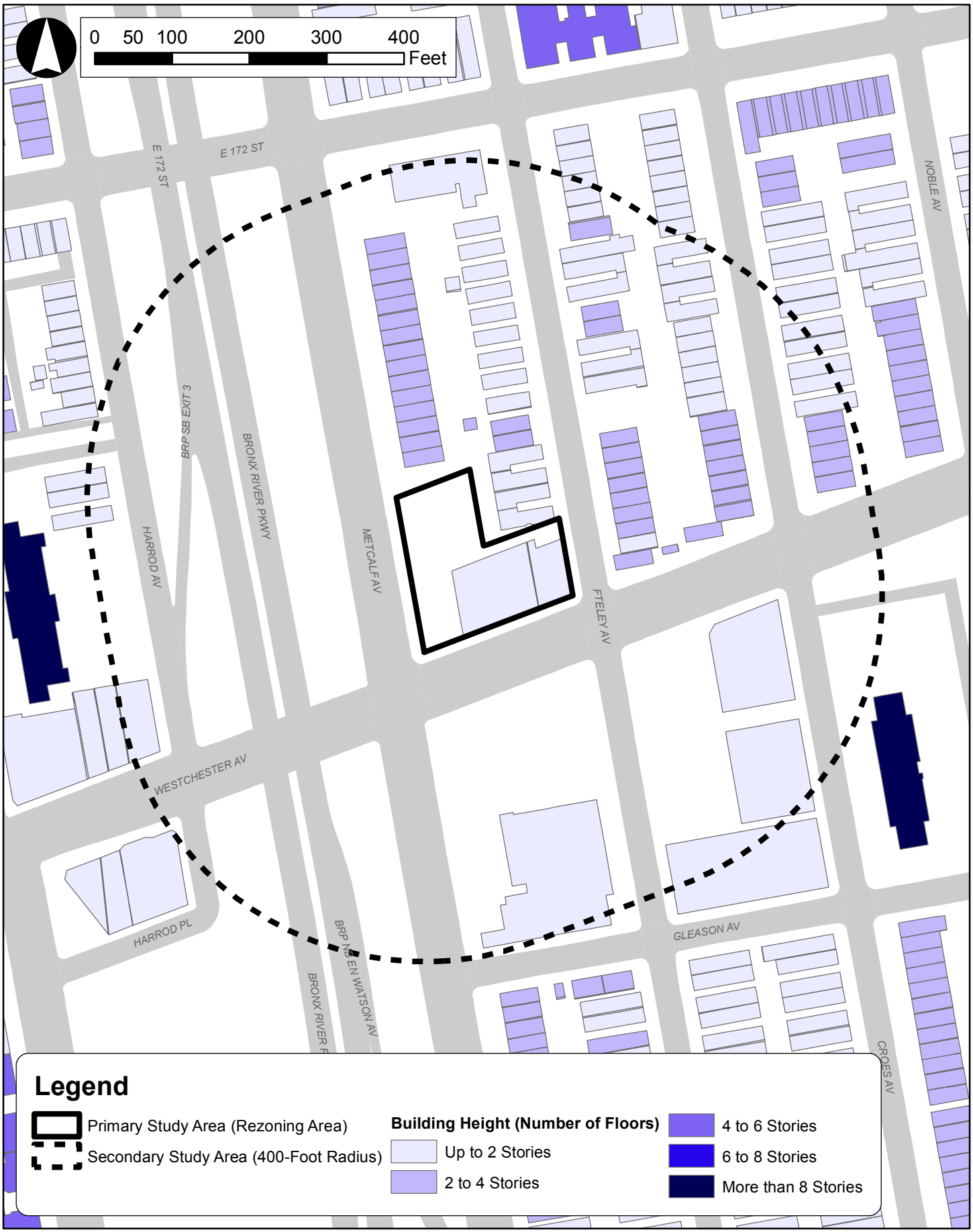
As shown in Figure G-3, the blocks comprising the secondary study area are oriented north-south and are generally trapezoidal in form due to the angle of Westchester Avenue, which disrupts the regular grid formed by the east-west roadways to the north and south. Westchester Avenue, which is the primary east-west roadway of the secondary study area, is a two-way roadway serving two travel lanes in each direction, as well as parking along the north and south curbs. The roadway is also characterized by the presence of the Metropolitan Transportation Authority's (MTA's) elevated IRT (No. 6) subway line, which dominates the streetscape; due to the presence of this elevated subway track and its associated structural elements, traffic in both the eastbound and westbound directions include one lane below the elevated track and one lane outside of the elevated track (refer to photograph 5 in Figure G-4). Street trees are found sporadically along Westchester Avenue; other streetscape elements are limited to standard cobra-head streetlights, fire hydrants, bollards, trash cans, and street signage. The sidewalks lining the north side of the roadway are generally narrower than those present to the south, although the southern sidewalk is frequently disrupted by large curb cuts associated with big box retailers present in the secondary study area, as discussed below.

The western portion of the secondary study area is characterized by the presence of the Bronx River Parkway, which, while parallel to the local north-south roadways of the secondary study area, is distinguished from the north-south roadways by the volume of traffic it carries, its elevation, and its geometric design (refer to photograph 6 in Figure G-4). Notably, the Bronx River Parkway is serves as a limited-access commuter route that is at a lower elevation and is flanked by open space that is largely inaccessible to the public and enclosed by chain-link fencing. As shown in photograph 6 in Figure G-4, the Bronx River Parkway is not accessible to pedestrians and does not feature any pedestrian amenities (e.g., sidewalks, crosswalks). Within the secondary study area, the Parkway is comprised of three northbound travel lanes and two southbound travel lanes, which are separated by a concrete raised median. The Parkway also features large signage and standard cobra-head streetlights.

Other north-south roadways in the secondary study area are (from east to west) Croes, Fteley, Metcalf, and Harrod avenues. Croes Avenue is a one-way northbound roadway with curbside parking on both sides. The roadway's streetscape is characterized by the presence of mature trees lining its smaller residential-scaled sidewalks. Fteley Avenue serves one-way southbound traffic, with parking on both sides. As shown in photograph 7 of Figure G-4, the sidewalks lining both Croes and Fteley avenues feature multiple curb cuts serving the residential uses present along these corridors. Metcalf Avenue is substantially wider than both Croes and Fteley Avenues, and serves both northbound and southbound traffic, with parking on both sides. The roadway is much more auto-oriented, with no sidewalks located on the west side of Metcalf Avenue, south of Westchester Avenue (refer to photograph 6 in Figure G-4). Harrod Avenue is a one-way southbound roadway; within the secondary study area, the roadway is characterized by the presence of an exit ramp from the Bronx River Parkway, which merges with Harrod Avenue just north of Westchester Avenue.

Within the secondary study area, the building typologies present to the north of Westchester Avenue differ substantially from the building typologies present to the south of Westchester Avenue. As

Study Area Building Heights





5. View west on Westchester Avenue from Metcalf Avenue, with rezoning area buildings visible on left



6. View north on Metcalf Avenue from south of Westchseter Avenue, with Bronx RIver Parkway visible on left



7. View north on Fteley Avenue from north of Westchester Avenue.



8. View Southwest on Westchester Avenue from Fteley Avenue

discussed in Attachment C, "Land Use, Zoning, and Public Policy," residential uses are concentrated to the north of Westchester Avenue. As presented in Figure G-3, these residential uses generally occupy small lots and, while set back from the sidewalk, the buildings form a consistent streetwall. The buildings' front yards/drives are generally lined with decorative fences and/or walls, which abut the sidewalk (refer to photograph 7 of Figure G-4). The residential buildings found to the north of Westchester Avenue are generally two to three stories in height.

In contrast, the portion of the secondary study area located along the south side of Westchester Avenue is characterized by larger lots occupied by one-story big box commercial retailers, surrounded by paved surface parking lots (refer to photograph 8 of Figure G-4). These retailers feature large signage and well-maintained parking lots improved with plantings and lighting. Further to the west, there is a 20-story multifamily residential building that is setback from Westchester Avenue on an approximately two-acre site, which is visible in photograph 5 of Figure G-4. The approximately 198,000 sf residential building occupies the southeast corner of the site and extends along the east side of Croes Avenue.

Visual Resources

There are no visual resources located on, or visible from, the primary or secondary study areas.

The Future without the Proposed Actions (No-Action Condition)

Primary Study Area (Rezoning Area)

In the 2020 future without the proposed actions, it is anticipated that both projected development sites 1 and 2 would be redeveloped in accordance with the existing R6 zoning district. Specifically, it is anticipated that the applicant-owned projected development site 1 would be developed with an approximately 110,316-gsf mixed-use residential and community facility building with a built FAR of 3.5. The No-Action building would be constructed pursuant to Quality Housing Program and would rise to a maximum building height of 75 feet (seven stories) and would be built to the lot line along the site's Westchester Avenue and Metcalf Avenue frontages (refer to Figure A-5 in Attachment A, "Project Description").

The adjacent projected development site 2 is also expected to be developed in accordance with the existing R6 zoning in the 2020 No-Action condition. The No-Action Lot 51 development would comprise and approximately 15,930 gsf residential building (2.98 FAR) pursuant to Quality Housing regulation, with approximately 16 DUs. Projected development site 2's No-Action building is assumed to have a maximum building height of 70 feet (seven stories) and would be built to the lot line along the site's Westchester Avenue and Fteley Avenue frontages.

Secondary Study Area

As described in Attachment C, "Land Use, Zoning, and Public Policy," there are no known development projects in the secondary study area that are expected to be completed and occupied by the 2020 analysis year.

The Future with the Proposed Actions (With-Action Condition)

In the 2020 With-Action condition, the proposed actions, which include zoning map and text amendments, in addition to public financing approval, would be approved. As presented in Attachment A, "Project Description," under the RWCDS, the proposed actions would facilitate the incremental development of 144 DUs (including a net increase of 227 affordable DUs) and 11,401 gsf of local retail, in addition to a net reduction of 8,193 gsf of medical office floor area and 47 accessory parking spaces. Comparisons of the No-Action and With-Action condition views of the primary study area from the secondary study area are provided in Figures G-5 and G-6.

Urban Design

Primary Study Area (Rezoning Area)

The proposed actions would map an R8A zoning district, which is a contextual zoning district governed by quality housing regulations, which encourages development consistent with the character of established neighborhoods, resulting in high lot coverage buildings set at or near the street line with height limits. In the 2020 future with the proposed actions, as a RWCDS, the applicant-owned projected development site 1 would be developed with a 145-foot-tall (14-story) 6.75 FAR mixed-use building containing affordable housing, local retail, and community facility uses. Projected development site 1's RWCDS development would include 220 affordable DUs, 7,570 sf of local retail, and 6,846 sf of community facility floor area. As a RWCDS, the adjacent projected development site 2 is assumed to be developed with a 145-foot-tall (14-story), 7.2 FAR[3], mixed-use building containing residential and local retail uses (refer to Figure A-5 in Attachment A, "Project Description").

The proposed actions would improve projected development site 1, compared to No-Action conditions, by activating the streetscape with new local retail use and community facility uses that would complement the residential and community-oriented uses of the neighborhood. In accordance with zoning requirements, as part of the proposed development, street trees would be planted along the rezoning area's street frontages, further improving the adjacent streetscape. Unlike the No-Action development anticipated on the applicant-owned projected development site 1, the With-Action development on the site would not include any accessory parking; as such, the With-Action streetscape would have a more pedestrian-oriented streetscape with no frontage devoted to auto-oriented garage uses.

Local retail is expected to occupy the ground floor of the proposed buildings on projected development sites 1 and 2 along Westchester Avenue, and community facility space is expected to occupy the ground floor of the proposed building on projected development site 1. The proposed local retail and community facility space would increase foot traffic in the immediate vicinity of the project area further activating the streetscape and improving the pedestrian experience.

As shown in Figures G-5 and G-6, the RWCDS buildings on the two development sites would rise to a maximum height of 145 feet tall and would be built to the streetline on all street frontages. The upper floors of the building would be visible from Westchester, Metcalf and Fteley Avenues. As described

[3] Pursuant to ZR Section 77-211, the bulk regulations of the proposed R8A/C2-4 zoning district may apply to entire property (Lot 51) in the future with the proposed actions, as more than 50 percent of the lot area would be mapped within the proposed R8A/C2-4 zoning district and the greatest distance from the proposed zoning district boundary line to any lot line of the property in the R6 zoning district would be less than 25 feet.



No-Action Condition

Looking west towards the projected development site 2 along Westchester Avenue.



With-Action Condition

Looking west towards the projected development site 2 along Westchester Avenue.



No-Action Condition

Looking south towards projected development site 1 along Metcalf Avenue.



With-Action Condition

Looking south towards projected development site 1 along Metcalf Avenue.

previously, the surrounding area supports a mix of building types, scales, and heights, including low-rise two-to three-story residential building, single-story retail buildings, and high-rise 20-story multifamily housing. The propose buildings would be within the existing range of building heights in the surrounding area. While the RWCDS buildings would be taller and have greater density than the seven-story buildings anticipated in the No-Action condition, the additional height would not significantly impact the pedestrian experience along adjacent roadways. There would be no change to the street grid or block form. The proposed buildings would not encroach on public streets or sidewalks, and no publicly accessible views to significant visual resources in the study area would be affected.

The project area is located at the intersection of two wide streets, including Metcalf Avenue, which adjoins the Bronx River parkway. The RWCDS buildings would form a consistent streetwall along the entirety of the rezoning area's Westchester Avenue frontage, complementing the existing building context. The maximum heights of the RWCDS building would be appropriate for the rezoning area's location along Westchester Avenue, a wide avenue that is dominated by the presence of elevated rail infrastructure.

Overall, the RWCDS buildings would enhance the pedestrian environment with new pedestrian-oriented buildings and would enliven the primary study area with new residents and visitors. For these reasons, the proposed actions would not result in significant adverse impacts on the urban design of the primary study area.

Secondary Study Area

The proposed actions would not result in any changes in the urban design in the secondary study area, as development facilitated by the proposed actions would be limited to the rezoning area. While the RWCDS buildings would represent a departure from the urban design character of the secondary study area in terms of building height, they would be consistent with the secondary study area buildings in terms of its lot placement and street wall (refer to Figures G-5 and G-6). In addition, the primary study area buildings' land uses, including active ground floor uses, would fill a void that currently exists between the residential uses found to the north of Westchester Avenue and the commercial uses found south of Westchester Avenue.

The proposed actions would contribute to the urban design character of the secondary study area and would not adversely affect any urban design features of the secondary study area and would not result in significant adverse impacts to the experience of the pedestrian.

Visual Resources

As described above, there are no visual resources within, or visible from, the primary or secondary study areas. As such, the proposed actions would not result in significant adverse impacts on visual resources.

ATTACHMENT H

HAZARDOUS MATERIALS

I. INTRODUCTION

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

The proposed actions would redevelop the applicant–owned projected development site 1 (Bronx Block 3780, Lot 1) with residential, community facility, and local retail uses on a site that has had an underground storage tank (UST). In addition, the projected development site 2 (Block 3780, Lot 51), which is not owned or controlled by the applicant, is expected to be redeveloped as a result of the proposed zoning changes.

Two Phase I Environmental Site Assessments (Phase I ESAs) and a Phase II ESA have been prepared for the applicant's development site (projected development site 1; Block 3780, Lot 1) in the past three years. The additional projected development site 2 (Block 3780, Lot 51), which is not owned or controlled by the applicant and is expected to be redeveloped as a result of the proposed rezoning, was also reviewed for possible hazardous materials contamination. These assessments were undertaken to determine whether any additional investigations are necessary and whether an (E) designation should be placed on either the applicant's site (Block 3780, Lot 1) and/or projected development site 2 (Block 3780, Lot 51) under the proposed actions to avoid the potential for impacts pertaining to hazardous materials.

II. PRINCIPAL CONCLUSIONS

The hazardous materials assessment identified that both projected development sites 1 and 2 (Block 3780, Lots 1 and 51) have some associated concerns regarding environmental conditions based on prior on-site and/or surrounding area land uses. As a result, the proposed zoning actions include an (E) designation for projected development site 1 (Block 3780, Lot 1) and 2 (Block 3780, Lot 51). Therefore, the proposed actions are not expected to result in significant adverse impacts for hazardous materials.

