Arthur Avenue Rezoning

Environmental Assessment Statement

CEQR No. 21DCP079X

ULURP Nos. 210027ZMX; 210028ZRX



Prepared for:
2461 Hughes Associates LLC

Prepared by:
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December 30, 2020

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Environmental Assessment Statement

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EAS SHORT FORM

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* Arthur Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
21DCP079X	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
210027ZMX; 210028ZRX	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning			2461 Hughes Associates LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Olga Abinader, Director, Environmental Review and Assessment Division			Nora Martins, Partner, Akerman LLP		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 520 Madison Avenue, 20th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10022
TELEPHONE	EMAIL		TELEPHONE	EMAIL	
212-720-3493	oabinad@planning.nyc.gov		212-259-6456	nora.martnins@akerman.com	

5. *Project Description*

2461 Hughes Associates LLC (the "Applicant") is seeking two discretionary actions from the New York City City Planning Commission (NYC CPC) to facilitate the redevelopment of 2457 Hughes Avenue (Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58) (the "Development Site") with an approximately 150,753 gross square feet (gsf) mixed-use commercial/residential development in the Belmont/Little Itlay neighborhood of Bronx Community District (CD) 6 (the "Proposed Project"). Specifically, the Applicant is requesting the following actions:

(1) A zoning map amendment which would rezone Rezoning Area 1 (Block 3077, Lots 29, 31, 33, 53, 54, 55, 56, and 58 in their entirety; and a portion of (p/o) Lot 34) from R6 and R6/C2-4 districts to a C6-1 (R7-2 equivalent) district and to rezone Block 3077, portions of Lots 4 and 6 ("Rezoning Area 2") from an R6 district to an R6/C1-4 district; and

(2) A zoning text amendment which would designate the Rezoning Area as a Mandatory Inclusionary Housing (MIH) Area, which would require the construction of permanently affordable residential units in the Rezoning Area, in accordance with City policy. The Applicant proposes to map Rezoning Area 1 with both Option 2 and the Workforce Option, and intends to develop the Proposed Project pursuant to the Workforce Option.

Under the With-Action scenario, the requested zoning map and text amendments would be approved, allowing the Applicant to construct the Proposed Project. The Proposed Project would maximize the available 6.0 FAR available for a mixed-use building containing commercial and residential uses (comprising approximately 58,091 gsf of residential uses and approximately 70,409 gsf of commercial uses). As the Proposed Project would maximize the floor area allowable on the Development Site, the Proposed Project is considered the RWCDS for the Development Site. The Proposed Project would comprise two new buildings totaling approximately 150,753 gsf (122,694 zsf) that would be constructed on the Development Site. One building, known as Building A, would contain seven floors (75-feet tall to the rooftop, 100-feet tall including bulkhead) and comprise approximately 58,091 gsf of residential uses, introducing a total of approximately 56 DUs (the residential unit size for the Proposed Project is approximately 1,037 gsf per DU). Building A would be located on the eastern portion of the Development Site. The Applicant is seeking to develop the Proposed Project's residential

portion pursuant to the MIH Workforce Option, which would require that 30 percent of the residential floor area, equivalent to approximately 17 DUs, would be affordable at an average of 115 percent AMI, with five percent of the residential floor area restricted at 70 percent AMI and five percent of the residential floor area restricted at 90 percent AMI. However, for CEQR analysis purposes, for MIH units, the most conservative assumption will be used for each CEQR technical area; unless otherwise stated, it will be assumed that 20 percent of the total residential floor area would be restricted as affordable to households with incomes at or below 80 percent AMI, resulting in the development of approximately 11 MIH units. In addition to Building A, an approximately 70,409 gsf hotel containing 176 rooms would be located in a second building, known as Building B. Building B would be located on the western portion of the Development Site, on the entirety of Lot 29 and portions of Lots 31 and 58. Building B would contain 13 floors (135-feet tall to the rooftop, 160-feet tall including bulkhead). Approximately 156 total parking spaces would be provided and located in an approximately 22,253 gsf parking garage located on a portion of the ground floor and in the cellar of the Proposed Project. The parking garage would utilize stackers and would be accessed via a new curb cut on Arthur Avenue.

Although the Applicant is proposing a mixed-use commercial/residential development, as the Proposed Actions would increase the permitted residential density on the Development Site, a second reaonable-worst case development scenario (RWCDS) (the "Alternate Residential Scenario") is being analyzed to encompass all potential environmental impacts that could occur as a result of the Proposed Actions. The Alternate Residential Scenario maximizes the potential residential FAR of 4.6, the maximum permitted residential FAR pursuant to the proposed zoning map and text amendments, and includes a reasonable and likely amount of ground floor retail uses.

Project Location

BOROUGH Bronx	COMMUNITY DISTRICT(S) 6	STREET ADDRESS 2402, 2410, 2450, 2452, 2456, 2458 Arthur Avenue; 609, 617 East 188th Street; 2457, 2459, 2461 Hughes Avenue
TAX BLOCK(S) AND LOT(S) Block 3077, Lots 29, 31, 33, 53, 54, 55, 56, and 58 in their entirety; portion of Lots 4, 6, and 34		ZIP CODE 10458

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Rezoning Area 1 is located on the East 188th Street block-front of Block 3077 and occupies approximately 170 feet of frontage on the north side of East 188th Street, approximately 145 feet of frontage on the east side of Arthur Avenue, and approximately 145 feet of frontage on the west side of Hughes Avenue. Rezoning Area 2 is located on Block 3077, immediately to the south of Ciccarone Park, and occupies approximately 20 feet of frontage on the east side of Arthur Avenue, 20 feet of frontage on the west side of Hughes Avenue, and approximately 171 feet of frontage on the south side of Ciccarone Park.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6, R6/C2-4	ZONING SECTIONAL MAP NUMBER 3c

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

Board of Standards and Appeals: ☐ YES ☒ NO

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 24,650 sf (Rezoning Area 1); 3,414 sf (Rezoning Area 2)
Waterbody area (sq. ft) and type: 0 sf
Roads, buildings, and other paved surfaces (sq. ft.): 24,650 sf (Rezoning Area 1); 5,432 sf (Rezoning Area 2)
Other, describe (sq. ft.): 0 sf

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): Proposed Project: 150,753 gsf; Alternate Residential Scenario: 135,438 gsf

NUMBER OF BUILDINGS: Proposed Project: 2 (Building A and Building B on the Development Site); Alternate Residential Scenario: 1

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): Proposed Project: Building A: 58,091 gsf, Building B: 70,409 gsf, 22,253 gsf shared parking garage; Alternate Residential Scenario: 135,438 gsf

HEIGHT OF EACH BUILDING (ft.): Proposed Project: Building A: 75' (100' including bulkhead), Building B: 135' (160' including bulkhead); Alternate Residential Scenario: 75' (100' including bulkhead)

NUMBER OF STORIES OF EACH BUILDING: Proposed Project: Building A: 7, Building B: 13; Alternate Residential Scenario: 7

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: 20,462 sf
The total square feet not owned or controlled by the applicant: 7,532 sf

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: 20,462 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 306,930 (20 feet cellar depth) cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 20,462 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.)	Proposed Project: 58,091 gsf; Alternate Residential Scenario: 100,377 gsf	Proposed Project: 70,409 gsf; Alternate Residential Scenario: 21,007 gsf	0	0
Type (*e.g.,* retail, office, school)	Proposed Project: 56; Alternate	Proposed Project: Hotel; Alternate	N/A	N/A

	Residential Scenario: 100 units	Residential Scenario: Local retail		

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

If "yes," please specify:

NUMBER OF ADDITIONAL RESIDENTS:
Proposed Project: 105
Alternate Residential Scenario: 227

NUMBER OF ADDITIONAL WORKERS:
Proposed Project: 47
Alternate Residential Scenario: 44

Provide a brief explanation of how these numbers were determined: The number of additional residents is based on the average household size of 2.77 from the 2010 Census for Neighborhood Tabulation Area (NTA) BX06 (Belmont). The number of existing and No-Action scenario employees has been provided by the Applicant. The number of With-Action scenario employees has been calculated based on: One employee per 25 DUs; three employees per 1,000 gsf of local retail space; one employee per 2.67 hotel rooms; and one employee per 50 parking spaces.

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

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

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

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2023

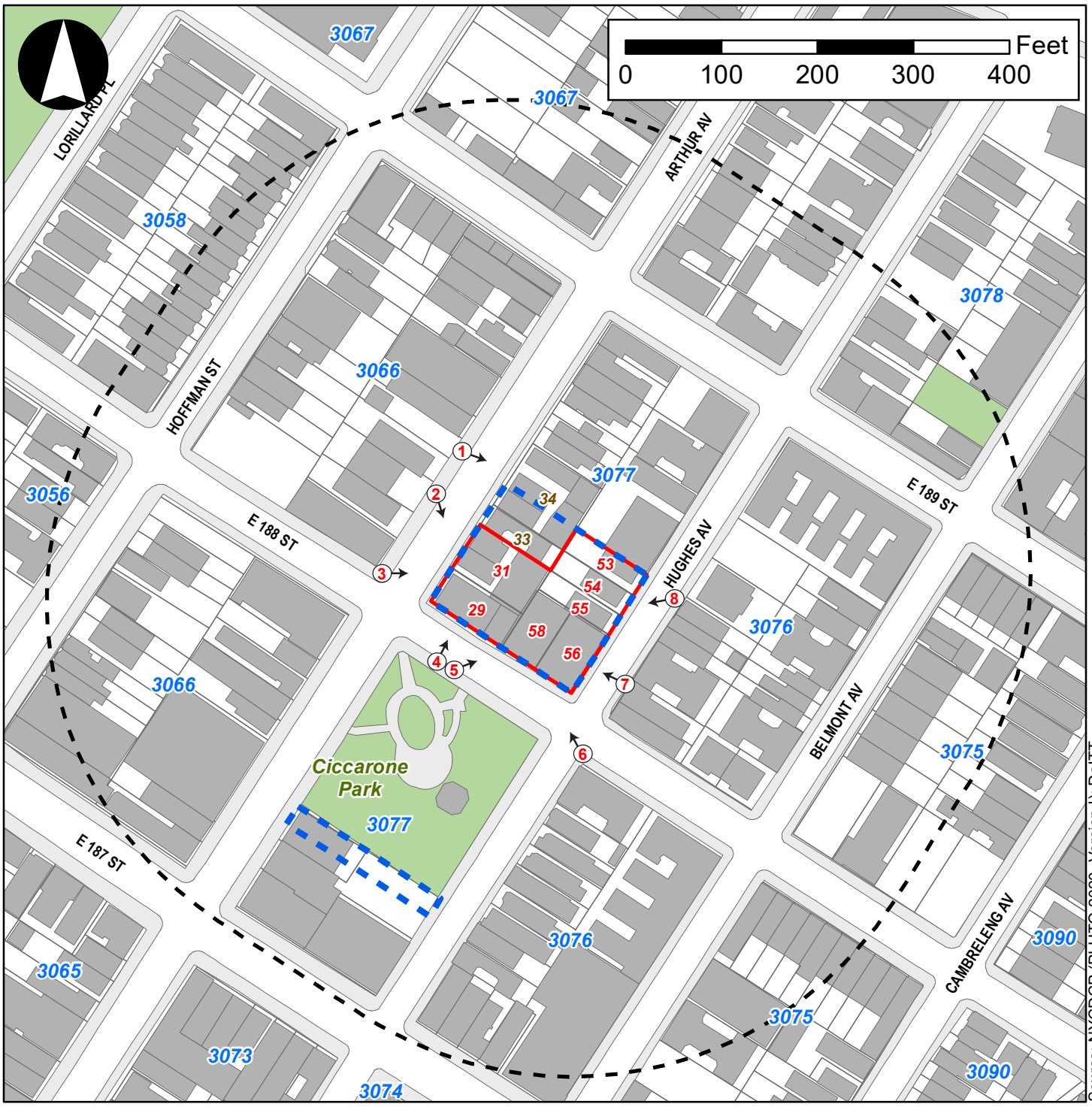
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: approximately 18 to 24 months

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: Single phase with construction lasting up to 24 months.

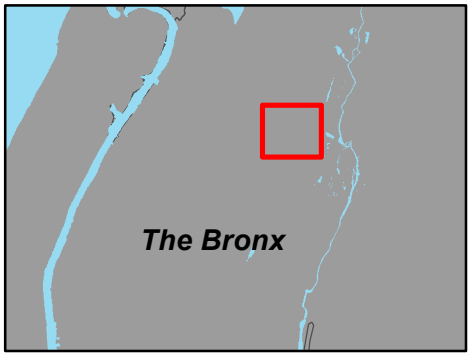
10. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

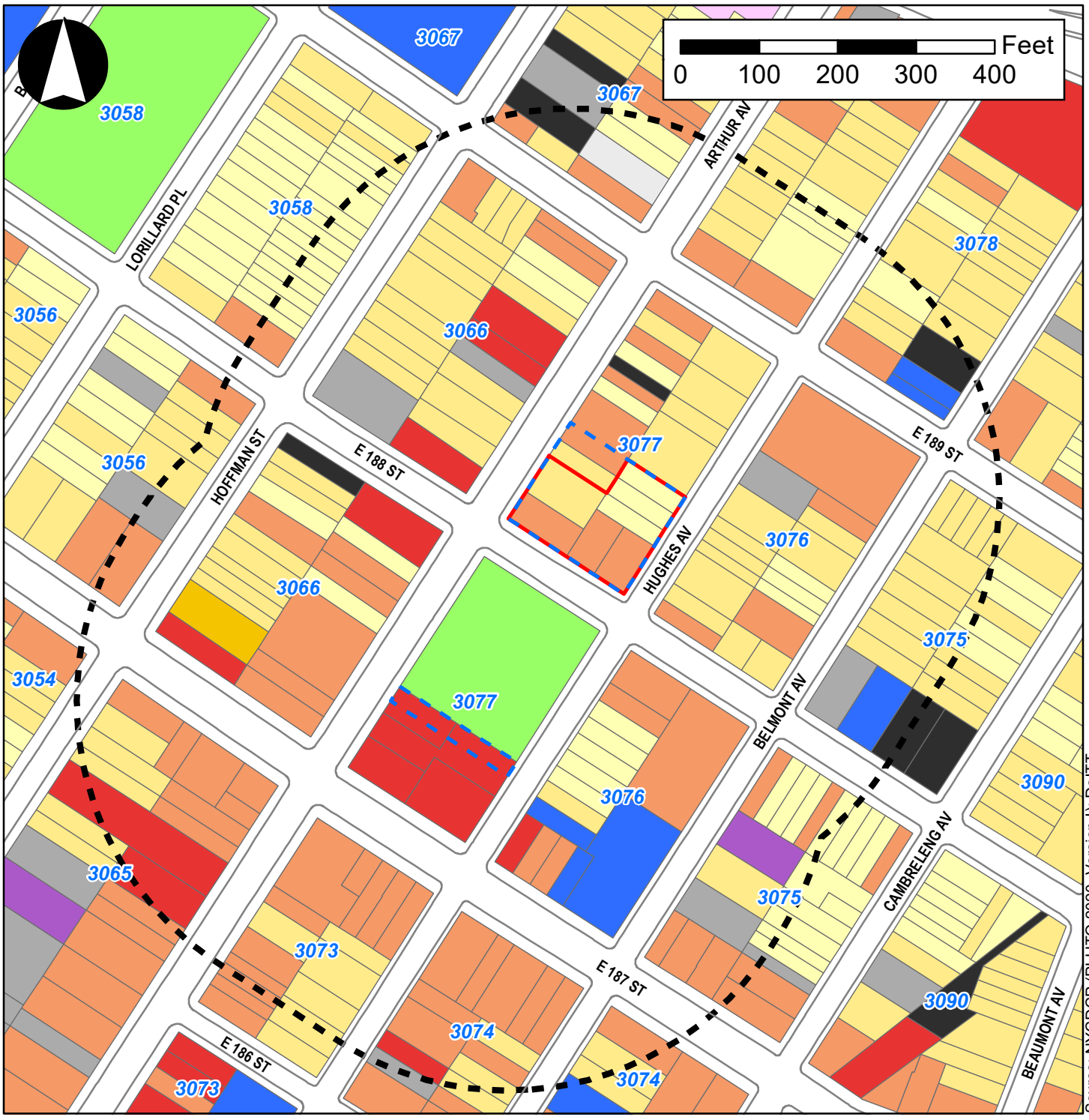
☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Mixed-use Commercial/Residential



Legend

- 400-Feet Radius
- Rezoning Areas
- Development Site
- 56 — Development Site Tax Lots
- ① → Photo Locations (refer to Figures 5a and 5b)
- 33 — Non-Applicant Owned Tax Lots
- 3077 — Tax Blocks
- Building Footprints
- Open Space

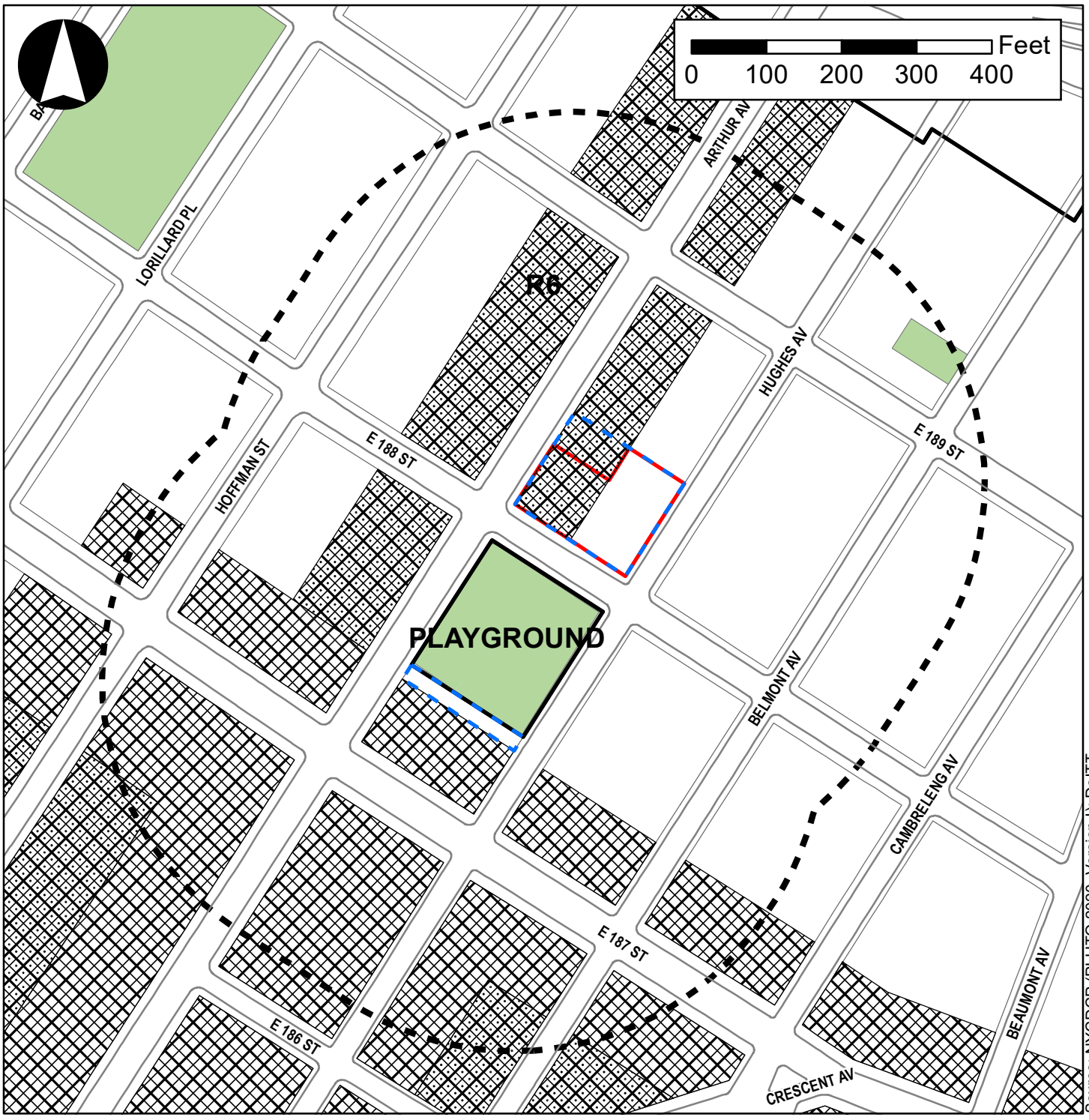




Source: NYCDCP (PLUTO 2020, Version I); DoITT

Legend

- Rezoning Areas
- 400-Feet Radius
- Development Site
- 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 Space
- Parking Facilities
- Vacant Land
- All Others or No Data



Legend

- Rezoning Areas
- 400-Feet Radius
- Development Site
- R6 Zoning District Boundaries
- C1-4 Overlay
- C2-4 Overlay
- Open Space



Arthur Avenue Rezoning EAS

Figure 4
Tax Map



1. View of Rezoning Area 1 looking east from Arthur Avenue.



2. View of Rezoning Area 1 looking southeast from Arthur Avenue.



3. View of Rezoning Area 1 looking east from intersection of Arthur Avenue and East 188th Street.



4. View of Rezoning Area 1 looking north from East 188th Street.



5. View of Rezoning Area 1 looking east from East 188th Street.



6. View of Rezoning Area 1 looking northwest from intersection of Hughes Avenue and East 188th Street.



7. View of Rezoning Area 1 looking northwest from Hughes Avenue.



8. View of Rezoning Area 1 looking southwest from Hughes Avenue.

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?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐

	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.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☐	☒
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☐	☒
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☐	☒
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☐	☒
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☐	☒
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See Attachment B	☐	☒
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒

	YES	NO
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): Proposed Project: 7,240 pounds per week; Alternate Residential Scenario: 9,084 pounds per week		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): Proposed Project: 22,589,597 annual BTUs; Alternate Residential Scenario: 17,261,580 annual BTUs		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☒	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☒
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☒
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☒	☐
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☒	☐
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		

	YES	NO
(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. See Attachment B		
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. Neither the Proposed Project nor the Alternate Residential Scenario are expected to result in any significant adverse impacts on the technical areas relating to neighborhood character, including land use, zoning, and public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, and noise. Therefore, the Proposed Actions would not result in a significant adverse impact to neighborhood character, and further analysis is not warranted.		
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		

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
Philip Habib, Principal, Philip Habib & Associates	12-22-2020

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).

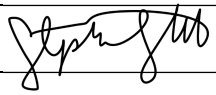
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. 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	Department of City Planning on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe	December 30, 2020

SIGNATURE



NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The applicant, Bajraktari Realty Management, seeks a Zoning Map Amendment from R6 and R6/C2-4 to C6-1 and extending a C1-2 commercial overlay and Zoning Text Amendment to designate the Project Area as a Mandatory Inclusionary Housing Area to facilitate the development of two new buildings comprised of a seven-story residential building (56 units) and a thirteen-story hotel (146 rooms) located at 2450 Arthur Avenue, Community District 6, Bronx, Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58. Approximately 156 total parking spaces would be provided. The area surrounding the affected area is a dense urban setting consisting predominantly of residential and mixed-use commercial/residential land uses, which are reflective of the residential and commercial (overlay) zoning districts mapped throughout the neighborhood. The analysis concludes that the proposed actions would not introduce a new land use, nor affect the existing mixed-use character of the area, nor affect public policy, which represent the thresholds of impact significance in the 2014 CEQR Technical Manual. Therefore, no significant adverse impacts related to Land Use, Zoning, and Public Policy would result from the proposed actions.

Open Space

A detailed analysis related to Open Space is included in this EAS. A quantitative assessment of open space was performed to determine how the proposed action would change the ratio of open space to population in the study area. The qualitative assessment supplements the quantitative assessment and considers nearby destination open space resources. The study area contains a total of approximately 6.96 acres of publicly accessible open space, of which approximately 3.49 acres (50.1 percent) comprises active open space uses and approximately 3.47 acres (49.9 percent) comprises passive open space uses. In the future with the Proposed Actions, the total, active, and passive open space ratios would each decrease by 0.57 percent from the No-Action scenario. The total, active, and passive open space ratios would decrease by less than the one percent significant adverse impact threshold in the 2014 CEQR Technical Manual. As such, demand for open space generated by the Reasonable Worst Case Development Scenario used for analysis would not significantly exacerbate the No-Action deficiency, and the population added as a result of the Proposed Actions is not expected to noticeably affect utilization of the area's open spaces, and a significant impact would not occur.

Shadows

A detailed analysis related to Shadows is included in this EAS. Per CEQR Technical Manual guidance, shadow analyses were performed for the sunlight-sensitive resource Ciccarone Park on four representative days of the year: March 21/September 21 (the equinoxes); May 6 (the midpoint between the summer solstice and the equinoxes, and equivalent to August 6); June 21 (the summer solstice and the longest day of the year); and December 21 (the winter solstice and shortest day of the year). Ciccarone Park is an approximately 0.55-acre public park owned and operated by NYC Parks. The Proposed Project would cast incremental shadows on portions of Ciccarone Park on two of the four representative analysis days. Incremental shadow duration would be minimal, ranging from one hour and 12 minutes on May 6/August 6 to two hours and 10 minutes on June 21, and would be limited to the early morning hours generally before 8:00AM. Therefore, incremental shadows from the Proposed Project on Ciccarone Park would not be considered a significant adverse impact per the 2014 CEQR Technical Manual, as the extent and duration of the incremental shadows would not significantly reduce direct sunlight exposure on any of the sunlight-sensitive features found within the open space, and would not significantly alter the public's use of the open space resource or threaten the viability of vegetation.

Hazardous Materials and Air Quality

An (E) designation (E-599) related to hazardous materials and air quality would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials and air quality analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials or air quality.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Katherine Glass at kglass@planning.nyc.gov.

TITLE Deputy Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE December 30, 2020
SIGNATURE	
TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE January 4, 2021
SIGNATURE	

Project Name: Arthur Avenue Hotel
CEQR # 21DCP079X
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Bx	Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials and air quality an (E) designation (E-599) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

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

Hazardous Materials

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

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

Project Name: Arthur Avenue Hotel
CEQR # 21DCP079X
SEQRA Classification: Unlisted

Air Quality

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

Projected Development Site 1:
Block 3077, Lots 53, 54, 55, 56, and p/o 58 (Building A): Any new residential and/or commercial development on the above-referenced property must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and hot water equipment, and ensure that the HVAC and hot water equipment stack is located at the highest tier and at least 103 feet above grade, at most 15 feet away from the eastern lot line facing Hughes Avenue, and at least 64 feet away from the lot line facing East 188 Street, to avoid any potential significant adverse air quality impacts.
Block 3077, Lots 31, 29, p/o 58 (Building B): Any new residential and/or commercial development on the above-referenced property must ensure the heating, ventilating, and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 138 feet above grade, to avoid any potential significant adverse air quality impacts.

ATTACHMENT A

PROJECT DESCRIPTION

I. INTRODUCTION

The Applicant, 2461 Hughes Associates LLC, is seeking the approval of two discretionary actions to facilitate the redevelopment of 2457 Hughes Avenue (Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58) (the "Development Site") with an approximately 150,753 gross square feet (gsf) mixed-use commercial/residential development in the Belmont/Little Italy neighborhood of Bronx Community District (CD) 6 (the "Proposed Project"). The discretionary actions include: (1) a zoning map amendment to rezone the following tax lots on Bronx Block 3077 in their entirety: Lots 29, 31, 33, 53, 54, 55, 56, and 58, as well as a portion of (p/o) Lot 34 ("Rezoning Area 1") from R6 and R6/C2-4 zoning districts to a C6-1 (R7-2 equivalent) zoning district and to rezone Block 3077, portions of Lots 4 and 6 ("Rezoning Area 2") from R6 zoning district to an R6/C1-4 zoning district; and (2) a zoning text amendment to Appendix F of the *Zoning Resolution of the City of New York* (ZR) to establish a Mandatory Inclusionary Housing (MIH) area coterminous with the area to be rezoned to a C6-1 district (collectively known as the "Proposed Actions"). The New York City Department of City Planning (DCP) will be serving as the lead agency on behalf of the NYC City Planning Commission.

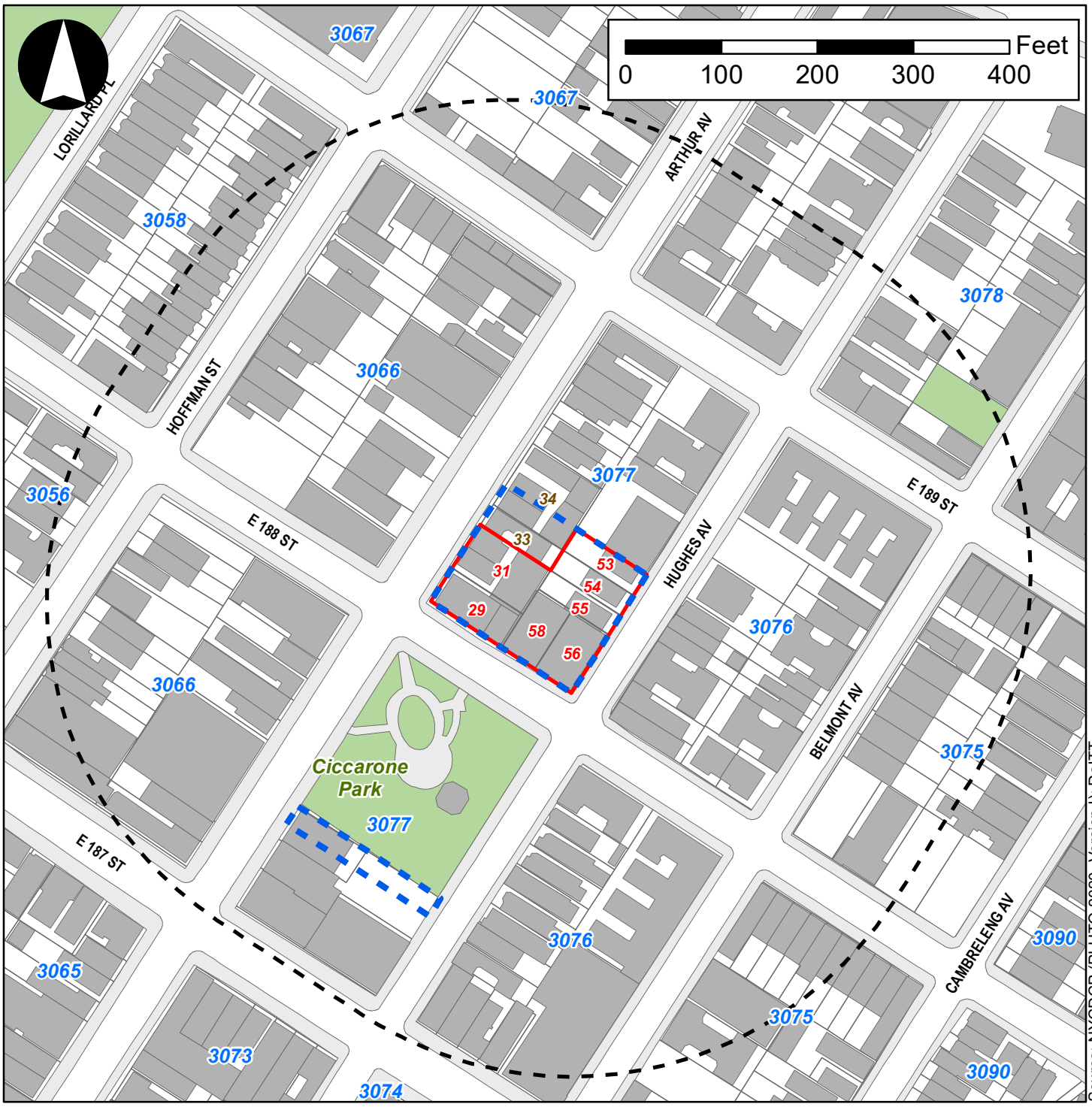
This attachment provides a description of the Proposed Actions, including information about the Rezoning Area and the Development Site, existing conditions, project purpose and need, the reasonable worst-cast development scenario (RWCDS), and the governmental approvals required. The attached supplemental studies examine the potential for the Proposed Actions to result in significant adverse impacts in any City Environmental Quality Review (CEQR) technical areas, including separate attachments with detailed analyses of land use, zoning, and public policy; open space; shadows; urban design and visual resources; air quality; and noise in Attachments C through H, respectively. All other preliminary screening assessments are summarized in **Attachment B, "Supplemental Screening."**

II. EXISTING CONDITIONS

Rezoning Area 1

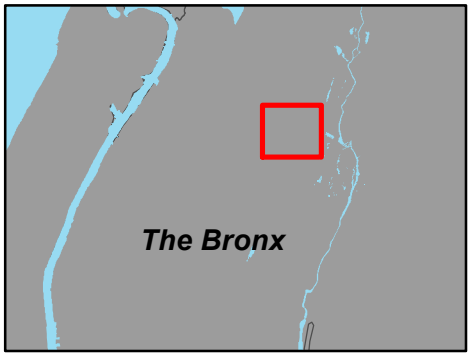
As shown in **Figure A-1**, Rezoning Area 1 has approximately 170 feet of frontage on the north side of East 188th Street, approximately 145 feet of frontage on the east side of Arthur Avenue, and approximately 145 feet of frontage on the west side of Hughes Avenue. Rezoning Area 1 measures 24,530 square feet (sf), consisting of the 20,462 sf Applicant-owned Development Site (Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58), as well as approximately 4,068 sf of property not owned or controlled by the Applicant, which includes the 2,038 sf Lot 33 and an approximately 2,030 sf portion of Lot 34.