With the requirements of the (E) designation on projected development sites 1 and 2 (Block 3780, Lots 1 and 51), it is expected that there would be no impact from the potential presence of contaminated materials. The implementation of the preventative and remedial measures outlined in this attachment would reduce or avoid the potential that significant adverse hazardous materials impacts would result from potential construction in the rezoning area resulting from the proposed actions. Further

hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation (OER). Following such construction, there would be no potential for significant adverse impacts.

III. METHODOLOGY

The methodology for the hazardous materials assessments was determined by the proximity of the proposed rezoning area to the elevated MTA subway tracks for the IRT No. 6 train extending above Westchester Avenue, and the historic presence of an underground storage tank (UST) on projected development site 1. As per Chapter 24 of Title 15 of the Rules of the City of New York, reviews of the regulatory database and/or Sanborn maps and city directories were used to determine past uses of the property and enable an assessment of whether the lot should receive an (E) designation.

Chapter 24 of Title 15 of the Rules of the City of New York specifies the process for determining if an (E) designation should be placed on a specific site. Section 24-04 describes the preliminary screening process, which includes reviewing historical documentation for past or current uses that may have affected or be affecting a development site or an adjacent site. Appendix A of the Hazardous Materials Appendix 5 (Chapter 24 of Title 15 of the Rules of the City of New York) provides a list of types of facilities, activities or conditions which would lead to a site receiving an (E) designation.

A Phase I ESA was conducted for the applicant-owned projected development site 1 (Block 3780, Lot 1) in 2014 using the following parameters:

- *Thorough Site Inspection*

- *Historical Land Use* – The land use history was evaluated using available historical Sanborn fire insurance maps. Sanborn Maps from the years 1919 through 2007 and aerial photographs from 1924 to 2011 were obtained and reviewed for projected development site 1, as well as the adjacent and surrounding areas.

- *Regulatory Agency List Review* – A review of the federal, state, and local hazardous materials databases, maintained by the United States Environmental Protection Agency (US EPA), New York State Department of Environmental Conservation (NYSDEC), City of New York Fire Department, City of New York Health Department, City of New York Finance Department, and New York City Department of Buildings, was performed. This review identified the sites where storage, handling, emission, and /or spill cleanup of hazardous or toxic materials have been performed to determine whether they may have impacted projected development site 1.

Subsequent to the completion of the 2014 Phase I ESA, a Phase II ESA was prepared for projected development site 1 in October 2014, and Tank Closure Report in December 2014. An additional Phase I ESA was completed on February 22, 2017 to follow-up on the remediation work that was completed at the development site in 2014.

IV. EXISTING CONDITIONS

An assessment was conducted to determine whether the proposed actions could lead to increased exposure of people or the environment to hazardous materials and whether the increased exposure would result in significant adverse public health impacts or environmental damage.

Projected Development Site 1

The following provides a summary of the environmental studies and site investigations prepared for the applicant-owned projected development site 1 (Block 3780, Lot 1). A Phase I ESA was prepared for site by Environmental Investigations, LLC on July 14, 2014 for the purchase of the property. Subsequent to the completion of the 2014 Phase I ESA, a Phase II ESA was prepared by Cider Environmental for projected development site 1 in October 2014, and a Tank Closure Report, also prepared by Cider Environmental, was prepared for the site in December 2014. An additional Phase I ESA was completed on February 22, 2017 by Cider Environmental to follow-up on the remediation work that was completed at the projected development site in 2014.

2014 Phase I ESA

Based on the information gathered as a result of the 2014 Phase I ESA process, Environmental Investigations, LLC identified one Recognized Environmental Condition (REC)[1] on projected development site 1. The 2014 Phase I ESA for projected development site 1 identified that fill lines and vent lines for an Underground Storage Tank (UST) are located on the north side of the site, which is a REC. Environmental Investigations, LLC did not locate the UST, as part of the 2014 Phase I ESA process, but recommended that the soil adjacent to the UST fill lines and vent lines be tested to confirm whether the UST has leaked. The 2014 Phase I ESA determined that although there are various properties within a one-mile radius of the site with RECs relative to their operations, none of these sites are within 1/8-mile of projected development site 1, or are considered to have an adverse environmental impact on projected development 1 due to the nature of the condition, distance from, and/or location downgradient of projected development site 1.

2014 Phase II ESA

The October 2014 Phase II ESA prepared by Cider Environmental investigated the RECs as identified in the 2014 Phase ESA, which determined the potential presence of a historic UST to the north of the existing building as a REC. The Phase II identified a single, inactive, fuel oil, 1,000-gallon UST by remote sensing survey. Three soil borings were advanced in the vicinity of the fuel oil UST from grade to 15 below ground surface (BGS), and one groundwater sample was also collected in the vicinity of the fuel oil UST at approximately 12 feet BGS. The Phase II ESA indicated that the laboratory analysis performed on the soil and groundwater samples detected several fuel oil related VOCs and SVOCs at levels exceeding applicable guidance values. The Phase II ESA concluded that the historic operation of the 1,000-gallon fuel oil UST has impacted the environmental quality of projected development site 1; specifically soil and groundwater in the immediate vicinity of the UST was found to be contaminated with fuel oil related chemicals at levels exceeding the applicable guidance values.

[1] Recognized Environmental Conditions (RECs) are defined in the ASTM E-1527-13 Standard as "*the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment".*

Phase II ESA recommended that NYSDEC be contacted regarding the spill, and that a NYSDEC Spill case be signed to projected development site 1 and any future investigative/remedial activities be performed under the auspices of NYSDEC. Phase II ESA also recommended that remedial activities be performed to mitigate subsurface soil and groundwater contamination in the vicinity of the UST. At a minimum, the Phase II ESA recommended that the inactive UST be removed for off-site disposal, any impacted soil in the Vadose zone (i.e., from grade to 12 feet BGS) be excavated, field screened and transported for off-site disposal, and a groundwater monitoring network be established to monitor the fate-and-transport of groundwater contamination.

2014 Tank Closure Report

Cider Environmental prepared a Tank Closure Report in December 2014 concerning the petroleum UST closure activities performed at projected development site 1, which had been implemented in accordance with NYSDEC requirements.

The Tank Closure Report noted that that NYSDEC was contacted to report the Spill at projected development site 1, and NYCDEC assigned Spill Case number 1407300 to the site (Block 3780, Lot 1). Upon reviewing the laboratory analysis results from the Phase II, NYSDEC closed the Spill Case on October 15, 2014, and according to the Tank Closure Report, no further action was required by NYSDEC.

The Tank Closure Report further documents that on November 18, 2014 the 1,000-gallon fuel oil UST was removed from the site and petroleum impacted soil was encountered and over excavation was performed to the extent until there was no visual and/or olfactory indication of impact and PID reading was less than 10 part per million (ppm). According to the Tank Closure Report, the over-excavation was approximately 19 feet by 14 feet by eight feet in depth, and no groundwater was encountered. NYSDEC was notified regarding tank removal and five endpoint/confirmatory soil samples were collected from the excavation via USEPA Test Method 8260.8270 CP-51 for target VOCs and SVOCs.

According to the Tank Closure Report, a total of 55,59 tons of petroleum-impacted soil was excavated and disposed of office-site, and a total of 756-gallon of waste fuel was properly removed from the fuel oil UST and property transported/disposed of off-site. The Tank Closure Report concluded that the over excavation had been sufficient in removing the bulk of the source contamination, and that additional over-excavation was neither feasible nor cost-effective due to the presence of utility lines and the proximity to the existing building.

Based on the UST removal activities, the Tank Closure Report recommended no further remedial actions at projected development site 1.

2017 Phase I ESA

An additional Phase I ESA was completed on February 22, 2017 by Cider Environmental subsequent to the completion of the Phase II ESA and Tank Closure Report for projected development site 1. Based on the information gathered, the 2017 Phase I ESA, did not identify any RECs associated with projected development site 1. The 2017 Phase I ESA identified the 2014 NYSDEC Spill (case (No. 1407300) as a Historic Recognized Environmental Concern (HREC). However, as the UST and the impacted soil was removed and the Spill case was closed on October 15, 2014, the 2017 Phase I ESA indicated that no additional investigation or remediation is recommended regarding the HREC. The 2017 Phase I ESA further confirmed that no Controlled Recognized Environmental Conditions (CRECs), no De minimis

conditions, and no Vapor Encroachment Conditions (VECs) were identified at projected development site 1, and that no Phase II ESA activities are recommended.

The 2017 Phase I revealed that historical on-site and surrounding area land uses consisted of a variety of residential and commercial uses, including residential buildings, commercial buildings, vacant lots, a liquor store, supermarket, a medical center/office, dry cleaning, grocery stores, etc. An active dry cleaner was identified approximately 50 feet from the site. The New York State Department of Conservation database search conducted for the 2017 Phase I identified 11 NY Spills within 1/8-mile, and eight underground storage tank sites, and 37 aboveground storage tank sites within ¼-mile, and 38 leaking storage tanks within ½-mile of the site. In addition, there is one manufactured gas plant site within approximately one mile from the site.

The 2017 Phase I also indicated that should any future excavation activities occur at projected development site 1, the presence of residual impacted material cannot be ruled out with regard to the previous NYSDEC spill and subsequent closure. The 2017 Phase I ESA further noted that any impacted soil would need to be properly excavated and disposed in accordance with applicable rules and regulations. As such, an (E) designation would be required for the site (Block 3780, Lot 1) to ensure that development of the site does not result in significant adverse impacts related to hazardous materials.

Projected Development Site 2

For projected development site 2 (Block 3780, Lot 51), which is located adjacent to and east of the applicant-owned projected development site 1, no Phase I or Phase II reports have been completed. This site is currently occupied by a dry cleaning operation at 1881 Westchester Avenue, which has a Dry Cleaning Machine Certificate of Operation from the New York City Department of Environmental Protection (DEP) that is valid until March 5, 2018. As such, an (E) designation would be required for the site (Block 3780, Lot 51) to ensure that development of the site does not result in significant adverse impacts related to hazardous materials.

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

In the future without the proposed actions, the projected development sites would not be rezoned and no (E) designations would be mapped. Both development sites are anticipated to redeveloped in accordance with the existing R6 zoning regulations in absence of the proposed actions, and all existing buildings demolished. The applicant-owned projected development site 1 would be developed with a mixed-use residential and community facility building, and projected development site 2 with a residential building.

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

In the future with the proposed actions, the proposed zoning change would replace the existing R6 zoning district with a R8A zoning district and a C2-4 commercial overlay mapped within 100 feet of Westchester Avenue between Metcalf and Fteley Avenues. No new activities or processes using hazardous materials would be introduced to either development site due to the proposed actions. All

existing structures on both development sites would be demolished, and the two development sites would be excavated and some soil disturbance would occur to facilitate the construction of a mixed-use residential, commercial and/or community facility development on the two sites.

The assessment above established that projected development sites 1 and 2 have some potential of hazardous material contamination. Based on the identified potential hazardous material concerns within projected development sites 1 and 2, the proposed actions will include mapping a hazardous materials (E) designation on Lots 1 and 51 of Block 3780 (E-425). The (E) designation that would be assigned to these two lots would require that further investigation be performed to determine the presence and nature of contaminants of concern and the proper remedial and/or health and safety measures that would be employed during construction.

In addition, by assigning an (E) designation on projected development sites 1 and 2 (where there is suspect environmental concern), the potential for an adverse impact to human health and the environment resulting from the proposed actions would be reduced or avoided. The (E) designation provides the impetus to identify and address environmental conditions so that significant adverse impacts during site development would be reduced, with New York City Mayor's Office of Environmental Remediation (OER) providing the regulatory oversight of the environmental investigation and remediation during the process. Building permits are not issued by the New York City Department of Buildings (DOB) without prior OER approval of the investigation and/or remediation pursuant to the provisions of Section 11-15 of the New York City Zoning Resolution (Environmental Requirements).

The text of the hazardous materials (E) designations for projected development sites 1 and 2 (Block 3780, Lots 1 and 51) would be as follows:

Task 1:

Prior to construction, the applicant must submit to the New York City Mayor's Office of Environmental Remediation (OER), for review and approval, a Phase I ESA of the site along with a soil and groundwater testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.

No sampling should begin until written approval of a protocol is received by 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:

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 for the test results, a proposed remedial action plan (RAP) must be submitted by OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

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

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

With these measures in place, the proposed actions would not result in any significant adverse impacts related to hazardous materials. In addition, suspected asbestos containing material (ACM) and lead based paint (LBP) may be present on the existing building on projected development site 1. These materials should be removed and/or managed in accordance with all federal, state, and local regulations.

ATTACHMENT I

AIR QUALITY

I. INTRODUCTION

The potential for air quality impacts from the proposed project are examined in this attachment, which was conducted pursuant to 2014 *CEQR Technical Manual* guidelines. Per *CEQR Technical Manual* guidelines, an air quality analysis is conducted to assess the effect of a proposed action on ambient air quality (i.e., the quality of the surrounding air), or effects on a proposed project because of ambient air quality. Air quality can be affected by mobile sources (pollutants produced by motor vehicles), and by stationary sources (pollutants produced by fixed facilities). According to the *CEQR Technical Manual*, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts.

Based on the preliminary screening provided in Attachment B, "Supplemental Screening," this attachment evaluates the potential for significant adverse air quality impacts that may result from stationary sources generated by the proposed actions and associated RWCDS and the potential adverse impacts from the Bronx River Parkway.

II. EXISTING CONDITIONS

Site and Surrounding Neighborhood

The rezoning area occupies the southern portion of Block 3780 in the Bronx River neighborhood of Bronx Community District 9, comprising approximately 25,790 square feet (sf) of Lot 1 and approximately 4,724 sf of Lot 51, for a total of approximately 30,514 sf (see Figure I-1). Block 3780 is bounded by East 172nd Street on the north, Westchester Avenue on the south, Fteley Avenue on the east, and Metcalf Avenue on the west. Lot 1 (projected development site 1) is currently occupied by a vacant, single-story, approximately 12,275 gross square foot (gsf) building that formerly had accommodated a health center and its associated at-grade accessory parking lot, and Lot 51 (projected development site 2) is currently occupied by with a single-story, approximately 3,525 gsf legally non-conforming commercial building that accommodates a dry cleaner and liquor store.

The area surrounding the rezoning area is predominantly residential, including both one- and two-family and multi-family residential buildings. Commercial uses are generally concentrated along Westchester Avenue. Community facility uses, including several religious institutions, a post office, a library, and a day care center are also scattered throughout the surrounding area contains a mix of commercial, residential, institutional, and industrial uses (refer to Figure I-2). The elevated tracks of the number 6 subway line are located immediately south of the rezoning area, running above Westchester Avenue. The Bronx River Parkway is a multilane, limited access parkway for passenger cars that is located approximately 170 feet west of the rezoning area extending parallel along Metcalf Avenue. As compared to the surrounding area, the Bronx River Expressway is depressed.