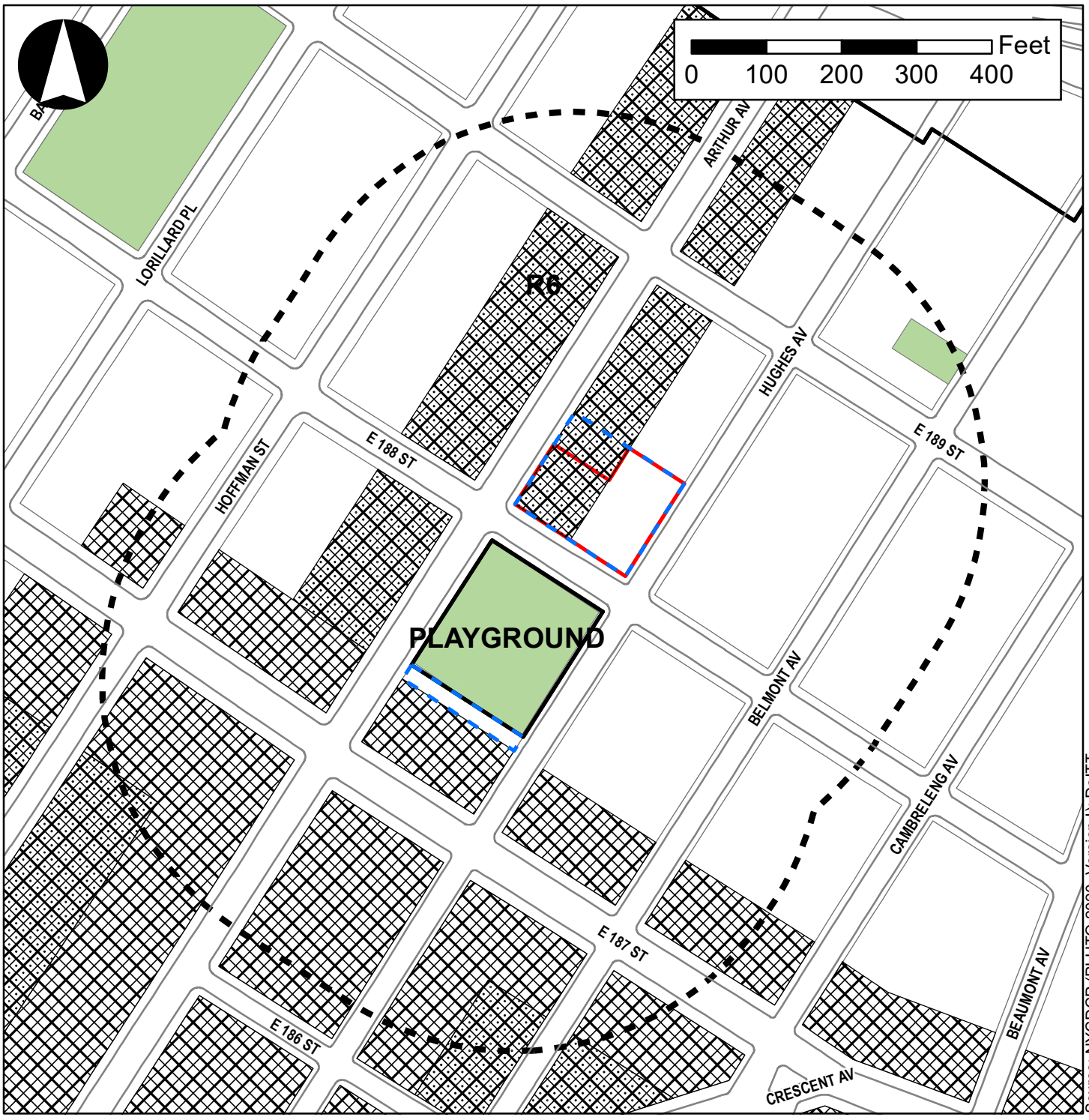
As shown in **Figure A-2**, Rezoning Area 1 is currently zoned R6 and R6/C2-4. R6 districts are widely mapped in built-up, medium-density areas of the City and can range in character from neighborhoods with a diverse mix of building types and heights to large scale "tower in the park" developments. Developers 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



Legend

- 400-Feet Radius
- Rezoning Areas
- Development Site
- 56 Development Site Tax Lots
- 33 Non-Applicant Owned Tax Lots
- 3077 Tax Blocks
- Building Footprints
- Open Space





Source: NYCDCP (PLUTO 2020, Version I); DoITT

Legend

- Rezoning Areas
- 400-Feet Radius
- Development Site
- R6 Zoning District Boundaries
- C1-4 Overlay
- C2-4 Overlay
- Open Space

limits that often reflect the scale of older, pre-1961 apartment buildings. 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. Community facility uses are permitted up to 4.8 FAR in R6 districts under both Height Factor and Quality Housing regulations. 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. 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. In addition, the Rezoning Area is located in a Transit Zone, which makes underlying off-street parking requirements optional for new developments containing income-restricted housing units (IRHU).

Properties located within the western portion of Rezoning Area 1, which feature frontage along Arthur Avenue, are mapped with C2-4 commercial overlays. C2-4 commercial overlays are mapped along streets that serve local retail needs and are found extensively throughout the City's medium-density neighborhoods. Typical retail uses include neighborhood grocery stores, restaurants, and beauty parlors; C2 districts permit a slightly wider range of uses than C1 districts, such as funeral homes and repair services. C2-4 commercial overlays, when mapped in R6-R10 districts, allow up to 2.0 FAR of commercial uses.

Applicant-Owned Development Site

The Applicant-owned Development Site measures 20,462 sf in size and encompasses Lots 29, 31, 53, 54, 55, 56, and 58 on Block 3077. The Development Site has approximately 170 feet of frontage on East 188th Street, approximately 95 feet of frontage Arthur Avenue, and approximately 145 feet of frontage on Hughes Avenue. The Development Site contains six existing curb cuts: four along Hughes Avenue, one along East 188th Street, and one along Arthur Avenue. As shown in **Table A-1**, located on the subsequent page, and in **Figures A-3a** and **A-3b**, the Development Site contains several low-rise buildings totaling 27,337 gsf.



1. View of Rezoning Area 1 looking east from Arthur Avenue.



2. View of Rezoning Area 1 looking southeast from Arthur Avenue.



3. View of Rezoning Area 1 looking east from intersection of Arthur Avenue and East 188th Street.



4. View of Rezoning Area 1 looking north from East 188th Street.



5. View of Rezoning Area 1 looking east from East 188th Street.



6. View of Rezoning Area 1 looking northwest from intersection of Hughes Avenue and East 188th Street.



7. View of Rezoning Area 1 looking northwest from Hughes Avenue.



8. View of Rezoning Area 1 looking southwest from Hughes Avenue.

Table A-1: Rezoning Area 1 – Existing Conditions

Lot	Total Lot Area SF	Address	Owner	Zoning	Land Use	Total Building SF	Built FAR	Residential SF	Commercial SF	Parking
Applicant-Owned										
29	3,279	2450 Arthur Avenue	Musli Bajraktari Realty Corp	R6/ C2-4	Mixed Commercial/ Residential	7,510	2.29	1,600 (4 DUs)	5,910	0 spaces
31	4,492	2452 Arthur Avenue	Halilarifi Realty Corp		Residential	3,398	0.76	3,398 (4 DUs)	0	0 spaces
53	2,185	2461 Hughes Avenue	2461 Hughes Associates LLC	R6	Residential	1,428	0.65	1,428 (1 DU)	0	2 spaces
54	2,185	2459 Hughes Avenue	2457 Hughes Realty, LLC		Residential	1,890	0.86	1,890 (2 DUs)	0	2 spaces
55	2,185	2457 Hughes Avenue	2457 Hughes Realty LLC		Residential	2,835	1.30	1,890 (2 DUs)	0	2 spaces
56	3,080	617 East 188th Street	Prieren Realty Corp		Mixed Commercial/ Residential	5,580	1.81	2,500 (2 DUs)	3,080	0 spaces
58	3,039	609 East 188th Street	605 East Realty, LLC		Mixed Commercial/ Residential	4,696	1.55	2,112 (3 DUs)	2,584	0 spaces
Non-Applicant Owned										
33	2,038	2456 Arthur Avenue	2456 Arthur Ave HDFC	R6/ C2-4	Residential	5,640	2.77	5,640 (9 DUs)	0	0 spaces
p/o 34	6,081	2458 Arthur Avenue	Maria Ciavarello		Mixed Commercial/ Residential	4,312	0.71	3,412 (4 DUs)	900	0 spaces
Total SF	**24,530**									

Note: Properties owned and controlled by the Applicant (comprising the Development Site) are highlighted in gray.
Sources: New York City Department of City Planning (DCP) 2020 PLUTO Data (Version I); PHA Site Visit (April 2020).

Lot 29 is an approximately 3,279 sf lot located at the northeast corner of Arthur Avenue and East 188th Street. Lot 29 contains two mixed-use commercial/residential buildings, which range in height from two- to three-stories and total 7,510 gsf (2.29 FAR). These buildings contain commercial space, which is occupied by a funeral home, as well as four dwelling units (DUs).

Lot 31 is an approximately 4,492 sf lot located along Arthur Avenue. Lot 31 contains three residential buildings, ranging in height from one- to two-stories, totaling 3,398 gsf (0.76 FAR). These three buildings contain a total of four DUs.

Lots 53, 54, and 55, which each contain approximately 2,185 sf of lot area, are located along Hughes Avenue. Lot 53 contains a two-story residential building containing one DU and totaling 1,428 gsf (0.65 FAR), Lot 54 contains a two-story residential building containing two DUs and totaling 1,890 gsf (0.86 FAR), and Lot 55 contains a two-story residential building containing two DUs and totaling 2,835 gsf (1.30 FAR).

Lot 56 is an approximately 3,080 sf lot located at the northwest corner of Hughes Avenue and East 188th Street. Lot 56 contains a one- and three-story mixed-use commercial/residential building totaling 5,580

gsf (1.81 FAR). The building contains commercial space, which is occupied by office and retail space, as well as two DUs.

Lot 58 is an approximately 3,039 sf lot located along East 188th Street. Lot 58 contains a one- and three-story mixed-use commercial/residential building totaling 4,696 gsf (1.55 FAR). The building contains commercial space, which is occupied by a hair salon and office space, as well as three DUs.

Non-Applicant-Owned Lots 33 and 34

Two properties not owned and controlled by the Applicant are located within Rezoning Area 1: the entirety of Lot 33, which has a total lot area of 2,038 sf, and an approximately 2,030 sf portion of Lot 34, which has a total lot area of 6,081 sf. As shown in **Figure A-3b**, 2456 Arthur Avenue (Lot 33) contains a four-story residential walkup building containing nine DUs and totaling 5,640 gsf (2.77 FAR). 2458 Arthur Avenue (Lot 34) contains five mixed-use commercial/residential buildings, which range in height from one- to two-stories and comprise 4,312 gsf (0.71 FAR). The complex of buildings contains one ground-level commercial space, which is currently vacant, as well as four DUs.

Rezoning Area 2

As also shown in **Figure A-1**, Rezoning Area 2 has approximately 20 feet of frontage on the east side of Arthur Avenue, 20 feet of frontage on the west side of Hughes Avenue, and approximately 171 feet of frontage on the south side of Ciccarone Park. Rezoning Area 2 measures approximately 3,414 sf, consisting of an approximately 1,750 sf portion of Lot 4 and an approximately 1,664 sf portion of Lot 6. Rezoning Area 2 is also zoned R6.

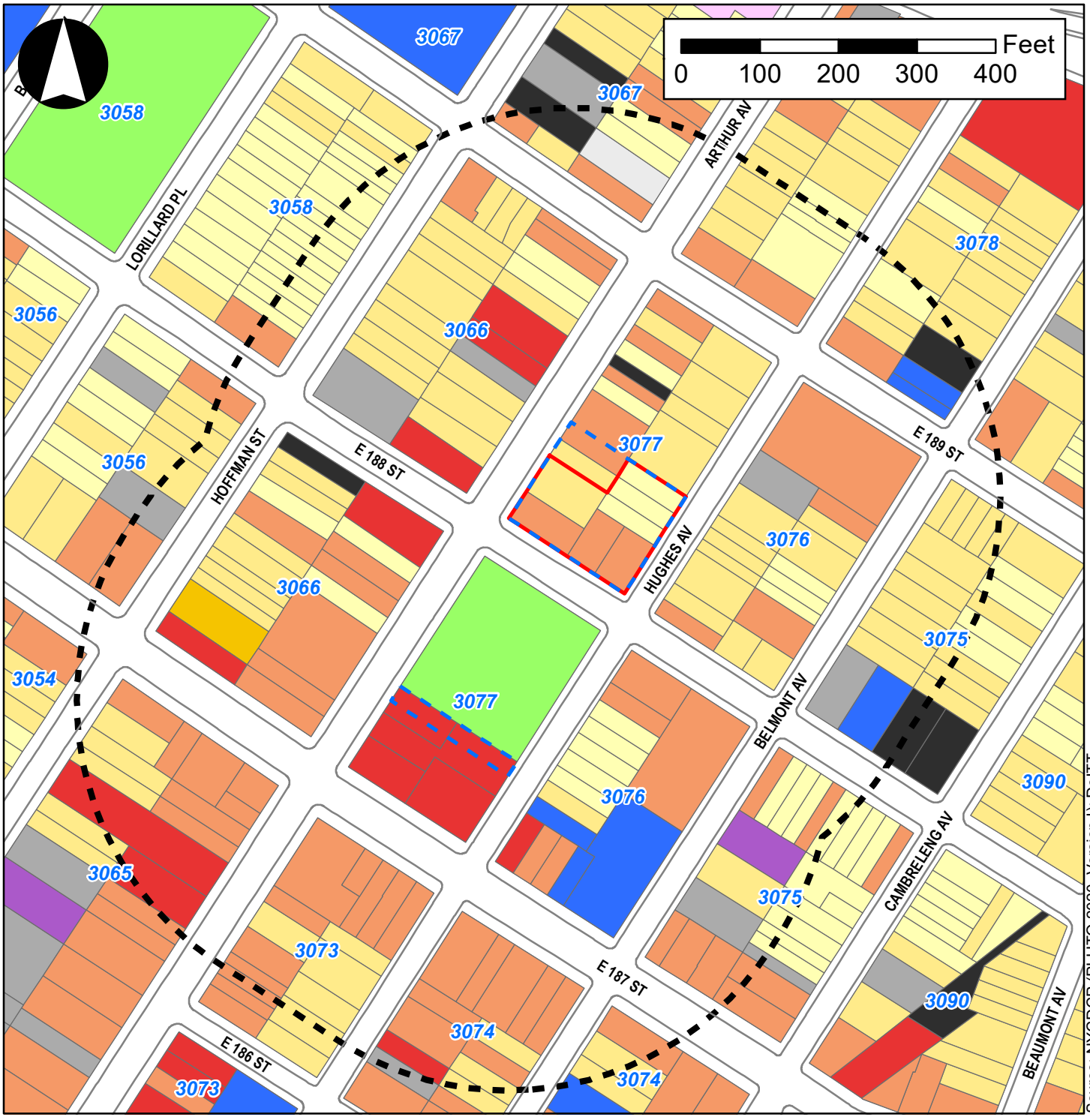
Lot 4 is an approximately 7,509 sf lot containing approximately 37.5 feet of frontage along the east side of Arthur Avenue and approximately 50 feet of frontage along the west side of Hughes Avenue. Lot 4 contains a one-story commercial building (occupied by a retail bank) totaling 3,000 gsf (0.4 FAR). A curb cut along Lot 4's Hughes Avenue frontage provides vehicular access to a surface parking lot containing approximately nine spaces.

Lot 6 is an approximately 3,121 sf lot containing approximately 37.5 feet of frontage along the east side of Arthur Avenue. Lot 6 contains a one-story commercial building (occupied by a restaurant) totaling 2,432 gsf (0.78 FAR).

Surrounding Area

Land Use

As shown in **Figure A-4**, the area surrounding Rezoning Areas 1 and 2 is a dense urban setting consisting predominantly of residential and mixed-use commercial/residential land uses, which are reflective of the residential and commercial (overlay) zoning districts mapped throughout the neighborhood of Belmont/Little Italy. Residential buildings, of which multi-family walkup buildings are the predominant building type, are located throughout the surrounding area. Mixed-use commercial/residential buildings are also located throughout the surrounding area, but many of these uses are primarily clustered along Arthur Avenue and East 187th Street, which serve as commercial corridors near Rezoning Areas 1 and 2. Along these commercial thoroughfares, commercial uses are typically local restaurant and retail



Source: NYCDCP (PLUTO 2020, Version I); DoITT

Legend

- Rezoning Areas
- 400-Feet Radius
- Development Site
- 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 Space
- Parking Facilities
- Vacant Land
- All Others or No Data

establishments located on the ground floors of low-rise buildings with residential uses located above the commercial uses. Several public facility/institutional uses are also located throughout the surrounding area and include Thomas C. Giordano Middle School (I.S. 45) and multiple houses of worship. Open space uses in the surrounding area include the 1.45-acre "Doc" Serpone Field, located two blocks to the west of Rezoning Area 1, and the 0.55-acre Ciccarone Park, located across East 188th Street from Rezoning Area 1 and immediately adjacent to Rezoning Area 2. The surrounding area also features several parking facilities and multiple parcels of vacant land.

The Development Site is well-served by mass transit. In terms of rail transit, the Fordham Station of the Metro-North Railroad is located approximately half-a-mile to the northwest of the Rezoning Area and the Fordham Road Subway Station (serviced by the B and D trains) is located approximately 0.7 miles to the northwest of Rezoning Area 1. In terms of bus transit, numerous local and select bus routes are located near Rezoning Area 1, including: the Bx9 (connecting Riverdale and West Farms Square), which runs east and west along East Fordham Road, the Select Bus Service (SBS) 12 (connecting Inwood and Bay Plaza Shopping Center), which runs east and west along East Fordham Road, the Bx15 (connecting Fordham Plaza and Manhattanville), which runs north and south along Third Avenue, the Bx17 (connecting Fordham Plaza and Port Morris), which runs east and west along East Fordham Road, the Bx19 (connecting New York Botanical Garden and Riverbank State Park), which runs north and south along Southern Boulevard, and the Bx22 (connecting Bedford Park and Caste Hill), which runs east and west along East Fordham Road. In addition, Fordham Plaza, which is located approximately four-tenths of a mile to the northwest of Rezoning Area 1, provides additional access to local and Select Bus Service.

Zoning

As shown in **Figure A-2** and described above, Rezoning Areas 1 and 2 are located in an R6 zoning district, which encompasses much of the surrounding neighborhood. Additionally, a C4-5D contextual zoning district is mapped along East Fordham Road, roughly two blocks to the north of Rezoning Area 1. C4 districts are mapped in regional commercial centers, such as Flushing in Queens or the Hub in the Bronx, that are located outside of 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. In C4-5D districts, the maximum commercial FAR is 4.2 and the maximum residential FAR is also 4.2 (or up to 5.6 if a building participates in the Inclusionary Housing Program), which is equivalent to regulations governing R7D districts. In C4-5D districts, off-street parking requirements are dependent on use group.

Properties located along Arthur Avenue are mapped with either C1-4 or C2-4 commercial overlays, while properties located along East 187th Street are mapped with C1-4 commercial overlays. These commercial overlays are mapped along streets that serve local retail needs and are found extensively throughout the City's medium-density neighborhoods. Typical retail uses include neighborhood grocery stores, restaurants, and beauty parlors; C2 districts permit a slightly wider range of uses than C1 districts, such as funeral homes and repair services. Commercial overlays mapped within R1 to R5 districts are subject to a maximum commercial FAR of 1.0, while commercial overlays mapped within R6 to R10 districts are subject to a maximum commercial FAR of 2.0.

III. THE PROPOSED ACTIONS

The Applicant is seeking a zoning map amendment and a zoning text amendment from the New York City City Planning Commission (NYC CPC). The Proposed Actions are discretionary actions that are subject to both the Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR).

Zoning Map Amendment

The zoning map amendment would rezone Rezoning Area 1 from R6 and R6/C2-4 zoning districts to a C6-1 (R7-2 equivalent) zoning district. Rezoning Area 1 measures 24,530 sf, consisting of the 20,462 sf Applicant-owned Development Site (Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58), as well as approximately 4,068 sf of property not owned or controlled by the Applicant, which includes Lot 33 in its entirety and an approximately 2,030 sf portion of Lot 34. As shown in **Table A-2**, with both the rezoning to a C6-1 (R7-2 equivalent) zoning district and the establishment of Rezoning Area 1 as an MIH area, the maximum permitted FAR within Rezoning Area 1 would be 6.5 and the maximum permitted building height would be 135 feet or 13 stories.

Table A-2: Comparison of Existing and Proposed Zoning

	Existing R6, R6/C2-4	Proposed C6-1 (MIH)
Use Groups	1-4 (Base R6); 5-9 (Overlay)	1-12
Maximum Permitted FAR		
Residential		
Height Factor Regulations	0.78-2.43	4.6[3]
Quality Housing Regulations	2.2[1]-3.0[2]	4.6[3]
Community Facility	4.8	6.5
Commercial	Not Permitted in R6; 2.0 (Overlay)	6.0
Manufacturing	Not Permitted	Not Permitted

Source: *Zoning Resolution of the City of New York.*
Notes:
[1] For zoning lots on narrow streets.
[2] For zoning lots on wide streets.
[3] With MIH.

In addition, the zoning map amendment would rezone Rezoning Area 2 from an R6 zoning district to an R6/C1-4 zoning district. Rezoning Area 2 measures 24,530 sf, consisting of approximately 3,414 sf of property not owned or controlled by the Applicant, which includes an approximately 1,750 sf portion of Lot 4 and an approximately 1,664 sf portion of Lot 6. The rezoning to an R6/C1-4 zoning district would increase the maximum permitted commercial FAR within Rezoning Area 2 to 2.0 from 0.0; the underlying R6 zoning controls within Rezoning Area 2 would remain.

Zoning Text Amendment

The Applicant is also proposing a Zoning Text Amendment to Appendix F of the *Zoning Resolution of the City of New York* (ZR) to establish Rezoning Area 1 as a Mandatory Inclusionary Housing (MIH) area in Bronx Community District 6. An MIH area requires compliance with one of the affordable housing options provided in ZR Section 23-154(d)(3). As part of the Proposed Project, the Applicant is seeking to develop the Proposed Project's residential portion pursuant to the MIH Workforce Option (Rezoning Area 1 would be mapped with both Option 2 and the Workforce Option), which would require that 30 percent of the

residential floor area, equivalent to approximately 17 DUs, be affordable at an average of 115 percent of the Area Median Income (AMI), with five percent of the residential floor area restricted at 70 percent AMI and five percent of the residential floor area restricted at 90 percent AMI. The final MIH option will be selected by the City Council during ULURP.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The proposed zoning map amendment to rezone Rezoning Area 1 from R6 and R6/C2-4 zoning districts to a C6-1 (R7-2 equivalent) zoning district, combined with the proposed zoning text amendment to designate Rezoning Area 1 as an MIH Area, would allow the development of new mixed-use commercial and residential uses on the Applicant-owned Development Site.

The Development Site's existing R6 and R6/C2-4 zoning districts do not permit the Applicant's desired commercial use (a full-service hotel) at the density necessary to successfully finance the construction of a full-service hotel use. The proposed C6-1 (R7-2 equivalent) zoning district would allow new, higher-density commercial uses along Arthur Avenue, a key corridor linking the heart of Belmont/Little Italy's commercial activity south of East 187th Street with East Fordham Road to the north. It is the Applicant's opinion that the proposed zoning map amendment would encourage the extension of the commercial corridor northward and would be consistent with the goals and objectives of the 2013 East Fordham Road Rezoning (CEQR No: 13DCP107X; ULURP No: C130273ZMK), including fostering retail continuity and promoting commercial development along Arthur Avenue. Furthermore, it is the Applicant's opinion that the proposed zoning map amendment would be consistent with the existing land use and zoning character of the surrounding area, including the C4-5D (R7D equivalent) zoning district mapped along East Fordham Road to the north and the C4-4D (R8A equivalent) zoning district mapped along Third Avenue between East 181st Street and East 184th Street.

It is the Applicant's opinion that the proposed C6-1 (R7-2 equivalent) zoning district is appropriate as the Development Site is located in the Belmont/Little Italy neighborhood of the Bronx, a regional destination for dining and shopping in close proximity to public transportation as well as major cultural attractions and employment centers, such as Fordham University, the New York Botanical Garden, the Bronx Zoo, St. Barnabas Hospital, and Montefiore Medical Center. The proposed zoning map amendment would facilitate the construction of new housing, including affordable housing, providing opportunities for those that work or go to school in the surrounding area to live in the neighborhood. In addition, the proposed zoning map amendment would facilitate the construction of the only hotel in the Belmont/Little Italy area, and one of the few full-service hotels in the Bronx.

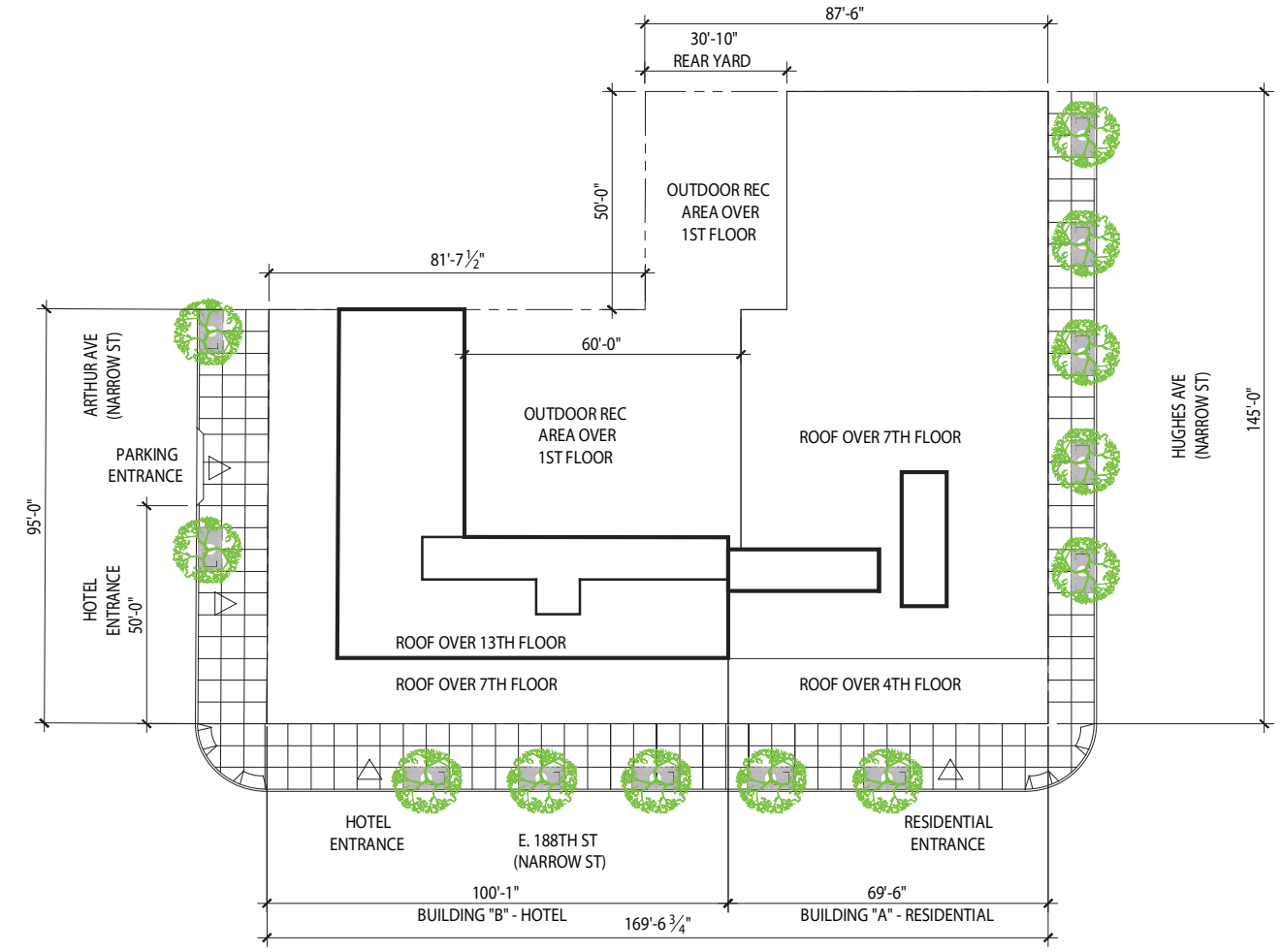
The proposed zoning map amendment would also extend an existing C1-4 commercial overlay 20 feet north along Arthur and Hughes Avenues to include Rezoning Area 2. The commercial overlay would be mapped to a depth of 120 feet from East 187th Street and would be paired with the existing R6 zoning district. C1-4 commercial overlays are typically mapped within the City's medium- and higher-density residential districts along streets that serve local retail needs. C1 districts generally only permit Use Group 6 retail and service establishments. Within R6 districts, C1-4 commercial overlays allow a maximum commercial FAR of 2.0. The proposed zoning map amendment would allow commercial uses at Rezoning Area 2, the only property on Arthur Avenue between East 184th Street and East Fordham Road where commercial uses are not allowed. The proposed zoning map amendment is intended to strengthen the commercial zoning framework along Arthur and Hughes Avenues and unify this block with those south of East 187th Street. Furthermore, the proposed zoning map amendment would be consistent with the goals

and objectives of the 2013 East Fordham Road Rezoning, including fostering retail continuity and promoting commercial development along Arthur Avenue.

V. DESCRIPTION OF THE PROPOSED PROJECT

As shown in **Figures A-5** and **A-6**, the Applicant is proposing to redevelop the Development Site with a new, two-building mixed-use commercial/residential development containing approximately 150,753 gsf (122,694 zoning square feet (zsf)) of total space. The Proposed Project would comprise approximately 58,091 gsf of residential uses located in Building A, introducing a total of approximately 56 DUs. Building A would be located on the eastern portion of the Development Site. The Applicant is seeking to develop the Proposed Project's residential portion pursuant to the MIH Workforce Option, which would require that 30 percent of the residential floor area, equivalent to approximately 17 DUs, would be affordable at an average of 115 percent AMI, with five percent of the residential floor area restricted at 70 percent AMI and five percent of the residential floor area restricted at 90 percent AMI. In addition to the residential component, an approximately 70,409 gsf full-service hotel containing approximately 176 rooms (400 gsf per hotel room) would be located in Building B. Building B would be located on the western portion of the Development Site. Approximately 156 total parking spaces would be provided, consisting of 28 required accessory parking spaces for the residential component of the Proposed Project, as well as 128 accessory spaces intended for use by the hotel component of the Proposed Project. It should be noted that the Applicant is proposing to provide parking in exceedance of the minimum parking requirements, despite the inclusion of MIH units. The proposed parking would be located in an approximately 22,253 gsf parking garage located on a portion of the ground floor and in the cellar of the Proposed Project. The parking garage would utilize stackers and would be accessed via a new curb cut on Arthur Avenue. As shown in **Figures A-5** and **A-6**, Building A would feature an entrance on East 188th Street, near the northwest corner of East 188th Street and Hughes Avenue. As also shown in **Figures A-5** and **A-6**, Building B would feature two entrances, one on East 188th Street and one on Arthur Avenue, near the northeast corner of East 188th Street and Arthur Avenue.

As shown in **Figures A-5** and **A-6**, Building A would contain seven floors (75-feet tall; 100-feet tall including a 25-feet tall rooftop bulkhead) and Building B would contain 13 floors (135-feet tall; 160-feet tall including a 25-feet tall rooftop bulkhead). As also shown in **Figures A-5** and **A-6**, Building A would feature a four-story base with a height of approximately 45-feet along East 188th Street at the southern perimeter of the Development Site, while featuring a seven-story street wall without setback along Hughes Avenue at the eastern perimeter of the Development Site. Building A would be set back 15-feet from the street above the base height along East 188th Street before rising to seven stories. As also shown in **Figures A-5** and **A-6**, Building B would have a seven-story base with a height of approximately 75-feet along both 188th Street and Arthur Avenue, at the southern and western perimeters of the Development Site. Building B would be set back 15-feet from the street above the base height along East 188th Street and Arthur Avenue before rising to 13 stories. Building B would contain an unenclosed recreation area above the first floor within the courtyard of Building B. The outdoor recreation area would be utilized as amenity space for the proposed full-service hotel use.



SCHEMATIC PLOT PLAN
SCALE: 1/32" = 1'-0"

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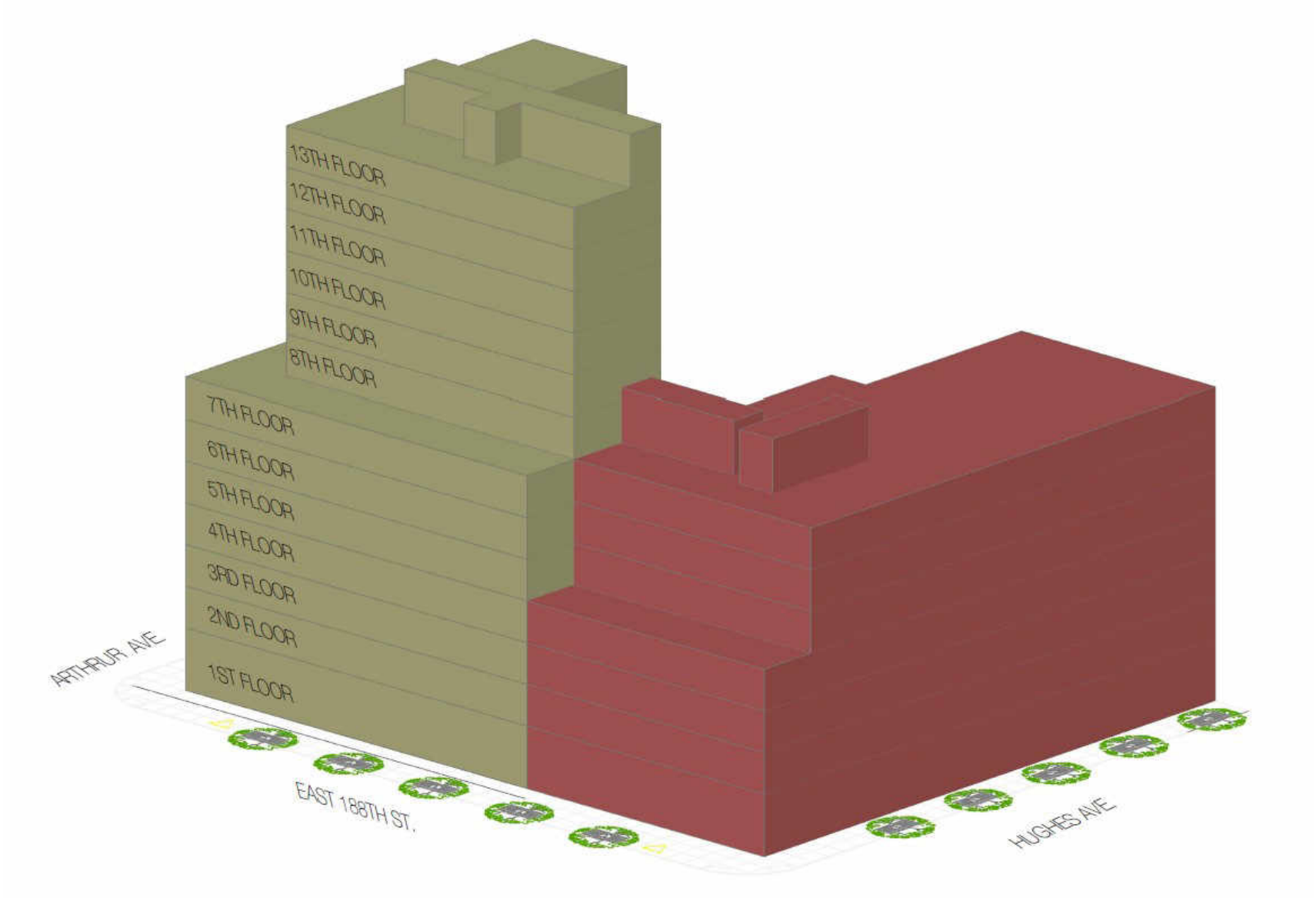

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VI. ANALYSIS FRAMEWORK AND RWCDS

Build Year

Assuming certification of the Proposed Project in late 2020, it is anticipated that ULURP would be completed in mid-2021. Following certification, it is expected that the Proposed Project would be constructed over an approximately 18- to 24-month period with completion and occupancy expected to occur in 2023. No other properties within Rezoning Areas 1 and 2, other than the Applicant-owned Development Site, are anticipated to be redeveloped as a result of the Proposed Actions. This Build Year reflects a reasonable estimate of the time required for the Applicant to demolish the existing structures on the Development Site, obtain approvals for building design, and construct the Proposed Project. Accordingly, a 2023 Build Year has been estimated for completion of the Proposed Project.

Identification of Development Sites

According to 2014 *CEQR Technical Manual* guidance, 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 a proposed action:

- The use 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 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 related 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 sf or less, but the lot size criteria is dependent on neighborhood-specific trends, and common development sizes in the surrounding 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 a proposed action:

- 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 or more units constructed before 1974. These building are likely to be rent-stabilized and difficult to legally demolish due to tenant relocation requirements.

Definition of Projected and Potential Development Sites

To produce a reasonable, conservative estimate of future growth, identified development sites are typically divided into two categories: projected development sites and potential development sites. Projected development sites are considered more likely to be developed within the analysis period for the Proposed Actions (i.e. by 2023), while potential sites are considered less likely to be developed over the same period.

Rezoning Area 1 includes the Applicant-owned and controlled Development Site (Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58), as well as approximately 4,068 sf of property not owned or controlled by the Applicant, which includes the approximately 2,038 sf Lot 33, and an approximately 2,030 sf portion of Lot 34. The Applicant-owned Development Site is considered a projected development site (Projected Site), as the Applicant intends to develop the Development Site with a mixed-use commercial/residential development in the future with the Proposed Actions. As discussed in the "Future with the Proposed Actions (With-Action Scenario)" section, the Applicant-owned Development Site (Projected Site) represents the RWCDS for analysis purposes.

No other sites within Rezoning Area 1 are considered projected or potential development sites. Lot 33 is a small lot (2,038 sf) occupied by a four-story residential building containing nine DUs. This property has been determined not to be a projected or potential development site as the lot size is less than the recommended minimum lot size criteria for projected or potential development sites, according to *CEQR Technical Manual* guidance with consideration of neighborhood development trends and because the existing building is a Housing Development Fund Corporation (HDFC) subject to a security interest with the City and building tenants own shares within the building. Therefore, it is unlikely that Lot 33 would be redeveloped as a result of the Proposed Actions, as all shares within the building would need to be sold and tenants relocated.

In the future with the Proposed Actions, Lot 34 would be split between two zoning districts – C6-1 and R6/C2-4 – that permit different uses and have different bulk rules. As both the width of the C6-1 district would measure 25 feet or less at every point and less than 50 percent of the total lot area of Lot 34 would be located within Rezoning Area 1, any development on Lot 34 would remain subject to the existing R6/C2-4 zoning controls as per ZR Sections 77-11 and 77-211. Therefore, the Proposed Actions would not affect the underlying zoning controls of this parcel and thus the property is not considered a projected or potential development site.

In addition, no sites within Rezoning Area 2 are considered projected or potential development sites. Lot 4 contains a one-story commercial building (occupied by a retail bank) totaling 3,000 gsf (0.4 FAR) and a surface parking lot containing approximately nine spaces. Lot 6 contains a one-story commercial building (occupied by a restaurant) totaling 2,432 gsf (0.78 FAR). It is anticipated that neither of these properties would be redeveloped in the future with the Proposed Actions, as each of these sites contain existing commercial uses that the proposed zoning map amendment applicable to Rezoning Area 2 is intended to formalize to strengthen the existing commercial zoning framework along Arthur and Hughes Avenues.

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

Rezoning Area 1

In the future without the Proposed Actions, Rezoning Area 1's R6 and R6/C2-4 zoning would remain in place. The maximum allowable FAR in the R6 district would remain 2.43 for residential uses and up to 4.8 for community facility uses. Under the No-Action scenario, it is anticipated that none of the lots within Rezoning Area 1 would be redeveloped, and the Applicant would not proceed with the Proposed Project. As such, the existing conditions within Rezoning Area 1 would remain, and no changes to land uses are expected to occur (refer to **Table A-1**). Under the No-Action scenario, the Development Site would continue to be occupied by several low-rise residential and mixed-use commercial/residential buildings totaling 27,337 gsf. In sum, the existing low-rise buildings include 18 DUs (14,818 gsf), 11,574 gsf of commercial uses (5,910 gsf funeral home and 5,664 gsf of local retail space), and six surface parking spaces (located on portions of Lots 53, 54, and 55).

Within 400 Feet of the Rezoning Area 1

There is one known development project that would be completed within 400 feet of Rezoning Area 1 in the future without the Proposed Actions. An as-of-right six-story, approximately 22,604 gsf residential building containing 10 DUs and 21 parking spaces is under construction at 2406 Hoffman Street, located approximately one block to the southwest of the Rezoning Area.[1] The project is expected to be completed and occupied by 2023.

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

In the future with the Proposed Actions, the requested zoning map and zoning text amendments would be approved. As such, the Rezoning Area would be mapped as a C6-1 (R7-2 equivalent) zoning district. The Rezoning Area would also be designated as an MIH area. Under the With-Action scenario, the maximum allowable residential FAR in the Rezoning Area would be 4.6 when fully utilizing the additional FAR pursuant to the MIH Program, while the maximum allowable commercial FAR in the Rezoning Area would be 6.0 and the maximum allowable community facility FAR in the Rezoning Area would be 6.5. Although the proposed C6-1 (R7-2 equivalent) zoning district permits community facility space at a greater density than commercial and residential uses, it has been determined that the development of community facility uses in this area of the City would not be economically feasible; existing community facility and institutional uses are well-represented in the area surrounding the Development Site. Therefore, the development of commercial (a full-service hotel) and multi-family residential space would be more appropriate for economic purposes, while remaining complementary to the existing commercial uses present along Arthur Avenue, a key corridor linking the heart of Belmont/Little Italy's commercial activity south of East 187th Street with East Fordham Road to the north.

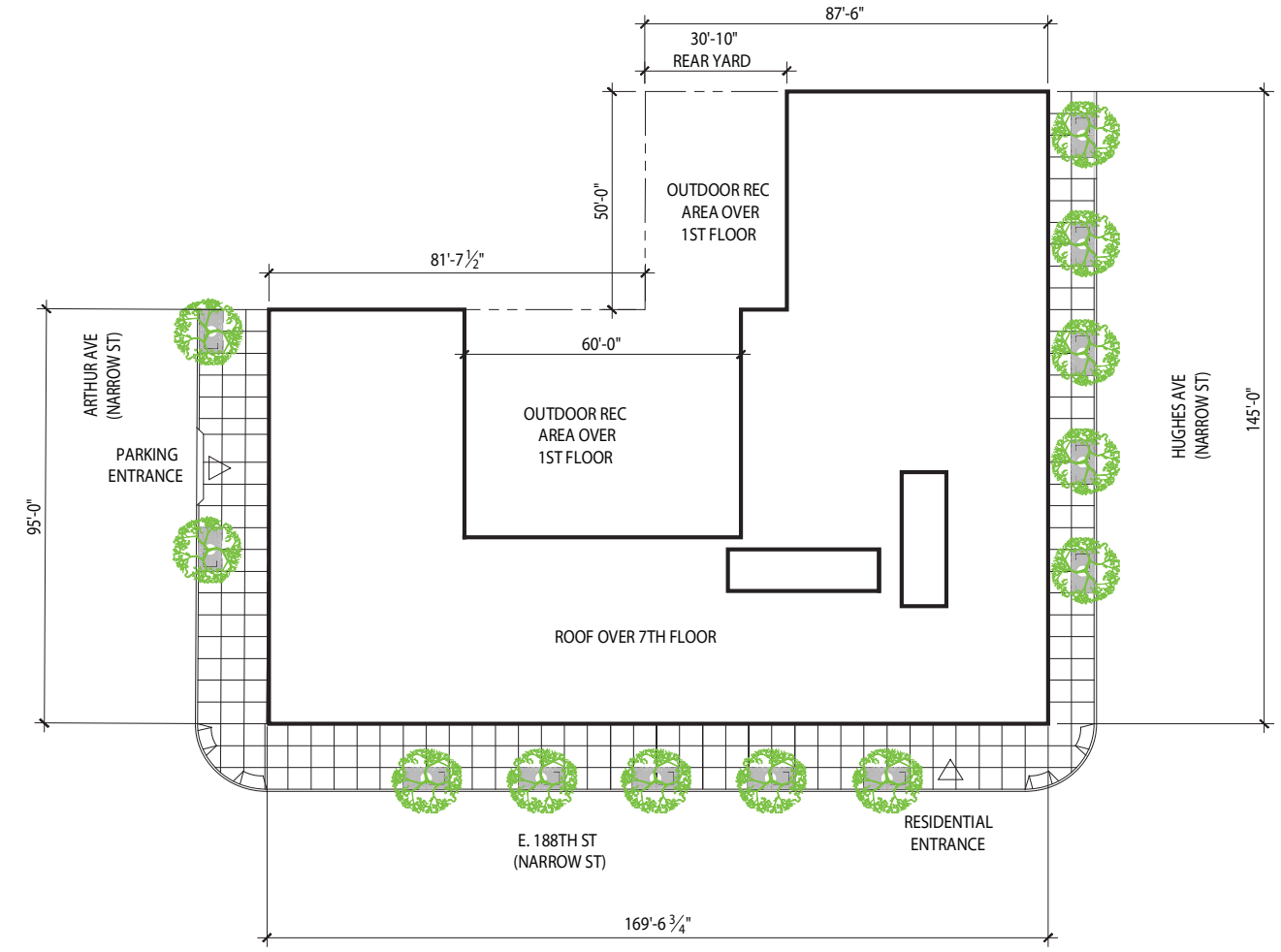
In the future with the Proposed Actions, the Applicant-owned Development Site would be redeveloped in accordance with underlying zoning applicable to the Development Site. As detailed above in the "Description of the Proposed Project" section, the Applicant intends to redevelop the Development Site with a 150,753 gsf, two-building mixed-use commercial/residential development with a combined FAR of

[1] Source: New York City Department of Buildings (DOB) Building Information System (BIS) New Building (NB) Job No. 220445481.

6.5 (122,694 zsf). As shown in **Figures A-5** and **A-6**, Building A would contain seven floors (75-feet tall; 100-feet tall including a 25-feet tall rooftop bulkhead) and Building B would contain 13 floors (135-feet tall; 160-feet tall including a 25-feet tall rooftop bulkhead). The Proposed Project would comprise approximately 58,091 gsf of residential uses, introducing a total of approximately 56 DUs (1,037 gsf per dwelling unit) located in Building A. The Applicant is seeking to develop the Proposed Project's residential portion pursuant to the MIH Workforce Option, which would require that 30 percent of the residential floor area, equivalent to approximately 17 DUs, would be affordable at an average of 115 percent AMI, with five percent of the residential floor area restricted at 70 percent AMI and five percent of the residential floor area restricted at 90 percent AMI. However, for CEQR analysis purposes, for MIH units, the most conservative assumption will be used for each CEQR technical area; unless otherwise stated, it will be assumed that 20 percent of the total residential floor area would be restricted as affordable to households with incomes at or below 80 percent AMI, resulting in the development of approximately 11 MIH units. In addition to the residential component, an approximately 70,409 gsf full-service hotel containing approximately 176 rooms (400 gsf per hotel room) would be located in Building B. As the Proposed Project would maximize the floor area allowable on the Development Site, the Proposed Project is considered the RWCDS for the Applicant-owned Development Site.

In addition, as the Proposed Actions would increase the maximum permitted residential FAR to 4.6, a second RWCDS (the "Alternate Residential Scenario") will also be assessed. As shown in **Figures A-7** and **A-8**, under the Alternate Residential RWCDS, the Applicant could construct a single seven-story, 75-feet tall (100-feet tall including a 25-feet tall rooftop bulkhead) 135,438 gsf (109,688 zsf) mixed-use commercial/residential building containing 100 total DUs (100,377 gsf of total residential space, assuming 1,000 gsf per DU), 21,007 gsf of ground-floor local retail space, and 28 accessory residential parking spaces. The Alternate Residential Scenario's parking would be located in an approximately 12,756 gsf parking garage located on a portion of the ground floor and in the cellar; the garage would be accessed via a new curb cut on Arthur Avenue. The Alternate Residential Scenario would rise seven-stories without setback to a maximum rooftop height of approximately 75-feet. For CEQR analysis purposes, the most conservative MIH assumptions will be used for each CEQR technical area; unless otherwise stated, it will be assumed that 20 percent of the total residential floor area would be restricted as affordable to households with incomes at or below 80 percent AMI, resulting in the development of approximately 20 MIH units. Under the Alternate Residential Scenario, the residential FAR for the Development Site would be 4.6, the maximum permitted residential FAR pursuant to the proposed zoning map and zoning text amendments, while the commercial FAR for the Development Site would be 0.8. As was indicated above for the Proposed Project, although the proposed C6-1 (R7-2 equivalent) zoning district permits community facility space at a greater density than commercial and residential uses, it has been determined that the development of community facility uses in this area of the City would not be economically feasible; existing community facility and institutional uses are well-represented in the area surrounding the Development Site. Therefore, the development of commercial (local retail) space and multi-family residential space would be more appropriate for economic purposes, while remaining complementary to the existing commercial uses present along Arthur Avenue, a key corridor linking the heart of Belmont/Little Italy's commercial activity south of East 187th Street with East Fordham Road to the north.

It should be noted that, for each CEQR technical area, the more conservative development scenario will be assessed in the EAS, and where the effects of each development scenario are different rather than worse, both the Proposed Project and the Alternate Residential Scenario will be assessed.



SCHEMATIC PLOT PLAN
SCALE: 1/32" = 1'-0"

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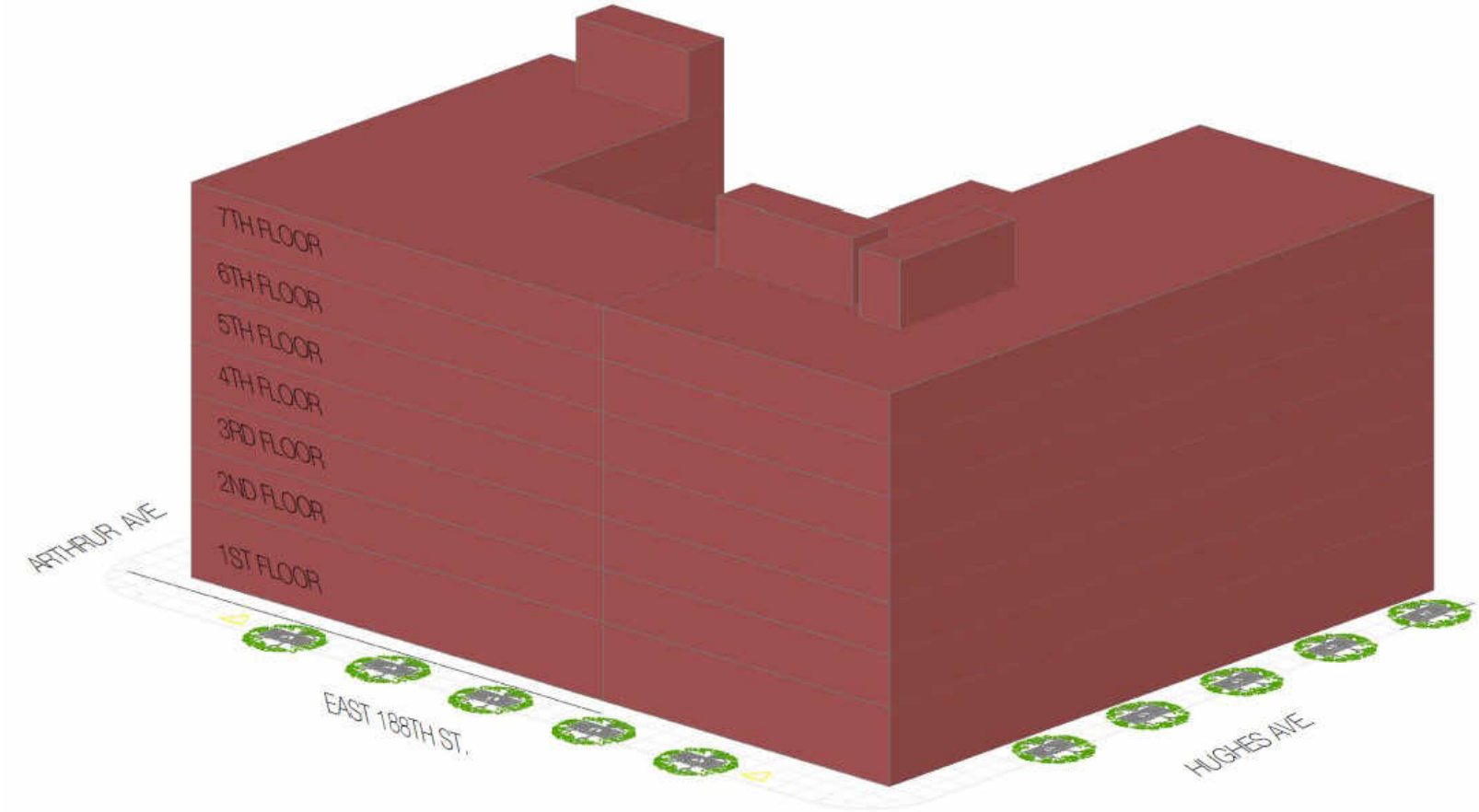

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Project Increment

As presented in **Table A-3**, compared to the No-Action scenario, the Proposed Project would result in the incremental development of approximately 58,835 gsf of commercial space, approximately 43,273 gsf of residential space (38 DUs), and approximately 150 parking spaces. In terms of population, the Proposed Project is expected to generate approximately 105 incremental residents and approximately 47 incremental employees, as compared to the 2023 No-Action scenario.

As presented in **Table A-4**, compared to the No-Action scenario, the Alternate Residential Scenario would result in the incremental development of approximately 9,433 gsf of commercial space, approximately 85,559 gsf of residential space (82 DUs), and approximately 22 parking spaces. In terms of population, the Alternate Residential Scenario would generate approximately 227 incremental residents and approximately 44 incremental employees, as compared to the 2023 No-Action scenario.

For CEQR analysis purposes, for MIH units, the most conservative assumption will be used for each CEQR technical area; unless otherwise stated, it will be assumed that 20 percent of the total residential floor area would be restricted as affordable to households with incomes at or below 80 percent AMI, resulting in the development of approximately 11 MIH units for the Proposed Project and 20 MIH units for the Alternate Residential Scenario.

Table A-3: Comparison of Existing, No-Action, and With-Action Scenarios – Proposed Project

	Existing Condition		No-Action Condition		With-Action Condition		Increment
LAND USE							
Residential	**X** YES	□ NO	**X** YES	□ NO	**X** YES	□ NO	
If "yes," specify the following:							
Describe type of residential structure	Multi-family residential		Multi-family residential		Multi-family residential		Multi-family residential
No. of dwelling units	18		18		56		+38 DUs
No. of low- to moderate-income units	0		0		11		+11 DUs
Gross floor area (sf)	14,818		14,818		58,091 gsf		+43,273 gsf
Commercial	**X** YES	□ NO	**X** YES	□ NO	**X** YES	□ NO	
If "yes," specify the following:							
Type of use	Local Retail, Funeral Home		Local Retail, Funeral Home		Hotel		
Gross floor area (sf)	11,574 gsf		11,574 gsf		176 rooms (70,409 gsf)		-11,574 gsf Local Retail, Funeral Home; +70,409 gsf Hotel
Manufacturing/Industrial	□ YES	**X** NO	□ YES	**X** NO	□ YES	**X** NO	N/A
Community Facility	□ YES	**X** NO	□ YES	**X** NO	□ YES	**X** NO	N/A
Vacant Land	□ YES	**X** NO	□ YES	**X** NO	□ YES	**X** NO	N/A
Other Land Uses	□ YES	**X** NO	□ YES	**X** NO	□ YES	**X** NO	N/A
PARKING							
Garages	□ YES	**X** NO	□ YES	**X** NO	**X** YES	□ NO	
If "yes," specify the following:							
No. of public spaces	0		0		0		No change
No. of accessory spaces	0		0		156		+156
Lots	**X** YES	□ NO	**X** YES	□ NO	□ YES	**X** NO	
No. of public spaces	0		0		0		No change
No. of accessory spaces	6 (Portions of Lots 53, 54, and 55)		6		0		-6
ZONING							
Zoning classification	R6 and R6/C2-4		R6 and R6/C2-4		C6-1 (MIH)		Change from R6 and R6/C2-4 to C6-1 (MIH)
Maximum amount of floor area that can be developed	Residential: 2.43 Community Facility: 4.8 Commercial: 2.0 (Overlay) Manufacturing: 0.0		Residential: 2.43 Community Facility: 4.8 Commercial: 2.0 (Overlay) Manufacturing: 0.0		Residential: 4.6 (with MIH) Community Facility: 6.5 Commercial: 6.0 Manufacturing: 0.0		Residential: +2.17 (with MIH) Community Facility: +1.7 Commercial: +4.0 Manufacturing: 0.0
Predominant land use and zoning classifications within the land use study area(s) or a 400 ft. radius of proposed project	Land use: Residential, Commercial, and Mixed-Use Commercial/Residential Zoning: R6, C1-4, C2-4, and C4-5D		Land use: Residential, Commercial, and Mixed-Use Commercial/Residential Zoning: R6, C1-4, C2-4, and C4-5D		Land use: Residential, Commercial, and Mixed-Use Commercial/Residential Zoning: R6, C1-4, C2-4, and C4-5D		No change
POPULATION[1]							
Residents	50		50		155		+105
Workers	24		24		71		+47

Notes:

[1] Number of residents calculated based on the average household size of 2.77 from the 2010 Census for Neighborhood Tabulation Area (NTA) BX06 (Belmont). Number of Existing and No-Action scenario employees provided by the Applicant. Number of With-Action scenario employees calculated based on: One employee per 25 DUs; one employee per 2.67 hotel rooms; and one employee per 50 parking spaces.

Table A-4: Comparison of Existing, No-Action, and With-Action Scenarios – Alternate Residential Scenario

	Existing Condition		No-Action Condition		With-Action Condition		Increment
LAND USE							
Residential	**X** YES	□ NO	**X** YES	□ NO	**X** YES	□ NO	
If "yes," specify the following:							
Describe type of residential structure	Multi-family residential		Multi-family residential		Multi-family residential		Multi-family residential
No. of dwelling units	18		18		100		+82 DUs
No. of low- to moderate-income units	0		0		20		+20 DUs
Gross floor area (sf)	14,818		14,818		100,377 gsf		+85,559 gsf
Commercial	**X** YES	□ NO	**X** YES	□ NO	**X** YES	□ NO	
If "yes," specify the following:							
Type of use	Local Retail, Funeral Home		Local Retail, Funeral Home		Local Retail		
Gross floor area (sf)	11,574 gsf		11,574 gsf		21,007 gsf		+9,433 gsf
Manufacturing/Industrial	□ YES	**X** NO	□ YES	**X** NO	□ YES	**X** NO	N/A
Community Facility	□ YES	**X** NO	□ YES	**X** NO	□ YES	**X** NO	N/A
Vacant Land	□ YES	**X** NO	□ YES	**X** NO	□ YES	**X** NO	N/A
Other Land Uses	□ YES	**X** NO	□ YES	**X** NO	□ YES	**X** NO	N/A
PARKING							
Garages	□ YES	**X** NO	□ YES	**X** NO	**X** YES	□ NO	
If "yes," specify the following:							
No. of public spaces	0		0		0		No change
No. of accessory spaces	0		0		28		+28
Lots	**X** YES	□ NO	**X** YES	□ NO	□ YES	**X** NO	
No. of public spaces	0		0		0		No change
No. of accessory spaces	6 (Portions of Lots 53, 54, and 55)		6		0		-6
ZONING							
Zoning classification	R6 and R6/C2-4		R6 and R6/C2-4		C6-1 (MIH)		Change from R6 and R6/C2-4 to C6-1 (MIH)
Maximum amount of floor area that can be developed	Residential: 2.43 Community Facility: 4.8 Commercial: 2.0 (Overlay) Manufacturing: 0.0		Residential: 2.43 Community Facility: 4.8 Commercial: 2.0 (Overlay) Manufacturing: 0.0		Residential: 4.6 (with MIH) Community Facility: 6.5 Commercial: 6.0 Manufacturing: 0.0		Residential: +2.17 (with MIH) Community Facility: +1.7 Commercial: +4.0 Manufacturing: 0.0
Predominant land use and zoning classifications within the land use study area(s) or a 400 ft. radius of proposed project	Land use: Residential, Commercial, and Mixed-Use Commercial/Residential Zoning: R6, C1-4, C2-4, and C4-5D		Land use: Residential, Commercial, and Mixed-Use Commercial/Residential Zoning: R6, C1-4, C2-4, and C4-5D		Land use: Residential, Commercial, and Mixed-Use Commercial/Residential Zoning: R6, C1-4, C2-4, and C4-5D		No change
POPULATION[1]							
Residents	50		50		277		+227
Workers	24		24		68		+44

Notes:

[1] Number of residents calculated based on the average household size of 2.77 from the 2010 Census for Neighborhood Tabulation Area (NTA) BX06 (Belmont). Number of Existing and No-Action scenario employees provided by the Applicant. Number of With-Action scenario employees calculated based on: One employee per 25 DUs; three employees per 1,000 sf of local retail space; and one employee per 50 parking spaces.

VII. REQUIRED APPROVALS

The Applicant is seeking a zoning map amendment and a zoning text amendment to facilitate the Proposed Project. The proposed zoning map amendment and zoning text amendment are discretionary actions that are subject to both ULURP and CEQR.

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: Community Board, Borough President, the NYC 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 DCP that the ULURP application is complete. The application is then referred to the relevant Community Board (in this case Bronx Community Board 6). 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 Borough President then has up to 30 days to review the application. NYC CPC then has up to 60 days, during which time a public hearing is held on the ULURP application. Following NYC CPC approval, the application is then forwarded to the City Council, which has 50 days to review the ULURP application. Mayoral approval is not required. A decision by the City Council to approve or disapprove a land use application is considered to be final unless the Mayor elects to veto a Council action within five days of the vote. The City Council can override a Mayor's veto of its decision within 10 days of the veto, by a supermajority vote.

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 the environmental review. The environmental review for the Proposed Actions will be reviewed by the New York City Department of City Planning (DCP), which is serving as the lead agency for this project.

- *Environmental Review and Determination of Significance*. The lead agency will determine whether the Proposed Actions may have a significant impact on the environment. 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 subsequent development will 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 guidance and methodologies presented in the 2014 *CEQR Technical Manual*. For each technical area, thresholds are defined, which, if met or exceeded, require that a detailed technical analysis be undertaken. Using this guidance, preliminary screening assessments were conducted for the Proposed Actions to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. 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, Transportation, Air Quality, Noise, Public Health, Neighborhood Character, and Construction. As such, a supplemental screening assessment for each area is provided in this attachment. It should be noted that, although Neighborhood Character warranted a "Yes" answer in Part II of the EAS Form, a supplemental screening assessment for this technical area is not provided in this attachment, rather, this technical area has been screened out per the EAS Form. All remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial CEQR thresholds and/or are unlikely to result in significant adverse impacts.

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, and Public Policy			X
Socioeconomic Conditions	X		
Community Facilities and Services		X	
Open Space			X
Shadows			X
Historic and Cultural Resources	X		
Urban Design and Visual Resources			X
Natural Resources	X		
Hazardous Materials		X	
Water and Sewer Infrastructure	X		
Solid Waste and 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 **Table B-1**, the supplemental screening assessment contained herein identified that a detailed analysis is required for Land Use, Zoning, and Public Policy, Open Space, Shadows, Urban Design and Visual Resources, Air Quality, and Noise. **Table B-1** identifies for each CEQR technical area whether (a) the potential for impacts can be screened out based on the EAS Form, Part II, Technical Analyses; (b) the potential for impacts can be screened out based on a supplemental screening per the *CEQR Technical Manual*; (c) or whether a more detailed assessment is required.

II. SUPPLEMENTAL SCREENING

LAND USE, ZONING, AND PUBLIC POLICY

According to *CEQR Technical Manual* guidance, a detailed analysis of land use, zoning, and public policy 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. Analyses of zoning and public policy are typically performed in conjunction with a land use analysis when an action would change the zoning on the site or result in the loss of a particular use.

As the Proposed Actions include a zoning map amendment and a zoning text amendment, a detailed analysis of land use, zoning, and public policy is provided in **Attachment C, "Land Use, Zoning, and Public Policy."** As discussed in Attachment C, no significant adverse impacts on land use, zoning, or public policy, as defined by the guidance for determining impact significance set forth in the *CEQR Technical Manual*, are anticipated in the 2023 future with the Proposed Actions in the primary and secondary study areas. In the future with the Proposed Project, the Proposed Actions would result in changes to land use within the primary study area by introducing a new use (a full-service hotel) to the Development Site. The Alternate Residential Scenario would not result in changes to land use within the primary study area, as the primary study area contains existing commercial and residential uses. Under each RWCDS, the commercial and residential uses would be compatible with adjacent land uses within the secondary study area, which are primarily commercial, mixed-use commercial/residential, and residential. The Proposed Actions would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it 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 proposed zoning or existing zoning designations within the surrounding secondary study area, nor would it cause a substantial number of existing structures within the proposed rezoning area to become nonconforming. The Proposed Actions would also not result in land uses that would conflict with public policy applicable to the primary or secondary study areas. Therefore, the Proposed Actions are not anticipated to result in significant adverse impacts to land use, zoning, or public policy.

COMMUNITY FACILITIES AND SERVICES

Potential direct or indirect effects of a proposed action can trigger the need for analysis of community facilities. Direct effects would occur if an action would "physically alter a community facility, whether by displacement or other physical change." Indirect effects would occur if an action would add population to an area, which may potentially affect service delivery.

Direct Effects

As presented in the *CEQR Technical Manual*, if an action would physically alter a community facility, whether by displacement of the facility or other physical change, this "direct" effect triggers the need to assess the service delivery of the facility and the potential effect that the physical change may have on that service delivery. The Proposed Actions would facilitate the redevelopment of the Development Site, which does not contain any publicly-funded child care facilities or other community facilities as defined by the *CEQR Technical Manual*. As such, the Proposed Actions would not result in direct effects on community facilities and services.

Indirect Effects

Both the Proposed Project and the Alternate Residential Scenario would include residential space. However, as the Alternate Residential Scenario includes a greater number of incremental residential space (82 DUs) than the Proposed Project, the Alternate Residential Scenario is assessed for conservative analysis purposes. 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. As discussed below, neither RWCDS would trigger a detailed analysis of community facilities. As indicated in the EAS Form, Part II, Technical Analysis, additional study of the potential for impacts related to community facilities is not warranted.

Public Schools

As presented in the *CEQR Technical Manual*, if a proposed action would generate 50 or more elementary/intermediate school students or 150 or more high school students, a detailed indirect public schools analysis is warranted. Based on the most recent school multiplier rates for Community School District (CSD) 10 provided by the School Construction Authority (SCA), the Alternate Residential Scenario's 82 DUs would generate approximately 17 elementary school students, approximately seven intermediate school students, and approximately 11 high school students (refer to **Table B-2**). As the Alternate Residential Scenario would not exceed the *CEQR Technical Manual* analysis thresholds, no further analysis is warranted, and no significant adverse impacts would result.

Table B-2: Number of Students Generated by the Alternate Residential Scenario

	Incremental DUs	Public School Students per DU[1]	Estimated Number of Students Generated		Threshold Triggering Detailed Analysis	Triggers Detailed Analysis?
Elementary	82	0.21	17	24	50	NO
Intermediate School		0.08	7			
High School		0.13	11		150	NO

Notes:

[1] SCA Projected Public School Ratio for Bronx CSD 10 (2019).

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 dwelling 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. Based on *CEQR Technical Manual* multipliers, 141 affordable dwelling units in the Bronx would yield more than 20 children under age six eligible for publicly-funded child care.

As presented in **Attachment A, "Project Description,"** for CEQR analysis purposes, it will be assumed that 20 percent of the total residential floor area would be restricted as affordable to households with incomes at or below 80 percent AMI, resulting in the development of approximately 11 MIH units in the Proposed Project's residential portion and approximately 20 MIH units in the Alternate Residential Scenario. As both the Proposed Project and the Alternate Residential Scenario would introduce fewer than 141 affordable dwelling units, a detailed analysis is not warranted as no significant adverse child care impacts would occur.

Libraries, Health Care Facilities, and Fire and Police Protection

As both the Proposed Project and the Alternate Residential Scenario would not result in the introduction of a sizeable new neighborhood, and neither development scenario would result in more than a 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 DUs, per the *CEQR Technical Manual*), 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.

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. 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 *CEQR Technical Manual* guidance, 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.

Direct Effects

The Proposed Actions would not result in any direct displacement or alteration of existing public open space in the study area. The Proposed Actions would also not result in any significant adverse operational air quality, construction, noise, or shadow impacts affecting open space resources.

Indirect Effects

As discussed in **Attachment A, "Project Description,"** the Proposed Project would introduce approximately 105 residents and 47 employees to the Rezoning Area compared to the 2023 No-Action scenario. The Alternate Residential Scenario would introduce approximately 227 residents and 44 employees to the Rezoning Area compared to the 2023 No-Action scenario. Because the Alternate Residential Scenario would exceed the 200-resident CEQR threshold, an open space assessment for the residential population generated by the Proposed Actions is warranted. Neither the Proposed Project nor the Alternate Residential Scenario would introduce more than 500 employees; as such, an open space assessment for the worker population generated by the Proposed Actions is not warranted.

As described in **Attachment D, "Open Space,"** the detailed analysis for the Alternate Residential Scenario shows that the study area total, active, and passive open space ratios would each decrease by approximately 0.57 percent from the No-Action scenario. The *CEQR Technical Manual* indicates that a decrease in the open space ratio of five percent or more is generally considered significant for a project located in an area that is currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. For areas that are extremely lacking in open space, a decrease of as little as one percent may be considered significant. Conversely, in areas that are well-served by open space, a greater percentage of change (more than five percent) may be tolerated. As the total, active, and passive open space ratios would decrease by less than one percent in an area that is neither underserved nor well-served by open space, no significant adverse open space impacts would result.

SHADOWS

As stated in the *CEQR Technical Manual*, a shadow assessment considers projects that result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. Therefore, a shadow assessment is generally required only if a project would either (a) result in new structures (or additions to existing structures) of 50 feet or more; or (b) be located adjacent to, or across the street from, a sunlight-sensitive resource.

As discussed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of the Proposed Project, a new building greater than 50 feet in height (135-feet tall, 160-feet tall including a 25-feet tall rooftop bulkhead) located adjacent to a sunlight-sensitive resource (Ciccarone Park). In addition, the Alternate Residential Scenario would comprise a new building greater than 50 feet in height (75-feet tall, 100-feet tall including a 25-feet tall rooftop bulkhead). However, as the Proposed Project does not fully maximize the potential building envelope across the entire Development Site, for worst-case analysis purposes, the detailed shadows analysis assesses the potential for shadow impacts for a development that would maximize the potential building envelope pursuant to the proposed zoning. The building envelope development would have a rooftop height of 135-feet and a total height of 160-feet including a 25-feet tall rooftop bulkhead.