Figure I-1
Project Location

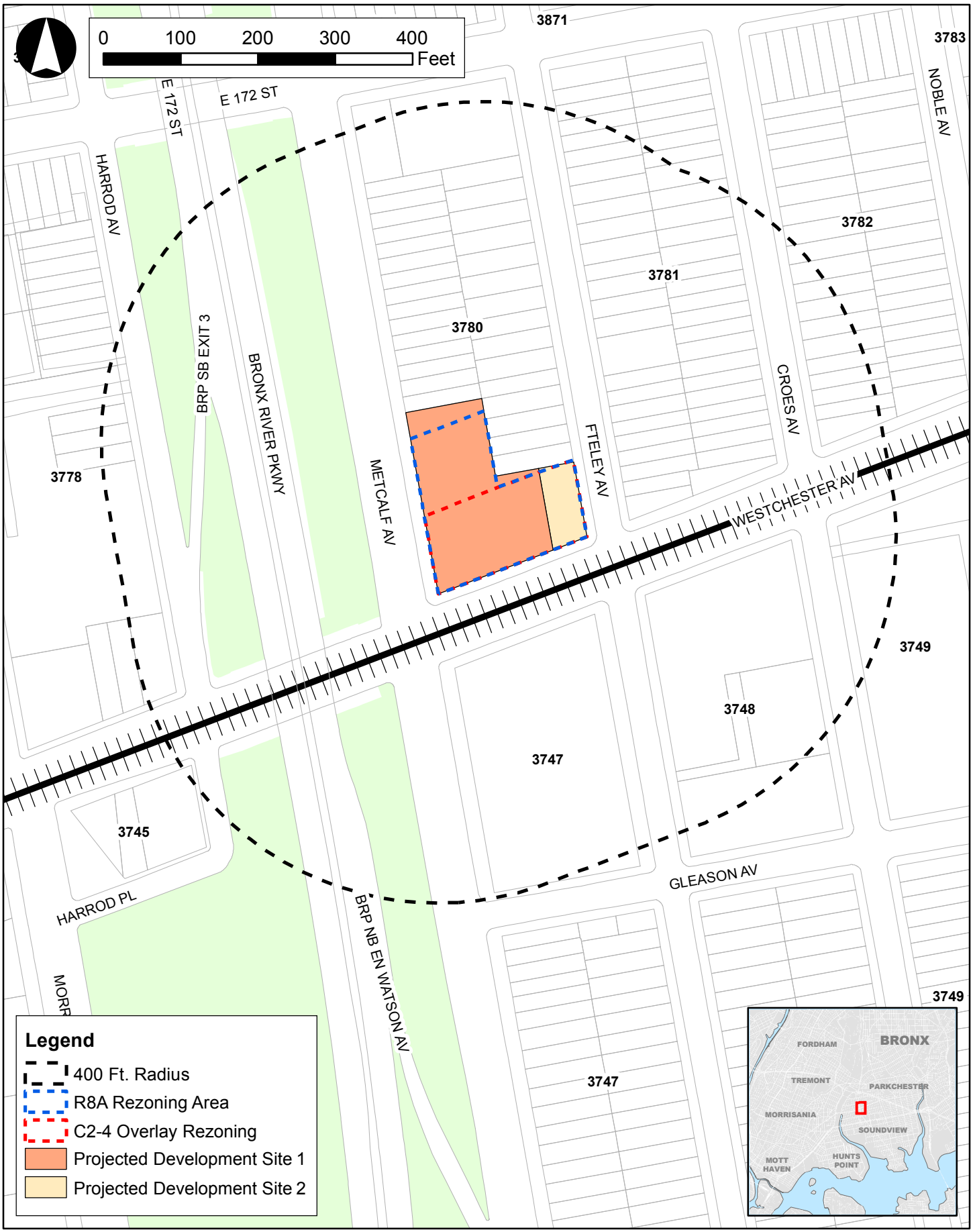


Figure I-2
Study Area Land Uses



Existing Air Quality

As stated previously, Bronx County is part of a CO maintenance area and is non-attainment (moderate) for the eight-hour ozone standard. It is in compliance with all other NAAQS.

IV. METHODOLOGY

Mobile Source Screen

Carbon Monoxide (CO)

Localized increases in CO levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area because of the proposed actions. The mobile source analysis outlined in the *CEQR Technical Manual* considers actions that add new vehicles to roadways or change traffic patterns, either of which may have significant adverse air quality impacts. For this area of the City, the threshold volume for modeling CO concentrations using MOVES2010b and CAL3QHC or CAL3QHCR is an increment of 170 vehicles through an intersection during a peak traffic hour.

Based on a trip generation analysis for the proposed actions, no intersection would experience an increase of 50 or more vehicles in any peak period. Therefore, the project-generated increment would be below the 170-vehicle threshold, and no CO modeling is required.

Particulate Matter ($PM_{2.5}$)

A $PM_{2.5}$ screening analysis was conducted using the spreadsheet referenced on page 17-12 of the *CEQR Technical Manual*. The algorithm uses traffic volume according to vehicular class and determines the number of heavy duty diesel vehicles (HDDVs) that would generate equivalent emissions. The equivalent number of HDDVs varies by type of road. Based on guidance from DEP, the minor leg of an intersection determines its classification as a local road, collector, arterial, or expressway. A more detailed analysis is required if a proposed action would meet or exceed the thresholds shown below:

- 12 HDDV for paved roads with average daily traffic fewer than 5,000 vehicles;
- 19 HDDV for collector-type roads;
- 23 HDDV for principal and minor arterial roads; and
- 23 HDDV for expressways and limited-access roads.

Table I-1:
NYC DOT Functional Classifications near Rezoning Area

Roadway	NYCDOT Classification
Westchester Avenue	Principal Arterial -- Other
Fteley Avenue	Local
Metcalf Avenue	Minor Collector

Table I-1 shows the New York State (NYSDOT) functional classifications for the roadways near the rezoning area. All are urban roads. For urban areas, the classifications are: principal arterial (interstate), principal arterial (other freeway/expressway), principal arterial (other), minor arterial, major collector, minor collector, and local. A trip generation analysis for the projected development sites showed that

the highest increment in the 2020 With-Action condition would be 46 vehicles during the Saturday midday period. This increment is equivalent to 11 diesel trucks on a local road, 5 diesel trucks on a collector road, and 1 diesel truck on an arterial road. These values do not exceed the threshold volumes of 12 HDDV for a local road, 19 HDDV for collector roads, and 23 HDDV for arterials. Therefore, no further analysis of fine particulates from traffic volumes is required.

Parking Facilities

The area to be rezoned is in a CEQR Traffic Zone 2, which covers all areas within 0.25 mile of subway stations. In Zone 2, no analysis of parking facilities is required unless 85 or more off-street spaces are proposed. As described in Attachment B, "Supplemental Screening," there are no off-street parking spaces proposed within the rezoning area and therefore, no parking facilities analysis is required.

Bronx River Parkway

The Bronx River Parkway (which is open to autos only) is located less than 200 feet from projected development site 1, and is depressed relative to the surrounding terrain. Therefore, pursuant to *CEQR Technical Manual* guidelines, a detailed mobile source analysis is warranted to evaluate the potential impact from mobile emissions generated by vehicles on the Bronx River Parkway to receptors on RWCDS on projected development site 1.

$PM_{2.5}$ Emissions Modeling Methodology

$PM_{2.5}$ emission factors utilized in the dispersion modeling were computed using EPA's Motor Vehicle Emission Simulator (MOVES). This emissions model can calculate engine emission factors for various vehicle types, based on the fuel type (gasoline, diesel, or natural gas), meteorological conditions, vehicle speeds, vehicle age, roadway types, number of starts per day, engine soak time, and various other factors that influence emissions, such as inspection maintenance programs.

The analysis year for the emissions modeling is 2020. County- specific hourly temperature, relative humidity and vehicle age distribution were based on the regional MOVES databases provided by the New York State Department of Environmental Conservation (NYSDEC).

The Bronx River Parkway was modeled using the "urban restricted access" roadway type, which represents limited access roadways with interchanges. To account for seasonal variations, emissions were calculated for both the AM and PM peak four, for four representative months (January, April, July and October). Table I-2 summarizes the resulting emission rates. Since the January AM emission rates were the highest, these rates were conservatively used for all analysis months and hours.

For the 24-hr $PM_{2.5}$ analysis, during the daytime hours (8AM to 7PM), an average speed of 25 mph on the Bronx River Parkway was assumed. The 25 mph accounts for non-reoccurring congestion (such as accidents) that could affect 24-hour average concentrations. This speed assumption is conservative since the NYSDOT 2010 peak hour volumes (attachment 1) do not suggest a major capacity issue on this segment of the Bronx River Parkway (approximately Level of Service [LOS] C northbound and LOS D southbound). In the overnight hours, a free flow speed of 55 mph is assumed because traffic volumes overnight are very low. For the annual average $PM_{2.5}$ analysis, occasional congestion events are less important and free flow traffic conditions are assumed (55 mph emission factors).

Table I-2:
Bronx River Parkway MOVES Emission Rates (exhaust+tirewear+brakewear), 2020 (grams/veh-mile)

	January		April		July		October	
Speed	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
25 mph	**0.0137**	0.0132	0.0123	0.0119	0.0114	0.0113	0.0120	0.0116
55 mph	**0.0076**	0.0071	0.0062	0.0058	0.0053	0.0052	0.0059	0.0055

Notes: Bold- indicates highest emission rate used in dispersion modeling. 25 mph assumed during day, 55 mph overnight.

To account for the suspension of fugitive road dust in air from vehicular traffic in the local microscale analysis, $PM_{2.5}$ emission rates include fugitive road dust for the 24-hr $PM_{2.5}$ and annual $PM_{2.5}$ analyses for discrete receptors. However, since the DEP considers fugitive road dust to have an insignificant contribution on a neighborhood scale, fugitive road dust was not included in the neighborhood scale $PM_{2.5}$ microscale analyses.

Fugitive road dust emissions were accounted for according to the guidelines and formulas contained in Chapter 13 of the EPA's Compilation of Air Pollutant Emission Factors (AP-42).[1] One of the key inputs to the fugitive dust formula is the silt loading factor. Based on data collected in New York City, for paved roadways in New York City, the following silt factor was used: 0.015 g/m^2 (for expressways and limited access roadways). An average vehicle weight of 4,000 lbs. was used in the paved road dust calculation, which is a typical weight for passenger vehicles (trucks that would increase the average weight are excluded from the Bronx River Parkway).

AP 42 Equation for particulate emissions from resuspension of loose material on the road surface due to vehicle travel on a dry paved road.

$$E = k\,(sL)^{0.91} \times (W)^{1.02} \qquad (1)$$

where: E = particulate emission factor (having units matching the units of k),
k = particle size multiplier for particle size range and units of interest (see below),
sL = road surface silt loading (grams per square meter) (g/m^2), and
W = average weight (tons) of the vehicles traveling the road.

Dispersion Modeling Methodology

The mobile source analysis for $PM_{2.5}$ was conducted using EPA's AERMOD model (version# 16216r, January 2017).[2] For this analysis, five consecutive years of meteorological data (2011-2015), from La Guardia Airport (LGA) National Weather Service station and concurrent upper air data from Brookhaven, New York, were utilized for the simulation program.

[1] https://www3.epa.gov/ttn/chief/ap42/ch13/final/c13s0201.pdf
[2] AERMOD, designed to support EPA's regulatory modeling programs, is a steady-state Gaussian plume model with three separate components: AERMOD (a dispersion model), AERMAP (a terrain preprocessor), and AERMET (a meteorological preprocessor). AERMOD can handle emissions from point, line, area, and volume sources.

The Bronx River Parkway was represented using the LINE AREA source option in AERMOD[3] and the emission quantitates from MOVES converted to grams/second/m2. The modeled portion of the Bronx River Parkway extended approximately 1,300 feet north and south of the projected development site 1. The area source width was 24 meters, encompassing both the northbound and southbound lanes of the Bronx River Parkway as shown in Figure I-3.

Release height and Initial vertical dimension were based on EPA's recommendations in *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas* and taking into account that the Bronx River Parkway is used by light duty vehicles only. The sigma-z initial vertical dispersion coefficient was 1.2 meters. The release height was 1.3 meters.

Multiple ground-level receptors at a height of 1.8 meters were modeled at publicly accessible areas (including the sidewalk) at projected development site 1 and at multiple flagpole elevations on the proposed building façade at projected development site 1. The RWCDS assumes that proposed building would have a maximum height of 145 feet tall (approximately 44 meters). Receptors were placed at heights of 1.8 meters, 3, 6, 14, 24, 30 and 40 meters around the proposed building. A total of 210 receptors were included in the model.

Based on NYC DOITT's Elevation GIS file (2-ft contours), Metcalf Avenue is located at an elevation approximately 18 feet whereas the Bronx River Parkway is in a depression/cut as low as 8 feet. AERMAP (the terrain pre-processor to AERMOD) can accept x,y,z data of elevation points over a uniform grid. A grid with 2-meter spacing was created in GIS and each point was assigned the elevation corresponding to the contour line it was closest to using a spatial join. The resulting x, y and z coordinates were used to define elevations in AERMAP. Figure I-3 shows the elevation contours generated by AERMAP (contours are labeled in meters).

Background Concentrations

Background concentrations (i.e. pollutant levels from other sources in the study area) for $PM_{2.5}$ were obtained from 2013-2015 monitoring data. The closest monitoring site to the proposed rezoning area with three complete years of monitoring data is the Pfizer Plant Research Laboratory at the New York Botanical Garden (site ID # 36-005-0133). EPA has calculated the 2013-2015 design values for this monitor as follows:

- 24-hr PM2.5- 26 $\mu g/m^3$
- Annual Average PM2.5- 9.4 $\mu g/m^3$

[3] The LINE source option in AERMOD uses the same dispersion parameterization as the AREA source option, but with simplified inputs for rectangular area sources and was specifically added to AERMOD to aid in modeling for transportation projects. See: https://www3.epa.gov/ttn/scram/appendix_w/2016/CAL3_AERMOD_Replacement_TSD.pdf

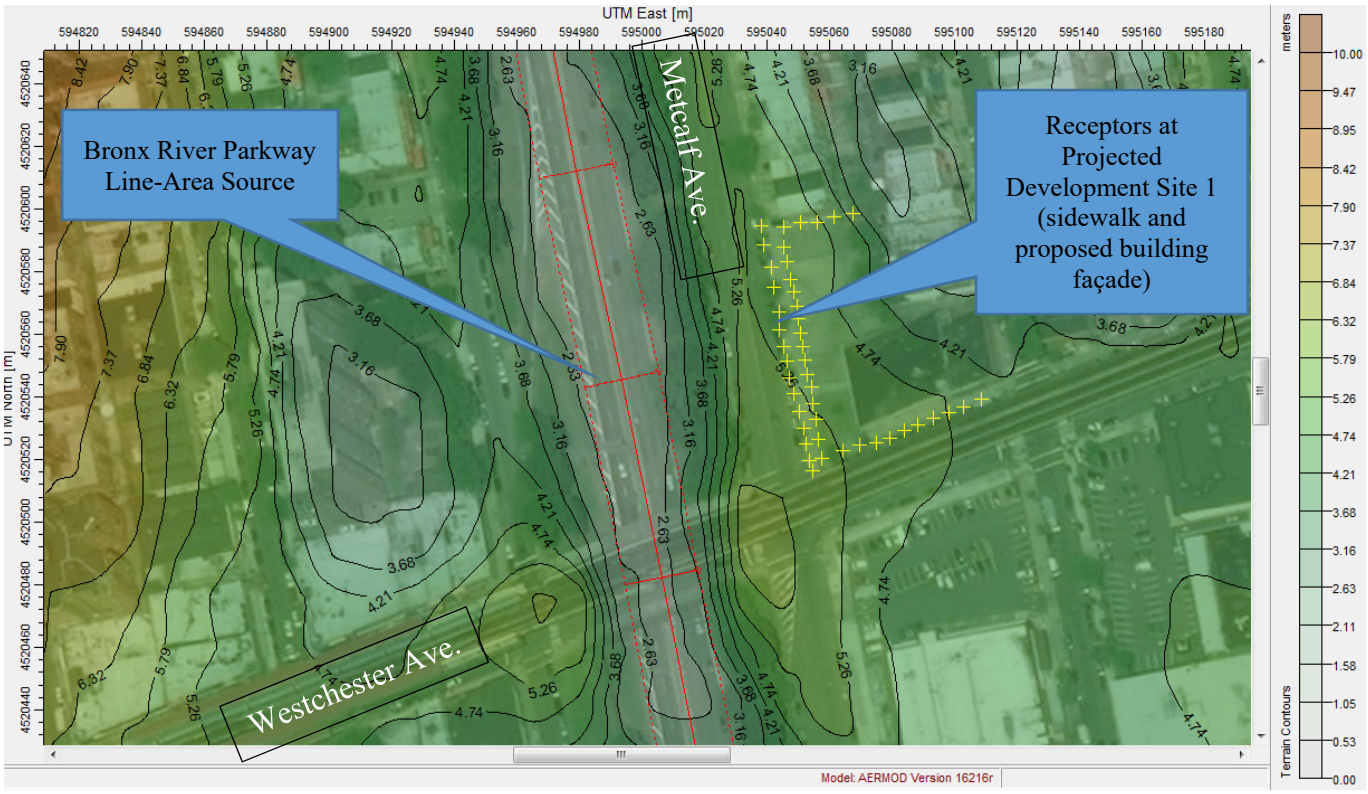


Figure I-3: AERMOD Setup Showing Terrain Data, Receptors and Bronx River Parkway Area Source

Stationary Source HVAC Analysis

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

Applicable Air Quality Standards and Significant Impact Criteria

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA. The NAAQS are concentrations set for each of the criteria pollutants to protect public health and the nation's welfare, and New York has adopted the NAAQS as the State ambient air quality standards. This analysis addressed compliance of the potential impacts with the 1-hour and annual NO_2 NAAQS.