As the potential for significant adverse shadow impacts could not be screened out, a detailed analysis was prepared and is provided in **Attachment E, "Shadows."** As discussed in Attachment E**,** the Proposed Project would result in incremental shadow coverage (i.e. additional, or new, shadow coverage) on portions of one sunlight-sensitive open space resource: Ciccarone Park. The extent and duration of the incremental shadows on this open space resource would not (1) significantly reduce or completely eliminate direct sunlight exposure on any of the open space resource's sunlight-sensitive features; and

would not (2) significantly alter the public's utilization or enjoyment of the open space resource's facilities or threaten the viability of vegetation or other sunlight-sensitive features within the open space resource. Therefore, incremental shadows from the Proposed Project on Ciccarone Park would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

URBAN DESIGN AND VISUAL RESOURCES

Collectively, an area's urban design and visual resources define the look and character of a neighborhood. The urban design characteristics of a 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 those from 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, modify a 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 a zoning map amendment and a zoning text amendment that would alter the permitted bulk allowed in the Rezoning Area, a detailed urban design analysis is required and is provided in **Attachment F, "Urban Design and Visual Resources."** As discussed therein, the Proposed Actions would permit a development that differs from what is permitted as-of-right. However, neither the Proposed Project nor the Alternate Residential Scenario would result in significant adverse impacts on urban design as determined by guidance for determining impact significance set forth in the *CEQR Technical Manual*. In the future with the Proposed Actions, the visual appearance within the primary study area would be altered and thus the pedestrian experience of the Development Site within the primary study area would change. However, this change would not alter the arrangement, appearance, or functionality of the primary study area such that the alteration would negatively affect a pedestrian's experience of the area. Both the Proposed Project and the Alternate Residential Scenario would enhance the pedestrian experience adjacent to the Development Site within the primary study area through the improvement of streetscape and sidewalk conditions, including the reconstruction of concrete sidewalks along all three street frontages, the elimination of certain curb cuts along all three street frontages, and, where possible, the addition of a new street trees along all three street frontages. Additionally, both the Proposed Project's and the Alternate Residential Scenario's various ground-floor commercial spaces would create active, continuous street walls along the Development Site's three street frontages, which would help to enhance the pedestrian experience adjacent to the primary study area. As such, the Proposed Actions would not result in a significant adverse urban design impact.

Ciccarone Park is a visual resource located within the secondary study area. Neither the Proposed Project nor the Alternate Residential Scenario would obstruct nor eliminate any public views or affect any view corridors of Ciccarone Park. As such, the Proposed Actions would not result in any significant adverse impacts to visual resources.

HAZARDOUS MATERIALS

As detailed in the *CEQR Technical Manual*, the goal of a hazardous materials assessment is to determine whether a proposed 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 semivolatile 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.

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) dated July 2020 was performed by McFarland-Johnson, Inc. (MJ) for Bronx Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58 (refer to **Appendix 1** for Phase I ESA Executive Summary). The Phase I ESA was prepared in conformance with American Society for Testing Materials (ASTM) International's Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process – E1527-13. MJ utilized a variety of information sources to perform the Phase I ESA, including a site visit, a review of regulatory databases pertaining to hazardous wastes and contaminated materials, a review of resources that provided historical information about the properties, as well as interviews with the property owner and other appropriate person(s) with knowledge of the subject properties. In addition, Environmental Data Resources, Inc. (EDR), a nationwide database search and report service, was used to access information from numerous federal, state, and local government databases on environmentally sensitive sites contained in records. The report provided by EDR was propagated based on ASTM International's 1527-13 and is compliant with the Environmental Protection Agency's (EPA's) All Appropriate Inquiry (AAI) standards.

Based on the information gathered as a result of the Phase I ESA process, MJ did not identify any recognized environmental conditions (RECs) in connection with the subject properties. It should be noted that several upgradient or cross gradient properties were identified as having the potential to impact the subject properties if a release were to occur. Therefore, MJ recommended the completion of a limited Phase II Environmental Site Investigation (ESI) to further evaluate the subject properties for the potential presence of environmental contamination associated with the identified offsite, upgradient or cross gradient properties. However, a Phase II ESI cannot be performed for the subject properties, as they are presently improved with occupied buildings.

To avoid the potential for significant adverse impacts related to hazardous materials, as part of the Proposed Actions, an (E) designation (E-599) will be assigned to the Development Site (Bronx Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58). The (E) designation provides the impetus to identify and address environmental conditions so that significant adverse impacts during development activities on the Development Site would be reduced, with the 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 ("Environmental Requirements") of the *Zoning Resolution of the City of New York* (ZR).

The text of the hazardous materials (E) designation (E-599) for the development site Development Site (Bronx Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58) would be as follows:

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

TRANSPORTATION

The objective of the transportation analysis is to determine whether a proposed action may have a potential significant adverse impact on traffic operations, 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. Based on the results of the Level 1 and Level 2 screening assessment below, neither the Proposed Project nor the Alternate Residential Scenario would meet or

exceed *CEQR Technical Manual* thresholds for detailed traffic, transit, pedestrian or parking analyses (refer to **Appendix 2** for Transportation Planning Factors and Travel Demand Forecast Technical Memorandum). Significant adverse impacts to transportation systems and services are therefore considered unlikely to occur based on *CEQR Technical Manual* guidance, and further detailed transportation analyses are not warranted.

Level 1 Screening Assessment

The *CEQR Technical Manual* identifies minimum development densities that have the potential to result in significant adverse impacts to transportation conditions and therefore require a detailed transportation analysis. The *CEQR Technical Manual* indicates that, should a proposed project involve a mix of land uses, it is appropriate to conduct a preliminary trip generation assessment for each land use or use a weighted average to determine whether the total site generated trips exceed the threshold for analysis. As the Proposed Project and Alternate Residential Scenario would include residential and commercial uses, a Level 1 screening is warranted to estimate the number of person and vehicle trips attributable to the Proposed Actions. **Tables B-3** and **B-4** below present the transportation planning factors and the travel demand forecast for the Proposed Project and Alternate Residential Scenario, respectively.

Table B-3: Travel Demand Forecast Summary—Proposed Project

Peak Hour	Vehicle Trips[1]			Person Trips														
				Subway			Railroad			Bus			Walk/Other			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	33	41	74	5	15	20	0	1	1	5	12	17	-10	-4	-14	0	24	24
Midday	62	44	106	11	5	16	0	0	0	13	6	19	-81	-87	-168	-57	-76	-133
PM	60	50	110	16	8	24	1	0	1	14	8	22	-36	-42	-78	-5	-26	-31
Saturday	45	42	87	6	5	11	0	0	0	3	3	6	-54	-54	-108	-45	-46	-91

Notes:
[1]Includes auto, taxi and trucktrips.
[2]Includes walk-only trips and pedestrians walking to/from subwayand commuter rail stations and bus stops.

Table B-4: Travel Demand Forecast Summary—Alternate Residential Scenario

Peak Hour	Vehicle Trips[1]			Person Trips														
				Subway			Railroad			Bus			Walk/Other			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	5	13	18	5	21	26	0	2	2	3	14	17	43	52	95	51	89	140
Midday	19	19	38	16	16	32	0	0	0	10	10	20	254	254	508	280	280	560
PM	18	13	31	23	13	36	1	1	2	15	8	23	143	137	280	182	159	341
Saturday	15	15	30	18	18	36	1	1	2	11	11	22	161	161	322	191	191	382

Notes:
[1]Includes auto, taxi and trucktrips.
[2]Includes walk-only trips and pedestrians walking to/from subway and commuter rail stations and bus stops.

Traffic

According to the *CEQR Technical Manual*, if a proposed action is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. As shown in **Table B-3**, the Proposed Project would generate a net increase in peak hour vehicle trips (including auto, taxi and truck trips) of approximately 74 in the weekday AM peak hour, 106 in the weekday midday, 110 in the weekday PM, and 85 in the Saturday peak hour. As these numbers of trips would exceed the 50 vehicle trip *CEQR Technical Manual* analysis threshold, a Level 2 screening

analysis is warranted for the Proposed Project to determine which, if any, intersections would require quantified analysis.

As shown in **Table B-4**, the Alternate Residential Scenario would generate a net increase of 18, 38, 31, and 30 vehicle trips in the weekday AM, midday, PM, and Saturday peak hours, respectively. Therefore, significant adverse traffic impacts are considered unlikely to occur under this scenario based on *CEQR Technical Manual* guidance, and further analysis of traffic conditions under the Alternate Residential Scenario is not warranted.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus route in one direction, or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours, as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in **Table B-3**, the Proposed Project is expected to generate approximately 20 and 24 incremental subway trips in the weekday AM and PM peak hours, respectively, while the Alternate Residential Scenario is expected to generate approximately 26 and 36 incremental subway trips during these same periods, respectively. As these numbers of trips would be less than the 200-trip threshold, significant adverse subway impacts are considered unlikely to occur based on *CEQR Technical Manual* guidance, and further analysis of subway conditions is not warranted for either the Proposed Project or the Alternate Residential Scenario.

As also shown in **Table B-3**, the Proposed Project is expected to generate approximately 17 and 22 incremental bus trips in the weekday AM and PM peak hours, respectively, while the Alternate Residential Scenario is expected to generate approximately 17 and 23 incremental bus trips during these same periods, respectively. As a total of seven NYC Transit bus routes operate within approximately ¼-mile of the Development Site—the Bx9, Bx12, BX12 SBS, Bx15, Bx17, Bx19 and Bx22—the number of incremental trips in one direction on any one of these routes is not expected to reach the 50-trip *CEQR Technical Manual* analysis threshold under either scenario. Therefore, further detailed analysis of bus conditions is not warranted.

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in **Table B-3**, the Proposed Project would add fewer than 200 incremental pedestrian trips in all peak periods, and is therefore not expected to result in significant adverse pedestrian impacts, and further detailed analysis of pedestrian conditions under this scenario is not warranted.

As shown in **Table B-4**, the Alternate Residential Scenario would result in a net incremental increase of approximately 140, 560, 341, and 382 pedestrian trips in the weekday AM, midday and PM peak hours

and Saturday peak hour, respectively. As the numbers of trips in the weekday midday and PM peak hours and the Saturday peak hour would exceed the 200-trip threshold, a Level 2 screening analysis is warranted for these periods to determine which, if any, pedestrian elements would require quantified analysis.

Parking

In accordance with *CEQR Technical Manual* guidance, a parking analysis is typically not warranted unless detailed traffic analysis is triggered. As discussed above and in the Level 2 Screening below, the Proposed Actions would not trigger a detailed traffic analysis, and therefore a parking assessment is not warranted.

Level 2 Screening Assessment

Traffic

Figure B-1 shows the assignments of the net incremental peak hour vehicle trips generated by the Proposed Project at intersections in proximity to the Development Site. As discussed above, under *CEQR Technical Manual* guidance, a detailed traffic analysis is warranted if a trip assignment shows that a proposed action would generate 50 or more peak hour vehicle trips at an intersection. As shown in **Figure B-1** and discussed in greater detail in the Transportation Planning Factors and Travel Demand Forecast Technical Memorandum provided in **Appendix 2**, no intersections are expected to experience 50 or more incremental trips in any peak hour. Therefore, based on *CEQR Technical Manual* guidance, significant adverse traffic impacts are considered unlikely to occur as a result of the Proposed Actions, and a detailed traffic analysis is not warranted.

Pedestrians

The assignment of incremental pedestrian trips in the weekday midday and PM peak hours and Saturday peak hour is shown in **Figure B-2**. As shown in the figure and discussed in greater detail in the Transportation Planning Factors and Travel Demand Forecast Technical Memorandum provided in **Appendix 2**, no sidewalk, corner area or crosswalk would experience 200 or more incremental trips in any of these peak hours. Therefore, based on *CEQR Technical Manual* guidance, significant adverse pedestrian impacts are considered unlikely to occur under the Alternate Residential Scenario, and a detailed analysis of pedestrian conditions under this scenario is not warranted.

AIR QUALITY

Mobile Sources

As stated in the *CEQR Technical Manual*, a project—whether site-specific or generic—may result in significant mobile source air quality impacts when it increases or causes a redistribution of traffic, creates any other mobile sources of pollutants, or adds new users near mobile sources. According to the *CEQR Technical Manual* screening threshold criteria for the Project Area, if 170 or more project-generated vehicles pass through an intersection in any given peak (period for CO impact), or if a project would result in greater than 12 to 23 heavy-duty diesel vehicle (HDDV) trips or its equivalent vehicle emissions based on the type of road (for $PM_{2.5}$ impact), there is the potential for mobile source air quality impacts and a detailed analysis is required.

As discussed in the transportation section above, the Proposed Actions are not anticipated to result in a substantial number of diesel vehicle trips. As the entrances and exits to the Proposed Project's garage, as well as the main hotel entrance, would be located on Arthur Avenue, a $PM_{2.5}$ screening was conducted for this street segment pursuant to *CEQR Technical Manual* guidance. Arthur Avenue is classified as a major collector road (Functional Class (FC) – 17 "Major Collector") by the New York State Department of Transportation (NYSDOT). The trip generation, travel demand forecast, and associated vehicle trip assignments indicate that the Proposed Project would generate a maximum increment of 48 vehicle trips through the intersection of Arthur Avenue. All incremental project-generated trips were conservatively assigned to this frontage for $PM_{2.5}$ screening purposes. Based on the New York City Department of Environmental Protection's (DEP's) Equivalent Truck Calculation Matrix, the Proposed Project would not exceed the *CEQR Technical Manual* screening criteria for $PM_{2.5}$ analysis (the screen value being 19 and the truck equivalent of 48 vehicles being 10). Therefore, a detailed mobile source air quality analysis for $PM_{2.5}$ emissions is not warranted.

In addition, the Proposed Project would introduce a maximum of 48 incremental vehicle trips through any intersection, well below the CO screening threshold of 170 vehicle trips. Therefore, the Proposed Actions would not exceed the *CEQR Technical Manual* screening thresholds and a detailed mobile source air quality analysis is not warranted.

Parking Facilities

As stated in the *CEQR Technical Manual*, a project that would result in parking facilities may require a microscale air quality analysis. The Proposed Project would result in the development of a below-grade parking garage containing 156 parking spaces, while the Alternate Residential Scenario would result in the development of a below-grade parking garage containing 28 parking spaces. As such, further analysis is warranted for the Proposed Project and has been provided in **Attachment G, "Air Quality."** As discussed in Attachment G, no significant adverse mobile source air quality impacts would result.

Stationary Sources

Actions can result in stationary source air quality impacts when they (1) create new stationary sources of pollutants such as emission stacks from industrial plants, hospitals, or other large institutional uses, or a building's boiler stack(s) used for heating/hot water, ventilation, and air conditioning systems (HVAC) that can affect surrounding uses; (2) introduce new sensitive receptors near existing (or planned future) emissions stacks that may adversely affect the new use; or (3) introduce potentially significant odors. Air quality impacts from HVAC sources are unlikely at distances of 400-feet or more, but a large or major emission source within 1,000-feet warrants further evaluation.

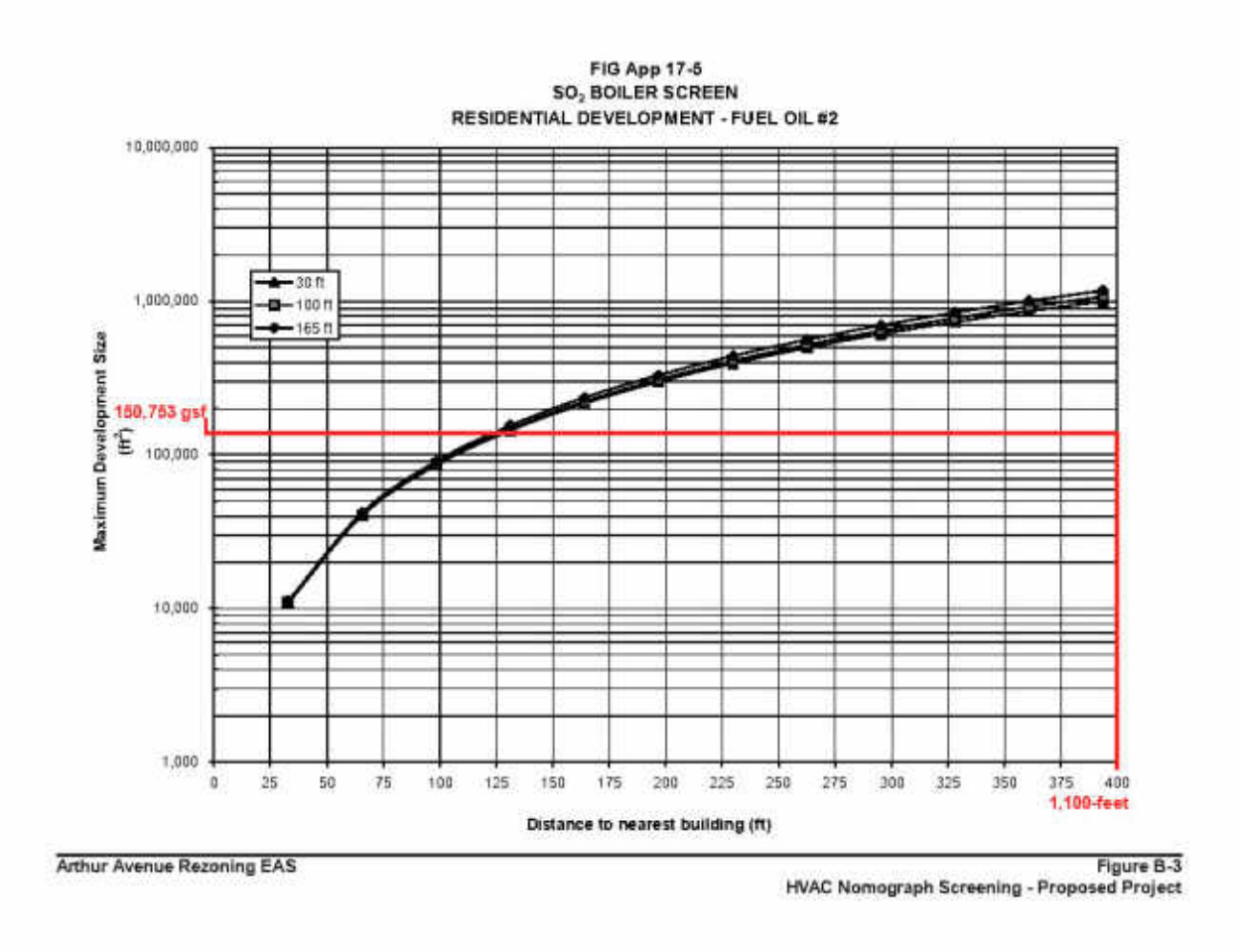
HVAC

The Proposed Project would use fossil fuels for HVAC purposes; both Building A (containing residential uses) and Building B (containing the full-service hotel) would maintain separate, independent HVAC systems. Emissions from the HVAC system of the Proposed Project may affect air quality levels at other nearby existing land uses. According to *CEQR Technical Manual* guidance, the impacts of these emissions would be a function of fuel type, stack height, building size, and location of each emissions source relative to nearby sensitive land uses. As two reasonable worst-case development scenarios are being analyzed for the Proposed Actions, separate HVAC screenings were prepared for each scenario.

The preliminary screening analyses were conducted using the nomograph screening graphs provided in the Air Quality Appendix of the *CEQR Technical Manual*. The nomograph screening graphs indicate the size of the proposed development and distance to the nearest building of a height similar to or greater than the stack height of the proposed development. If the distance between the source building and the receptor building(s) is less than or equal to the threshold distance (i.e., falls above the curve on the nomograph), further analysis is required using the U.S. Environmental Protection Agency's (EPA's) AERSCREEN or AERMOD models. If the source building is taller than the receptor building or the distance between the two buildings falls below the applicable curve provided in the *CEQR Technical Manual* nomographs, a potential significant adverse impact due to boiler stack emissions is unlikely and no further analysis is needed.

Proposed Project

As discussed in **Attachment A, "Project Description,"** the Proposed Project would comprise a two-building development containing 150,753 gsf of combined commercial and residential floor area; Building A would contain seven floors (75-feet tall) and Building B would contain 13 floors (135-feet tall). A survey of existing residential land uses and other sensitive receptor properties in the vicinity of the Development Site was conducted through field observation and use of the New York City Zoning and Land Use Map (ZoLa). The nearest existing building of similar or greater height to the Proposed Project, specifically Building B, that could be affected by HVAC emissions generated by the Proposed Project is a residential building located at 2410 Washington Avenue (Block 3057, Lot 11), which features a maximum building height of 147-feet, approximately 1,100-feet to the northwest of the Development Site. As this building is the closest sensitive receptor of similar or greater height, if the Proposed Project would not cause significant impacts at this property, no impacts would occur at sensitive receptors located further from the Development Site. In addition, air quality impacts from HVAC sources are unlikely at distances of 400-feet or more. Based on the nomograph screening presented in **Figure B-3**, it was determined that the Proposed Project's HVAC system would not result in significant adverse impacts on this sensitive receptor (the nearest sensitive receptor).

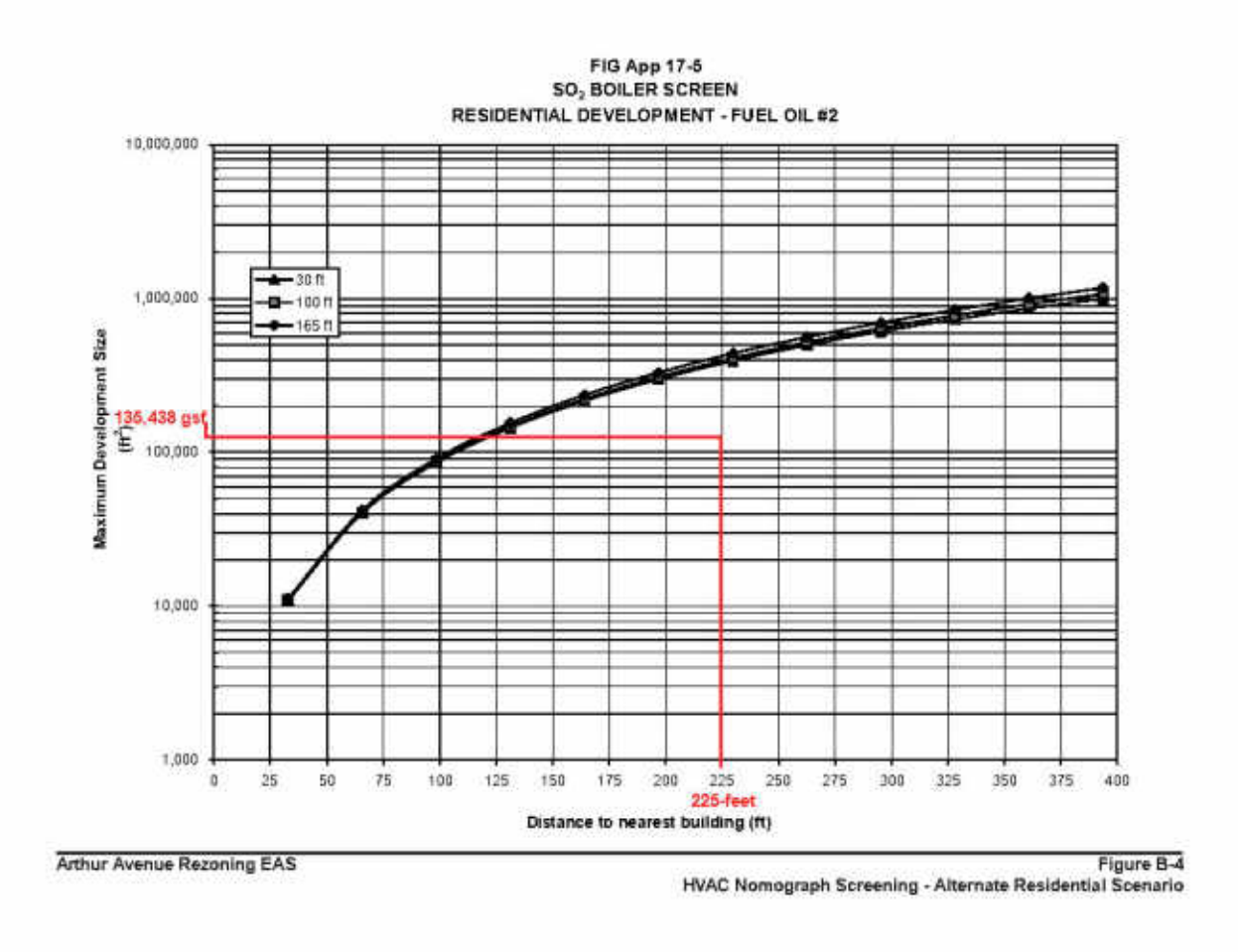


However, the two buildings comprising the Proposed Project would be located in close proximity (less than 30 feet) to one another. As such, there is the potential for project-on-project impacts and further analysis is warranted for the Proposed Project and has been provided in **Attachment G, "Air Quality."** As discussed in Attachment G, the results of the detailed HVAC analysis for the Proposed Project demonstrate that, with adherence to the minimum stack setback location and the exclusive use of natural gas (to be required pursuant to (E) designations (E-599)), no significant adverse air quality impacts from the project-on-project HVAC emissions would occur.

Alternate Residential Scenario

As discussed in **Attachment A, "Project Description,"** the Alternate Residential Scenario would comprise a total of 135,438 gsf of predominantly residential floor area and comprise one seven-story (75-feet tall) building. As the Alternate Residential Scenario would comprise a single 75-feet tall building, a project-on-project HVAC analysis would not be warranted. A survey of existing residential land uses and other sensitive receptor properties in the vicinity of the Development Site was conducted through field observation and use of the New York City Zoning and Land Use Map (ZoLa). The nearest existing building of similar or greater height to the Alternate Residential Scenario that could be affected by HVAC emissions generated by the Alternate Residential Scenario is a mixed-use commercial/residential building located at 2415 Arthur Avenue (Block 3066, Lot 7501), which features a maximum building height of 75-feet, approximately 225-feet to the southwest of the Development Site. As this building is the closest sensitive

receptor of similar or greater height, if the Alternate Residential Scenario would not cause significant impacts at this property, no impacts would occur at sensitive receptors located further from the Development Site. Based on the nomograph screening presented in **Figure B-4**, it was determined that the Alternate Residential Scenario's HVAC system would not result in significant adverse impacts on this sensitive receptor (the nearest sensitive receptor). As such, a detailed HVAC analysis of the Alternate Residential Scenario is not warranted.



Air Toxics

A preliminary assessment was performed to determine if any industrial source emissions exist within a 400-foot radius of the Development Site. Although the area surrounding the Development Site is primarily characterized by a mix of commercial, mixed-use commercial/residential, and residential uses, an investigation of potential industrial sources of concern (as defined in the *CEQR Technical Manual*) was carried out. A field survey and property record search were conducted in February 2020. The field survey and property record search revealed that no major or large emission sources, such as Title V facilities, are located within 1,000-feet of the Development Site. The field survey and property record search revealed one nearby industrial property is a potential source of industrial emissions within 400-feet of the Development Site. However, in consultation with the New York City Department of City Planning (NYCDCP) and the New York City Department of Environmental Protection (NYCDEP), it was determined that the identified industrial property would not warrant a detailed air toxics analysis in accordance with *CEQR*

Technical Manual methodology. In addition, during the field survey, no unpermitted sources of industrial emissions were observed within the surrounding area. Therefore, no significant adverse stationary air quality impacts are expected in the future with the Proposed Actions.

NOISE

The purpose of a noise analysis is to determine both a proposed action's potential effects on sensitive noise receptors and the effects of ambient noise levels on new sensitive uses introduced by a proposed action. The principal types of noise sources affecting the New York City environment are mobile sources (primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with manufacturing operations or building heating, ventilating, and air conditioning systems) and construction noise (e.g. trucks, bulldozers, power tools, etc.). As the Proposed Actions would facilitate the development of new hotel and residential uses ("sensitive receptors" as defined by CEQR), a preliminary assessment of noise is warranted to determine whether noise attenuation is required for the Proposed Project or the Alternate Residential Scenario to maintain adequate interior noise levels.

Mobile Source Screening

According to the *CEQR Technical Manual*, a detailed mobile source analysis is generally performed if a proposed action would increase noise passenger car equivalent (Noise PCE) values by 100 percent or more. As discussed in **Attachment H, "Noise,"** the Proposed Actions would not result in the doubling of PCEs. Therefore, no significant mobile source noise impacts are expected as a result of the Proposed Actions.

Stationary Source Screening

According to the *CEQR Technical Manual*, a detailed stationary source analysis is generally performed if a proposed action would cause a substantial stationary source (i.e. unenclosed equipment for building ventilation purposes) to be operating within 1,500-feet of a receptor, with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses.

The Proposed Project and the Alternate Residential Scenario would not meet either of these criteria. It is expected that the rooftop mechanical equipment for the Proposed Project and the Alternate Residential Scenario would be located within enclosed mechanical bulkheads or would be designed to meet all applicable noise regulations to avoid producing noise levels that would result in any significant adverse noise impacts.

While people are not usually thought of as sources of stationary noise, children in playgrounds or spectators at outdoor sporting events or concerts can introduce additional sources of noise within communities. According to the *CEQR Technical Manual*, noise generated by children in playgrounds or people using parks is considered a stationary source of noise. Ciccarone Park, a public park containing playground equipment, is located directly across East 188th Street from the Development Site. As such, a stationary noise analysis of the playground equipment located in Ciccarone Park is provided in **Attachment H, "Noise."** As discussed in the attachment, the future sensitive receptors located on the Development Site's southern and eastern frontages would not experience significant adverse noise impacts due to the proximity of the outdoor playground equipment in Ciccarone Park.

Sensitive Receptor Analysis/Noise Attenuation Analysis

According to the *CEQR Technical Manual*, a detailed noise analysis may be warranted if a proposed action would introduce a new noise-sensitive location in an area with high ambient noise levels. As the Proposed Actions would facilitate the development of new hotel and residential uses, a detailed assessment of ambient noise has been provided in **Attachment H, "Noise."** As discussed in Attachment H, noise from the traffic volumes generated by the Proposed Actions would not cause significant adverse noise impacts, as the noise level increases would fall below the applicable *CEQR Technical Manual* significant adverse impact threshold (3.0 dBA).

Based on the noise analysis presented in Attachment H, the maximum predicted L_{10} noise level adjacent to the Development Site's western frontage (Arthur Avenue), southern frontage (East 188th Street), and eastern frontage (Hughes Avenue) are expected to be 69.0 dBA, 68.2 dBA, and 67.5 dBA, respectively. Based on the predicted future With-Action exterior noise levels and *CEQR Technical Manual* criteria, With-Action noise levels at the Development Site's western and southern frontages would remain in the "marginally acceptable" CEQR noise exposure category and noise levels at the Development Site's eastern frontage would remain in the "acceptable" CEQR noise exposure category. As such, as described in **Attachment H, "Noise,"** no special noise attenuation measures beyond standard construction practices would be required. Therefore, according to *CEQR Technical Manual* guidance, no significant adverse noise impacts would occur as a result of the Proposed Actions.

PUBLIC HEALTH

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

According to the guidance of the *CEQR Technical Manual*, a public health assessment may be warranted if a proposed 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 the Proposed Project would not result in significant adverse impacts in any of the technical areas related to public health (air quality, hazardous materials, or noise), it would not have the potential for significant adverse impacts related to public health and no further assessment is warranted.

CONSTRUCTION

Although temporary, construction impacts can include noticeable and disruptive effects from an action that is associated with construction or could induce construction. Determination of the significance of construction impacts and the need for mitigation is generally based on the duration and magnitude of the impacts. Construction impacts are usually important when construction activity could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, or air quality conditions.

The Proposed Project is expected to be constructed over an approximately 18- to 24-month period, and is therefore considered short-term. 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 the New York City Department of Buildings (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 DOB and, in certain instances, approval of a noise mitigation plan from the New York City Department of Environmental Protection (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 Development Site. 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 Site. Most construction traffic would take place outside of the AM and PM traffic peak hours in vicinity of the Development Site due to typical construction hours. Additionally, construction may at times result in temporary closings of sidewalks adjacent to the Development Site in order to accommodate construction vehicles, equipment, and supplies. The construction site would be surrounded by construction fencing and barriers as required by DOB. While it is anticipated that some sidewalks immediately adjacent to the construction site would be closed to accommodate heavy loading areas for at least several months of the construction period for the site, detailed Maintenance and Protection of Traffic (MPT) plans for the construction site would need to be submitted for approval to the New York City Department of Transportation (DOT) Office of Construction Mitigation and Coordination (OCMC), the entity that ensures 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 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.

The Proposed Project would result in temporary disruption in the surrounding area, including noise, dust, and traffic associated with the delivery of materials and arrival of workers on the Development Site. However, given the magnitude and duration of construction effects, no impacts from construction are expected as a result of the Proposed Project, and further analysis is not warranted.

ATTACHMENT C

LAND USE, ZONING, AND PUBLIC POLICY

I. INTRODUCTION

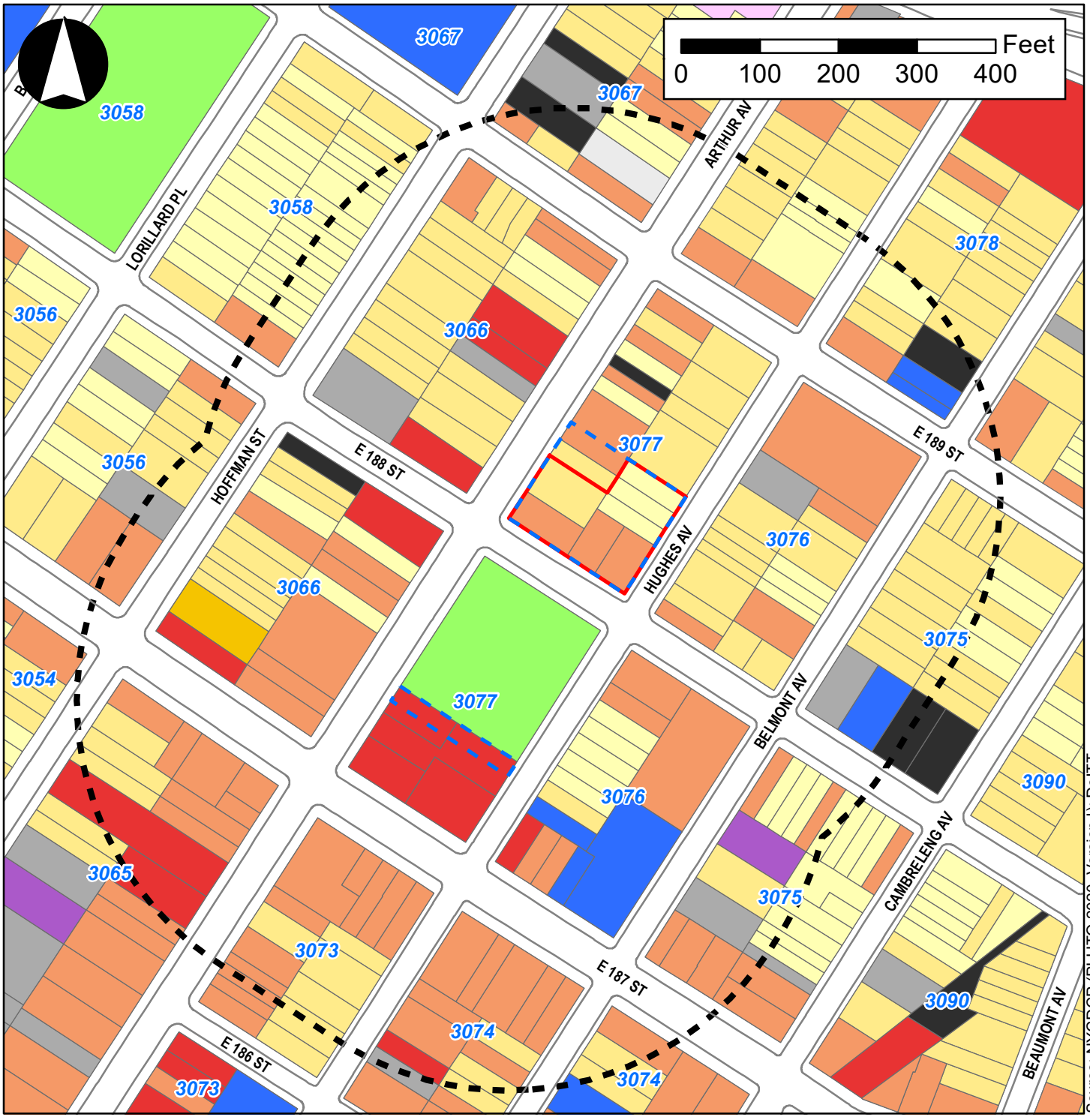
As outlined in the 2014 *City Environmental Quality Review* (CEQR) *Technical Manual*, a detailed assessment of land use and zoning is appropriate if a proposed action would result in a significant change in land use or would substantially affect regulations or policies governing land use. An assessment of zoning is typically performed in conjunction with a land use analysis when the action would change the zoning on a site or result in the loss of a particular use. As the Proposed Actions include a zoning map amendment and a zoning text amendment, a detailed assessment of land use, zoning, and public policy is warranted and is provided in this attachment.

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 2014 *CEQR Technical Manual*, are anticipated in the 2023 future with the Proposed Actions in the primary and secondary study areas. Compared to the future without the Proposed Actions, the Proposed Project would introduce a new commercial land use (a full-service hotel) into the primary study area; the Alternate Residential Scenario would not introduce new land uses into the primary study area. Under each RWCDS, the commercial and residential land uses would be compatible with adjacent land uses within the secondary study area, which are predominantly residential and mixed-use commercial/residential. 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, or cause existing structures to become nonconforming. The Proposed Actions would not result in land uses that conflict with public policies applicable to the primary study area or the secondary study area. The Proposed Project and the Alternate Residential Scenario would both result in developments that would be located in an appropriate location in Belmont/Little Italy, an area of the City that is well-served by infrastructure and characterized by a complementary mixture of land uses under existing conditions.

III. METHODOLOGY

As mentioned above, the Proposed Actions include a zoning map amendment and a zoning text amendment, which would affect land use, zoning, and public policy. Land use, zoning, and public policy are addressed and analyzed for two geographical areas. For the purpose of this assessment, the primary study area encompasses Rezoning Area 1 (Block 3077, Lots 29, 31, 33, 53, 54, 55, 56, and 58 in their entirety, as well as a portion of Lot 34) and Rezoning Area 2 (Block 3077, portions of Lots 4 and 6). 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-feet radius from the boundary of the primary study area. The secondary study area is generally bound by East 189th Street to the north, Belmont Avenue to the east, East 187th Street to the south, and Hoffman Street to the west. Both the primary and secondary study areas have been established in accordance with *CEQR Technical Manual* guidance and are presented in **Figure C-1**.



Legend

- Primary Study Area (Rezoning Areas)
- Secondary Study Area (400-Feet Radius)
- Development Site
- 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 Space
- Parking Facilities
- Vacant Land
- All Others or No Data

The analysis of land use, zoning, and public policy first provides a description of the existing land use, zoning, and public policy conditions in each of the study areas. Existing land uses in the primary and secondary study areas were determined based on the New York City Primary Land Use Tax Lot Output (PLUTO) data files for 2020 and late February 2020 field visits; no discrepancies between PLUTO data files and existing field conditions were observed. 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 each of 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.

The analysis then projects land use, zoning, and public policy conditions in the 2023 analysis year without the Proposed Actions. This is the "No-Action" or "future without the Proposed Actions" scenario, which is developed by identifying known and proposed developments and other relevant changes anticipated to occur in the primary and secondary study areas within this time frame. The No-Action scenario describes the baseline conditions in each of the study areas against which the Proposed Actions' incremental changes are measured. Finally, the analysis projects land use, zoning, and public policy conditions in 2023 with the approval of the Proposed Actions. This is the "With-Action" or "future with the Proposed Actions" scenario.

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. As the Proposed Actions include a zoning map amendment and a zoning text amendment, a detailed assessment of land use and zoning is warranted and provided in **Section V, "Detailed Assessment,"** 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 areas. If a 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 within an urban renewal area, a designated Industrial Business Zone (IBZ), a designated historic district, or within an area defined by an adopted 197-a plan; nor would the Proposed Actions involve the siting of any public facilities (Fair Share). However, portions of the primary and secondary study areas are located within the Belmont Business Improvement District (BID), and one adopted City policy is applicable to the primary and secondary study areas: *Housing New York: A Five-Borough, Five-Year Plan*, both of which are discussed in **Section V, "Detailed Assessment,"** below.

V. DETAILED ASSESSMENT

Existing Conditions

Land Use

Primary Study Area (Rezoning Areas 1 and 2)

As described in **Attachment A, "Project Description,"** the approximately 24,530 sf Rezoning Area 1 includes the entirety of the 20,462 sf Applicant-owned Development Site and approximately 4,068 sf of property not owned or controlled by the Applicant, which includes the 2,038 sf Lot 33 and an approximately 2,030 sf portion of Lot 34. Rezoning Area 1 is currently occupied by several low-rise residential and mixed-use commercial/residential uses, which include a total of 31 DUs (23,870 gsf), 12,474 gsf of commercial uses, and six surface parking spaces. As also described in **Attachment A, "Project Description,"** the approximately 3,414 sf Rezoning Area 2 consists of an approximately 1,750 sf portion of Lot 4 and an approximately 1,664 sf portion of Lot 6. Rezoning Area 2 is currently occupied by commercial/office uses, including a one-story, 3,000 gsf retail bank and nine-space surface parking lot located on Lot 4, as well as a one-story, 2,432 gsf restaurant located on Lot 6.

Secondary Study Area

As shown in **Figure C-1** and **Table C-1**, the built floor area within the secondary study area is predominantly comprised of residential and mixed-use commercial/residential buildings, and to a lesser extent commercial/office buildings and public facilities and institutions.

The southern portion of the secondary study area consists primarily of low-rise, two- to six-story mixed-use commercial/residential and commercial buildings clustered around East 187th Street and Arthur Avenue, which feature numerous Italian cultural institutions, restaurants, and bakeries located on the ground floors, with either commercial or residential uses located above. The northern and eastern portions of the secondary study area consist primarily of two- to six-story multi-family walk-up residential and mixed-use commercial/residential buildings.

As shown in **Figure C-1**, public facility and institutional uses are generally located in the southern and eastern portions of the secondary study area and include: Our Lady of Mount Carmel Church, Musa Mosque, and Italian Christian Church. Although there are few public facility and institutional uses in the secondary study area, there are several notable public facility and institutional uses located just beyond the secondary study area including St. Barnabas Hospital, Montefiore Medical Center, MedAlliance Medical Center, Fordham University, P.S. 205 Fiorello LaGuardia, and Bronx Academy for Software Engineering. As also shown in **Figure C-1**, one parcel of land is utilized as open space. Ciccarone Park, a 0.55-acre public park owned and operated by the New York City Department of Parks and Recreation (NYC Parks), is located between Rezoning Areas 1 and 2 and features playgrounds, spray showers, bocce courts, fitness equipment, game tables, and a comfort station.

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

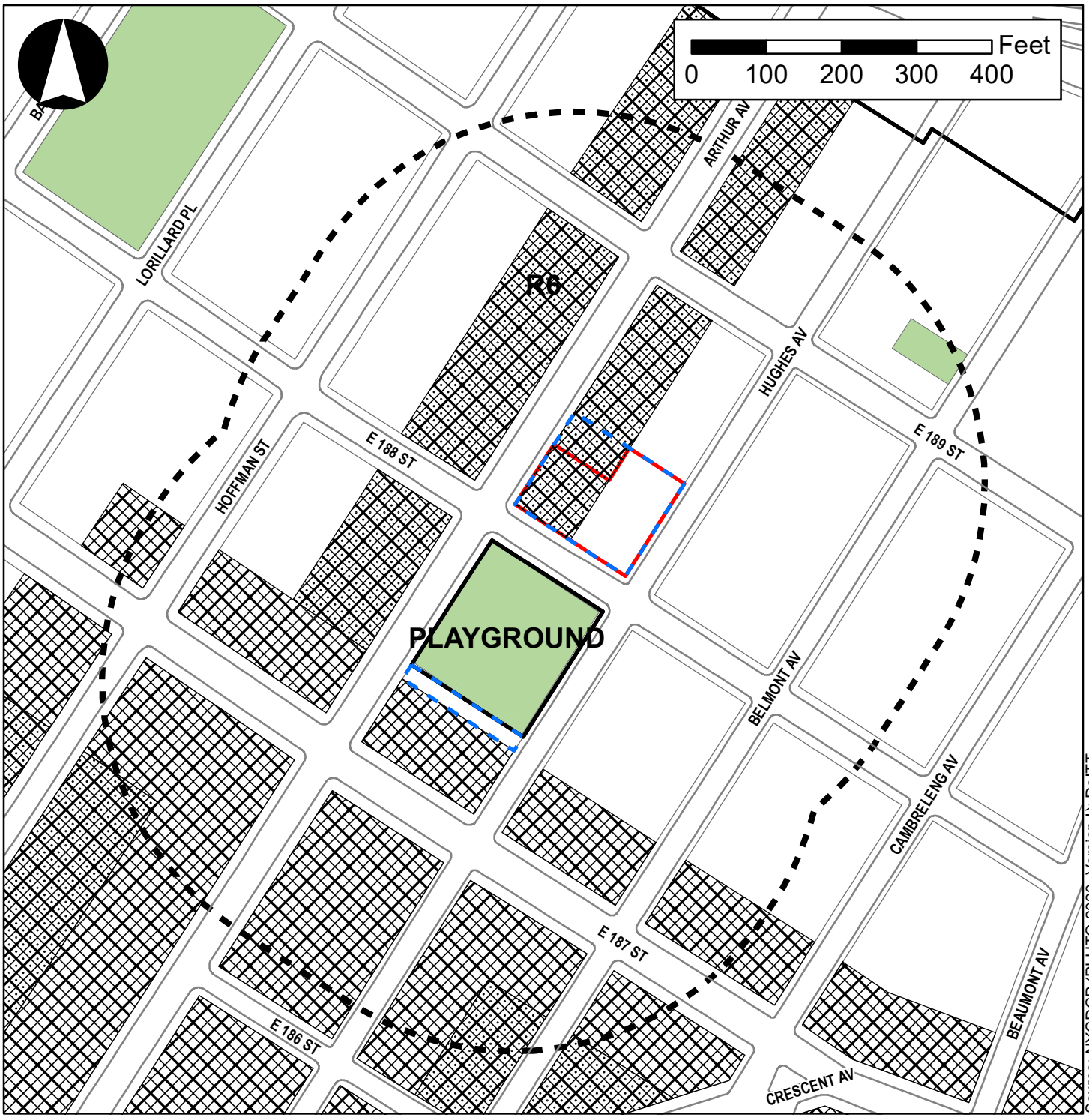
Land Use	Number of Lots	Percentage of Total Lots (%)	Lot Area (SF)	Percentage of Total Lot Area (%)	Building Area (SF)	Percentage of Total Building Area (%)
Residential (Total)	100	52.9	263,667	42.3	498,717	39.5
One & Two-Family Buildings	*33*	*17.5*	*71,559*	*11.5*	*64,100*	*5.1*
Multi-Family Walkup Buildings	*66*	*34.9*	*186,225*	*29.9*	*411,621*	*32.6*
Multi-Family Elevator Buildings	*1*	*0.5*	*5,883*	*0.9*	*22,996*	*1.8*
Mixed Commercial/Residential Buildings	58	30.7	195,361	31.3	608,405	48.2
Commercial/Office Buildings	11	5.8	53,022	8.5	83,647	6.6
Industrial/Manufacturing	1	0.5	5,000	0.8	7,500	0.6
Transportation/Utility	0	0.0	0	0.0	0	0.0
Public Facilities & Institutions	6	3.2	25,089	4.0	59,339	4.7
Open Space	1	0.5	33,085	5.3	930	0.1
Parking Facilities	6	3.2	26,748	4.3	898	0.1
Vacant Land	5	2.6	17,191	2.8	0	0.0
All Others or No Data	1	0.5	4,265	0.7	1,700	0.1
Total	*189*	*100.0*	*623,428*	*100.0*	*1,261,136*	*100.0*

Source: 2020 PLUTO data, Version I; February 2020 field visits.
Note: Total lot areas and built areas included for all lots which have 50 percent or more of their area within a 400-feet radius of Rezoning Areas 1 and 2; Lots within Rezoning Areas 1 and 2 are excluded from the analysis of land uses within the secondary study area (refer to **Figure C-1**).

Zoning

Primary Study Area (Rezoning Areas 1 and 2)

As shown in **Figure C-2**, the western portion of Rezoning Area 1 fronting Arthur Avenue is within an R6/C2-4 zoning district mapped as part of the 2013 East Fordham Road Rezoning (CEQR No: 13DCP107X; ULURP No: C130273ZMK) and the eastern portion of Rezoning Area 1 fronting Hughes Avenue is within an R6 zoning district. As also shown in **Figure C-2**, Rezoning Area 2 is located within an R6 zoning district. The East Fordham Road Rezoning replaced all or portions of C8-1, R6, R6/C2-3, and R6/C2-4 zoning districts with C4-5D, R6, and R6B zoning districts to better reflect prevailing land use trends in Fordham and surrounding neighborhoods and to facilitate new opportunities for growth and development in these neighborhoods while reinforcing the established commercial character and preserving the existing neighborhood character. Similarly, the new commercial overlays mapped along Arthur Avenue north of East 187th Street were intended to reinforce the existing commercial character and create retail continuity along Arthur Avenue between the commercial core of Belmont/Little Italy and East Fordham Road. Prior to the 2013 East Fordham Road Rezoning, which mapped a C2-4 overlay onto the western portion of Rezoning Area 1, properties located within the primary study area were exclusively zoned R6 since the adoption of the 1961 Zoning Resolution.



Legend

- Primary Study Area (Rezoning Areas)
- Secondary Study Area (400-Feet Radius)
- Development Site
- R6 Zoning District Boundaries
- C1-4 Overlay
- C2-4 Overlay
- Open Space

R6 districts are widely mapped in built-up, medium-density areas of the City 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 (refer to **Table C-4** for R6 summary). 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. Community facility uses are permitted up to 4.8 FAR in R6 districts under both Height Factor and Quality Housing regulations. 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. 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. In addition, the Rezoning Area is located in a Transit Zone, which makes underlying off-street parking requirements optional for new affordable housing developments.

Several properties located within the western portion of Rezoning Area 1, which feature frontage along Arthur Avenue, are mapped with C2-4 commercial overlays. C2-4 commercial overlays are mapped along streets that serve local retail needs and are found extensively throughout the City's medium-density neighborhoods. Typical retail uses include neighborhood grocery stores, restaurants, and beauty parlors; C2 districts permit a slightly wider range of uses than C1 districts, such as funeral homes and repair services. C2-4 commercial overlays, when mapped in R6-R10 districts, allow up to 2.0 FAR of commercial uses.

Secondary Study Area

As shown in **Figure C-2**, the R6 district mapped in Rezoning Areas 1 and 2 also extends to encompass the entirety of the secondary study area, as well as portions of the surrounding Belmont/Little Italy neighborhood. In addition to C2-4 commercial overlays, which are mapped along Arthur Avenue, C1-4 commercial overlays are mapped along East 187th Street and the entire southern portion of the secondary study area. The secondary study area north of East 188th Street, both to the east and west of Arthur Avenue, do not contain any commercial zoning designations.

Public Policy

As noted above, the primary study area is not located within an urban renewal area, a designated Industrial Business Zone (IBZ), a designated historic district, or within an area defined by an adopted 197-a plan; nor would the Proposed Actions involve the siting of any public facilities (Fair Share). However, portions of the primary and secondary study areas are located within the Belmont Business Improvement District (Belmont BID), and two adopted City policies are applicable to the primary and secondary study areas: *Housing New York: A Five-Borough, Five-Year Plan* and *PlaNYC 2030/OneNYC*.

Belmont Business Improvement District

As shown in **Figure C-3**, a majority of the primary study area is located within the Belmont BID. In New York City, BIDs are administered by the New York City Department of Small Business Services (SBS); the SBS defines a BID as a geographical area where local stakeholders oversee and fund the maintenance, improvement, and promotion of their commercial district.

According to the SBS, BIDs deliver targeted services, such as business development programs and capital improvement projects, that seek to foster vibrant, clean, and safe commercial districts. The services provided by BIDs do not replace services provided by the City, rather, such services are provided above and beyond the services provided by the City. BIDs help to promote the distinctive brand of their districts, as well as market the businesses located within their districts. BIDS facilitate networking among district merchants, organize community events, and advocate for improvements within the district. In addition, BIDs also serve as a liaison between local businesses and stakeholders and the City government. In this role, BIDs provide a collective voice for the commercial districts they represent, helping to inform City policy that can be based in local knowledge.

The mission of the Belmont BID is to support and expand the economic well-being of the business community in Belmont, as well as the Belmont community at large. The Belmont BID promotes the "Little Italy in the Bronx" brand, as well the strong ethnic and culinary heritage of the district by leveraging the mercantile, social, political, and cultural assets within and around the Belmont community. The Belmont BID undertakes sanitation and security measures, marketing and promotion strategies, cultural programming, and streetscape improvements to enhance the status and well-being of the district.

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

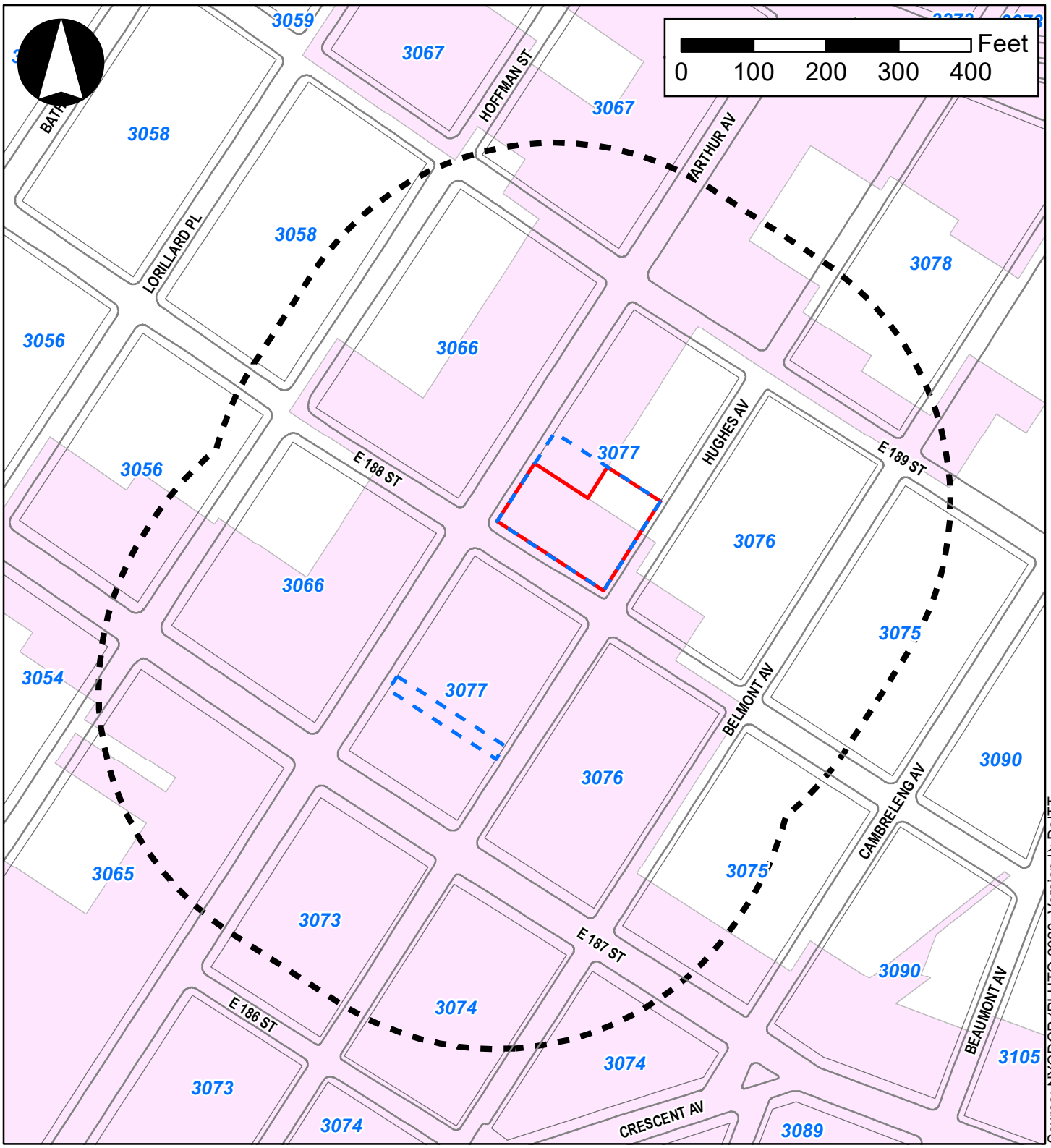
Housing New York, released in 2014, is the City's comprehensive housing development policy plan that seeks, as a primary goal, to build and preserve 200,000 units of high-quality affordable housing to meet the needs of more than 500,000 people by 2024. Framed by the policy goals and objectives in *Housing New York*, the City-approved MIH program requires, through zoning actions, a share of new housing to be permanently affordable. *Housing New York* was developed in conjunction with 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 inclusionary 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 New York City. 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 compatible with their surroundings and which help enliven the pedestrian environment.

Belmont Business Improvement District (BID)



Source: NYCDCP (PLUTO 2020, Version I); DoITT

Legend

- Primary Study Area (Rezoning Areas)
- Secondary Study Area (400-Feet Radius)
- Development Site
- Belmont Business Improvement District (BID)

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

PlaNYC 2030/OneNYC (Previously PLaNYC)

In 2011, the Mayor's Office of Long Term Planning and Sustainability released an update to *PlaNYC: A Greener, Greater New York*. PlaNYC represents a comprehensive and integrated approach to planning for New York City's future. It includes policies to address three key challenges that the City faces over the next twenty years: population growth; aging infrastructure; and global climate change. In the 2011 update, elements of the plan were organized into ten categories—housing and neighborhoods, parks and public space, brownfields, waterways, water supply, transportation, energy, air quality, solid waste, and climate change—with corresponding goals and initiatives for each category.

In April 2015, *One New York: The Plan for a Strong and Just City* (OneNYC) was released by the de Blasio administration, building upon the sustainability goals established by PlaNYC. Sustainability and resiliency remain the core goals of OneNYC, but with the poverty rate remaining high and income inequality continuing to grow, the de Blasio administration added equity as a guiding principle throughout the plan. In addition to the focuses of population growth, aging infrastructure, and global climate change, OneNYC brings new attention to additional concerns. OneNYC includes updates on the progress towards the 2011 sustainability initiatives and 2013 resiliency initiatives, with additional goals and new initiatives under the organization of four visions: growth, equity, resiliency, and sustainability.

Goals of the plan are to make New York City:

- A Growing, Thriving City by fostering industry expansion and cultivation, promoting job growth, creating and preserving affordable housing, supporting the development of vibrant neighborhoods, increasing investment in job training, expanding high-speed wireless networks, and investing in infrastructure.
- A Just and Equitable City by raising the minimum wage, expanding early childhood education, improving health outcomes, making streets safer, and improving access to government services.
- A Sustainable City by reducing greenhouse gas emissions, diverting organics from landfills to attain Zero Waste, remediating contaminated land, and improving access to parks.
- A Resilient City by making buildings more energy efficient, making infrastructure more adaptable and resilient, and strengthening coastal defenses.

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

Land Use and Zoning

Primary Study Area (Rezoning Areas 1 and 2)

As described in **Attachment A, "Project Description,"** in the future without the Proposed Actions, the Rezoning Area's R6 and R6/C2-4 zoning would remain in place. The maximum allowable FAR in the R6 district would remain 2.43 for residential uses and up to 4.8 for community facility uses. Under the No-

Action scenario, it is anticipated that none of the lots within the primary study area would be redeveloped, and the Applicant would not proceed with the Proposed Project. As such, the existing conditions within the primary study area would remain, and no changes to land uses are expected to occur. Under the No-Action scenario, the Applicant-owned Development Site would continue to be occupied by several low-rise residential and mixed-use commercial/residential buildings totaling 27,337 gsf.

Secondary Study Area

In the future without the Proposed Actions, there is one known and anticipated development project expected to be completed and occupied in the secondary study area, which is summarized in **Table C-2**. The as-of-right development project, which is currently under construction, will introduce a six-story, approximately 22,604 gsf residential building containing 10 DUs and 21 parking spaces at 2406 Hoffman Street, located approximately one block to the southwest of Rezoning Area 1.

Table C-2: Known Developments

Project	Market-rate DUs	Retail (sf)	Hotel Rooms	Community Facility (sf)	Parking Spaces	# of Floors	Anticipated Build Year
2406 Hoffman Street	10	-	-	-	21	6	2020

Sources: New York City Department of Buildings (DOB) Building Information System (BIS), accessed January 9, 2019.

Public Policy

There are no known or planned changes to public policy applicable to either the primary or secondary study areas in the future without the Proposed Actions.

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

In the future with the Proposed Actions, the requested zoning map and zoning text amendments would be approved. As such, Rezoning Area 1 would be remapped as a C6-1 (R7-2 equivalent) zoning district and Rezoning Area 2 would be remapped as an R6/C1-4 zoning district. Rezoning Area 1 would also be designated as an MIH Area. As described in **Attachment A, "Project Description,"** two With-Action reasonable worst-case development scenarios (RWCDSs) have been established for the Applicant-owned Development Site; as these two scenarios would introduce different land uses to Rezoning Area 1, an assessment of each scenario's impact on land use is provided below.

Land Use

Proposed Project

As summarized in **Table C-3**, located on the subsequent page, under the With-Action scenario, the Proposed Actions would be approved, allowing the Applicant to construct the Proposed Project. As discussed in greater detail in the "Zoning" section, below, the Proposed Actions would permit a maximum commercial FAR of 6.0, a maximum community facility FAR of 6.5, and a maximum residential FAR of 4.6. The Proposed Project would maximize the available 6.0 commercial FAR.

Table C-3: Comparison of No-Action and With-Action Scenarios – Proposed Project & Alternate Residential Scenario

Proposed Project			
Use	**No-Action Scenario**	**With-Action Scenario**	**Increment**
Commercial	11,574 gsf (Local Retail; Funeral Home)	70,409 gsf (Hotel; 176 rooms)	+58,835 gsf
Residential	18 DUs (14,818 gsf)	56 DUs (58,091 gsf)	+11 DUs (+43,273 gsf)
Alternate Residential			
Use	**No-Action Scenario**	**With-Action Scenario**	**Increment**
Commercial	11,574 gsf (Local Retail; Funeral Home)	21,007 gsf (Local Retail)	+9,433 gsf
Residential	18 DUs (14,818 gsf)	100 DUs (100,377 gsf)	+82 DUs (+85,559 gsf)

Assessment

In the future with the Proposed Project, the Proposed Actions would result in changes to land use within the primary study area by introducing a new commercial use (a full-service hotel) to the Applicant-owned Development Site. As described above, the primary study area, which is currently occupied by several low-rise buildings containing commercial and residential uses, is located in Belmont/Little Italy, a mixed-use neighborhood with an established blend of commercial and residential land uses. The new commercial use that the Proposed Project would introduce would be complementary to the existing land use character of Belmont/Little Italy, a regional destination for dining and shopping located in close proximity to public transportation, as well as major cultural attractions, employment centers and institutions, including Fordham University, the New York Botanical Garden, the Bronx Zoo, St. Barnabas Hospital, and Montefiore Medical Center. Through the construction of the only full-service hotel in Belmont/Little Italy, the Proposed Project's new commercial use would complement and serve existing tourist- and visitor-oriented uses located in the neighborhood. In addition, the Proposed Project would be consistent with the goals and objectives of the 2013 East Fordham Road Rezoning, including fostering retail continuity and promoting commercial development along Arthur Avenue.

As such, the Proposed Project would not generate land uses that would be incompatible with surrounding land uses, nor would it displace existing land uses within the primary study area in such a way as to adversely affect surrounding land uses. Therefore, the Proposed Project would support land use trends, and no significant adverse land use impacts are expected in the primary study area. In addition, the secondary study area would not undergo any land use changes as a result of the Proposed Actions. As noted above, the secondary study area includes a mix of commercial, mixed-use commercial/residential, and residential land uses. Therefore, the Proposed Project would not introduce any new land uses that would be incompatible with their surroundings, and no significant adverse land use impacts would occur in the secondary study area.

Alternate Residential Scenario

As summarized in **Table C-3**, under the Alternate Residential Scenario, the Applicant could develop a 135,438 gsf mixed-use commercial/residential building containing 100 total DUs, 21,007 gsf of local retail space, and 28 accessory residential parking spaces. Under the Alternate Residential Scenario, the residential FAR for the Applicant-owned Development Site would be 4.6, the maximum permitted

residential FAR pursuant to the proposed zoning map and zoning text amendments, while the commercial FAR for the Applicant-owned Development Site would be 0.8.

Assessment

The Alternate Residential Scenario would not result in changes to land use within the primary study area, as the primary study area contains existing commercial and residential uses. As described above, the primary study area, which is currently occupied by several low-rise buildings containing commercial and residential uses, is located in Belmont/Little Italy, a mixed-use neighborhood with an established blend of commercial and residential land uses. The commercial and residential uses that the Alternate Residential Scenario would introduce would be complementary to the existing land use character of Belmont/Little Italy. The commercial and residential uses that the Alternate Residential Scenario would introduce would be complementary to the existing land use character of Belmont/Little Italy, a regional destination for dining and shopping located in close proximity to public transportation, as well as major cultural attractions, employment centers and institutions, including Fordham University, the New York Botanical Garden, the Bronx Zoo, St. Barnabas Hospital, and Montefiore Medical Center. The Alternate Residential Scenario would facilitate the construction of new, affordable multi-family housing, providing additional opportunities for those that work or attend school in this area of the City to live in Belmont/Little Italy. In addition, the Alternate Residential Scenario would be consistent with the goals and objectives of the 2013 East Fordham Road Rezoning, including fostering retail continuity and promoting commercial development along Arthur Avenue.

As such, the Alternate Residential Scenario would not generate land uses that would be incompatible with surrounding land uses, nor would it displace existing land uses within the primary study area in such a way as to adversely affect surrounding land uses. Therefore, the Alternate Residential Scenario would support land use trends, and no significant adverse land use impacts are expected in the primary study area. In addition, the secondary study area would not undergo any land use changes as a result of the Proposed Actions. As noted above, the secondary study area includes a mix of commercial, mixed-use commercial/residential, and residential land uses. Therefore, the Alternate Residential Scenario would not introduce any new land uses that would be incompatible with their surroundings, and no significant adverse land use impacts would occur in the secondary study area.

Zoning

In the future with the Proposed Actions, the primary study area would be rezoned: from R6 and R6/C2-4 to C6-1 in Rezoning Area 1, and from R6 to R6/C1-4 in Rezoning Area 2. Rezoning Area 1 would also be designated as an MIH Area. As shown in **Table C-4**, located on the subsequent page, the Proposed Actions would increase the maximum allowable density in Rezoning Area 1 to 4.6 FAR for residential uses, 6.5 for community facility uses, and 6.0 FAR for commercial uses; the maximum allowable density in Rezoning Area 2 would increase to 2.0 FAR for commercial uses.

Table C-4: Comparison of Existing and Proposed Zoning

	Existing R6	Existing R6/C2-4	Proposed C6-1	Proposed R6/C1-4
Use Groups	1-4	1-9, 14	1-12	1-6
Maximum Permitted FAR				
Residential	3.0 (QH)[1], 2.2 (QH)[2], 2.43 (HF)	3.0 (QH)[1], 2.2 (QH)[2], 2.43 (HF)	4.6[3]	3.0 (QH)[1], 2.2 (QH)[2], 2.43 (HF)
Affordable Independent Residences for Seniors	3.9	3.9	5.01	3.9
Community Facility	4.8	4.8	6.5	4.8
Commercial	N/A	2.0	6.0	2.0
Commercial and Community Facility	N/A	4.8	6.5	4.8
Manufacturing	N/A	N/A	N/A	N/A
Yards				
Minimum Front Yard	N/A	N/A	N/A	N/A
Minimum Side Yard	None or 8’	None or 8’	None or 8’	None or 8’
Minimum Rear Yard	30’	30’, 20’ (Commercial)	30’, 20’ (Commercial)	30’, 20’ (Commercial)
Height and Setbacks				
Minimum Base Height	40’ (QH)[1], 30’ (QH)[2]	40’ (QH)[1], 30’ (QH)[2]	40’[3]	40’ (QH)[1], 30’ (QH)[2]
Maximum Base Height	65’ (QH)[1], 45’ (QH)[2]	65’ (QH)[1], 45’ (QH)[2]	75’[3]	65’ (QH)[1], 45’ (QH)[2]
Maximum Building Height	75’ (QH)[1], 55’ (QH)[2]	75’ (QH)[1], 55’ (QH)[2]	90’[3] or 95’[3] (w/ QGF)	75’ (QH)[1], 55’ (QH)[2]
Maximum Height of Front Wall	65’ (QH)[1], 45’ (QH)[2]	65’ (QH)[1], 45’ (QH)[2]	75’[3]	65’ (QH)[1], 45’ (QH)[2]
Sky Exposure Plane	2.7:1 narrow/ 5.6:1 wide (HF)	2.7:1 narrow/ 5.6:1 wide (HF)	3.7:1 narrow/ 7.6:1 wide[3]	2.7:1 narrow/ 5.6:1 wide (HF)
Setbacks from Narrow Streets	15’ (QH)	15’ (QH)	15’[3]	15’ (QH)
Setbacks from Wide Streets	10’ (QH)	10’ (QH)	10’[3]	10’ (QH)
Parking				
Residential	50% (QH), 70% (HF)	50% (QH), 70% (HF)	50%	50% (QH), 70% (HF)
Commercial	N/A	By Use	By Use	By Use
Income-Restricted Housing Units	None (Transit Zone)	None (Transit Zone)	None (Transit Zone)	None (Transit Zone)
Affordable Independent Residences for Seniors	None (Transit Zone)	None (Transit Zone)	10%	None (Transit Zone)
Government Assisted Dwelling Units	35% (QH), 55% (HF)	35% (QH), 55% (HF)	25%	35% (QH), 55% (HF)

Source: *Zoning Resolution of the City of New York.*
Notes:
[1] Within 100-feet of a wide street.
[2] Beyond 100-feet of a wide street.
[3] With MIH.

Assessment

The proposed C6-1 zoning designation would increase the allowable commercial, community facility, and residential densities in Rezoning Area 1; the proposed R6/C1-4 zoning designation would increase the allowable commercial density in Rezoning Area 2. While the proposed C6-1 zoning designation would facilitate as-of-right development at a higher-density than what is currently allowed in Rezoning Area 1, including permitting commercial uses where they are not currently permitted (to the east of Arthur

Avenue), it is the Applicant's opinion that the higher-density zoning designation would be appropriate, given the primary study area's location in Belmont/Little Italy, a regional destination for dining and shopping in close proximity to public transportation, as well as major cultural attractions and employment centers such as Fordham University, the New York Botanical Garden, the Bronx Zoo, St. Barnabas Hospital, and Montefiore Medical Center. The proposed C6-1 zoning designation would allow new, higher-density commercial uses along a key corridor linking the heart of the Belmont/Little Italy neighborhood's commercial activity south of East 187th Street with East Fordham Road to the north. The proposed zoning map amendment would encourage the extension of the commercial corridor northward and would be consistent with the goals and objectives of the 2013 East Fordham Road Rezoning (CEQR No: 13DCP107X; ULURP No: C130273ZMK), including fostering retail continuity and promoting commercial development along Arthur Avenue. Furthermore, the proposed zoning map amendment would be consistent with the existing land use and zoning character of the surrounding area, including the C4-5D (R7D equivalent) zoning district mapped along East Fordham Road to the north and the C4-4D (R8A equivalent) zoning district mapped along Third Avenue between East 181st Street and East 184th Street.