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

The current standards and CEQR significant impact criteria that were applied to this analysis, together with their health-related averaging periods, are provided in Table I-3.

Table I-3
Applicable National Ambient Air Quality Standards and CEQR Threshold Values

Pollutant	Averaging Period	NAAQS	CEQR Thresholds
NO_2	1 Hour	0.10 ppm (188 μg/m^3)	--
	Annual	.053 ppm (100 μg/m^3)	--
$PM_{2.5}$	24 Hour	35 μg/m^3	4.6
	Annual	12 μg/m^3	0.3

NO_2 NAAQS

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

The 1-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100 percent) conversion of NOx to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80% to the NOx estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model, and averages these values over the numbers of the years modeled. Total estimated concentrations are generated in the statistical form of the 1-hour NO_2 NAAQS format and can be directly compared with the 1-hour NO_2 NAAQS standard.

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

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

$PM_{2.5}$ CEQR Significant Impact Criteria

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

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

The 24-hour $PM_{2.5}$ background concentration of 25.8 ug/m^3 was obtained from Bronx Botanical Garden (Pfizer Lab) monitoring station as the average of the 98th percentile for the latest 3 years of available monitoring data collected by the NYSDEC for 2013-2015. As the applicable background value is 25.8 ug/m^3, half of the difference between the 24-hour $PM_{2.5}$ NAAQS and this background value is 4.6 ug/m^3. As such, a significant impact criterion of 4.6 ug/m^3 was used for determining whether the potential 24-hour $PM_{2.5}$ impacts of the proposed development are considered to be significant.

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

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

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

CEQR Screening Nomographs

The client has committed to using natural gas at projected development site 1. The first step in the HVAC analysis is a screening analysis using the Figure 17-7 nomograph (NO_2 boiler screen for natural gas) from the 2014 *CEQR Technical Manual* Appendices. The size of the proposed development is plotted against the distance to the receptor building. As a worse-case analysis for screening purposes, the distance between a stack and the nearest building of similar or greater height is assumed to be the distance between the lot lines for the two buildings. If the plotted point is below the applicable curve, then the site passes the screen and no further analysis is necessary. If the plotted point is on or above the applicable curve, the potential for a significant air quality impact exists, and further analysis is required using AERSCREEN or AERMOD modeling. If the distance between the lots is less than 30 feet, a more detailed analysis must be carried out, and no nomograph is necessary.

Emissions released from the heating, ventilation, and air conditioning (HVAC) systems of each proposed RWCDS buildings on projected development sites 1 and 2 could potentially impact each other being as the RWCDS assumes that the two buildings would be the same height and located adjacent to each other. The CEQR screening procedure is not applicable to proposed RWCDS developments as the proposed buildings would be located less than 30 feet apart from each other. Therefore, a project-on-project analysis was conducted to determine whether the potential impacts of these emissions would be significant.

A review of existing land uses using NYC Oasis interactive mapping application and Google imaging software shows that there are no existing buildings taller than any of the proposed developments or major combustion emission sources (e.g., Title V or State Facilities) within 400 feet of the rezoning area. As such, no project-on-existing buildings or major source analyses are warranted.

Detailed Analysis

A dispersion modeling analysis was conducted to estimate impacts from the HVAC emissions of each of the projected development sites using the latest version of EPA's AERMOD dispersion model 7.12.1 (EPA version 16216r). In accordance with *CEQR Technical Manual* guidance, this analysis was conducted assuming stack tip downwash, urban dispersion surface roughness length, and elimination of calms. AERMOD's Plume Volume Molar Ratio Method (PVMRM) module was utilized for 1-hour NO_2 analysis -- to account for NOx to NO_2 conversion. Analyses were conducted with and without the effects of wind

flow around the proposed sites (i.e., with and without downwash) utilizing AERMOD Building Profile Input Program (BPIP) algorithm and the highest results are reported.

Emission rates for HVAC analysis were estimated as follows:

- As both development buildings are expected to be heated by natural gas, emission rates of NOx and $PM_{2.5}$ were calculated based on annual natural gas usage corresponding to the gross floor area of the site (gsf), EPA AP-42 emission factors for firing natural gas combustion in small boilers, and gross heating values of natural gas;
- $PM_{2.5}$ emissions from natural gas combustion accounted for both filterable and condensable particulate matter;
- Short-term NO_2 and $PM_{2.5}$ emission rates were estimated by accounting for seasonal variation in heat and hot water demand; and
- The natural gas fuel usage factor 59.1 cubic foot per square foot per year was obtained from CEQR Table US1, Total Energy Consumption, Expenditures and Intensities, 2005, Part I: Housing Unit Characteristics and Energy Use Indicators for New York using more conservative factor for residential uses (even thou buildings are mix-used).

Table I-4 provides estimated $PM_{2.5}$ and NO_2 short-term (e.g., 24-hour and 1-hour) and annual emission rates for each building from the boiler firing natural gas. The diameter of the stacks and the exhaust's exit velocities were estimated based on values obtained from NYCDEP "CA Permit" database for the corresponding boiler sizes (i.e., rated heat input or million BTUs per hour). Boiler sizes were estimated based on assumption that all fuel would be consumed during the 100-day (or 2,400 hour) heating season. A stack exit temperature was assumed to be 300°F (423°K), which is appropriate for boilers, was assumed for all boilers.

Table I-4:
Estimated Pollutant Short-term and Annual Emission Rates

Site ID	Lot	Stack Height [1]	Total Floor Area	$PM_{2.5}$ Emission Rate [2]		NO_2 Emission Rate [3]	
		feet	ft^2	g/sec	g/sec	g/sec	g/sec
				24-hr	Annual	1-hr	Annual
Proposed Development Site 1	3780/1	158.7	203,722	4.80E-03	1.32E-03	6.32E-02	1.73E-02
Projected Development Site 2	3780/51	158.7	38,348	9.04E-04	2.48E-04	1.19E-02	3.26E-03

Notes:
1. Stack height is located on bulkhead of 10'-8" tall
2. $PM_{2.5}$ emission factor for natural gas combustion of 7.6 lb./10^6 cubic feet included filterable and condensable particulate matter (Filterable $PM_{2.5}$=1.9 lb./10^6 ft^3 and condensable $PM_{2.5}$=5.7 lb/10^6 ft^3 (AP-42, Table 1.4-2).
3. NOx emission factor for natural gas of 100 lb./10^6 ft^3 for uncontrolled boilers with <100MMBtu/hr. (AP-42, Table 1.4-1).

Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2011-2015). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. The data were processed by Trinity Consultants, Inc. using the current EPA AERMET and EPA procedures. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Five years of meteorological data were combined into a single multiyear file to conduct 24-hour $PM_{2.5}$ and 1-hour NO_2 modeling. The $PM_{2.5}$ special procedure which incorporated into AERMOD calculates concentrations at each receptor for each year modeled, averages those concentrations across the number of years of data, and then selects the highest values across all receptors of the 5-year averaged highest values.

Background Concentrations

Because Bronx Botanical Garden (Pfizer Lab) monitoring station does not collect hourly ozone and NO_2 background data, in order to conduct the 1-hour NO_2 Tier 3 analysis, hourly NO_2 and hourly ozone background concentrations was developed from available monitoring data collected by the New York State Department of Environmental Conservation (NYSDEC) at the Queens College II monitoring station for the 5 consecutive years (2011-2015), and compiled into AERMOD's required hourly emission (NO_2) and concentration (ozone) data format.

The maximum 1-hour NO_2 background concentration at Queens College monitoring station of 60.2 ppb or 114 ug/m^3, which is 3-year average of the 98th percentile of daily maximum 1-hour concentrations for 2013-2015, and the annual NO_2 background concentration of 17.14 ppb or 32.3 ug/m^3, which is the maximum annual average for latest 3 years from Queens College monitoring station, were also used.

Stack and Receptors Locations for HVAC Analysis

One HVAC system (with one roof-top exhaust stack) is proposed for the RWCDS building on projected development site 1, and it was conservatively assumed that projected development site 2's building, which is smaller) would also have one HVAC system and stack. The building on projected development site 1 is expected to be an L-shaped structure with two approximately 10'-8" bulkheads on a roof. The largest, southern, bulkhead was assumed to house the HVAC system's exhaust stack. It is conservatively assumed that the building on projected development site 2 would also have a bulkhead on the roof that would be similar in height to projected development site 2. Emissions from each building were assumed to be released through a single stack located on each bulkhead. Stack heights were assumed to be 3 feet above the height on the bulkhead, as per CEQR recommendation (Figure I-4).

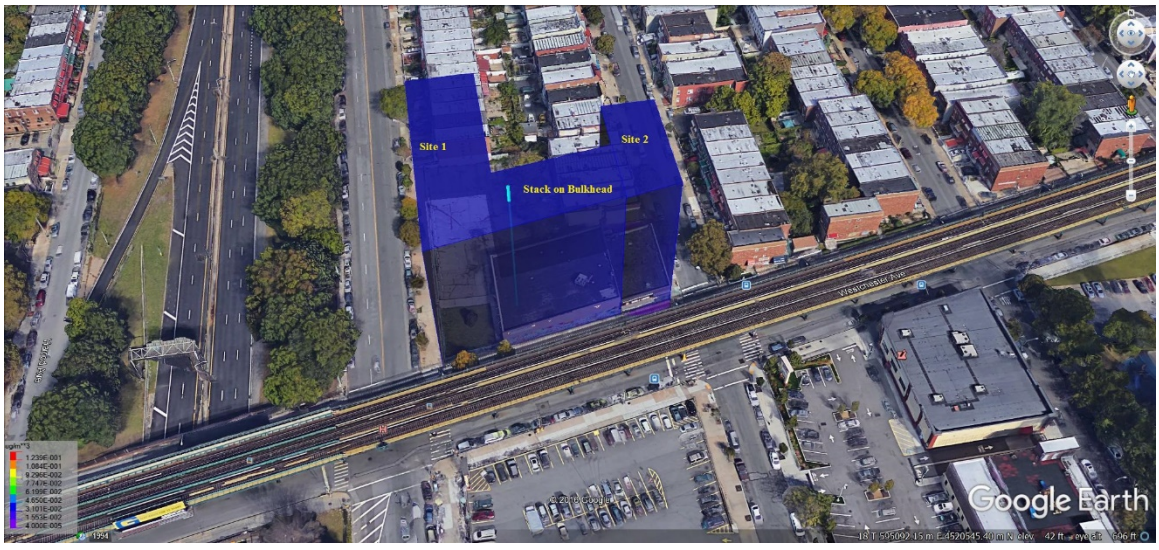


Figure I-4: Proposed Development Sites with Stack on Site 1 Bulkheads

Receptors were placed around all faces of each proposed buildings in 10 foot increments on all floor levels, starting 10 feet above the ground and extending up to the levels of the upper windows (that were assumed to be approximately 5 feet below roof level, e.g., 140 feet). More than 1,500 receptors were considered in the analysis.

Modeling parameters used in the analysis are provided in Table I-5, and Figure I-5 shows the proposed building and receptor configuration.

Table I-5:
Modeling Parameters for HVAC Analysis

Model	AERMOD (EPA Version 16216r)
Source Type	Point Source
Number of emission points (stacks) considered	One on each building
Surface Characteristic	Urban Area Option
Urban Surface Roughness Length	1
Downwash effect	BPIP Program
Meteorological Data	Preprocessed by the AERMET meteorological preprocessor program by Trinity Consultants, Inc. Yearly meteorological data for 2011-2015 concatenated into single multiyear file for $PM_{2.5}$ modeling, as EPA recommended.
Surface Meteorological Data	LaGuardia 2011-2015
Profile Meteorological Data	Brookhaven Station 2011-2015
Pollutant Background Concentrations	Queens College 2 monitoring stations data for 2011-2015
$PM_{2.5}$ Analysis	Special procedure incorporated into AERMOD where model calculates concentration at each receptor for each year modeled, averages those concentrations across the number of years of data, and then selects the highest across all receptors of the 5-year averaged highest values.

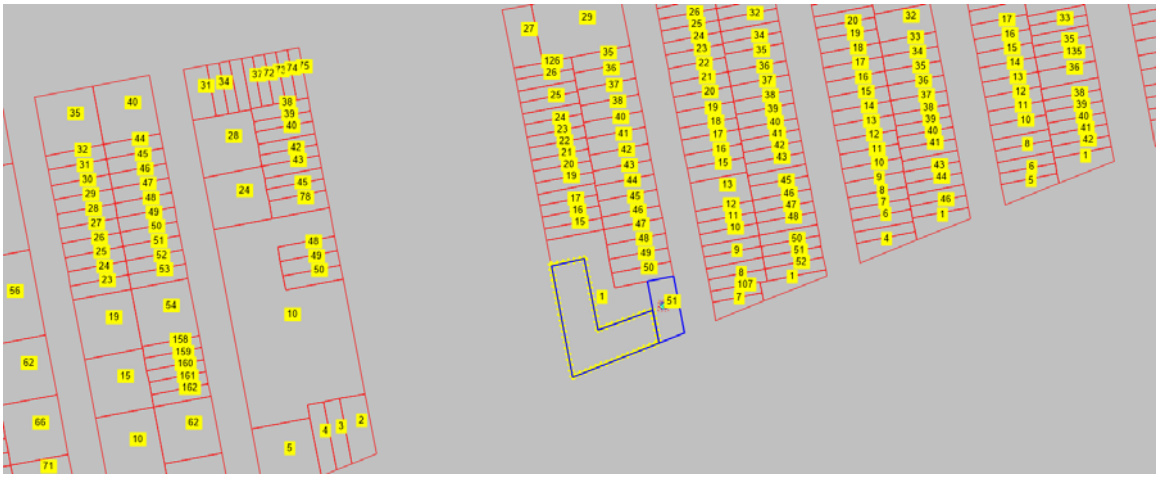


Figure I-5: Buildings and Receptors Configuration

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

In the future without the proposed actions (the No-Action condition), the rezoning area's existing R6 zoning would remain in place. Projected development site 1 could be redeveloped with a 7-story (approximately 75-foot-tall), approximately 110,316 gsf mixed-use residential and community facility building. Projected development site 2 could be redeveloped with a 7-story (approximately 70-foot-tall), approximately 15,930 gsf residential building. No analysis of the No-Action condition is required.

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

Description of the Proposed Actions

In the future with the proposed actions, the applicant-owned projected development site 1 (Lot 1) would be redeveloped in accordance with the proposed R8A and R8A/C2-4 zoning districts and MIH area. Although the proposed project would include up to 13-stories, for conservative CEQR analysis purposes, the reasonable worst case development scenario (RWCDS) assumes that projected development site 1 could be developed with up to a 14-story (approximately 145-foot tall) approximately 203,001 gsf mixed-use-building with a qualifying ground floor. Likewise, the RWCDS assumes that projected development site 2 (Lot 51) could be redeveloped under the proposed R8A/C2-4 zoning with a new 14-story (approximately 145-foot tall) 38,348 gsf residential building with ground floor retail.

Mobile Source Air Quality Analysis Results

As described above, the Bronx River Parkway (which is open to autos only) is located less than 200 feet from projected development site 1, and is depressed relative to the surrounding terrain. Therefore, a mobile source detailed analysis was conducted to elevate the potential impact of the Bronx River Parkway on the RWCDS associated with the proposed action. The analysis considered potential impacts from fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and the analysis results demonstrate there would be no exceedance of CEQR $PM_{2.5}$ de minimis criteria.

The maximum predicted 24-hr $PM_{2.5}$ increment is 1.0 µg/m3 (including fugitive dust), which is less than the CEQR de minimis threshold of 4.5 $\mu g/m^3$ (based on one-half of the difference between the 26 $\mu g/m^3$ background concentration and the 35 $\mu g/m^3$ NAAQS). The highest concentrations would occur at sidewalk receptors along Metcalf Avenue, all concentrations on proposed building at projected development site 1 are expected to be 0.94 $\mu g/m^3$ or less. Concentrations would decrease further from ground level towards the upper floors of the proposed building (approximately 0.03 $\mu g/m^3$ at 40 meters).

The *CEQR Technical Manual* states that the annual average $PM_{2.5}$ de minimis criterion of 0.3 $\mu g/m^3$ for discrete receptors is intended for stationary source analysis, as opposed to mobile source analysis. The *CEQR Technical Manual* does not provide an annual average PM2.5 de minimis criterion for discrete receptors that is specific to mobile source analysis. Nevertheless, the maximum predicted discrete receptor annual average PM2.5 concentration increment of 0.128 $\mu g/m^3$ is less than the 0.3 $\mu g/m^3$ discrete receptor de minimis criterion.

The CEQR Technical manual provides a "neighborhood scale" 0.1 µg/m^3 de minimis criterion, which applies to the average concentration over a large area (as opposed to individual receptor). The neighborhood scale criterion is not intended to be applied to localized area, such as a specific development site. Nevertheless, the annual average PM2.5 concentration results show that the average concentration of all modeled receptors is 0.045 µg/m^3 (excluding fugitive dust), which does not exceed the CEQR de minimis criterion. This average concentration includes ground level and elevated receptors along the building façade. Therefore, the Bronx River Parkway is not expected to result in a significant adverse mobile source air quality impact on the proposed actions and associated RWCDS.

Heating Ventilation and Air Conditioning (HVAC)

The two buildings that would be developed in the future with the proposed actions would have separate stacks for their respective boilers and HVAC systems. As the applicant has committed to using natural gas on projected development site 1, the same will be assumed for projected development site 2. Therefore, the pollutants for analysis would be NO_2 and $PM_{2.5}$ from natural gas. The boiler stacks would vent three feet above the bulkheads on the roof. The bulkheads are approximately 10 feet 8 inches high.

Project on Project Impacts

AERMOD is run with five years of meteorological data that include surface mixing height, wind speed, stability class, temperature, and wind direction. Table I-6 and Table I-7 show the results of the $PM_{2.5}$ and NO_2 analyses, respectively. All modeled concentrations were added to background values and compared with the NAAQS. Additionally, the $PM_{2.5}$ increments were compared with the NYCDEP *de minimis* values. All pollutant concentrations are in compliance with the applicable legislation and guidelines, and no impacts are projected.

Table I-6:
$PM_{2.5}$ Analysis Results

Site ID	Receptor Sites	24-hr $PM_{2.5}$ Impacts (µg/m^3)	Annual $PM_{2.5}$ Impacts (µg/m^3)	CEQR Significant Impact Criteria 24hr/Annual (µg/m^3)
Projected Development Site 1	Projected Development Site 2	0.23	< 0.1	4.6/0.3
Projected Development Site 2	Projected Development Site 1	0.04	< 0.1	4.6/0.3

When considering results, it should be noted that because both buildings are of the same height, lower impacts are predicted because the stacks are at least 10 feet above the roof while the receptors are considered to 5 feet below roof height, and the plume centerlines (i.e., where the highest impacts occur) would be above the roof where there are no receptors.

The results show no exceedances of the CEQR significant threshold values for both $PM_{2.5}$ 24-hour/annual are predicted. Therefore, $PM_{2.5}$ emissions would not significantly impact the receptors of each of the proposed development. However, an (E) designation would be required to restrict stack locations on bulkheads and fuel to the exclusive use of natural gas in the HVAC systems in each of the proposed developments.

The NO_2 analysis was conducted using the same stack locations on bulkheads of each building as they were determined in the $PM_{2.5}$ analysis. For the 1-hour NO_2 analysis, a Tier 1 analysis was sufficient to demonstrate the compliance with 1-hour NO_2 NAAQS of 188 ug/m^3. With the Tier 1 analysis, the background 1-hour NO_2 concentration is added to the estimated concentration and the total 1-hour NO_2 concentration is compared to the 1-hour NO_2 NAAQS.

As shown in Table I-5, the maximum estimated 1-hour NO_2 concentrations are less than the 1-hour NO_2 NAAQS. The annual average NO_2 total concentrations, which included impacts and the NO_2 annual background concentration, are also less than the annual NO_2 NAAQS of 100 ug/m^3 for each of the development sites. Therefore, NO_2 emissions would not cause significant impacts with the proposed (E) designations.

Table I-7:
NO_2 Analysis Results

Site ID	Receptor Sites	1-hr NO_2 Total Conc. [(1)] (µg/m^3)	Total Annual NO_2 Conc. [(2)] (µg/m^3)	NAAQS 1-hr/Annual (µg/m^3)
Projected Development Site 1	Projected Development Site 2	122.3 [(1)]	32.6	188/100
Projected Development Site 2	Projected Development Site 1	115.6 [(1)]	32.3	188/100

(1) Tier 1 Analysis include 1-hour NO_2 background value of 114 ug/m^3
(2) Total annual NO_2 concentrations include background value of 32.3 ug/m^3.

A summary of the results for all averaging time periods, with and without downwash effect, are presented in Table I-8.

Table I-8:
Summary of Results (ug/m^3)

Pollutant	Modeled Concentration (with/without Downwash) (µg/m^3)	Background Conc. (µg/m^3)	Total Conc. (µg/m^3)	Evaluation Criteria (µg/m^3)
$PM_{2.5}$				
Project Development Site 1 on Projected Development Site 2				
24-hr $PM_{2.5}$	0.23/0.18	-	0.23	4.6 (*CEQR)*
Annual $PM_{2.5}$	< 0.1	-	< 0.1	0.3 (*CEQR)*
Project Development Site 2 on Projected Development Site 1				
24-hr $PM_{2.5}$	0.04/0.04	-	0.04	4.6 (*CEQR)*
Annual $PM_{2.5}$	< 0.1	-	< 0.1	0.3 (*CEQR)*
NO_2				
Project Development Site 1 on Projected Development Site 2				
1-hr NO_2	3.92/8.25	114	122.3	188 (NAQQS)
Annual NO_2	< 0.1	32.3	32.3	100 (NAAQS
Project Development Site 2 on Projected Development Site 1				
1-hr NO_2	0.69/1.62	114	115.6	188 (NAQQS)
Annual NO_2	< 0.1	32.3	32.3	100 (NAAQS)

Notes: Modeled concentrations are shown with/without downwash effects.

(E) Designations

An (E) designation (E-425) would be required to restrict stack locations on bulkheads and fuel to the exclusive use of natural gas in the HVAC systems for each of the projected development sites. Exact bulkhead locations and distances from the streets for both sites should be determined based on the actual drawings which should be considered as a part of application.

The (E) designation text related to air quality would be as follows:

> **Block 3780, Lot 1: Any new residential, commercial, and/or community facility development on Block 3780 Lot 1 must use natural gas for HVAC systems and ensure that the heating, ventilating, air conditioning stack is located at 159 feet above grade and at least 68 feet from Metcalf Avenue and 27 feet from Westchester Avenue to avoid any potential significant adverse air quality impacts.**
>
> **Block 3780, Lot 51: Any new residential, commercial, and/or community facility development on Block 3780 Lot 51 must use natural gas for HVAC systems and ensure that the heating, ventilating, air conditioning stack is located at 159 feet above grade and at least 26 feet from Fteley Avenue and 56 feet from Westchester Avenue to avoid any potential significant adverse air quality impacts.**

Conclusion

The result of the air quality analyses are as follows:

- No significant adverse air quality impacts from the HVAC emissions of each proposed development on each other are predicted;
- Projected development site 1 and projected development site 2 would require (E) designations (E-425) that will restrict stack locations on the bulkheads, and
- Both projected development sites would be required to use exclusively natural gas in their HVAC systems.

The (E) designations (E-425) will assure that no significant adverse air quality impacts will occur from the proposed developments' HVAC emissions.

ATTACHMENT J

NOISE

I. INTRODUCTION

This attachment assesses the potential for the proposed actions and associated reasonable worst-case development scenario (RWCDS) to result in significant adverse noise impacts. As described in Attachment A, "Project Description," the proposed actions are a zoning map and zoning text amendments that would rezone the southern portion of Bronx Block 3780 in the Bronx River neighborhood of Bronx Community District 9, affecting approximately 25,790 square feet (sf) of Block 3780, Lot 1 and approximately 4,724 sf of Block 3780, Lot 51 (rezoning area)[1].

The RWCDS associated with the proposed actions would facilitate the development of an approximately 203,000 gross square foot (gsf) mixed-use building containing affordable housing, community facility and local retail uses on Lot 1 (projected development site 1), including up to approximately 220 affordable dwelling units (DUs), approximately 7,570 gsf of ground floor local retail, and approximately 6,846 gsf of community facility space. An additional projected development site 2 (Lot 51) is expected to be developed with an approximately 38,348 gsf mixed-use building containing 34 DUs and approximately 3,831 gsf of ground floor local retail.

As discussed in Attachment B, "Supplemental Screening," the proposed actions would change traffic patterns and volumes in the general vicinity of the rezoning area. As local vehicular traffic is a major source of ambient noise in the area, this could lead to changes in the ambient noise levels. According to the 2014 *City Environmental Quality Review* (CEQR) *Technical Manual*, if existing noise passenger car equivalent (PCE) values are increased by 100 percent or more due to a proposed action (which is equivalent to an increase of 3.0 dBA or more) a detailed analysis is generally warranted. Conversely, if existing noise PCE values are not increased by 100 percent or more it is likely that the proposed actions would not cause a significant adverse vehicular noise impact, and therefore no further vehicular noise analysis is needed. Noise emissions from the elevated 6 train subway rail tracks immediately south of the rezoning area also have the potential to impact the residential, commercial, and community facility land uses of the With-Action development. Therefore, a train noise analysis was conducted to determine ambient noise levels along the elevated train tracks.

The noise analysis for the proposed actions was carried out in compliance with *CEQR Technical Manual* guidelines and consists of three parts:

- (1) A screening analysis to determine whether traffic generated by the proposed actions and associated RWCDS would have the potential to result in significant noise impacts on existing sensitive receptors;

- (2) A train noise analysis to determine ambient noise levels along the elevated train tracks;

[1] As described in Attachment A, "Project Description," a tiny sliver of Lot 50 on Block 3780, at its southeastern corner, would also be affected by the proposed zoning changes, as the depth of Lot 51 on Block 3780 along Fteley Avenue is 99.66 feet.

- (3) An analysis to determine the level of building attenuation necessary to ensure that the With-Action developments' interior noise levels satisfy applicable interior noise criteria. This attachment does not include an analysis of mechanical equipment because such mechanical equipment would be designed to meet all applicable noise regulations and, therefore, would not result in adverse noise impacts.

II. PRINCIPAL CONCLUSIONS

In the future with the proposed actions, the predicted peak period L_{10} values at the receptor locations would range from a minimum of 71.99 dBA to a maximum of 81.94 dBA. When compared to the future without the proposed actions, the relative increases are well below 3.0 dBA at all receptor locations. Therefore, no significant adverse noise impacts due to action-generated vehicular traffic and existing and future train noise would occur.

To ensure acceptable interior noise levels for any future development at projected development site 1 (Block 3780, Lot 1) and projected development site 2 (Block 3780, Lot 51), the noise attenuation specifications would be mandated through the mapping of an (E) designation (E-425) assigned to the two tax lots that makes up these development sites in the rezoning area. The requirements of the (E) designation resulting from the noise analysis, outlined in Section VII of this attachment, state that the required noise attenuation ratings for projected development site 1's (Lot 1) residential, commercial, and/or community facility uses would be 38 dBA on the southern façade facing Westchester Avenue and the western and eastern facades within 100 feet of Westchester Avenue, and 31 dBA of attenuation on all other façades; and for future residential, commercial, and/or community facility uses on projected development site 2 (Lot 51), any future construction must provide a minimum of 38 dBA of composite window/wall attenuation on the southern and eastern façades facing Westchester Avenue and the western and eastern facades within 100 feet of Westchester Avenue, and 31 dBA of attenuation on all other façades. The minimum required composite window/wall attenuation for future commercial uses on either development site would be 5 dBA lower than that of residential uses. In addition, in order to maintain a closed-window condition, an alternate means of ventilation must also be provided for both development sites.

With the implementation of the attenuation requirements pursuant to the (E) designation on both projected development sites 1 and 2 (Lot 1 and Lot 51), the proposed actions would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines. Therefore, the proposed actions and associated RWCDS would not result in any significant adverse noise impacts related to building attenuation requirements.

II. NOISE FUNDAMENTALS

Noise is considered unwanted sound. Sound is a fluctuation in air pressure. Sound pressure levels are measured in units called "decibels" (dB). The particular character of the sound that we hear (a whistle compared with a French horn, for example) is determined by the speed, or "frequency," at which the air pressure fluctuates or "oscillates." Frequency defines the oscillation of sound pressure in terms of cycles per second (cps). One cycle per second is known as 1 Hertz (Hz). People can hear sound over a relatively limited range of frequencies, generally between 20 Hz and 20,000 Hz. Furthermore, the human ear does

not perceive all frequencies equally well. High frequencies (e.g., a whistle) are more easily discernible and therefore more intrusive than many of the lower frequencies (e.g., the lower notes on the French horn).

A-Weighted Sound Level (dBA)

In order to establish a uniform noise measurement that simulates people's perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human hearing range. This is known as the A-weighted sound level, or "dBA," and it is the descriptor of noise levels most often used for community noise. As shown in Table J-1, the threshold of human hearing is defined as 0 dBA; very quiet conditions (as in a rural area at night, for example) are approximately 30-40 dBA; levels between 50 dBA and 70 dBA define the range of noise levels generated by normal daily activity; levels above 70 dBA would be considered noisy, and then loud, intrusive, and deafening, as the scale approaches 120 dBA.

TABLE J-1: Common Noise Levels

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

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

Community Response to Changes in Noise Levels

Table J-2 shows the average ability of an individual to perceive changes in noise. It is important to note that the dBA scale is logarithmic, meaning that each increase of 10 dBA describes a doubling of perceived loudness. Thus, the noise on a platform with a passing subway train, at 100 dBA, is perceived as twice as loud as passing heavy trucks at 90 dBA. For most people to perceive an increase in noise, it must be at least 3 dBA. At 5 dBA, the change will be readily noticeable. These guidelines permit direct estimation of an individual's probable perception of changes in noise levels.

Noise Descriptors Used In Impact Assessment

Because the sound pressure level unit, dBA, describes a noise level at just one moment, and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent

sound level", L_{eq}, can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$) conveys the same sound-energy as the actual time-varying sound.

TABLE J-2: Average Ability to Perceive Changes in Noise Levels

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

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

Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and "x" percent of the time, respectively. Discrete event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

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

For the purposes of this analysis, the maximum 1-hour equivalent sound level (L_{eq}) has been selected as the noise descriptor to be used in the noise impact evaluation. L_{eq} is the noise descriptor used in the *CEQR Technical Manual* for noise impact evaluation, and is used to provide an indication of highest expected sound levels. L_{10} is the noise descriptor used in the *CEQR Technical Manual* for building attenuation.

The day-night sound level (L_{dn}) is the noise description used in the HUD Noise guidebook that sets exterior noise standards for housing construction projects receiving federal funds. Similar to L_{eq}, the L_{dn} refers to a 24-hour average noise level with a 10 dBA penalty applied to noise levels during the hours between 10:00 PM and 7:00 AM to reflect the greater intrusiveness of noise experienced during these hours. Pursuant to the Federal Transit Authority (FTA) noise impact analysis methodology, the L_{dn} is adopted to assess noise generated by trains.[2] However, because the L_{dn} descriptor tends to average out high hourly values over 24 hours, the *CEQR Technical Manual* recommends that the L_{eq} descriptor be used for purposes of impact analysis.

[2] Source: Report "Transit Noise and Vibration Impact Assessment", 2006, Federal Transportation Authority, Office of Planning and Environment.