In addition, Rezoning Area 1 would be designated an MIH Area subject to the affordability requirements of the MIH program (as an amendment to ZR Appendix F).

For these reasons, the Proposed Actions would not represent a significant adverse impact on zoning in the primary or secondary study areas, in accordance with the criteria set forth in the *CEQR Technical Manual*.

Public Policy

Belmont Business Improvement District

As shown in **Figure C-3**, a majority of the primary study area is located within the Belmont BID. As highlighted above, the mission of the Belmont BID is to support and expand the economic well-being of the business community in Belmont/Little Italy, as well as the Belmont/Little Italy community at large. The Belmont BID undertakes sanitation and security measures, marketing and promotion strategies, cultural programming, and streetscape improvements to enhance the status and well-being of the district.

The Proposed Actions and resultant Proposed Project would introduce a new, 70,409 gsf full-service hotel containing approximately 176 rooms and a new, 58,091 gsf residential building containing approximately 56 DUs. These uses would not interfere with the mission of the Belmont BID, nor would such uses compete with, or displace existing commercial businesses and merchants within the commercial district. The introduction of a new, full-service hotel to the Belmont BID would be complementary to the mission of the Belmont BID, as the hotel's future guests and visitors would likely support commercial businesses and merchants in the Belmont BID, enhancing the economic well-being of the commercial district. In addition, the introduction of new housing, including affordable housing, would also provide opportunities for those that work in the Belmont BID to live in the commercial district.

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

The Proposed Actions would support the policies and goals of *Housing New York: A Five-Borough, Five-Year Plan* by establishing a MIH Area encompassing the area to be rezoned (Rezoning Area 1), which would require development in the With-Action scenario to include permanent affordable dwelling units.

The affordable dwelling units provided under the With-Action scenario would provide the Belmont/Little Italy neighborhood with a much needed mix of new market-rate and affordable housing, and would support the City's efforts to increase the overall amount of affordable housing in New York City. Based on this information, the Proposed Actions would be consistent with the policy goals and objectives of *Housing New York: A Five-Borough, Five-Year Plan*.

PlaNYC 2030/OneNYC (Previously PLaNYC)

The Proposed Actions would support the policies and goals of PlaNYC 2030/OneNYC. The Proposed Actions and Proposed Project would create additional affordable housing opportunities and introduce a full-service hotel; each of these components would contribute to the community and economic development of the Belmont/Little Italy neighborhood and the Bronx as a whole. Therefore, the Proposed Actions would be consistent with the policy goals and objectives of *PlaNYC 2030/OneNYC*.

ATTACHMENT D

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 development would be sufficient to noticeably diminish the ability of an area's open space to serve the existing or future population. According to 2014 *City Environmental Quality Review* (CEQR) *Technical Manual* guidance, as Rezoning Area 1 is located in an area considered neither underserved nor well-served by open space, a project that would introduce fewer than 200 residents or 500 employees, or a similar number of other users, is typically not considered to have indirect effects on open space.

Although the Proposed Actions would not have a direct effect on existing open space resources, development facilitated by the Proposed Actions, specifically the Alternate Residential Scenario, is expected to result in an incremental increase of 82 dwelling units (DUs) over the 2023 No-Action scenario. This would result in an increase of 227 residents[1], which exceeds the *CEQR Technical Manual* threshold for a detailed indirect open space analysis. 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.

II. PRINCIPAL CONCLUSIONS

Direct Effects

The Proposed Actions would not result in any direct displacement or alteration of existing public open space in the study area. The Proposed Actions would also not result in any significant adverse operational air quality, construction, noise, or shadow impacts affecting open space resources.

Indirect Effects

The *CEQR Technical Manual* indicates that a decrease in the open space ratio of five percent or more is generally considered significant for a project located in an area that is currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. For areas that are extremely lacking in open space, a decrease of as little as one percent may be considered significant. Conversely, in areas that are well-served by open space, a greater percentage of change (more than five percent) may be tolerated. An open space impact assessment also considers qualitative factors.

As discussed in detail below, the preliminary open space assessment shows that the Alternate Residential Scenario would decrease the open space ratio by 0.57 percent in the study area. The open space ratio in

[1] Based on the average household size of 2.77 from the 2010 Census for Neighborhood Tabulation Area (NTA) BX06 (Belmont).

the study area would remain less than the Citywide median in the future with the Proposed Actions, as under existing conditions and in the future without the Proposed Actions (No-Action Scenario).

The deficiency of open space resources within the study area would be offset by several factors, including the excellent or good condition of the open space resources and their low to moderate utilization levels, which would be able to absorb additional users generated by the Alternate Residential Scenario. Furthermore, an additional 0.20-acres of open space were conservatively not included in the quantitative assessment (as they are not fully accessible to the public, have limited hours, or do not include seating or other amenities), although it is likely that they are used by people that live in the study area. Moreover, there is a significant, regional open space resource located just beyond the boundaries of the open space study area – the 718.37-acre Bronx Park. Although this resource was excluded from the quantitative assessment, it is likely that existing and future residents within the study area would take advantage of this additional, major resource located approximately four-tenths of a mile to the east of the Development Site.

Therefore, given the existing good condition and low to moderate utilization of a majority of the study area's open spaces and the availability of additional open spaces within and just outside the study area boundaries that were conservatively not included in the quantitative analysis, the Proposed Actions would not result in a significant adverse open space impact.

III. METHODOLOGY

The analysis of open space resources has been conducted in accordance with 2014 *CEQR Technical Manual* guidance. 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. This quantitative measure is then used to assess the changes in the adequacy of open space resources by the 2023 build year, both without and with the Proposed Actions. In addition, qualitative factors are considered in making an assessment of the Proposed Actions' effects on open space resources.

In accordance with *CEQR Technical Manual* guidance, 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 and a quarter-mile radius for commercial projects with a worker population. As discussed in **Attachment A, "Project Description,"** the Proposed Project would introduce approximately 105 residents and 47 employees to Rezoning Area 1 compared to the 2023 No-Action scenario. The Alternate Residential Scenario would introduce approximately 227 residents and 44 employees to Rezoning Area 1 compared to the 2023 No-Action scenario. Because the Proposed Actions and associated Alternate Residential Scenario have the potential to significantly increase the local residential population, an open space assessment for the residential population generated by the Proposed Actions is warranted. In addition, neither the Proposed Project nor the Alternate Residential Scenario would introduce more than 500 employees; as such, an open space assessment for the worker population generated by the Proposed Actions is not warranted for the Proposed Actions.

Open Space Study Area

Pursuant to *CEQR Technical Manual* guidance, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a half-mile boundary of Rezoning Area 1, as recommended in the *CEQR Technical Manual*. In this way, the study area allows an analysis of both the open spaces in the area, as well as the population data.

As shown in **Figure D-1**, the half-mile open space study area includes Census Tracts 383.02, 385, 387, 389, 391, 393, and 397 in their entirety. The open space study area extends to portions of Southern Boulevard, Bedford Park Boulevard, and Webster Avenue to the north; to portions of East 182nd Street and East 184th Street to the south; to portions of Southern Boulevard to the east; and to portions of Tiebout Avenue, Webster Avenue, and Decatur Avenue to the west.

Analysis Framework

Direct Effects Analysis

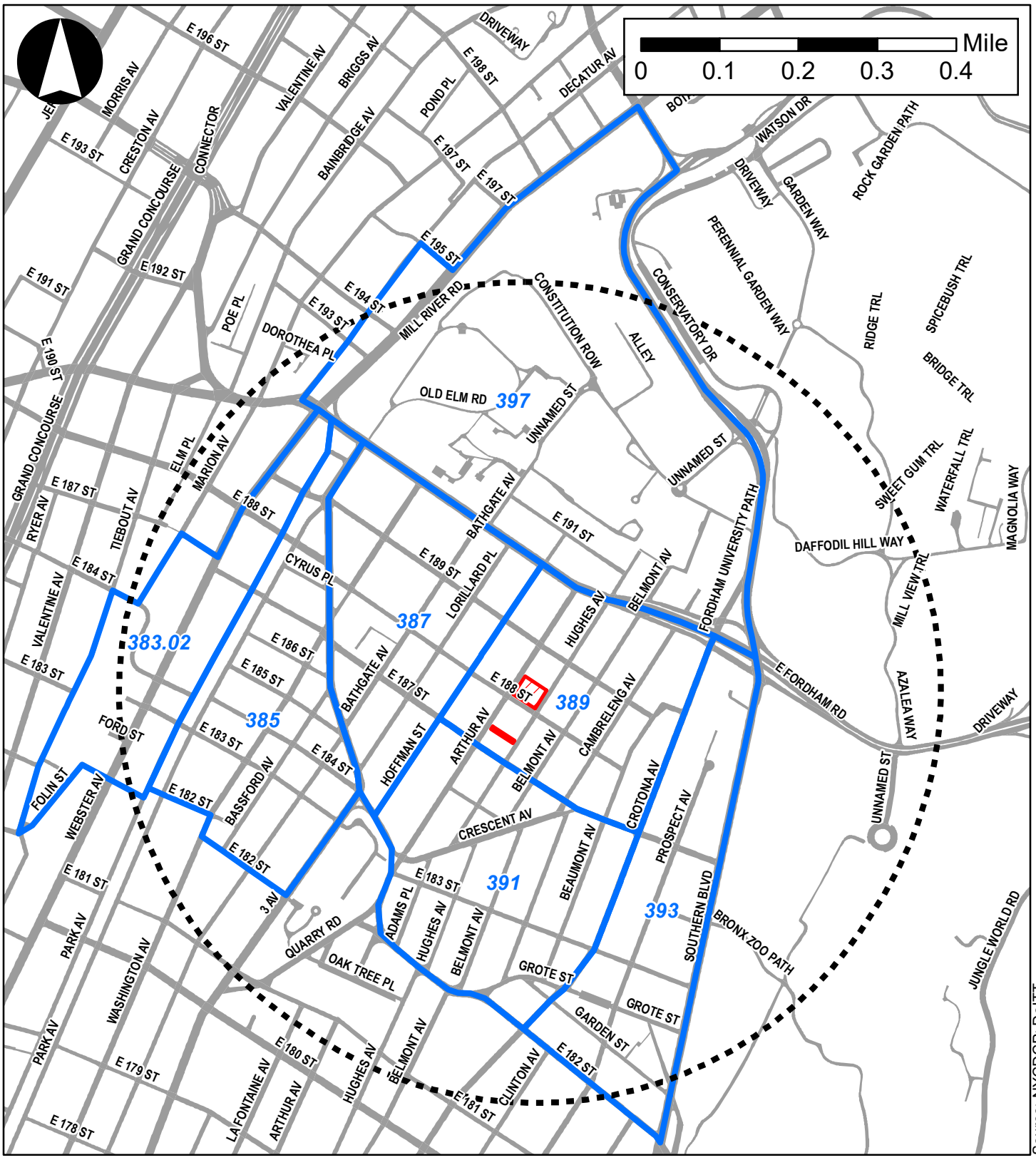
According to the *CEQR Technical Manual*, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; 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 no open space resources would be physically altered or displaced as a result of the Proposed Actions, this chapter uses information from **Attachment E, "Shadows," Attachment G, "Air Quality,"** and **Attachment H, "Noise"** to determine whether the Proposed Actions have the potential to directly affect any open space resources in close proximity to Rezoning Area 1. As (1) there are no publicly-accessible open space resources within Rezoning Area 1, and (2) the Proposed Actions would not result in significant adverse shadow, air quality, noise, or construction impacts on area open space resources, the Proposed Actions would not have any direct effects on open space resources and no further analysis is warranted.

Indirect Effects Analysis

Indirect effects occur to an area's open space resources when a proposed action would add enough population, either residents or workers, to noticeably diminish the ability of an area's open space to serve the existing or future population. *CEQR Technical Manual* guidance suggests conducting an initial quantitative assessment to determine whether more detailed analyses are appropriate, but also recognizes that for projects that introduce a large population in an area that is underserved by open space, it may be clear that a full, detailed analysis should be conducted. As discussed above, Rezoning Area 1 is located in an area considered neither underserved nor well-served by open space as identified in the *CEQR Technical Manual*.

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 open space resources beyond the study area, the availability of private

Open Space Study Area



Source: NYCDCP; DoITT

Legend

Rezoning Areas | Half-Mile Radius | Half-Mile Residential Study Area | Roadways

recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this chapter includes:

- Characteristics of the existing residential population. To determine the number of residents in the study area, 2010 Census data have been compiled for census tracts comprising the open space study area.
- 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. For residential populations, there are generally two guidelines that are used to evaluate residential open space ratios. The *CEQR Technical Manual* 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. However, the *CEQR Technical Manual* planning guidance is 2.5 acres of open space per 1,000 residents, comprised of a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents).
- An evaluation of qualitative factors affecting open space use.
- A final determination of the adequacy of open space in the residential open space study area.
- An assessment of expected changes in future levels of open space supply and demand in the 2023 analysis year, based on known planned development projects within the open space study area. To estimate the residential population expected in the study area in the future without the Proposed Actions, known study area No-Action developments are accounted for. Any new open space or recreational facilities that are anticipated to be operational by the analysis year are also accounted for. Open space ratios are calculated for the future No-Action condition and compared with existing ratios to determine changes in future levels of open space adequacy.

Impact Assessment

As described in the *CEQR Technical Manual,* the significance of a project's effects on an area's open space resources is determined using both quantitative and qualitative factors, as compared to the No-Action scenario. The determination of significance is based upon the context of a proposed project, including its location, the quality and quantity of the open space in the future With-Action scenario, the types of open space provided, and any new open space provided by the proposed project.

The quantitative assessment considers how a proposed project would change the open space ratios in the study area. The *CEQR Technical Manual* indicates that a significant adverse impact may result if a proposed project would reduce the open space ratio by more than five percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents, or where there would be a direct displacement or alteration of existing open space within the study area that has a significant adverse effect on existing users. In areas that are extremely lacking in open space, a reduction as small as one percent may be considered significant, depending on the area of the City. Furthermore, in areas that are well-served by open space, a greater change in the open space ratio may be tolerated.

The qualitative assessment supplements the quantitative assessment and considers nearby destination open space resources, the connectivity of open space resources, the effects of new open space provided by the proposed project, a comparison of projected open space ratios with established City guidelines,

and open space created by the proposed project not available to the general public. It is recognized that the City's planning goals are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks indicating how well an area is served by open space.

IV. DETAILED ANALYSIS

Existing Conditions

Demographic Characteristics of the Study Area

To determine the residential population served by existing open space resources, 2010 Census data were compiled for the census tracts comprising the half-mile study area. With an inventory of available open space resources and the number of potential users, open space ratios were calculated and compared with the existing citywide median ratio and the City's planning goals. As mentioned above and shown in **Figure D-1**, the open space study area is comprised of seven census tracts. As shown in **Table D-1** on the subsequent page, 2010 Census data indicate that the study area has a total residential population of approximately 38,242.

Table D-1: Residential Population and Age Distribution in the Half-Mile Study Area

Census Tract	Total Residential Population	Age Distribution												Median Age
		Under 5		5 to 9		10 to 14		15 to 19		20 to 64		65 and Over		
		#	%	#	%	#	%	#	%	#	%	#	%	
383.02	6,106	570	9.3	596	9.8	550	9.0	612	10.0	3,412	55.9	366	6.0	26.6
385	4,758	475	10.0	480	10.1	447	9.4	447	9.4	2,594	54.5	315	6.6	26.6
387	3,216	263	8.2	229	7.1	241	7.5	275	8.6	2,012	62.6	196	6.1	28.0
389	5,325	427	8.0	402	7.5	395	7.4	408	7.7	3,384	63.5	309	5.8	25.0
391	6,992	637	9.1	639	9.1	583	8.3	619	8.9	4,060	58.1	454	6.5	28.2
393	8,143	675	8.3	729	9.0	682	8.4	736	9.0	4,574	56.2	747	9.2	29.7
397	3,702	74	2.0	74	2.0	68	1.8	1,420	38.4	1,824	49.3	242	6.5	20.4
Half-Mile Study Area	***38,242***	***3,121***	***8.2***	***3,149***	***8.2***	***2,966***	***7.8***	***4,517***	***11.8***	***21,860***	***57.2***	***2,629***	***6.9***	***26.8***
Total for Bronx	1,385,108	103,144	7.4	98,664	7.1	99,159	7.2	115,662	8.4	822,597	59.4	145,882	10.5	32.8
Total for NYC	*8,175,133*	*517,724*	*6.3*	*473,159*	*5.8*	*468,154*	*5.7*	*535,833*	*6.6*	*5,187,105*	*63.4*	*993,158*	*12.1*	*35.5*

Source: U.S. Census Bureau, 2010 Census.

As shown in **Table D-1**, people between the ages of 20 and 64 make up the majority (approximately 57.2 percent) of the residential population in the half-mile study area. Children and teenagers (0 to 19 years old) account for approximately 36 percent of the entire study area population, and persons 65 years and over account for approximately 6.9 percent of the study area population. As also presented in **Table D-1**, compared to the Bronx and New York City as a whole, the half-mile study area includes a larger percentage of children/teenagers and a comparable adult (20-64 years) population; the study area's elderly population is smaller than that of the Bronx and New York City as a whole.

The half-mile study area's median age of 26.8 is six years younger than the median age for the Bronx (32.8 years) and nearly nine years younger than the median age for New York City as a whole (35.5 years). It should also be noted that the median age varies by census tract, with census tract 397 (which contains

the campus of Fordham University) exhibiting the lowest median age (20.4) and census tract 393 exhibiting the highest median age (29.7).

Within a given area, the age distribution of a population affects the way open space resources are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool-aged children. Children ages five through nine typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for activities, such as ball playing, running, and skipping rope. Children ages ten through 14 use playground equipment, court spaces, and Little League fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities, such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized forms of recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, ad hoc active sports, such as Frisbee, and recreational activities in which all ages can participate. Senior citizens engage in active recreation, such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

Inventory of Publicly Accessible Open Space

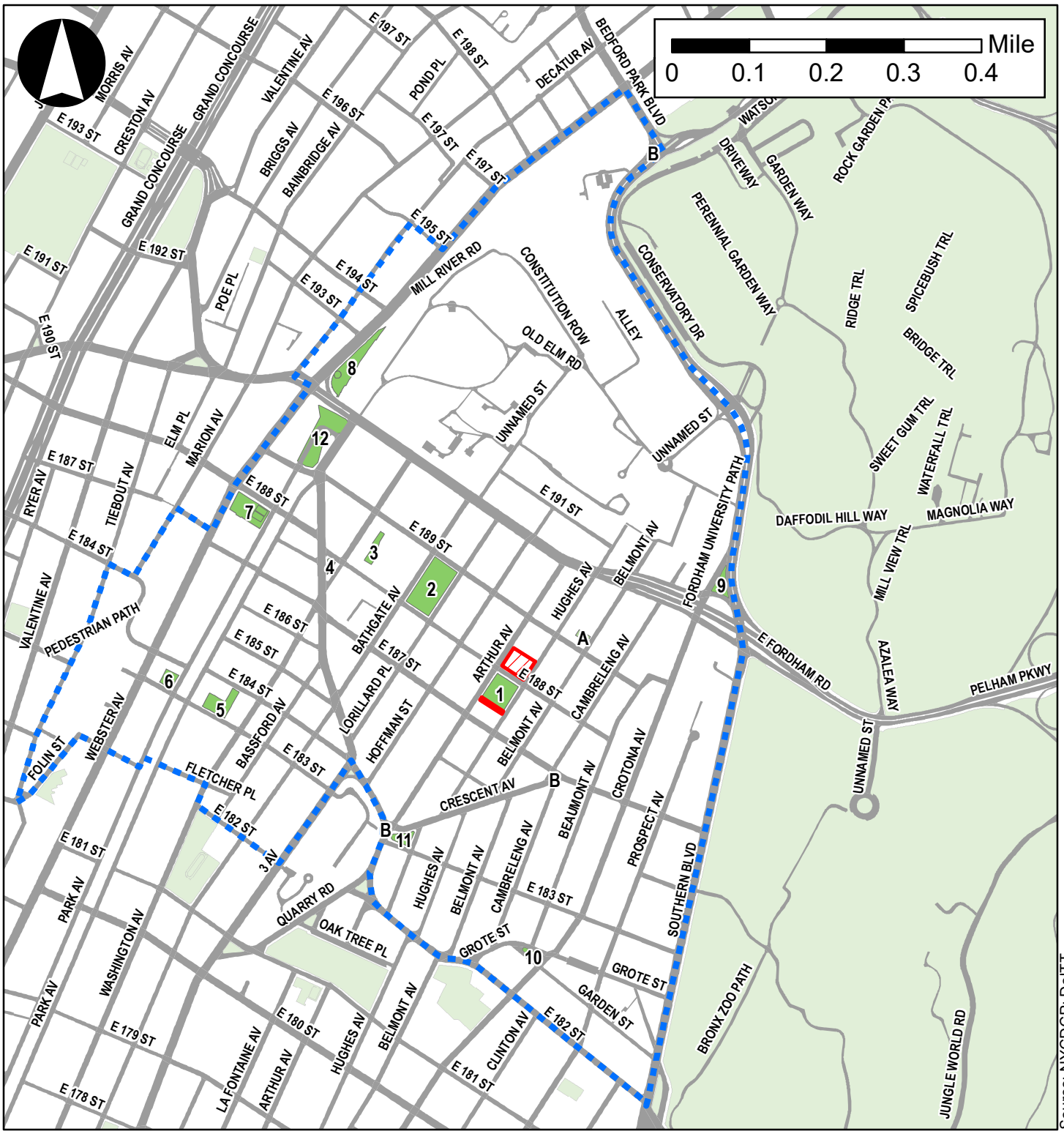
According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to *CEQR Technical Manual* guidance, publicly accessible open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts using both a quantitative and a qualitative analysis, whereas private open space is not accessible to the general public on a regular basis, and is considered only qualitatively.

An open space resource is determined to be active or passive by the uses that 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, and multi-purpose play areas (open lawns and paved areas for active recreation such as running, games, informal ball-playing, skipping rope, etc.). 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 lawn or riverfront walkway, which can also be used for ball playing, jogging, or rollerblading.

Within the open space study area, all publicly accessible open space resources were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. The information used for this analysis was gathered through field inventories conducted in late February 2020; the New York City Department of Parks and Recreation's (NYC Parks) website; and the New York City Open Accessible Space Information System (OASIS) database and other secondary sources of information.

The condition of each open space resource was categorized as "Excellent," "Good," "Fair," or "Poor." A resource was considered in excellent condition if the space was clean and attractive, and all equipment was present and in a state of good repair. A good resource had minor problems such as litter or older but operative equipment. A fair or poor resource was one that was poorly maintained, had broken or missing equipment or lack of security, or other factors that would diminish the facility's attractiveness to potential users. Determinations were made subjectively, based on a visual assessment of the open space resources.

Likewise, judgments as to the intensity of use of the resources were qualitative, based on an observed degree of activity or utilization on a weekday from 11 AM until 3 PM, which is considered the weekday peak utilization period according to *CEQR Technical Manual* guidance. If a resource seemed to be at or near capacity (i.e. the majority of benches or equipment was in use), then utilization was considered high. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. **Table D-2, "Inventory of Existing Open Space and Recreational Resources in Study Area,"** identifies the address, ownership, features, and acreage of active and passive open space resources in the half-mile study area, as well as their condition and utilization. **Figure D-2** maps their location within the study area.



Source: NYCDCP; DoITT

Legend

- Rezoning Areas
- Half-Mile Residential Study Area
- 1 Quantitative Open Space Resources (refer to Table D-2)
- A Qualitative Open Space Resources (refer to Table D-2)
- Open Space Resources Outside of Study Area

Table D-2: Inventory of Existing Open Space and Recreational Resources in the Study Area

Map No.[1]	Name	Location	Owner/ Agency	Amenities	User Groups	Hours of Operation	Acreage	Active		Passive		Condition/ Utilization
								Acres	%	Acres	%	
Open Space Resources Included in Quantitative Analysis												
1	Ciccarone Park	East 188th St. between Arthur Ave. & Hughes Ave.	NYC Parks	Playgrounds, Bocce Courts, Fitness Equipment, Comfort Station, Spray Showers, Benches, Plantings, Trees	Children, Teenagers, Adults, Senior Citizens	6AM to Dusk	0.55	0.50	90	0.06	10	Excellent condition/High utilization
2	"Doc" Serpone Field	Bounded by East 188th St., Bathgate Ave., East 189th St., & Lorillard Pl.	DCAS/DOE	Baseball Diamond, Soccer Field, Handball courts, Running Track, Fitness Equipment, Benches	Children, Teenagers, Adults	When school is in session: Open to the public after school hours until dusk; When school is out of session: 8 AM to Dusk	1.45	1.45	100	0.00	0	Good condition/Low utilization
3	I.S. 254 Playground	2452 Washington Ave.	DCAS/DOE	Asphalt Play Area, Benches	Children, Teenagers	When school is in session: Open to the public after school hours until dusk; When school is out of session: 8 AM to Dusk	0.20	0.20	100	0.00	0	Fair condition/Low utilization
4	Flood Triangle	Bounded by East 188th St., 3 Ave., &Washington Ave.	NYC Parks	Plaza with Benches, Trees	Teenagers, Adults, Senior Citizens	24 Hours	0.07	0.00	0	0.07	100	Fair condition/Low utilization
5	Washington Park	East 183rd St. between Washington Ave & Park Ave.	NYC Parks	Basketball Court, Playgrounds, Spray Showers, Benches, Plantings, Trees	Children, Teenagers, Adults, Senior Citizens	6AM to Dusk	0.52	0.44	85	0.08	15	Good condition/Moderate utilization
6	Thorpe Family Playground	East 183rd St. between Park Ave. & Webster Ave.	NYC Parks	Playgrounds, Spray Showers, Benches, Plantings, Trees	Children, Teenagers, Adults, Senior Citizens	6AM to Dusk	0.20	0.19	95	0.01	5	Good condition/Moderate utilization

Table D-2 (continued): Inventory of Existing Open Space and Recreational Resources in the Study Area

Map No.[1]	Name	Location	Owner/ Agency	Amenities	User Groups	Hours of Operation	Acreage	Active		Passive		Condition/ Utilization
								Acres	%	Acres	%	
Open Space Resources Included in Quantitative Analysis												
7	Webster Playground	East 188th St. between Park Ave. & Webster Ave.	NYC Parks	Basketball and Handball Courts, Playgrounds, Fitness Equipment, Comfort Station, Benches, Plantings, Trees	Children, Teenagers, Adults, Senior Citizens	6AM to Dusk	0.74	0.70	95	0.04	5	Excellent condition/Moderate utilization
8	Rose Hill Park	Located at NE corner of the intersection of East Fordham Rd. & Webster Ave.	NYC Parks	Landscaped plaza with Benches, Trees	Teenagers, Adults, Senior Citizens	24 Hours	0.74	0.00	0	0.74	100	Good condition/Moderate utilization
9	Sergeant Johnson Triangle	Bounded by Dr. Kazimiroff Blvd. & Crotona Ave. at East Fordham Rd.	NYC Parks	Benches, Landscaping, Trees	Teenagers, Adults, Senior Citizens	24 Hours	0.74	0.00	0	0.74	100	Excellent condition/Low utilization
10	Whalen Grove	Crotona Ave. at Grote St. & Garden St.	NYC Parks	Landscaped plaza with Benches, Trees	Teenagers, Adults, Senior Citizens	24 Hours	0.13	0.00	0	0.13	100	Excellent condition/Low utilization
11	D'Auria-Murphy Triangle	Adams Pl. between Cresent Ave. & East 183rd St.	NYC Parks	Christopher Columbus statue, Game Tables, Benches, Landscaping, Trees	Teenagers, Adults, Senior Citizens	6AM to Dusk	0.31	0.00	0	0.31	100	Good condition/Low utilization
12	Fordham Plaza	Bounded by East Fordham Rd., East 189th St., Park Ave., & 3 Ave.	DOT/MTA Metro-North Railroad	Landscaped Plaza with a Café, Retail Kiosks, Public Restroom, Benches, Landscaping, Trees	Teenagers, Adults, Senior Citizens	24 Hours	1.30	0.00	0	1.30	100	Excellent condition/High utilization
Total Included in Quantitative Analysis							***6.96***	***3.49***	***50.1***	***3.47***	***49.9***	

Table D-2 (continued): Inventory of Existing Open Space and Recreational Resources in the Study Area

Map No.[1]	Name	Location	Owner/ Agency	Amenities	Acreage
Open Space Resources not included in Quantitative Analysis					
A	Belmont Little Farmers Community Garden	2483-2485 Belmont Ave.	BLT	Community Garden with Plantings, Raised Plant beds, Trees, Seating	0.09
B	Greenstreets (3 total)	Various Locations within Study Area	DOT/NYC Parks	Plantings and Trees	0.11
Total Excluded from Quantitative Analysis					***0.20***

Source: OASIS, NYC Parks, 2020 Primary Land Use Tax Lot Output (PLUTO) data, site visits conducted in February 2020.
Notes:
[1] Refer to **Figure D-2**.
NYC Parks = New York City Department of Parks and Recreation; DOE = New York City Department of Education; DOT = New York City Department of Transportation; DCAS = New York City Department of Citywide Administrative Services; BLT = Bronx Land Trust; MTA = Metropolitan Transportation Authority.

Open Space Resources

As shown in **Figure D-2** and **Table D-2**, there are 12 publicly accessible open space resources located in the half-mile open space study area. These open space resources are primarily clustered in the central and western portions of the study area. In addition, there is one community garden and three greenstreets located within the study area that are not included in the quantitative analysis because they do not provide consistent public hours or do not include seating or other amenities.

The study area contains a total of approximately 6.96 acres of publicly accessible open space, of which approximately 3.49 acres (50.1 percent) comprises active open space uses and approximately 3.47 acres (49.9 percent) comprises passive open space uses (refer to **Table D-2**).

The largest open space resource in the half-mile study area is "Doc" Serpone Field (Map No. 2), a 1.45-acre open space resource located two blocks to the northwest of Rezoning Area 1, in the center of the study area. "Doc" Serpone Field, which is jointly owned and operated by the New York City Department of Citywide Administrative Services (DCAS) and the New York City Department of Education (DOE), is programmed with active open space uses, including a baseball diamond, a soccer field, multiple handball courts, a running track, and fitness equipment.

Another significant open space resource located in the half-mile study area is the 1.30-acre Fordham Plaza (Map No. 12), which is located near the western border of the study area. Fordham Plaza, which is jointly operated by the New York City Department of Transportation (DOT) and the Metropolitan Transportation Authority (MTA) Metro-North Railroad, is an urban, landscaped plaza which contains passive open space uses, including commercial space for a café and several retail kiosks, a public restroom, and benches. The plaza, which is situated on a platform constructed above the MTA Metro-North Railroad right-of-way and a portion of the Fordham Metro-North station, was recently reconstructed in 2016 to increase the amount of public space, among other design objectives.

With the exception of these two open space resources, the remaining open space resources located within the study area are below one acre in size and include a variety of passive (landscaped areas, walking paths, and benches) and active (basketball, bocce, and handball courts, fitness equipment, playgrounds, and spray showers) open space uses.

As mentioned above, there are several open space resources that are conservatively not included in the quantitative analysis because they do not provide consistent public hours or do not include seating or other amenities. These resources consist of a community garden and three Greenstreets, which, in total, comprise approximately 0.20-acres of open space.

Assessment of Open Space Adequacy

Quantitative Assessment

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

As previously stated, there are 6.96 acres of publicly accessible open space, including approximately 3.49 acres (approximately 50.1 percent) of active open space and approximately 3.47 acres (approximately

49.9 percent) of passive open space. With a residential population of 38,242, the total open space ratio for residents is 0.182 acres per 1,000 residents, which is less than the City's planning guideline of 2.50 acres of parkland per 1,000 residents (see **Table D-3**). The study area's active open space ratio (0.091 acres per 1,000 residents) is lower than the City's planning guideline of 2.00 acres per 1,000 residents. The area's passive open space ratio (0.091 acres per 1,000 residents) is also below the City's planning guideline of 0.50 acres per 1,000 residents.

Table D-3: Adequacy of Open Space Resources: Existing Conditions

Existing Population	Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
38,242	6.96	3.49	3.47	0.182	0.091	0.091	2.50	2.00	0.50

Qualitative Assessment

Although the existing total open space ratio in the study area is less than the City's planning guideline of 2.50 acres per 1,000 residents and the citywide median of 1.50 acres per 1,000 residents, the deficiency of open space resources within the half-mile study area is ameliorated by several factors. A total of 10 out of the 12 open space resources in the study area were found to be in either excellent or good condition. In addition, 10 of the 12 open space resources have only low or moderate utilization levels and would be able to absorb additional users. Moreover, a wide variety of options for residents are available in each of the 12 open space resources, ranging from passive uses, such as plazas containing seating and game tables, to active uses, such as playgrounds, spray showers, basketball, bocce, and handball courts, fitness equipment, and a multi-purpose field. Additionally, in the future with the Proposed Actions, the proximity of Bronx Park, which is located approximately four-tenths of a mile to the east of the Development Site, adjacent to the eastern boundary of the study area, to the east of Southern Boulevard, would be a factor in alleviating the study area's open space deficiency. Bronx Park, which contains approximately 718.37 acres of publicly accessible open space, is one of the largest public parks in the Bronx; in addition to containing the New York Botanical Garden and the Bronx Zoo, the park also includes diverse and numerous active and passive open space uses, such as playgrounds, spray showers, fitness equipment, greenways, barbecuing areas, dog parks, hiking trails, bicycle paths, skate parks, baseball diamonds, basketball, bocce, and tennis courts, football and soccer fields, and kayak/canoe launch sites. Although this resource was excluded from the quantitative assessment, it is likely that existing and future residents within the study area would take advantage of this additional resource.

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

Study Area Population

In the future without the Proposed Actions, the existing conditions at the Applicant-owned Development Site would remain. In addition, there are 14 known developments within the half-mile open space study area anticipated for completion by 2023. In total, the 14 No-Action developments are expected to introduce approximately 1,410 residents to the half-mile study area. As indicated in **Table D-4**, the residential growth rate is expected to increase the half-mile study area population to 39,652 residents by 2023.

Open Space Resources

There are no planned changes to open space resources that would increase or decrease the overall study area acreage, nor does NYC Parks have any capital projects planned within the study area.

Assessment of Open Space Adequacy

In the 2023 No-Action scenario, the additional population introduced to the study area would increase the demand on the area's open space resources (i.e., would reduce the residential open space ratios). As indicated in **Table D-4**, the No-Action total, active, and passive open space ratios per 1,000 residents are expected to decrease to 0.176, 0.0880, and 0.088, respectively, from 0.182, 0.091, and 0.091, respectively, under existing conditions. Similar to existing conditions, all ratios would remain below the City's community district median and the City's optimal planning guidelines.

Table D-4: Adequacy of Open Space Resources: No-Action Scenario

2023 No-Action Population	Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
39,652	6.96	3.49	3.47	0.176	0.0880	0.088	2.50	2.00	0.50

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

This section describes the open space conditions that would result from the Proposed Actions by 2023. 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 scenario (described above) to the With-Action scenario.

Study Area Population

In the future with the Proposed Actions, it is estimated the Alternate Residential Scenario would introduce 227 new residents to Rezoning Area 1. Based on this incremental residential population growth, the study area's population would increase to a total of 39,879 residents in the 2023 With-Action scenario.

Direct Effects Analysis

The Proposed Actions would not have a direct effect on any study area open space resources. Construction and operation of the Proposed Project, or the Alternate Residential Scenario, would not cause the physical loss of public open space because of encroachment or displacement of the space; would not change the use of an open space so that it no longer serves the same user population; and would not limit public access to an open space resource. In addition, as discussed in other attachments of this EAS, the Proposed Actions would not result in significant adverse shadow, air quality, noise, or construction impacts on study area open space resources.

Indirect Effects Analysis

As noted above, the open space impact analysis consists of both a quantitative assessment and a qualitative assessment. The quantitative assessment considers how a proposed project would change the open space ratios in the study area. As the study area open space ratios are significantly less than both the City's optimal benchmark of 2.5 acres of open space per 1,000 residents and the City's median community district open space ratio of 1.5 acres of open space per 1,000 residents, a reduction in the open space ratio of as small as one percent may be considered significant, depending on the area of the City, and in consideration of qualitative factors, including proximity to nearby destination open space resources, the connectivity of open space, the effects of new open space provided by the proposed project, and private open spaces created by the proposed project not available to the general public. It is recognized that the City's planning goals are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks indicating how well an area is served by open space.

Assessment of Open Space Adequacy

Quantitative Assessment

In the 2023 With-Action scenario, the additional population introduced to the study area by the Proposed Actions and associated Alternate Residential Scenario would further increase the demand on the area's open space resources. As indicated in **Table D-5**, the With-Action total, active, and passive open space ratios per 1,000 residents would decrease to 0.175, 0.0875, and 0.087, respectively, from the No-Action scenario. Similar to the No-Action scenario, all ratios would remain below the City's community district median and the City's optimal planning guidelines.

Table D-5: Adequacy of Open Space Resources: With-Action Condition

2023 With-Action Population	Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
39,879	6.96	3.49	3.47	0.175	0.0875	0.087	2.50	2.00	0.50

Qualitative Assessment

In the future with the Proposed Actions, the study area would continue to have a shortfall of open space. However, although the existing open space ratios in the study area would remain less than the City's planning goals and the City's community district median both without and with the Proposed Actions, the deficiency of open space resources within the study area would be ameliorated by several factors. A majority of the study area open space resources included in the quantitative analysis were found to be in good or excellent condition. In addition, a wide variety of active and passive open space uses are available, ranging from areas with passive uses, such as plazas containing seating and game tables, to areas with active uses, such as playgrounds, spray showers, basketball, bocce, and handball courts, fitness equipment, and a multi-purpose field. Additionally, in the future with the Proposed Actions, the proximity of Bronx Park, which is located approximately four-tenths of a mile to the east of the Development Site, adjacent to the eastern boundary of the study area, to the east of Southern Boulevard, would be a factor in alleviating the study area's open space deficiency. Bronx Park, which contains approximately 718.37 acres of publicly accessible open space, is one of the largest public parks in the Bronx; in addition to

containing the New York Botanical Garden and the Bronx Zoo, the park also includes diverse and numerous active and passive open space uses, such as playgrounds, spray showers, fitness equipment, greenways, barbecuing areas, dog parks, hiking trails, bicycle paths, skate parks, baseball diamonds, basketball, bocce, and tennis courts, football and soccer fields, and kayak/canoe launch sites. Although this resource was excluded from the quantitative assessment, it is likely that existing and future residents within the study area would take advantage of this additional resource.

Determining Impact Significance

A significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than five percent in areas that are currently below the City's community district median open space ratio of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction of as little as one percent may be considered significant, depending on the area of the City. Conversely, in areas that are well-served by open space, a greater percentage of change (more than five percent) may be tolerated. These reductions may result in the overburdening of existing facilities or further exacerbating a deficiency in open space. **Table D-6** displays the study area's open space ratio percentage changes from the No-Action scenario to the With-Action scenario under the Proposed Actions.

Table D-6: Residential Open Space Ratios Summary

Ratio	*CEQR Technical Manual* Open Space Optimal Planning Goal (acres per 1,000)	Open Space Ratios per 1,000			Percent Change (Future No-Action to Future With-Action)
		Existing	No-Action	With-Action	
Residential (½-Mile) Study Area					
Total	2.5	0.182	0.176	0.175	-0.57
Active	2.0	0.091	0.0880	0.0875	-0.57
Passive	0.5	0.091	0.088	0.087	-0.57

In the future with the Proposed Actions, the total, active, and passive open space ratios would each decrease by 0.57 percent from the No-Action scenario. As such, demand for open space generated by the Alternate Residential Scenario would not significantly exacerbate the No-Action deficiency, and the population added as a result of the Proposed Actions is not expected to noticeably affect utilization of the area's open spaces. As the total, active, and passive open space ratios would decrease by less than one percent, no significant adverse impacts would result.

ATTACHMENT E

SHADOWS

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the 2014 *City Environmental Quality Review (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 greater in height, or those that would be located adjacent to, or across the street from, a sunlight-sensitive resource. As discussed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of the Proposed Project, a new building greater than 50 feet in height (135-feet tall, 160-feet tall including a 25-feet tall rooftop bulkhead) located adjacent to a sunlight-sensitive resource (Ciccarone Park). In addition, a second RWCDS (the "Alternate Residential Scenario") has been assessed in the EAS and would comprise a new building greater than 50 feet in height (75-feet tall, 100-feet tall including a 25-feet tall rooftop bulkhead). As such, a detailed shadows analysis was prepared in accordance with *CEQR Technical Manual* guidance to determine the potential for the Proposed Actions to result in significant adverse impacts on sunlight-sensitive resources. However, as the Proposed Project does not fully maximize the potential building envelope across the entire Development Site, for worst-case analysis purposes, the analysis presented in this attachment assesses the potential for shadow impacts for a development that would maximize the potential building envelope pursuant to the proposed zoning. The building envelope development would have a rooftop height of 135-feet and a total height of 160-feet including a 25-feet tall rooftop bulkhead.

II. PRINCIPAL CONCLUSIONS

The Proposed Actions would result in incremental shadow coverage (i.e. additional, or new, shadow coverage) on portions of one sunlight-sensitive open space resource: Ciccarone Park. The extent and duration of the incremental shadows on this open space resource would not (1) significantly reduce or completely eliminate direct sunlight exposure on any of the open space resource's sunlight-sensitive features; and would not (2) significantly alter the public's utilization or enjoyment of the open space resource's facilities or threaten the viability of vegetation or other sunlight-sensitive features within the open space resource. Therefore, incremental shadows from the Proposed Project on Ciccarone Park would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

III. METHODOLOGY

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

First, a preliminary screening assessment must be conducted to ascertain whether shadows resulting from an action or 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[1]:

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

- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features are considered, as opposed to the entire architectural resource. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids, such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychromy [multicolored] features found on Victorian Gothic Revival or Art Deco 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 shadow screening assessment consists of three tiers of analysis. The first tier determines a simple radius around the site representing the longest shadow that could be cast by the proposed building. 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 action-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 coverage over the course of each representative day.

[1] According to the 2014 *CEQR Technical Manual*, city streets, sidewalks, and private open spaces (such as private residential front and back yards, stoops, and vacant lots) are not considered to be sunlight-sensitive resources.

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 – or the additional, or new, shadow that a building or other built structure resulting from a proposed action would cast on a sunlight-sensitive resource during the year – resulting from a proposed action. Incremental shadows are determined by establishing a baseline condition (the No-Action scenario) and comparing it to the future condition resulting from the proposed action (the With-Action scenario), thus illustrating the shadows cast by existing or future buildings and distinguishing the additional (incremental) shadows cast by a proposed project. In accordance with *CEQR Technical Manual* guidance, shadows on sunlight-sensitive resources of concern were modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21 vernal equinox (or the September 21 autumnal equinox, which is approximately the same), the June 21 summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6 or August 6 (which are approximately the same). For the cold weather months, the December 21 winter solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive 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 results 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 their survival (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive features of the resource are already subject to substandard sunlight (i.e., less than the minimum time necessary for their 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(s) of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

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

IV. PRELIMINARY SCREENING

Tier 1 Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. The maximum shadow radius for the Development Site (688-feet) was determined using the maximum building height (including the 25-feet tall rooftop bulkhead) of approximately 160-feet.

Base maps were prepared (refer to **Figure E-1**) for the Development Site, which identify all potentially sunlight-sensitive resources within the maximum shadow radius (sunlight-sensitive resources are identified in **Table E-1**). As shown in the figure, within the longest shadow study area, several potentially sunlight-sensitive resources were identified. Therefore, further screening was warranted to determine whether these resources could be affected by action-generated shadows.

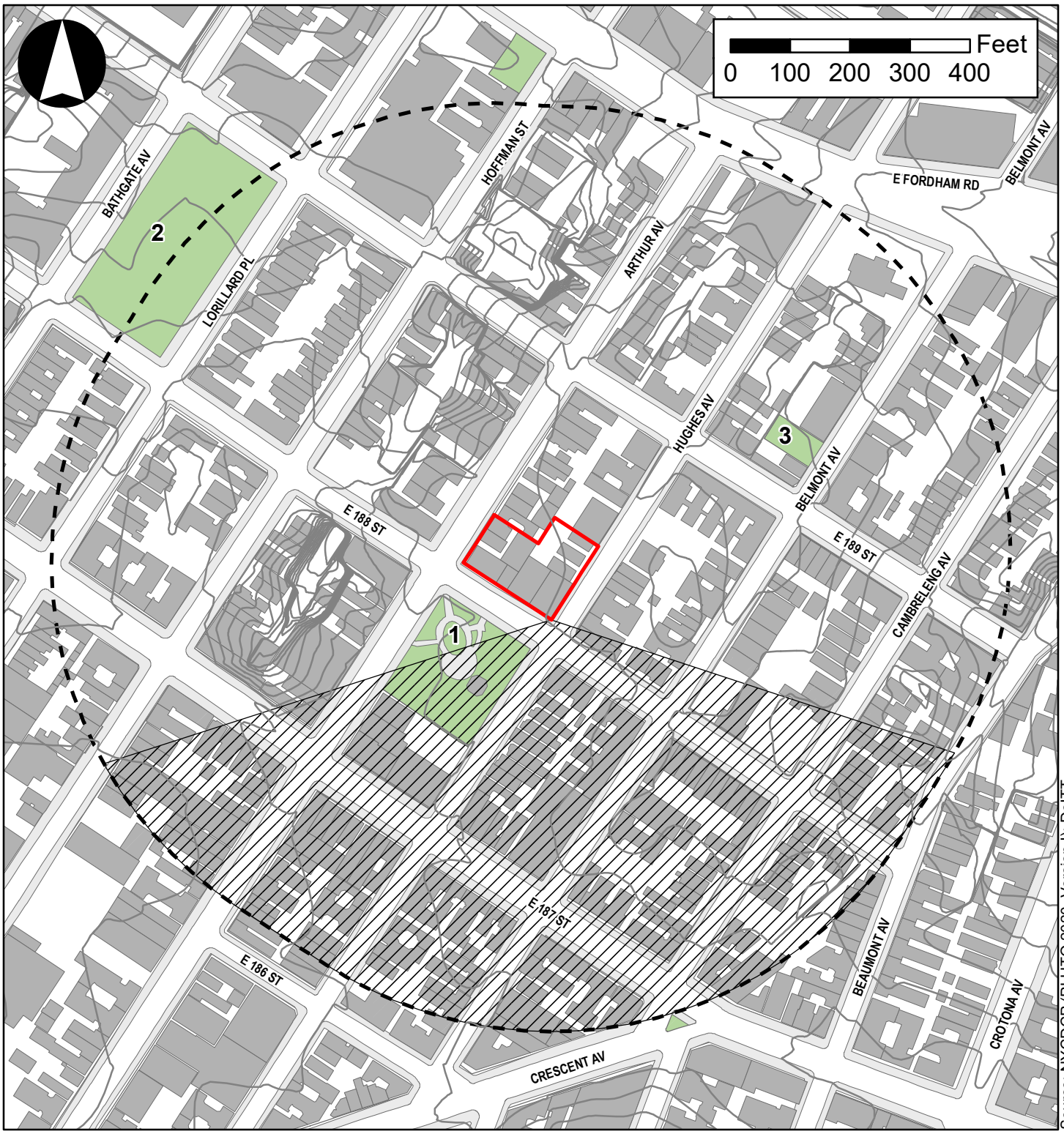
Tier 2 Screening Assessment

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 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 Project.

Figure E-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 the southernmost corner of the Development Site). As shown in **Figure E-1**, three resources were identified as sunlight-sensitive resources that warranted further assessment. **Table E-1**, provided on the subsequent page, identifies the sunlight-sensitive resources that warranted further assessment.

Table E-1: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 1 and 2 Screening

Map No.	Sunlight-Sensitive Resource
1	Ciccarone Park
2	"Doc" Serpone Field
3	Belmont Little Farmers Community Garden



Source: NYCDCP (PLUTO 2020, Version I); DoITT

Legend

- Development Site
- Tier I: Longest Shadow Study Area
- Tier II: Area That Cannot Be Shaded
- 1 Sunlight Sensitive Resources
- Existing Buildings
- Topographic Contour Lines

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 an hour and a half after sunrise and an hour and a half before sunset on representative analysis days.

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

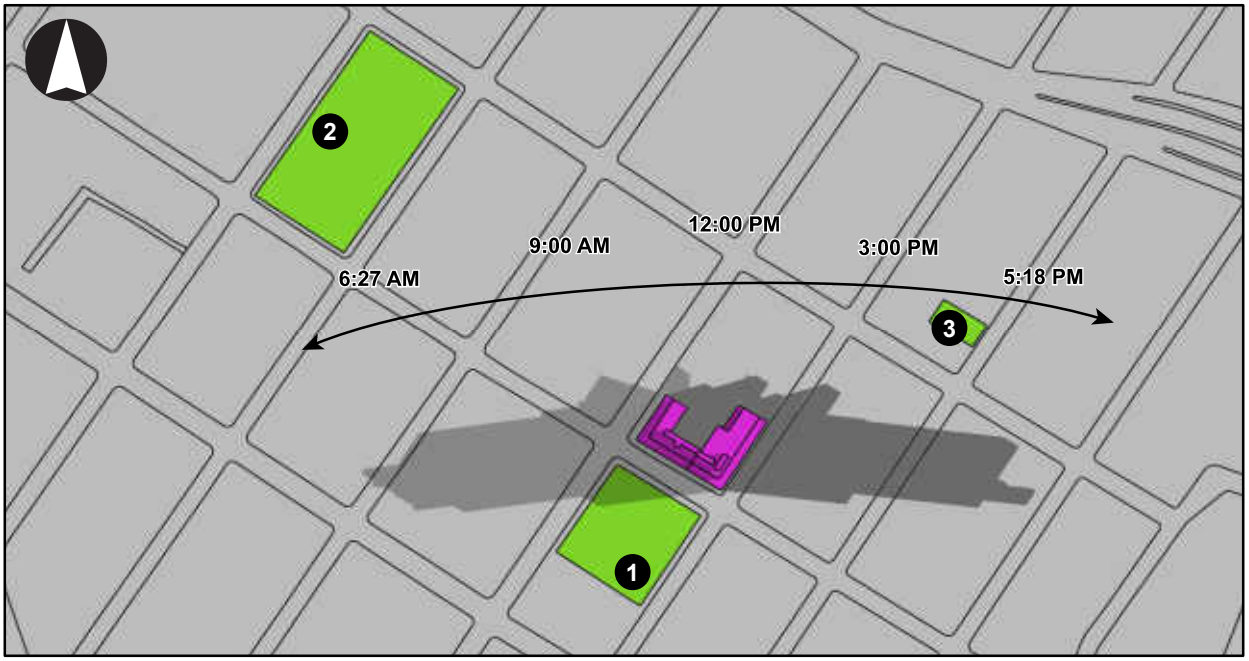
As shown in **Figures E-2a** and **E-2b**, and presented in **Table E-2**, based on the Tier 3 screening assessment, the potential for new incremental shadows to be cast on Ciccarone Park (Map No. 1) on the May6/August 6 and June 21 analysis days could not be ruled out. Therefore, a detailed shadows analysis is warranted for this sunlight-sensitive resource. Neither "Doc" Serpone Field (Map No. 2) or Belmont Little Farmers Community Garden (Map No. 3) would receive action-generated shadows on any of the four analysis days and would not require any further analysis.

Table E-2: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening

Map No.	Name	March 21/Sept. 21 7:36AM - 4:29PM	May 6/August 6 6:27AM - 5:18PM	June 21 5:57AM - 6:01PM	December 21 8:51AM - 2:53PM	Number of Analysis Days
1	Ciccarone Park	NO	YES	YES	NO	2
2	"Doc" Serpone Field	NO	NO	NO	NO	0
3	Belmont Little Farmers Community Garden	NO	NO	NO	NO	0



MARCH 21/SEPTEMBER 21



MAY 6/AUGUST 6

RWCDS Height Massing Open Space Incremental Shadow

Note: Resources keyed to Table E-1



JUNE 21



DECEMBER 21

RWCDS Height Massing

Open Space

Incremental Shadow

Note: Resources keyed to Table E-1

V. DETAILED ANALYSIS OF SHADOW IMPACTS

Resources Potentially Affected by Action-Generated Shadows

Ciccarone Park

Ciccarone Park is an approximately 0.55-acre public park owned and operated by NYC Parks. The park, located directly to the south of the Rezoning Area, across East 188th Street (Block 3077, Lot 7), is largely covered in pavement and features a comfort station, bocce courts, fitness equipment, playgrounds, spray showers, and multiple benches, as well as perimeter landscaping and multiple large trees. Ciccarone Park is open to the public daily from 6AM to dusk.

Detailed Shadows Analysis

Per *CEQR Technical Manual* guidance, shadow analyses were performed for the sunlight-sensitive resource identified above on four representative days of the year: March 21/September 21 (the equinoxes); May 6 (the midpoint between the summer solstice and the equinoxes, and equivalent to August 6); June 21 (the summer solstice and the longest day of the year); and December 21 (the winter solstice and shortest day of the year). These four representative days indicate the range of shadows over the course of the year. As noted previously, *CEQR Technical Manual* guidance 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 results of the shadow analyses show the incremental difference in shadow impact between the No-Action and With-Action scenarios, the results of which are summarized in **Table E-3**.

Table E-3: Duration of Shadows on Sunlight-Sensitive Resources (Increment Compared to No-Action Scenario)

Sunlight-Sensitive Resource	Analysis Day	March 21/Sept. 21	May 6/August 6	June 21	December 21
		7:36AM – 4:29PM	6:27AM – 5:18PM	5:57AM – 6:01PM	8:51AM – 2:53PM
Ciccarone Park	Shadow enter-exit time	--	6:27AM – 8:04AM	5:57AM – 8:26AM	--
	Incremental shadow duration	--	1 hour 37 minutes	2 hours 29 minutes	--

Notes:
[A] All times are Eastern Standard Time; Daylight Saving Time was not accounted for per *CEQR Technical Manual* guidance.
[B] Table indicates the entry and exit times and total duration of incremental shadows for the sunlight-sensitive resources.

As shown in **Table E-3**, incremental action-generated shadows would reach portions of one sunlight-sensitive resource identified in the Tier 3 assessment, Ciccarone Park. Increases in shadow coverage would occur on the May 6/August 6 and June 21 representative analysis days. Increases in shadow coverage would not occur on the March 21/September 21 and December 21 representative analysis days. **Figures E-3a** and **E-3b** and **Figures E-4a** through **E-4c**, provided at the end of this attachment, show representative shadow views for Ciccarone Park on each of the representative analysis days on which incremental shadows would occur: May 6/August 6 and June 21.

It should be noted that, per *CEQR Technical Manual* guidance, all times reported herein are Eastern Standard Time and do not reflect adjustments for Daylight Saving Time that is in effect from mid-March

to early November. As such, the times reported in this attachment for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect Daylight Saving Time.

May 6/August 6

On May 6/August 6 (the midpoint between the equinoxes and solstices), the time period for shadows analysis begins at 6:27AM and continues until 5:18PM. On this analysis day, incremental shadows from the Proposed Project would reach portions of Ciccarone Park.

The Proposed Project would cast incremental shadows on portions of Ciccarone Park beginning at 6:27AM and continuing until 8:04AM, for a duration of approximately one hour and 37 minutes. After 8:04AM, the park would not experience any incremental shadow coverage as a result of the Proposed Project. As indicated in **Figures E-3a** and **E-3b**, incremental shadows would be limited to the northern portion of the park during the early morning hours. Incremental shadows would move in a northerly direction throughout the early morning. By 7:00AM, incremental shadow coverage would decrease significantly, and a majority of the park would continue to receive direct sunlight. The areas of Ciccarone Park that would experience incremental shadow coverage feature paved areas and walkways, landscaped areas, trees, and benches.

June 21

On June 21 the time period for shadows analysis begins at 5:57AM and continues until 6:01PM. 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 Project would cast incremental shadows on Ciccarone Park beginning at 5:57AM and continuing until 8:26AM, for a duration of approximately two hours and 29 minutes. After 8:26AM, the park would not experience any incremental shadow coverage as a result of the Proposed Project. As indicated in **Figures E-4a** through **E-4c**, incremental shadows would be limited to the northern portion of the park during the early morning hours. Incremental shadows would move in a northerly direction throughout the early morning. By 7:00 AM, incremental shadow coverage would decrease significantly, and a majority of the park would continue to receive direct sunlight. The areas of Ciccarone Park that would experience incremental shadow coverage feature paved areas and walkways, landscaped areas, trees, and benches.

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 space resources, 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, four to six hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Consequently, the assessment of an open space's sensitivity to increased shadow coverage focuses on identifying the existing conditions of its facilities, plantings, and uses, and the sunlight requirements for each.

Ciccarone Park

The Proposed Project would cast incremental shadows on portions of Ciccarone Park on two of the four representative analysis days. Incremental shadow duration would be minimal, ranging from one hour and 12 minutes on May 6/August 6 to two hours and 10 minutes on June 21, and would be limited to the early morning hours generally before 8:00AM. Incremental shadow coverage would generally be limited to northern and western portions of the park and would not be cast on any single area of the park for an extended period of time, allowing the park's sunlight-sensitive features to receive adequate direct sunlight during the growing season (at least four to six hours as specified in the *CEQR Technical Manual*) throughout the day. Incremental shadow coverage would affect some of the park's passive recreational uses, including bench seating located in the park's northwestern acreage. However, bench seating is located throughout the park. The areas of bench seating located in the remainder of Ciccarone Park would continue to receive direct sunlight throughout the morning time period when the seating areas in the northwestern portion of the park would be cast in shadow. Further, as the portion of the park affected by incremental shadow coverage is largely paved and does not include the park's bocce courts, fitness equipment, playgrounds, or spray showers, incremental shadow coverage is not expected to have a significant effect on the utilization or enjoyment of Ciccarone Park. Therefore, as the extent and duration of the incremental shadows would: (1) not significantly reduce or completely eliminate direct sunlight exposure on any of the sunlight-sensitive features found within the open space; and (2) would not significantly alter the public's use of the open space resource or threaten the viability of vegetation or other sunlight-sensitive features, incremental shadows from the Proposed Project on Ciccarone Park would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* guidance.

Incremental Shadows on May 6th/August 6th - Ciccarone Park



6:30 AM



7:00 AM

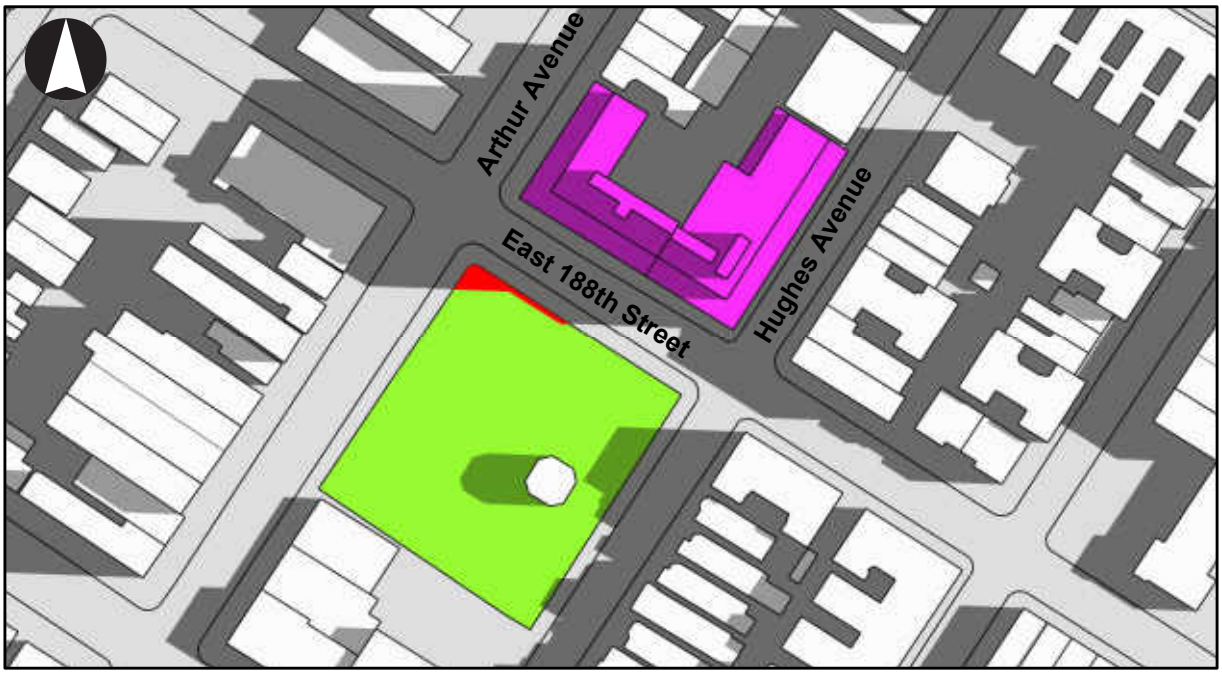
RWCDS Height Massing

Area of Open Space in Direct Sunlight

Area of Open Space in New Shadow

Area of Open Space in Existing Shadow

Incremental Shadows on May 6th/August 6th - Ciccarone Park



7:30 AM

RWCDS Height Massing

Area of Open Space in Direct Sunlight

Area of Open Space in New Shadow

Area of Open Space in Existing Shadow

Incremental Shadows on June 21st - Ciccarone Park



6:00 AM



6:30 AM

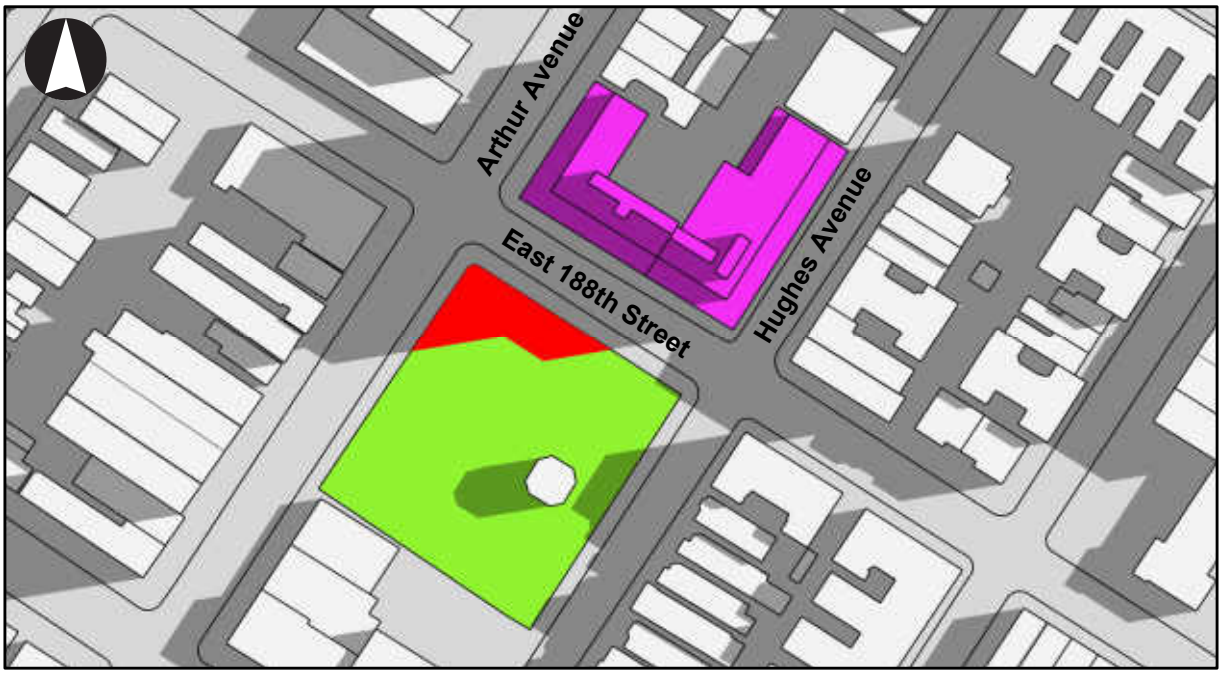
RWCDS Height Massing

Area of Open Space in Direct Sunlight

Area of Open Space in New Shadow

Area of Open Space in Existing Shadow

Incremental Shadows on June 21st - Ciccarone Park



7:00 AM



7:30 AM

RWCDS Height Massing

Area of Open Space in Direct Sunlight

Area of Open Space in New Shadow

Area of Open Space in Existing Shadow

Incremental Shadows on June 21st - Ciccarone Park



8:00 AM

RWCDS Height Massing

Area of Open Space in Direct Sunlight

Area of Open Space in New Shadow

Area of Open Space in Existing Shadow

ATTACHMENT F

URBAN DESIGN AND VISUAL RESOURCES

I. INTRODUCTION

This attachment assesses the Proposed Actions' potential effects on urban design and visual resources. As discussed in **Attachment A, "Project Description,"** two reasonable worst-case development scenarios are being assessed for environmental review purposes: The Proposed Project, which would comprise a 150,753 gross square feet (gsf), two-building mixed-use commercial/residential development (refer to **Figure A-6** in **Attachment A, "Project Description"** for massing of the Proposed Project), and the Alternate Residential Scenario, a 135,438 gsf mixed-use commercial/residential building containing 100 total DUs and 21,007 gsf of local retail space (refer to **Figure A-8** in **Attachment A, "Project Description"** for massing of the Alternate Residential Scenario). As such, the assessment presented herein considers the effects of both the Proposed Project and the Alternate Residential Scenario on both the primary and secondary study areas.

Per the 2014 *City Environmental Quality Review* (CEQR) *Technical Manual*, urban design is defined as the total of components – including streets, buildings, open spaces, wind, natural resources, and visual resources—that may affect a pedestrian's experience of public space. A visual resource is defined as the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources. In an urban design and visual resources assessment pursuant to CEQR, one considers whether and how a project or an action may change the visual experience of a pedestrian, focusing on the components of the project or the action that may have the potential to significantly and adversely affect the arrangement, appearance, and functionality of the built and natural environment. An assessment of the potential impacts of the Proposed Actions on urban design and visual resources was prepared in conformance to the *CEQR Technical Manual*. This analysis describes existing conditions and compares conditions in the future without and with the Proposed Actions to determine potential urban design and visual resource impacts. The urban design and visual resources analysis is based on field visits, photography, and computer imaging.

II. PRINCIPAL CONCLUSIONS

Urban Design

The Proposed Actions would not result in significant adverse urban design impacts in the primary study area or the surrounding secondary study area. Although both the Proposed Project and the Alternate Residential Scenario would represent a significant change within both the primary and secondary study areas, the Proposed Actions would not result in a significant adverse impact to urban design or visual resources. Both the Proposed Project and the Alternate Residential Scenario in the primary study area would be constructed on an existing block and would not entail any changes to topography, street patterns, street hierarchy, block shapes, or natural features in both the primary or secondary study areas. As shown in **Figures F-10** through **F-13**, the seven- and 13-story Proposed Project would feature a variety of building heights and tiered massings to provide a contextual transition from the Development Site to

the surrounding secondary study area. As also shown in **Figures F-10** through **F-13**, the seven-story Alternate Residential Scenario would feature a contextual bulk and height, which would be compatible with existing buildings, including planned & newly constructed buildings, in the secondary study area. Therefore, both the Proposed Project and the Alternate Residential Scenario would not result in significant adverse impacts on urban design as determined by guidance for determining impact significance set forth in the *CEQR Technical Manual*.

Visual Resources

Ciccarone Park is the only visual resource located within the secondary study area. Neither the Proposed Project nor the Alternate Residential Scenario would obstruct nor eliminate any public views or affect any view corridors of Ciccarone Park. As such, the Proposed Actions would not result in any significant adverse impacts to visual resources.

III. METHODOLOGY

In general, an assessment of urban design is needed when a project may have effects on one or more of the elements that contribute to a pedestrian's experience of public space. These elements, the totality of which defines the concept of urban design, are described below:

- *Streets*. The arrangement and orientation of streets define the location and flow of activity in an area, set street views, and create the blocks on which buildings and open spaces are organized. The apportionment of street space between cars, bicycles, transit, and sidewalk areas is critical to making a successful streetscape, as is the careful design of street furniture, grade, materials used, and permanent fixtures, including plantings, street lights, fire hydrants, curb cuts, or newsstands.

- *Buildings*. Buildings support streets. A building's street walls form the most common backdrop in the city for public space. A building's size, shape, setbacks, lot coverage, placement on the zoning lot and block, the orientation of active uses, and pedestrian and vehicular entrances all play major roles in the vitality of the streetscape. The public realm also extends to building façades and rooftops, offering more opportunity to enrich the visual character of an area.

- *Visual Resources*. A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

- *Open Space*. For the purpose of urban design, open space includes public and private areas such as parks, yards, cemeteries, parking lots, and privately owned public space (POPS).

- *Natural Features*. Natural features include vegetation and geologic, topographic, and aquatic features. Rock outcroppings, steep slopes or varied ground elevation, beaches, or wetlands may help define the overall visual character of an area.

- *Wind*. Channelized wind pressure from between tall buildings and down washed wind pressure from parallel tall buildings may cause winds that jeopardize pedestrian safety.

The Proposed Actions would enable development to be constructed that would differ from the bulk and form currently permitted as-of-right. This has the potential to change pedestrians' experience of public space. Therefore, it is appropriate to assess the Proposed Actions' potential impacts to urban design and visual resources.

A pedestrian wind condition analysis is not warranted for the Proposed Actions pursuant to *CEQR Technical Manual* methodology. As stated in the *CEQR Technical Manual*, construction of large buildings at locations that experience high wind conditions may result in an exacerbation of wind conditions due to "channelization" or "downwash" effects that may affect pedestrian safety. The need for a wind analysis is based on a number of factors, including whether the location is exposed to high wind conditions, such as along west and northwest-facing waterfronts, as well as the size and orientation of the buildings that are proposed to be constructed. As Rezoning Area 1 is not located along the waterfront, it is not exposed to high wind conditions. As such, a pedestrian wind condition analysis is not warranted for the Proposed Actions pursuant to *CEQR Technical Manual* methodology.

Study Areas

The study area for the assessment of urban design and visual resources corresponds to the area where the Proposed Actions may influence land use patterns and the built environment and is consistent with that used for the land use analysis. For visual resources, the view corridors within the study area from which such resources are publicly viewable have been identified.