Applicable Noise Codes and Impact Criteria00

CEQR Technical Manual Noise Standards

The NYC Department of Environmental Protection (DEP) has set external noise exposure standards based on L_{10} noise levels. These standards are shown on the following page in Table J-3. Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable.

TABLE J-3: Noise Exposure Guidelines for Use in City Environmental Impact Review

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

Notes:

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

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

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

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

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

Source: New York City Department of Environmental Protection (adopted policy 1983).

The *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise level. Recommended noise attenuation values for building façades are designed to maintain interior noise levels of 45 dBA or lower for residential uses and 50 dBA or lower for commercial uses, and are determined based on exterior L_{10} noise levels. The standards shown are based on maintaining an interior noise level for the worst-case hour L_{10} of 45 dBA or lower. Attenuation requirements are shown in Table J-4.

TABLE J-4: Required Attenuation Values to Achieve Acceptable Interior Noise Levels

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

Note: [A] The above composite window/wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB (A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.

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

Source: NYC Department of Environmental Protection, *CEQR Technical Manual*

III. NOISE PREDICTION METHODOLOGY

Proportional Modeling

Proportional modeling was used to determine No-Action and With-Action noise levels at the receptor locations, which are discussed in more detail below. Proportional modeling is one of the techniques recommended in the *CEQR Technical Manual* for mobile source analysis. Using this technique, the prediction of future noise levels, where traffic is the dominant noise source, is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine No-Action and With-Action noise levels. Vehicular traffic volumes, which are counted during the noise recording, are converted into Passenger Car Equivalent (PCE) values, for which one medium-duty truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of 13 cars, and one heavy-duty truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of 18 cars. Future noise levels are calculated using the following equation:

FNA NL =10 log (NA PCE/E PCE) + E NL
where:
FNA NL = Future No-Action Noise Level
NA PCE = No-Action PCEs
E PCE = Existing PCEs
E NL = Existing Noise Level

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

Analyses for the proposed actions and associated RWCDS were conducted for three typical time periods: the weekday AM peak hour (8 AM to 9 AM), the midday peak hour (12 PM to 1 PM), and the weekday PM peak hour (5 PM to 6 PM). These time periods are the hours when the maximum traffic generation is expected and, therefore, the hours when future conditions with the proposed actions are most likely to result in maximum noise impacts for the receptor locations.

For the purpose of this analysis, during the noise recording, vehicles were counted and classified. To calculate the No-Action PCE values, an annual background growth rate of 0.25 percent for 2016-2020 was applied to the existing PCE noise values based on counted vehicles[3]. In order to obtain the future With-Action noise PCE values to calculate the With-Action noise levels, a trip generation forecast was created based on the With-Action development of the rezoning area, and existing modal split data for the census tract within which the rezoning area is located.[4] For conservative purposes, all of the action-generated trips were assigned to both Westchester Avenue and Metcalf Avenue, exclusive of one another.

Train Noise Modeling

As the rezoning area is located in close proximity to elevated rail tracks, namely the number 6 line of the New York City Subway, noise emissions from train operations have the potential to impact the proposed land uses analyzed in the RWCDS. Pursuant to the guidelines of the *CEQR Technical Manual* Section 332.3 "Train Noise," noise from train operations are calculated using the detailed noise analysis methodology. Using this methodology, L_{eq} values may be calculated as a function of a number of factors, including the distance between the track and receptor, number of trains, average number of cars per train, train speed, track conditions, whether the track is on grade or on structure. Values calculated using this methodology may either be used directly or, based upon measurements, adjustment factors may be developed to account for site-specific differences between measured and model-predicted values.

IV. EXISTING CONDITIONS

The rezoning area comprises the southern portion of Bronx Block 3780 in the Bronx River neighborhood of Bronx Community District 9, affecting approximately 25,790 square feet (sf) of Block 3780, Lot 1 and approximately 4,724 sf of Block 3780, Lot 51. It is generally bounded by Westchester Avenue to the south, Fteley Avenue on the east, and Metcalf Avenue on the west. The rezoning area is currently underdeveloped, occupied by a vacant former medical office on Lot 1 and a legally non-conforming commercial uses on Lot 51. The elevated tracks of the Lexington Avenue/Pelham (number 6) subway line of the New York City Subway are located along Westchester Avenue, immediately south of the rezoning area.

The portion of the number 6 subway line that runs along Westchester Avenue near the rezoning area is an elevated three-track rail line used by subway trains operating between the Brooklyn Bridge-City Hall station in lower Manhattan and the Pelham Bay Park station in the northeastern Bronx. This rail line operates with 10-car R62A and R142A trainsets. According to the Metropolitan Transit Authority's (MTA's) Subway Timetable for the number 6 line, effective as of November 6, 2016, between 7 AM and 10 PM on weekdays, it operates approximately 225 northbound (to Pelham Bay Park and/or Parkchester) and approximately 212 southbound (to Brooklyn Bridge-City Hall) trains and between 10 PM and 7 AM on weekdays, it operates approximately 54 northbound and approximately 52 southbound trains. Fewer trains are operated on Saturdays, Sundays, and major holidays. There are no buildings or other structures located between the rezoning area and the elevated tracks.

[3] Calculation according to Table 16-4 in the *CEQR Technical Manual.*
[4] Based on T128. Means of Transportation to Work, Bronx Census Tract 64, 2010-14 5 Year ACS.

Selection of Noise Monitoring/Receptor Locations

In order to collect existing baseline volumes at the rezoning area, existing noise levels were measured at two locations. Receptor 1 had two separate monitor locations: Receptor 1a was located on the north side of Westchester Avenue along the southern boundary of projected development site 1 (Block 3780, Lot 1) at the ground level, to measure noise levels of traffic along Westchester Avenue and the trains on the elevated track; Receptor 1b was located on the north side of Westchester along the southern boundary of projected development site 1 on the roof of the existing building (approximately 25 feet in height[5]), to measure noise levels of the trains on the elevated track. Receptor 2 was located on the eastern side of Metcalf Avenue along the western boundary of projected development site 1, to measure noise resulting from traffic along Metcalf Avenue. Measurements performed at these two receptor locations were conducted as part of the impact identification and building attenuation analyses. For reference, the noise monitoring receptor locations are identified in Figure J-1.

The placement of Receptor 1 was in a location that would be along the southern façades of both projected development sites. This location is expected to experience the maximum impacts from train traffic as this façade would have frontage along the elevated tracks.

Noise emitted from LaGuardia Airport-bound overhead flights was captured during the noise monitoring at both receptor locations for all peak hour analysis periods.

Noise Monitoring

At Receptor 1, as the main source of noise was train-related, pursuant to CEQR guidelines, 1-hour measurements of existing noise levels were performed to establish existing noise levels for three analysis time periods, including: weekday AM peak hour (8AM to 9AM), midday (MD) peak hour (12PM to 1PM), and weekday PM peak hour (5PM to 6PM). At Receptor 2, as the main source of noise was local traffic, pursuant to CEQR guidelines, 20-minute measurements of existing noise levels were performed during the same three analysis time periods as at Receptor 1. Noise monitoring at both receptors was performed on Thursday, November 17th, 2017, with a follow-up monitoring at Receptor 2 on Tuesday, November 22nd, 2017, as well as at Receptor 1 on Tuesday, May 16th, 2017. On both November 17th and 22nd, the weather was partly cloudy with temperatures in the low-50s. On May 16th, 2017, the weather was partly cloudy with temperatures in the low-70s.

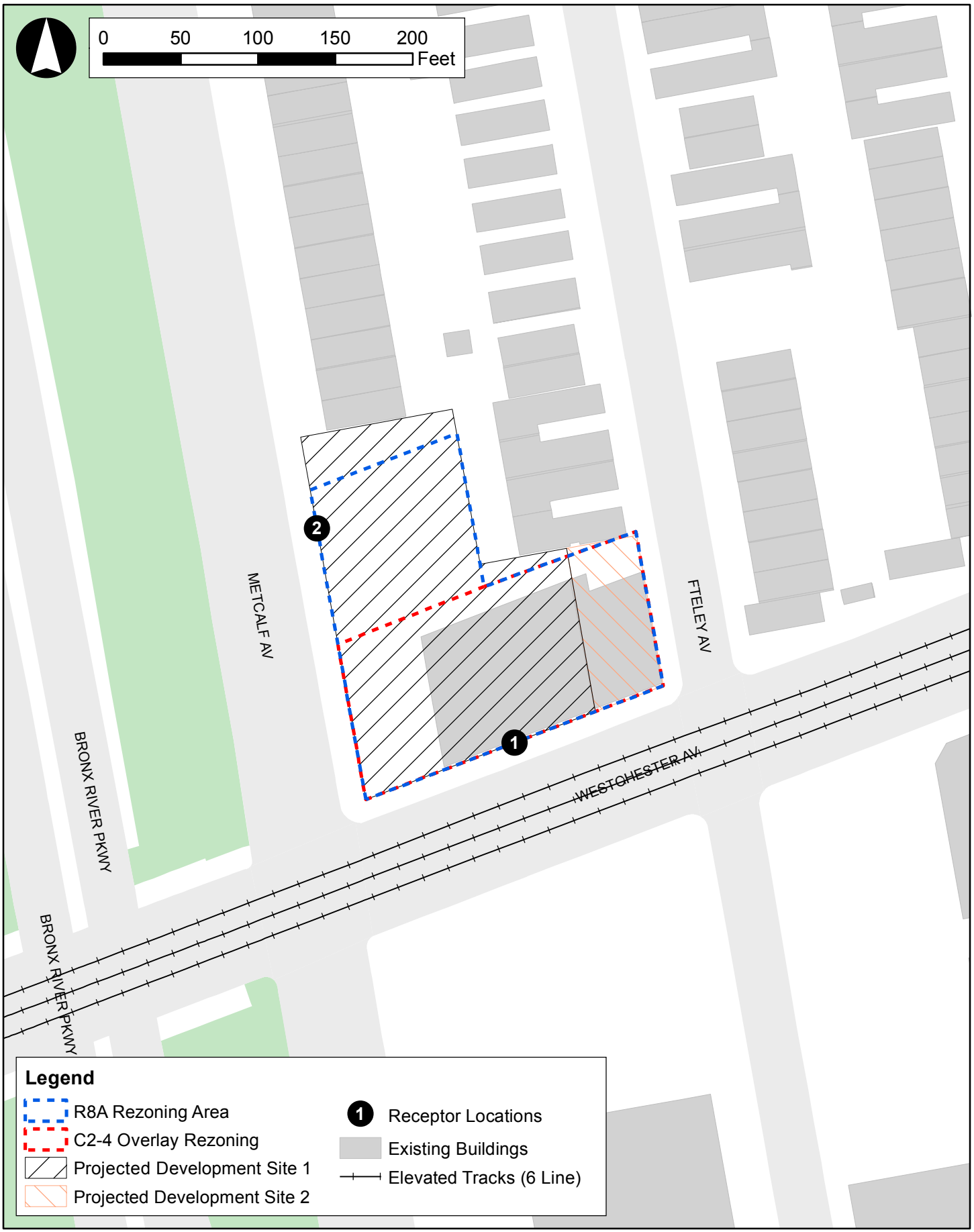
Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by the American National Standards Institute) sound level meter. This assembly was mounted at a height of 6 feet above the ground surface on a tripod and at least 6 feet away from any sound-reflecting surfaces to avoid major interference with source sound levels being measured at the receptor locations along Westchester Avenue and Metcalf Avenue. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at each location were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the

[5] Height of noise monitor session at Receptor 1b determined by adding the height of the existing building on the project site (approximately 20 feet in height) and the noise monitor tripod (approximately 5 feet in height).

Figure J-1

Noise Monitoring / Receptor Locations



measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. Traffic, elevated track-related, and aircraft flyover noise was captured; noise from other sources (e.g., emergency sirens etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at Monitoring Locations

The noise monitoring results are shown in Table J-5 below. Automobile traffic and passing trains were equal sources of noise at Receptor 1, since train traffic is not continuous. Two separate 1-hour noise monitor sessions were conducted at Receptor 1: one at ground level (Receptor 1a), and the other on the roof the existing building at approximately 25 feet in height, with a line-of-sight to the elevated 6 train (Receptor 1b). Automobile traffic was the dominant source of noise at Receptor 2. Overhead flights were moderate sources of noise at each of the receptors, since they are also not continuous.

TABLE J-5: Existing Noise Levels (dBA) at Rezoning Area

#[1]	Noise Receptor Location	Time	L_{eq}	L_{max}	L_{min}	L_1	L_{10}[2]	L_{50}	L_{90}	*CEQR* Noise Exposure Category
1a	North side of Westchester Avenue between Metcalf and Fteley Avenues; ground level	AM	81.03	97.83	55.56	94.12	**81.15**	66.36	59.89	**Clearly Unacceptable**
		MD	80.59	98.79	54.17	94.61	75.54	63.75	58.55	
		PM	80.08	96.54	53.85	93.84	79.22	64.42	58.99	
1b	North side of Westchester Avenue between Metcalf and Fteley Avenues; from roof of existing building	AM	76.59	93.91	56.58	90.42	**76.82**	64.09	60.44	**Marginally Unacceptable (III)**
		MD	78.02	99.04	52.78	92.61	75.25	64.16	57.72	
		PM	79.38	95.73	51.68	93.06	75.85	62.43	56.42	
2	East Side of Metcalf Avenue	AM	71.46	89.03	57.49	83.04	**73.39**	65.85	63.08	**Marginally Unacceptable (II)**
		MD	70.07	84.83	57.37	82.49	71.61	64.02	61.77	
		PM	70.09	83.70	56.83	81.60	72.25	64.21	59.83	

Notes: Field measurements were performed by Philip Habib & Associates on November 17th and 22nd, 2016, and May 5, 2017.
[1] Refer to Figure J-1 for receptor locations.
[2] Highest L_{10} at each receptor is shown in **bold**.

As shown in Table J-5, the highest overall L_{10} value (81.15 dBA) was measured in the AM peak hour at Receptor 1a, located immediately south of the rezoning area along Westchester Avenue. Pursuant to *CEQR Technical Manual* guidelines, this L_{10} value places Receptor 1 in the "Clearly Unacceptable" CEQR noise exposure category, as the noise levels exceed 80.0 dBA under Existing conditions. The highest L_{10} for Receptor 1b was also in the AM peak hour (76.82 dBA), placing it in the Marginally Unacceptable (III) noise exposure category under the Existing conditions. The highest L_{10} for Receptor 2 was in the AM peak hour as well (73.39 dBA), placing it in the Marginally Unacceptable (II) noise exposure category under Existing conditions.

Using the train noise modeling methodology previously described, existing noise levels emitted from the elevated tracks were calculated for the weekday Daytime (7AM to 10PM) and Nighttime (10PM to 7AM) periods according to the current MTA subway timetable for the number line 6. This included calculating the L_{eq} SEL values at 50 feet and comparing these to the monitored noise levels at Receptor 1a and 1b. The forecasted L_{eq} value at Receptor 1a was 81.54 dBA, which is slightly above the maximum L_{eq} based on the monitored value at Receptor 1a (81.03 dBA), and the forecasted L_{eq} value at Receptor 1b was 80.11 dBA, which is also slightly above the maximum L_{eq} based on the monitored value at Receptor 1b (79.38 dBA). Therefore, for conservative analysis purposes, the train noise modeling methodology forecasted value will be used for further analysis along the Westchester Avenue frontage of the rezoning area, while the monitored L_{eq} and L_{10} noise levels at Receptor 1a and 1b will be used as the background variable for the formula used in the train noise modeling methodology.

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

In the 2020 No-Action condition, the rezoning area's existing R6 zoning would remain in place. Under the existing zoning, it is possible to redevelop the proposed and projected development sites with a variety of uses including residential and community facility uses.

In absence of the proposed actions, it is anticipated that projected development site 1, consisting of Block 3780, Lot 1, would be developed in accordance with the existing R6 zoning district. It is anticipated that Lot 1 would be developed with up to a 7-story (approximately 75-foot-tall), approximately 110,316 gsf, mixed-use residential and community facility building. The No-Action building would be constructed pursuant to the Quality Housing Program, and would have a qualifying ground floor that would accommodate community facility space. The No-Action development would include approximately 95,277 gsf of residential space (approximately 94 market-rate dwelling units) and approximately 15,039 gsf of Use Group 4 ambulatory care/medical office community facility space on the ground floor.[6] Residential buildings built pursuant to the Quality Housing Program in R6 zoning districts require accessory parking spaces for a minimum of 50 percent of residential dwelling units. Therefore, it is anticipated that 47 accessory parking spaces would be provide in the No-Action condition on projected development site 1. For the community facility component, pursuant to R6 regulations, it is assumed that ambulatory diagnostic or treatment health care facilities would require one parking space per 800 sf, for a total of 18 spaces, which are anticipated to be waived pursuant to ZR Section 25-33.

Projected development site 2 (Lot 51) is also anticipated to be redeveloped in the future without the proposed actions. In absence of the proposed actions, Lot 51 would be developed with a 7-story (approximately 70-foot-tall), approximately 15,930 gsf residential building pursuant to Quality Housing regulations. It is anticipated that the residential building would contain approximately 16 dwelling units. It is anticipated that the required residential parking spaces would be waived pursuant to ZR Section 25-211(c), as Lot 51 comprises less than 5,000 sf.

As there are no additional anticipated developments expected to generate a significant number of vehicle trips by 2020 within a 400-foot radius of the rezoning area, estimates of peak hour noise levels

[6] The approximate gross square feet of the No-Action development is conservatively calculated by assuming an increase of approximately five percent from the zoning square feet of the community facility space and an approximately 10 percent increase in the residential zoning square feet (to account for commons areas required by Quality Housing).

for the No-Action condition were developed by projecting the trips generated by the RWCDS No-Action developments on Lots 1 and 51, and by applying an annual background growth rate of 0.25 percent from 2016 to 2020 to the existing traffic levels at Receptors 1 and 2 (refer to Table J-6).

As there are no known significant planned changes in train frequency anticipated by the 2020 Build Year, noise resulting from train traffic on the elevated track in the No-Action condition is expected to remain similar to that in the Existing condition. However, to account for the increase in background noise near the elevated tracks in the No-Action condition, the highest predicted No-Action L_{eq} and L_{10} noise levels for Receptor 1a (81.27 dBA and 81.39 dBA, respectively) and Receptor 1b (79.60 dBA and 79.83 dBA, respectively) from Table J-6 were used as the background variables for the formula used in the train noise modeling methodology. Therefore, the forecasted L_{10} values along Westchester Avenue in the No-Action condition would increase to 81.88 dBA (Receptor 1a) and 80.53 dBA (Receptor 1b).

TABLE J-6: 2020 No-Action Noise Levels (dBA) at Rezoning Area

#	Time	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change[1]	No-Action L_{10}	*CEQR* Noise Exposure Category
1a	AM	1092.0	1154.0	81.03	81.27	0.24	**81.39**	**Clearly Unacceptable**
	MD	758.0	803.6	80.59	80.84	0.25	80.96	
	PM	1121.0	1178.3	80.08	80.30	0.22	80.42	
1b	AM	1092.0	1154.0	76.59	76.83	0.24	77.06	**Marginally Unacceptable (IV)**
	MD	758.0	803.6	78.02	78.27	0.25	78.50	
	PM	1121.0	1178.3	79.38	79.60	0.22	**79.83**	
2	AM	438.0	493.4	71.98	71.98	0.52	**73.91**	**Marginally Unacceptable (II)**
	MD	567.0	610.7	70.39	70.39	0.32	71.93	
	PM	1113.0	1170.2	70.31	70.31	0.22	72.47	

Notes: All PCE and noise values are shown for a weekday.
[1] No-Action L_{eq} – Existing L_{eq}.
[2] Highest L_{10} at each receptor is shown in **bold**.

In the future without the proposed actions, noise levels at the rezoning area would be similar to existing conditions, apart from a slight increase associated with increased traffic along Westchester Avenue and Metcalf Avenue. As indicated in Table J-6, noise levels at both receptor locations would remain in their respective CEQR noise exposure categories; with noise levels at Receptor 1a remaining in the Clearly Unacceptable category, noise levels at Receptor 1b remaining in the Marginally Unacceptable (IV) category, and noise levels at Receptor 2 (L_{10} noise levels at 73.91 dBA) remaining in the Marginally Unacceptable (II) category.

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

Following *CEQR Technical Manual* guidelines, noise levels in the future with the proposed actions were calculated for the weekday AM, MD, and PM peak periods in the 2020 analysis year. These calculations account for the additional traffic that would be added as a consequence of the proposed actions. As shown in Table J-7, the analysis indicates that the highest L_{10} noise levels at Receptor 1a will be 81.46 dBA, and it will remain in the Clearly Unacceptable noise exposure category; the highest L_{10} noise levels at Receptor 1b will be 79.91 dBA and it will remain in the Marginally Unacceptable (IV) noise exposure category; and the highest L_{10} noise levels at Receptor 2 will be 74.06 dBA and it will remain in the Marginally Unacceptable (II) noise exposure category.

As there are no known significant planned changes in train frequency anticipated by the 2020 Build Year, noise resulting from train traffic on the elevated track in the With-Action condition is expected to remain similar to that in the Existing condition. However, to account for the increase in background noise near the elevated tracks in the With-Action condition, the highest predicted With-Action L_{eq} and L_{10} noise levels for Receptor 1a (81.34 dBA and 81.46 dBA, respectively) and Receptor 1b (79.60 and 79.91 dBA, respectively) from Table J-7 were used as the background variables for the formula used in the train noise modeling methodology. Therefore, the forecasted L_{10} value along Westchester Avenue in the With-Action condition would increase to 81.94 dBA for Receptor 1a and 80.52 dBA for Receptor 1b.

TABLE J-7: 2020 With-Action Noise Levels (dBA) at Rezoning Area

#	Time	No-Action PCEs	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change[1]	With-Action L_{10}[2]	With-Action L_{10} + Train Noise Level Projections[3]	*CEQR* Noise Exposure Category
1a	AM	1154.0	1172.0	81.27	81.34	0.07	**81.46**	**81.94**	**Clearly Unacceptable**[4]
	MD	803.6	811.6	80.84	80.89	0.04	81.01	81.54	
	PM	1178.3	1201.3	80.30	80.38	0.08	80.50	81.09	
1b	AM	1154.0	1172.0	76.83	76.90	0.07	77.13	78.35	**Clearly Unacceptable**[4]
	MD	803.6	811.6	78.27	78.32	0.04	78.55	79.46	
	PM	1178.3	1201.3	79.60	79.68	0.08	**79.91**	**80.60**	
2	AM	493.4	511.4	71.98	72.13	0.16	**74.06**	-	**Marginally Unacceptable (II)**
	MD	610.7	618.7	70.39	70.45	0.06	71.99	-	
	PM	1170.2	1193.2	70.31	70.39	0.08	72.55	-	

Notes: All PCE and noise values are shown for a weekday.
[1] With-Action L_{eq} – No-Action L_{eq}.
[2] Highest L_{10} at each receptor is shown in **bold**.
[3] Highest L_{10} with train noise modeling calculations is shown in **bold**.
[4] For Receptors 1a and 1b, CEQR Noise Exposure categories based on highest With-Action L_{10} noise level with train noise modeling calculations

In the future with the proposed actions, noise levels at the rezoning area would be similar to No-Action conditions, apart from a slight increase associated with increased traffic along Westchester Avenue and Metcalf Avenue. As indicated in Table J-7, noise levels at both receptor locations would remain in their respective CEQR noise exposure categories; with noise levels at Receptor 1a remaining in Clearly Unacceptable category, noise levels at Receptor 1b remaining in the Marginally Unacceptable (IV) category, and noise levels at Receptor 2 (L_{10} noise levels at 74.06 dBA) remaining in the Marginally Unacceptable (II) category. However, as noted above in Section IV, for conservative analysis purposes, the train noise modeling methodology forecasted value will be used for further analysis along the Westchester Avenue frontage of the rezoning area, while the monitored L_{eq} and L_{10} noise levels at Receptor 1a and 1b will be used as the background variable for the formula used in the train noise modeling methodology. As such, after calculating the increase in background noise near the elevated tracks in the With-Action condition, the highest predicted With-Action L_{10} noise levels for Receptor 1a and Receptor 1b will be 81.94 dBA and 80.52 dBA, respectively, thus resulting in noise levels at Receptor 1a remaining in the Clearly Unacceptable noise exposure category and Receptor 1b now falling in the Clearly Unacceptable noise exposure category as well.

Comparing the future With-Action noise levels with No-Action noise levels, increases in noise levels at both Receptor 1a and 1b would range from 0.04 dBA to 0.08 dBA, and increases in noise levels at Receptor 2 would range from 0.06 dBA to 0.08 dBA. According to the *CEQR Technical Manual*, increases of these magnitudes would not be perceptible. As these increases are less than the CEQR impact criteria

threshold (3.0 dBA), the overall changes to noise levels at the rezoning area as a result of the proposed actions would not result in any significant adverse noise impacts.
However, given that both Receptor 1 and Receptor 2 are anticipated to experience With-Action L_{10} noise levels that exceed 70.0 dBA, a set of required composite window/wall attenuation ratings must be determined for the rezoning area's street frontages. These attenuation requirements will be determined for the residential, community facility, and commercial uses of the RWCDS. The RWCDS development on both projected development sites would have to provide sufficient attenuation in order to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA or lower for residential/community facility uses and 50 dBA or lower for commercial uses.

VII. WINDOW/ WALL ATTENUATION RATINGS

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Typically, a building façade is composed of the wall, windows, and any vents or louvers for HVAC systems in various ratios of area. Since the proposed buildings would most likely be of masonry construction, which typically provides a high level of sound attenuation, the attenuation requirements for HUD or CEQR purposes apply primarily to the windows, but may also represent a composite window/wall attenuation value.

Composite window/wall attenuation can be described in terms of sound transmission class (STC), transmission loss (TL), and outdoor-indoor transmission class (OITC). Although these terms are sometimes used interchangeably, they are unique from each other. Transmission loss refers to how many decibels of sound a façade (wall) or façade accessory (window or door) can stop at a given frequency. The TL for a given construction material varies with the individual frequencies of the noise.

To simplify the noise attenuation properties of a wall, the STC rating was developed. It is a single number that describes the sound isolation performance of a given material for the range of test frequencies between 125 and 4,000 Hz. These frequencies sufficiently cover the range of human speech. Higher STC values reflect greater efficiencies to block airborne sound. HUD uses the STC when identifying the required sound attenuation for a façade.

The OITC is similar to the STC, except that it is weighted more towards the lower frequencies associated with aircraft, rail, and truck traffic. The OITC classification is defined by the American Society of Testing and Materials (ASTM E1332-90 (Reapproved 2003)) and provides a single-number rating that is used for designing a building façade including walls, doors, glazing, and combinations thereof. The OITC rating is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation noise. NYCDEP uses the OITC when identifying the required attenuation for a façade.

VIII. ATTENUATION REQUIREMENTS

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

All facades that would experience an L_{10} of 70.0 dBA or greater must provide an alternate means of ventilation (AMV) permitting a closed window condition during warm weather. This can be achieved by installing double-glazed windows on a heavy frame for masonry structures or windows consisting of laminated glass, along with AMV such as central air conditioning, through-wall sleeve-fitted air conditioners, packaged terminal air conditioning (PTAC) units, trickle vents integrated into window frames, or other approved means. Where the required window/wall attenuation is above 40 dBA, special design features may be necessary that go beyond the normal double-glazed window and air conditioning. These may include specially designed windows (e.g., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.) and additional building insulation.

As detailed above and presented in Tables J-7, the maximum predicted L_{10} noise levels adjacent to the rezoning area on Westchester Avenue are expected to be 81.94 dBA (Receptor 1a) and 80.52 dBA (Receptor 1b), and 74.06 dBA along Metcalf Avenue. As shown in Figure J-2, to ensure acceptable interior noise levels for the proposed and projected developments on Lots 1 and 51 of Block 3780, a minimum of 38 dBA and 31 dBA of attenuation is needed.

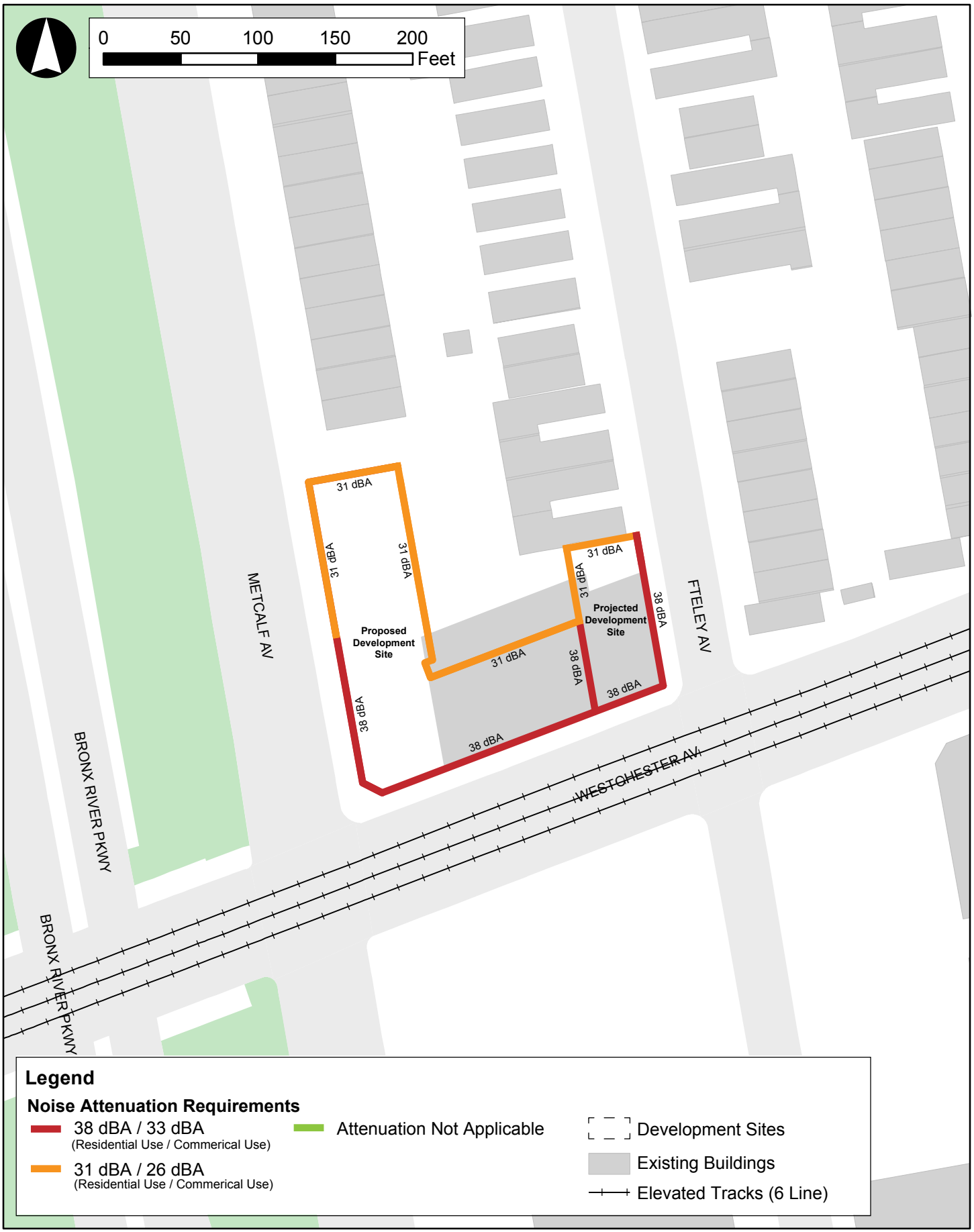
The noise attenuation specifications for the proposed and projected development sites would be mandated through the assignment of an (E) designation (E-425) on Lots 1 and 51 on Block 3780.

The (E) designation text related to noise would be as follows:

> **Block 3780, Lot 1: To ensure an acceptable interior noise environment, future residential, commercial, and/or community facility uses on Block 3780, Lot 1 must provide a closed window condition with a minimum 38 dBA window/wall attenuation on all southern façades facing Westchester Avenue and western and eastern facades within 100 feet from Westchester Avenue and 31 dBA of attenuation on all other facades to maintain an interior noise level of 45 dBA. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning. The minimum required composite building façade attenuation for future commercial uses would be 5 dBA lower than that for residential and community facility uses.**
>
> **Block 3780, Lot 51: To ensure an acceptable interior noise environment, future residential, commercial, and/or community facility uses on Block 3780, Lot 51 must provide a closed window condition with a minimum 38 dBA window/wall attenuation on all southern façades facing Westchester Avenue and western and eastern facades within 100 feet from Westchester Avenue and 31 dBA of attenuation on all other facades to maintain an interior noise level of 45 dBA. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning. The minimum required composite building façade attenuation for future commercial uses would be 5 dBA lower than that for residential and community facility uses.**

With the implementation of the attenuation levels outlined above, the proposed actions and associated RWCDS would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines. Therefore, the proposed actions and associated RWCDS would not result in any significant adverse noise impacts related to building attenuation requirements.

Noise Attenuation Requirements



VIII. OTHER NOISE CONCERNS

Mechanical Equipment

No detailed designs of the residential building's mechanical systems (i.e., heating, ventilation, and air conditioning systems) are available at this time. However, those systems would be designed to meet all applicable noise regulations and requirements, and would be designed to produce noise levels which would not result in any significant increases in ambient noise levels.

Aircraft Noise

The *CEQR Technical Manual* states that an aircraft assessment is warranted if a project contains a receptor within 1 mile of an existing flight path and causes an aircraft to fly through existing or new flight paths over or within 1 mile (horizontal distance parallel to the ground) of a receptor. As the Rezoning area is located within close proximity of LaGuardia Airport (approximately 3 miles south of the site), the impacts from aircraft noise were considered. While noise resulting from overhead inbound flights into LaGuardia Airport is evident from the Rezoning area, the site does not fall within a marginally unacceptable Federal Aviation Administration (FAA) noise exposure contour, as it outside the DNL 65 dBA (Day-Night Average Sound Level) contour of LaGuardia Airport.[7] The *CEQR Technical Manual* states that if the rezoning area is located outside an L_{dn} 65 contour or greater, it is not likely that the proposed actions would result in a significant adverse noise impact and therefore, no further analysis is necessary.

Noise Levels at the Applicant-owned Projected Development Site 1's Accessory Outdoor Recreational Space

Based on the predicted noise levels at Receptor 2 (along the proposed development's future western façade), the northern section of the proposed development's accessory outdoor recreational space – the rest of the outdoor recreational space is located in the interior yard of the site – may experience noise levels above 55 dBA L_{10}, and therefore would exceed the recommended noise levels for "outdoor areas requiring serenity and quiet" pursuant to *CEQR* noise exposure guidelines (see Table J-3).

As the dominant noise at this section of the outdoor recreational space would result from vehicular traffic, and noise levels exceed the 55 dBA recommendation under existing conditions, there are no practical and feasible measures that could be implemented to reduce noise levels at the proposed outdoor recreational space to below CEQR guidelines. However, while noise levels at the proposed outdoor recreational space would be above the guideline noise levels, they would be comparable to, if not lower than, noise levels at other open spaces in the surrounding area, including the Bronx River Parkway Ballfields and the Watson Gleason Playground. Due to the level of noise present at most New York City open spaces and parks from vehicular traffic and typical urban activities, the relatively low 55 dBA L_{10} noise level is not achievable in most locations within the City. Therefore, the future projected noise levels would not constitute a significant adverse noise impact to the proposed development's accessory outdoor recreational space.

[7] Day-Night Average Sound Level (DNL) is a 24-hour equivalent sound level. DNL 65 dBA is the Federal significance threshold for aircraft noise exposure. FAA Order 1050. 1E, Environmental Impacts: Policies and Procedures, Appendix A, paragraph 14.3, page A-61.

APPENDIX 1

WATERFRONT REVITALIZATION PROGRAM

CONSISTENCY ASSESSMENT FORM

FOR INTERNAL USE ONLY	WRP No. 17-030
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

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

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

A. APPLICANT INFORMATION

Name of Applicant: 1675 JV Associates, LLC

Name of Applicant Representative: Cara McAteer, Phipps Houses

Address: 902 Broadway, 13th Floor

Telephone: (646)388.8278 Email: cmcateer@phippsny.org

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The applicant, 1675 JV Associates, LLC, is seeking zoning map and text amendments from the New York City Planning Commission (CPC), in addition to public financing from the New York City Department of Housing Preservation and Development (HPD) and the New York City Housing Development Corporation (HDC), to facilitate the development of an approximately 203,000 gross square foot (gsf) mixed-use residential, community facility, and commercial building at 1675 Westchester Avenue (projected development site 1; Lot 1 on Block 3780) in the Soundview neighborhood of Bronx Community District (CD) 9 (the "proposed project"). The RWCDS for projected development site 1 would include up to approximately 220 dwelling units (DUs), approximately 6,846 gsf of community facility space, which is assumed to accommodate Use Group 4 ambulatory diagnostic or health care-related use, and approximately 7,570 gsf of local retail.

As the rezoning area would also include a non-applicant owned property (Lot 51 on Block 3780), the RWCDS was developed to assess the full scope of potential future development induced by the proposed actions. Under the RWCDS, the proposed actions would facilitate the incremental development of 144 DUs (including a net increase of 227 affordable DUs) and 11,401 gsf of local retail, in addition to a net reduction of 8,193 gsf of medical office floor area and 47 accessory parking spaces.

2. Purpose of activity

The proposed actions are intended to facilitate a new affordable housing development, as well as local retail and community facility uses, on projected development site 1. This project would help to address the continuing need for affordable housing for a range of household income levels in Soundview and the surrounding neighborhoods. In addition, extending the MIH to the projected development site would promote the creation of permanently affordable housing.

The proposed zoning map and text amendment would create additional zoning capacity in a transit accessible area to support new housing creation and increase the number of affordable housing units available in New York City. The creation of new housing supply at various income levels is also expected to help alleviate the upward pressure on housing prices, and contribute to housing affordability in the neighborhood and larger City. The MIH program would promote and retain neighborhood economic diversity in the area and create a considerable amount of affordable housing in close proximity to public transit.

The proposed C2-4 would activate the streetscape on Westchester Avenue between Metcalf and Fteley Avenues and allow a consistent streetwall, retail continuity, and serve local residents. It would also bring into conformance the existing local retail uses on a portion of the rezoning area.

C. PROJECT LOCATION

Borough: Bronx Tax Block/Lot(s): Block 3780, Lots 1 and 51 (sliver of Lot 50)

Street Address: 1675 & 1679 Westchester Avenue

Name of water body (if located on the waterfront): N/A

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

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

State Actions/Approvals/Funding

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

Federal Actions/Approvals/Funding

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

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

E. LOCATION QUESTIONS

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

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

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

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

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

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

F. WRP POLICY ASSESSMENT

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

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

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

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

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

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

G. CERTIFICATION

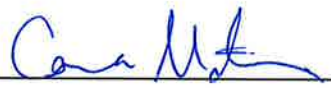
The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification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

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

Applicant/Agent's Name: Cara McAteer, Phipps Houses

Address: 902 Broadway, 13th Floor, New York, NY

Telephone: (646)388.8278 Email: cmcateer@phippsny.org

Applicant/Agent's Signature: 

Date: March 20, 2017

APPENDIX 2

NYC DEPARTMENT OF BUILDINGS COMPLAINT RECORD

CLICK HERE TO SIGN UP FOR BUILDINGS NEWS

NYC Department of Buildings

Overview for Complaint #:2199400 = RESOLVED

Complaint at: 1677 WESTCHESTER AVENUE **BIN: 2091258** **Borough: BRONX** **ZIP: 10472**
Re: NO C OF O ON FILE

Category Code: 05 PERMIT - NONE (BUILDING/ PA/ DEMO ETC.)

Assigned To: BRONX BOROUGH OFFICE **Priority:** B
Received from FDNY : 5096

Received: 06/13/2014 15:05 **Block:** 3780 **Lot:** 51 **Community Board:** 209
Owner: URBAN FACILITIES CORP

Last Inspection: 07/31/2014 - - BY BADGE # 2188
Disposition: 08/02/2014 - I2 - NO VIOLATION WARRANTED FOR COMPLAINT AT TIME OF INSPECTION
Comments: CURRENT BLDG OCCUPANCY CONFORM TO DOB RECORDS. NO C OF O ISSUED

Complaint Disposition History

#	Disposition Date	Disposition Code	Disposition	Inspection By	Date

If you have any questions please review these Frequently Asked Questions, the Glossary, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.

APPENDIX 3

CITY 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 / 77DCP332X
Project:
Address: 1675 WESTCHESTER AVENUE, **BBL:** 2037800001
Date Received: 1/25/2017

[X] No architectural significance

[X] No archaeological significance

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

Gina Santucci 2/7/2017

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 32086_FSO_GS_02072017.doc

NYC Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 17DCP154X
Project:
Address: 1675 WESTCHESTER AVENUE, **BBL:** 2037800001
Date Received: 4/5/2017

[X**] No architectural significance**

[X**] No archaeological significance**

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

Comments: The LPC is in receipt of the EAS dated 3/31/17. The text is acceptable for historic and cultural resources.

Gina Santucci 4/5/2017

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 32086_FSO_GS_04052017.doc

Environmental Protection

Vincent Sapienza, P.E.
Acting Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4479
alicata@dep.nyc.gov

May 1, 2017

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

Re: 1675 Westchester Ave
Block 3780, Lots 1, 50 and 51
CEQR # 17DCP154X

Dear Mr. Dobruskin:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the March 2017 Environmental Assessment Statement (EAS) prepared by Philip Habib & Associates and the February 2017 Phase I Environmental Site Assessment Report (Phase I) prepared by Cider Environmental on behalf of 1675 JV Associates, LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking discretionary actions from the New York City Department of City Planning (DCP) including a zoning map amendment that would affect a portion of Block 3780 in the Soundview neighborhood of Bronx Community District 9, and a related zoning text amendment to Appendix F of the New York City Zoning Resolution to establish the proposed rezoning area as a Mandatory Inclusionary Housing (MIH) area subject to the affordability requirements of Option 2 of the MIH program (collectively "the proposed actions"). The proposed zoning map amendment would change the zoning of an approximately 30,514 square foot portion of Block 3780, comprising the majority of Lots 1 and 51, as well as a sliver of Lot 50, which occupy the southern portion of the block with frontage on Westchester Avenue between Metcalf and Fteley Avenues, from R6 to R8A. In addition, a C2-4 commercial overlay would be mapped to a depth of 100 feet along the north side of Westchester Avenue between Metcalf and Fteley Avenues. The proposed actions would facilitate the development of an approximately 203,000 gross square foot (gsf) mixed-use building at 1675 Westchester Avenue on Lot 1 (projected development site 1) containing affordable housing, community facility space, and local retail by the applicant. The proposed building would be built to the street line along Westchester and Metcalf Avenues, and would be rise 13-stories with a qualifying ground floor. However, for the purposes of a conservative Reasonable Worst Case Development Scenario (RWCDS) analysis, this analysis will assume that the proposed development could include up to 14-stories with a qualifying ground floor, based on the proposed zoning. The proposed development as a RWCDS would contain up to approximately 220 affordable housing units, approximately

7,570 gsf of ground floor local retail, and approximately 6,845 gsf of community facility space. The proposed actions would also affect Lot 51 (projected development site 2), which is occupied by a single-story nonconforming commercial building that could redeveloped as a result of the proposed actions.

The February 2017 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential and commercial uses including residential buildings, commercial buildings, vacant lots, a liquor store, a supermarket, a medical center/office, dry cleaning, grocery stores, etc. An active dry cleaner was identified approximately 50 feet from the subject property. Due to the age of the on-site building asbestos containing materials (ACM) and lead based paint (LBP) may be present on the on-site building. The New York State Department of Environmental Conservation database identified 11 NY Spills within 1/8 mile, 8 underground storage tank sites and 37 aboveground storage tank sites within 1/4 mile, and 38 leaking storage tanks within ½ mile from the subject property. In addition, there is 1 manufactured gas plant site within approximately 1 mile from the subject property.

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

Projected Development Site 1: Block 3870, Lot 1 (Site under the control or ownership of the applicant)

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

- DCP should inform the applicant suspected ACM and LBP may be present on the on-site building. These materials should be removed and/or managed in accordance with all federal, state and local regulations.

Projected Development Site 2: Block 3870, Lot 51 (Site not under the control or ownership of the applicant)

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

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 number **17DCP154X**. If you have any questions, you may contact Mohammad Khaja-Moinuddin at (718) 595-4445.

Sincerely,

Wei Yu
Acting Deputy Director, Hazardous Materials

c: R. Weissbard
T. Estesen
M. Wimbish
M. Khaja-Moinuddin
A. Meunier – DCP
O. Abinader – DCP
M. Bertini – OER

APPENDIX 4

MIH ZONING TEXT AMENDMENT & MAP

PROPOSED
TEXT AMENDMENT
4.24.17

Matter in underline is new, to be added;
Matter in ~~strikeout~~ is to be deleted;
Matter within # # is defined in Section 12-10;
* * * indicates where unchanged text appears in the Zoning Resolution

* * *

APPENDIX F

Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas

* * *

THE BRONX

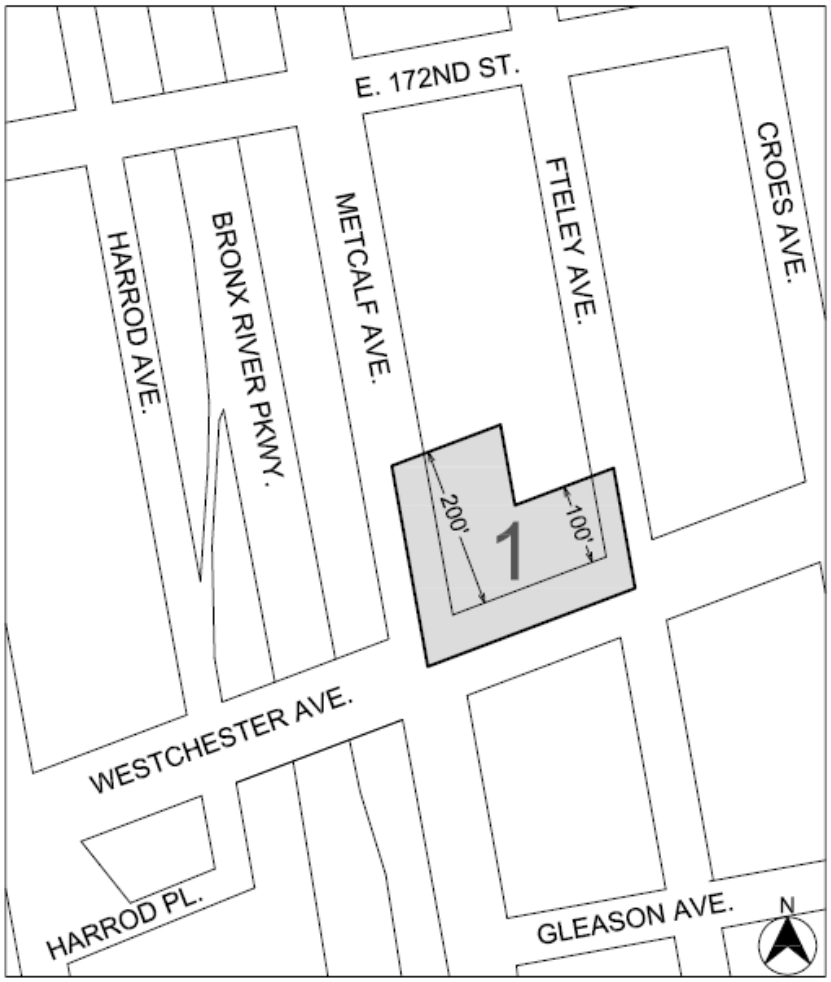
* * *

The Bronx Community District 9

In the R8A District within the area shown on the following Map 1:

Map 1 – [date of adoption]

[PROPOSED MAP]



Mandatory Inclusionary Housing area see Section 23-154(d)(3)
Area **1** [date of adoption] – MIH Program Option 2

Portion of Community District 9, The Bronx

* * *