The urban design analysis considers both a primary study area, which is generally coterminous with the boundaries of Rezoning Area 1, and a secondary study area, which extends a 400-foot radius from Rezoning Area 1's boundaries. Consistent with the secondary study area presented in **Attachment C, "Land Use, Zoning, and Public Policy,"** the urban design secondary study area is generally bound by East 189th Street to the north, Belmont Avenue to the east, East 187th Street to the south, and Hoffman Street to the west. The study areas have been established in accordance with *CEQR Technical Manual* guidance and can be viewed in **Figure F-1**.

IV. EXISTING CONDITIONS

Urban Design

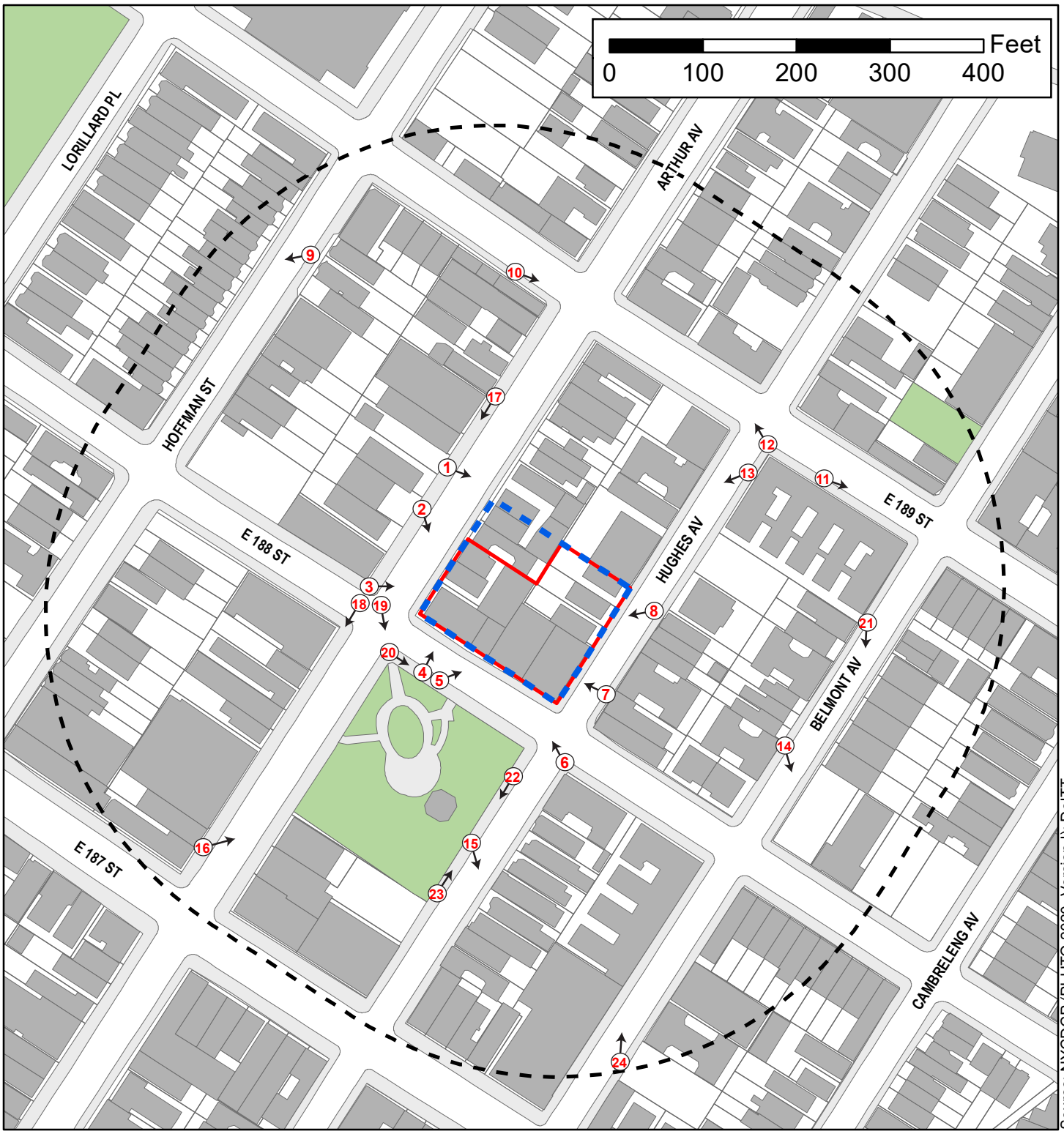
Primary Study Area (Rezoning Area 1)

The primary study area is coterminous with Rezoning Area 1.

BUILDINGS

The primary study area is currently occupied by several low-rise buildings totaling 37,289 gsf. These existing buildings contain 31 DUs and approximately 12,474 gsf of commercial space (refer to **Figure F-1** for photo locations and **Figures F-2** and **F-3** for photos of the primary study area). The primary study area's Arthur Avenue and East 188th Street frontages are generally characterized by a continuous streetwall of primarily active uses, while the Hughes Avenue frontage features one- and two-family buildings that

Figure F-1
Urban Design Study Area



Source: NYCDCP (PLUTO 2020, Version 1); DoITT

Legend

- Primary Study Area (Rezoning Area 1)
- Secondary Study Area (400-Feet Radius)
- Development Site
- Building Footprints
- Sidewalks
- Open Space
- (1) Photo Locations (refer to Figures F-2 to F-5; F-8 to F-9)



1. View of Rezoning Area 1 looking east from Arthur Avenue.



2. View of Rezoning Area 1 looking southeast from Arthur Avenue.



3. View of Rezoning Area 1 looking east from intersection of Arthur Avenue and East 188th Street.



4. View of Rezoning Area 1 looking north from East 188th Street.



5. View of Rezoning Area 1 looking east from East 188th Street.



6. View of Rezoning Area 1 looking northwest from intersection of Hughes Avenue and East 188th Street.



7. View of Rezoning Area 1 looking northwest from Hughes Avenue.



8. View of Rezoning Area 1 looking southwest from Hughes Avenue.

feature front and side yards, stoops, and driveways which break up the streetwall along this frontage. **Table F-1** summarizes the existing built conditions for each of the lots within the primary study area.

Table F-1: Primary Study Area – Existing Built Conditions

Lot	Total Lot Area SF	Address	Zoning	Land Use	Building SF	Maximum Number of Floors/Building Height (in feet)	Built FAR
Applicant Owned							
29	3,279	2450 Arthur Avenue	R6/C2-4	Mixed Commercial/Residential	7,510	3; 35.74’	2.29
31	4,492	2452 Arthur Avenue		Residential	3,398	2; 27.25’	0.76
53	2,185	2461 Hughes Avenue	R6	Residential	1,428	2; 26.5’	0.65
54	2,185	2459 Hughes Avenue		Residential	1,890	2; 23.68’	0.86
55	2,185	2457 Hughes Avenue		Residential	2,835	2; 23.65’	1.30
56	3,080	617 East 188th Street		Mixed Commercial/Residential	5,580	3; 35.42’	1.81
58	3,039	609 East 188th Street		Mixed Commercial/Residential	4,696	3; 32.66’	1.55
Non-Applicant Owned							
33	2,038	2456 Arthur Avenue	R6/C2-4	Residential	5,640	4; 45.71’	2.77
p/o 34	6,081	2458 Arthur Avenue		Mixed Commercial/Residential	4,312	2; 24.71’	0.71

Note: Properties owned and controlled by the Applicant (comprising the Development Site) are highlighted in gray.
Sources: New York City Department of City Planning (DCP) 2020 PLUTO Data (Version I); PHA Site Visit (April 2020).

Lot 29 is an approximately 3,279 sf lot located at the northeast corner of Arthur Avenue and East 188th Street. Lot 29 contains two mixed-use commercial/residential brick buildings, which range in height from two- to three-stories and total 7,510 gsf (2.29 FAR). The three-story building on Lot 29 features a maximum building height of approximately 35.74-feet. These buildings contain commercial space, which is occupied by a funeral home, as well as four dwelling units (DUs).

Lot 31 is an approximately 4,492 sf lot located along Arthur Avenue. Lot 31 contains three residential buildings, ranging in height from one- to two-stories, totaling 3,398 gsf (0.76 FAR). The three-story building on Lot 31 features a maximum building height of approximately 27.25-feet. These three brick buildings contain a total of four DUs.

Lots 53, 54, and 55, which each contain approximately 2,185 sf of lot area, are located along Hughes Avenue. Lot 53 contains a two-story (26.5-feet) brick residential building containing one DU and totaling 1,428 gsf (0.65 FAR), Lot 54 contains a two-story (23.68-feet) brick residential building containing two DUs and totaling 1,890 gsf (0.86 FAR), and Lot 55 contains a two-story (23.65-feet) brick residential building containing two DUs and totaling 2,835 gsf (1.30 FAR).

Lot 56 is an approximately 3,080 sf lot located at the northwest corner of Hughes Avenue and East 188th Street. Lot 56 contains a one- and three-story mixed-use commercial/residential building totaling 5,580 gsf (1.81 FAR). The three-story building on Lot 56 features a maximum building height of approximately 35.42-feet. The building, which is covered in vinyl siding, contains commercial space, which is occupied by office space, as well as two DUs.

Lot 58 is an approximately 3,039 sf lot located along East 188th Street. Lot 58 contains a one- and three-story mixed-use commercial/residential building totaling 4,696 gsf (1.55 FAR). The three-story building on Lot 58 features a maximum building height of approximately 32.66-feet. The building, which is covered in wood shingle siding, contains commercial space, which is occupied by a hair salon and office space, as well as three DUs.

Two properties not owned and controlled by the Applicant are located within Rezoning Area 1: the entirety of Lot 33, which has a total lot area of 2,038 sf, and an approximately 2,150 sf portion of Lot 34, which has a total lot area of 6,081 sf. 2456 Arthur Avenue (Lot 33) contains a four-story (45.71-feet) brick residential walkup building containing nine DUs and totaling 5,640 gsf (2.77 FAR). 2458 Arthur Avenue (Lot 34) contains five mixed-use commercial/residential buildings, which range in height from one- to two-stories and comprise 4,312 gsf (0.71 FAR). The tallest two-story building on Lot 34 features a maximum building height of approximately 24.71-feet. The complex of brick buildings contains one ground-level commercial space, which is currently vacant, as well as four DUs.

STREETS & STREETSCAPE

The area immediately surrounding the primary study area is characterized by a rectilinear street grid system, with east-west streets spaced 170 to 230 feet apart and north-south avenues spaced 300 to 350 feet apart. As a result of their widths and close proximity to Fordham University and Bronx Park, streets in the immediate vicinity of the primary study area carry local vehicular traffic. The three streets adjacent to the primary study area are one-way thoroughfares with parking lanes on both sides of the street. Arthur Avenue is a one-way, southbound street with mapped width of 70 feet; the road connects East Fordham Road to the north and Quarry Road/Third Avenue to the south. East 188th Street is a one-way, eastbound street with mapped width of 60 feet; the road connects Third Avenue to the west and Beaumont Avenue to the east. Hughes Avenue is a one-way, northbound street with a mapped width of 50 feet; the road connects Crescent Avenue to the south and East Fordham Road to the north.

All of the streets bordering the primary study area are flanked by concrete sidewalks: along Arthur Avenue, the sidewalk width is 6.3 feet; along East 188th Street, the sidewalk width is 6.3 feet; and along Hughes Avenue the sidewalk width is 7.5 feet. The primary study area contains six existing, narrow curb cuts: one along Arthur Avenue, one along East 188th Street, and four along Hughes Avenue. Other streetscape elements include multiple residential garbage and recycling receptacles located on Arthur Avenue, two standard cobrahead streetlights (attached to a single pole located at the northeastern corner of Arthur Avenue and East 188th Street), two fire hydrants (one on East 188th Street and one on Hughes Avenue), one circular New York City Department of Sanitation (DSNY) litter receptacle located at the northeastern corner of Arthur Avenue and East 188th Street, and standard New York City Department of Transportation (DOT) parking and street signage. There are numerous planters located along the primary study area's Arthur Avenue and East 188th Street frontages, as well as eight street trees (three on Arthur Avenue, three on East 188th Street, and two on Hughes Avenue) located on the sidewalks adjoining the primary study area.

NATURAL FEATURES & OPEN SPACE

The topography of the area surrounding the primary study area is generally flat and there are no natural features or open spaces located within the primary study area.

Secondary Study Area (400-Feet Radius)

BUILDINGS

As detailed in **Attachment C, "Land Use, Zoning, and Public Policy,"** the secondary study area is predominantly comprised of residential and mixed-use commercial/residential buildings, as well as several commercial/office buildings and public facilities and institutions (refer to **Figure C-1**). As shown in **Figures F-4** and **F-5**, the majority of buildings in the secondary study area are built to the lot lines, creating continuous street walls throughout much of the secondary study area. Residential buildings, of which multi-family walkup buildings are the predominant building type, are located throughout the secondary study area (see photo No. 13 in **Figure F-5**). Mixed-use commercial/residential buildings are also located throughout the secondary study area, but many of these uses are primarily clustered along Arthur Avenue and East 187th Street, which serve as commercial corridors in the secondary study area. Along these commercial thoroughfares, commercial uses are typically local restaurant and retail establishments located on the ground floors of low-rise buildings with residential uses located above the commercial uses (see photo Nos. 10 and 12 in **Figure F-4** and photo No. 16 in **Figure F-5**). Several public facility/institutional uses are also located throughout the secondary study area and include multiple houses of worship, including Our Lady of Mount Carmel Church, Musa Mosque, and Italian Christian Church. The secondary study area also features several properties containing surface parking lots enclosed with fencing (see photo No. 14 in **Figure F-5**). As shown in **Figure F-6**, buildings within the secondary study area are typically three- to four-stories tall, with taller buildings (containing more than four stories) located throughout the secondary study area; in feet, building heights in the secondary study area range from a minimum of 5.72-feet to a maximum of 75-feet. As shown in **Figure F-7**, taller buildings are also generally the buildings with the highest built density in the secondary study area.

Overall, the secondary study area is characterized by a variety of building typologies that lack a consistent built character. The secondary study area's east to west streets feature a mixture of high lot-coverage, low- and mid-rise structures which form continuous streetwalls, while the secondary study area's north to south streets feature low lot-coverage, one- and two-family buildings that contain front and side yards, stoops, and driveways that set them back from adjacent buildings and streets, which serves to break up the streetwall. In addition, surface parking lots and vacant lots in the secondary study area also breakup the streetwall of streets.

STREETS & STREETSCAPE

As discussed above, the area immediately surrounding the secondary study area is characterized by a rectilinear street grid system. All of the streets in the secondary study area are narrow (less than 75 feet in width), one-way thoroughfares that carry local traffic with parallel parking lanes on both sides of the street. **Figures F-8** and **F-9** show local streets and streetscapes in the secondary study area. As shown in the two figures, all of the streets in the secondary study area are flanked by concrete sidewalks with varied widths. Streetscape elements include street trees, standard cobrahead street lights, standard DOT parking



9. View looking southwest from Hoffman Street.



10. View looking southeast from East 189th Street towards the intersection of East 189th Street and Arthur Avenue.



11. View looking southeast from East 189th Street.



12. View looking northwest from the intersection of East 189th Street and Arthur Avenue.



13. View looking southwest from Hughes Avenue.



14. View looking southeast from Belmont Avenue.

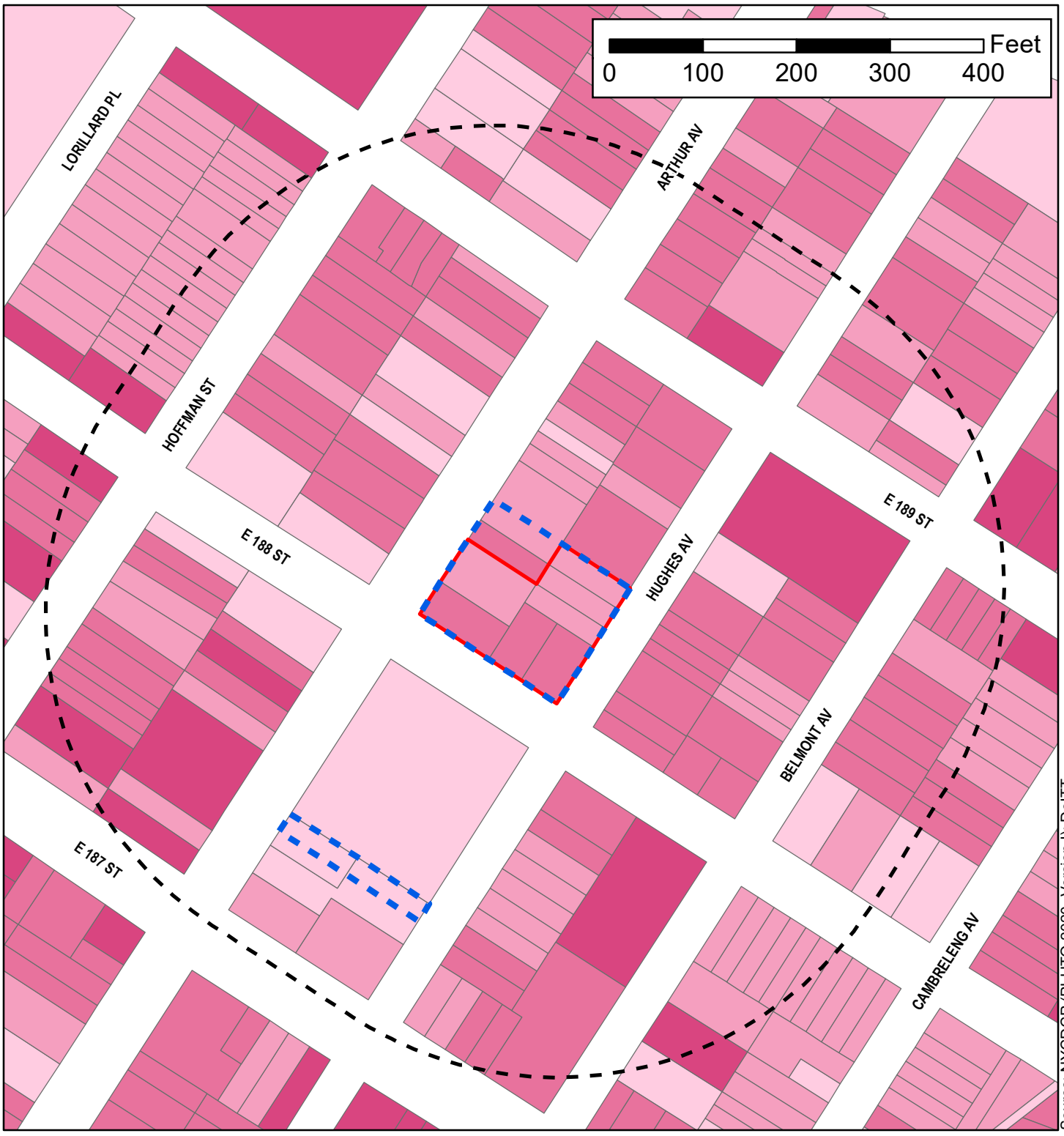


15. View looking southeast from Hughes Avenue.



16. View looking northeast from Arthur Avenue.

Figure F-6
Existing Building Heights



Legend

- Primary Study Area (Rezoning Area 1)
- Secondary Study Area (400-Feet Radius)
- Development Site

Number of Floors

- 1 Story
- 2 Stories
- 3-4 Stories
- 5-6 Stories
- More than 6 Stories

Figure F-7
Existing Building Density



Legend

- Primary Study Area (Rezoning Area 1)
- Secondary Study Area (400-Feet Radius)
- Development Site

Built FAR

- 1 FAR
- 2 FAR
- 3 FAR
- 4 FAR
- More than 4 FAR



17. View looking southwest from Arthur Avenue.



18. View looking southwest from the intersection of East 188th Street and Arthur Avenue.



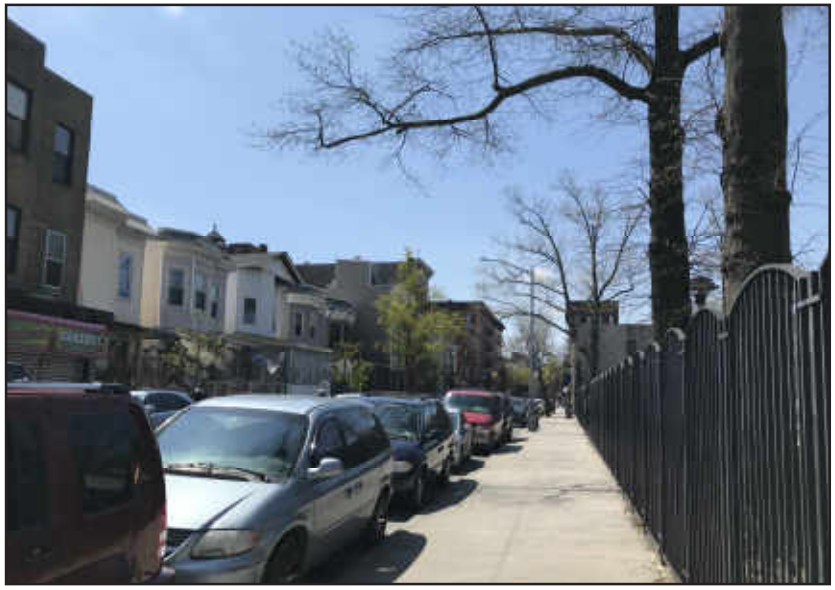
19. View looking southeast from the intersection of East 188th Street and Arthur Avenue, towards Ciccarone Park.



20. View looking southeast from East 188th Street.



21. View looking southwest from Belmont Avenue.



22. View looking southwest from Hughes Avenue.



23. View looking northeast from Hughes Avenue.



24. View looking northeast from Belmont Avenue.

and street signage, utility poles and lines, fire hydrants, United States Postal Service (USPS) collection boxes, DSNY litter receptacles, and planters.

NATURAL FEATURES & OPEN SPACE

The topography of the secondary study area is generally flat; there are no natural features located within the secondary study area. Open spaces in the secondary study include Belmont Little Farmers Community Garden and Ciccarone Park (see photo Nos. 18, 19, 20, 22, and 23 in **Figures F-8** and **F-9**). Ciccarone Park, a 0.55-acre public park owned and operated by the New York City Department of Parks and Recreation (NYC Parks), is located directly to the south of the primary study area.

Visual Resources

Primary Study Area (Rezoning Area 1)

There are no visual resources located within the primary study area. Views of Ciccarone Park (when looking southward) are visible from vantages located adjacent to the primary study area's southern (East 188th Street) frontage.

Secondary Study Area (400-Feet Radius)

As highlighted above in "Natural Features and Open Space" and shown in **Figures F-8** and **F-9** (see photo Nos. 18, 19, 20, 22, and 23), Ciccarone Park is a visual resource located in the southern portion of the secondary study area. There are no other visual resources located within or visible from the secondary study area.

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

Urban Design

Primary Study Area (Rezoning Area 1)

As detailed in **Attachment A, "Project Description,"** in the future without the Proposed Actions, the primary study area's R6 and R6/C2-4 zoning would remain in place. Under the No-Action scenario, it is anticipated that none of the lots within the primary study area would be redeveloped, and the Applicant would not proceed with the Proposed Project on the Development Site. As such, the existing conditions within the primary study area would remain, and no changes to land uses are expected to occur. Under the No-Action scenario, the primary study area would continue to be occupied by several low-rise residential and mixed-use commercial/residential buildings totaling 37,289 gsf.

Secondary Study Area (400-Feet Radius)

BUILDINGS

As detailed in **Attachment C, "Land Use, Zoning, and Public Policy,"** one development project is anticipated to be completed in the secondary study area in the future without the Proposed Actions. The

as-of-right development project, which is currently under construction, will introduce a six-story, approximately 22,604 gsf residential building containing 10 DUs and 21 parking spaces at 2406 Hoffman Street, located approximately one block to the southwest of the primary study area. The new 2.97 FAR residential building would feature a 60-feet base height, no building setbacks, and a 30-feet rear yard.

STREETS & STREETSCAPE

In the future without the Proposed Actions, no changes to streets and streetscape elements are anticipated within the secondary study area. There are no known streetscape improvement plans in the secondary study area.

NATURAL FEATURES & OPEN SPACE

The secondary study area does not contain any natural features. In the future without the Proposed Actions, no changes to the secondary study area's open spaces are anticipated.

Visual Resources

Primary Study Area (Rezoning Area 1)

There are no visual resources within the primary study area itself, and no new visual resources are expected to be introduced within the primary study area in the future without the Proposed Actions. Therefore, in the future without the Proposed Actions, view corridors and visual resources would remain similar to existing conditions.

Secondary Study Area (400-Feet Radius)

In the future without the Proposed Actions, the setting of visual resources within the secondary study area is not expected to change substantially, as only one planned development (2406 Hoffman Street) has been identified. As this would be an infill development built entirely within an existing tax lot, it would not interfere with view corridors or obstruct views of visual resources. Therefore, in the future without the Proposed Actions, no changes to visual resources are anticipated within the secondary study and would remain similar to existing conditions.

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

This section describes the effects of the Proposed Actions on the urban design and visual resource conditions in both the primary and secondary study areas and evaluates the potential for the Proposed Actions to result in significant adverse impacts. As described in **Attachment A, "Project Description,"** two reasonable worst-case development scenarios are being assessed for environmental review purposes. As such, both the Proposed Project and the Alternate Residential Scenario are analyzed for their potential to result in significant adverse urban design and visual resources impacts.

Urban Design

BUILDINGS

Proposed Project

In the future with the Proposed Actions, the proposed zoning map and zoning text amendments would facilitate the construction of the Proposed Project on the Development Site within the primary study area. The Proposed Project would comprise an approximately 150,753 gsf two-building (Building A and Building B) mixed-use development. As described in **Attachment A, "Project Description,"** Building A would contain seven floors (75-feet tall, 100-feet tall including a rooftop bulkhead) and Building B would contain 13 floors (135-feet tall, 160-feet tall including a rooftop bulkhead). Building A would feature a four-story base with a height of approximately 45-feet along East 188th Street at the southern perimeter of the Development Site, while featuring a seven-story street wall without setback along Hughes Avenue at the eastern perimeter of the Development Site. Building A would be set back 15-feet from the street above the base height along East 188th Street before rising up to seven stories. Building B would feature a seven-story base with a height of approximately 75-feet along both 188th Street and Arthur Avenue, at the southern and western perimeters of the Development Site. Building B would be set back 15-feet from the street above the base height along East 188th Street and Arthur Avenue before rising up to 13 stories. **Figures F-10** through **F-13** provide illustrative views of the Development Site comparing the No-Action scenario and the Proposed Project. As shown in the figures, the Proposed Project would introduce two new buildings that would alter the visual setting of the Development Site within the primary study area. As compared to the No-Action scenario, the Proposed Project would introduce a new building bulk and height.

As described above, while differing in bulk and height from many of the existing buildings in the secondary study area, the Proposed Project's two new buildings would incorporate a variety of building heights and setbacks to break down the Proposed Project's overall massing and in the Applicant's opinion would therefore provide a contextual transition from the Development Site to the surrounding secondary study area. The Proposed Project would position the taller Building B at the northeastern corner of Arthur Avenue and East 188th Street, while the shorter Building A would be positioned at the northwestern corner of Hughes Avenue and East 188th Street. This arrangement would be compatible with the prevailing nature of the adjacent streets, as the taller Building B would be located along Arthur Avenue, an active commercial corridor with 70 feet of mapped width, and the shorter Building A would be located along Hughes Avenue, a residential street with 50 feet of mapped width.

Alternate Residential Scenario

In the future with the Proposed Actions, the proposed zoning map and zoning text amendments would increase the maximum permitted residential FAR to 4.6. As such, an approximately 135,438 gsf Alternate Residential Scenario could be constructed on the Development Site within the primary study area. As described in **Attachment A, "Project Description,"** the Alternate Residential Scenario would contain seven floors (75-feet tall, 100-feet tall including a rooftop bulkhead) and a seven-story street wall without setback along all three frontages of the Development Site: Arthur Avenue, East 188th Street, and Hughes Avenue. **Figures F-10** through **F-13** provide illustrative views of the Development Site comparing the No-Action scenario and the Alternate Residential Scenario. As shown in the figures, the Alternate Residential Scenario would introduce a new building that would alter the visual setting of the Development Site within

the primary study area. As compared to the No-Action scenario, the Proposed Project would introduce a new building bulk and height. However, the Alternate Residential Scenario would feature a contextual bulk and height, which would be compatible with existing buildings in the secondary study area, including: (1) the planned development project located at 2406 Hoffman Street, which would feature a base height of 60-feet and contain six stories, and (2) a six-story mixed-use commercial/residential building located at 2415 Arthur Avenue (Block 3066, Lot 7501), which was completed in 2015 and features a maximum building height of 75-feet.

As described above, while differing in bulk and height from many of the existing buildings in the secondary study area, the Alternate Residential Scenario would feature a contextual bulk and height, which would be compatible with existing buildings, including planned & newly constructed buildings, in the secondary study area.

STREETS & STREETSCAPE

The Proposed Actions, under both the Proposed Project and the Alternate Residential Scenario, would alter and enhance the streetscape surrounding the Development Site within the primary study area by introducing an active, pedestrian-oriented ground floor and improving the public sidewalks adjoining the Development Site. The Proposed Actions, under both the Proposed Project and the Alternate Residential Scenario, would not change the configuration of the existing block. Consistent with City policy, the sidewalks adjoining the Development Site within the primary study area would be reconstructed on the Development Site's three street frontages. As part of the sidewalk reconstruction process, the six existing curb cuts (one along Arthur Avenue, one along East 188th Street, and four along Hughes Avenue) would be eliminated. A single, new curb cut would be constructed along the Development Site's Arthur Avenue street frontage, where both the Proposed Project's and the Alternate Residential Scenario's parking and loading areas would be accessed. Existing street trees adjacent to the Development Site's three street frontages would be preserved where feasible, and new street trees would be provided on the Development Site's three street frontages where practical. The ground floor commercial spaces, where present in both the Proposed Project and the Alternate Residential scenario, would serve to form a visually dynamic ground floor connecting the pedestrian to the commercial interiors.

NATURAL FEATURES & OPEN SPACE

The Proposed Project would not result in the creation of any new publicly accessible open space within the primary study area. The primary study area does not contain natural features or open space.

Visual Resources

The Proposed Actions are site-specific, and would not alter building uses, bulks, or arrangements in the secondary study area, or result in any changes to streets, blocks, topography, open spaces, or natural features in the secondary study area under either the Proposed Project or the Alternate Residential Scenario. As illustrated in **Figures F-10** through **F-13**, the Proposed Project would not obstruct public views of Ciccarone Park from vantages within the secondary study area. As such, no changes to visual resources are anticipated in the secondary study area as a result of the Proposed Actions.

Assessment

The Proposed Actions would not result in significant adverse urban design or visual resource impacts in the primary study area or the surrounding secondary study area. Although both the Proposed Project and the Alternate Residential Scenario would represent a significant change within both the primary and secondary study areas, the Proposed Actions would not result in a significant adverse impact to urban design or visual resources. Both the Proposed Project and the Alternate Residential Scenario in the primary study area would be constructed on an existing block and would not entail any changes to topography, street patterns, street hierarchy, block shapes, or natural features in both the primary or secondary study areas. Additionally, the Proposed Actions would not create land uses nor structures that would be substantially incompatible with the existing mixed-use commercial/residential character of the surrounding Belmont/Little Italy neighborhood.

As illustrated in **Figures F-10** through **F-13**, the secondary study area would undergo a noticeable transformation in relation to the visual context of the primary study area, with both the Proposed Project and the Alternate Residential Scenario each representing a visible change to the perspective of a pedestrian adjacent to the primary study area. As presented in these three figures, both the Proposed Project and the Alternate Residential Scenario would alter the visual setting of the primary study area by replacing the existing low-rise structures, which would remain under the No-Action scenario, with structures that differ in scale, both in bulk and height. Although the bulk and height of both the Proposed Project and the Alternate Residential Scenario would each be a departure from the existing built conditions in both the primary and secondary study areas, they would not be incompatible with existing buildings or bulk in the secondary study area. As shown in **Figures F-10** through **F-13**, the seven- and 13-story Proposed Project would feature a variety of building heights and tiered massings to provide a contextual transition from the Development Site to the surrounding secondary study area. As also shown in **Figures F-10** through **F-13**, the seven-story Alternate Residential Scenario would feature a contextual bulk and height, which would be compatible with existing buildings, including planned & newly constructed buildings, in the secondary study area.

In addition, both the Proposed Project and the Alternate Residential Scenario would not obstruct any public views of visual resources, nor would either development scenario adversely impact any public view corridors within the secondary study area. Both the Proposed Project and the Alternate Residential Scenario would enhance the pedestrian experience adjacent to the Development Site within the primary study area through the improvement of streetscape and sidewalk conditions, including the reconstruction of concrete sidewalks along all three street frontages, the elimination of unnecessary curb cuts along all three street frontages, and, where possible, the addition of a new street trees along all three street frontages. Additionally, both the Proposed Project's and the Alternate Residential Scenario's various ground-floor commercial spaces would create active, continuous street walls along the Development Site's three street frontages, which would help to enhance the pedestrian experience adjacent to the primary study area. Therefore, while the addition of either the Proposed Project or the Alternate Residential Scenario to the primary study area would represent a significant change from the perspective of a pedestrian, the change would not represent a significant adverse impact. As such, the Proposed Actions would not result in significant adverse urban design or visual resource impacts in the primary study area or the surrounding secondary study area.

Figure F-10
No-Action and With-Action Massing



Existing Conditions and No-Action Scenario:
Looking northeast from Arthur Avenue.



1. With-Action Scenario - Proposed Project:
Looking northwest from Arthur Avenue. The red dashed line indicates the maximum building envelope.



2. With-Action Scenario - Alternate Residential Scenario:
Looking northwest from Arthur Avenue. The red dashed line indicates the maximum building envelope.

Figure F-11
No-Action and With-Action Massing



Existing Conditions and No-Action Scenario:
Looking southwest from Arthur Avenue.



1. With-Action Scenario - Proposed Project:
Looking southwest from Arthur Avenue. The red dashed line indicates the maximum building envelope.



2. With-Action Scenario - Alternate Residential Scenario:
Looking southwest from Arthur Avenue. The red dashed line indicates the maximum building envelope.

Figure F-12
No-Action and With-Action Massing



Existing Conditions and No-Action Scenario:
Looking northwest from East 188th Street.



1. With-Action Scenario - Proposed Project:
Looking northwest from East 188th Street. The red dashed line indicates the maximum building envelope.



2. With-Action Scenario - Alternate Residential Scenario:
Looking northwest from East 188th Street. The red dashed line indicates the maximum building envelope.

Figure F-13
No-Action and With-Action Massing



Existing Conditions and No-Action Scenario:
Looking southwest from Hughes Avenue.



1. With-Action Scenario - Proposed Project:
Looking southwest from Hughes Avenue. The red dashed line indicates the maximum building envelope.



2. With-Action Scenario - Alternate Residential Scenario:
Looking southwest from Hughes Avenue. The red dashed line indicates the maximum building envelope.

ATTACHMENT G

AIR QUALITY

I. INTRODUCTION

This attachment assesses the Proposed Actions' potential effects on air quality. Air quality impacts can be either direct or indirect. Direct impacts result from emissions generated by stationary sources at a development site, such as emissions from on-site fuel combustion for heat and hot water systems, or emissions from parking garage ventilation systems. Indirect impacts are caused by off-site emissions associated with a project, such as emissions from nearby existing stationary sources (impacts on the proposed project) or by emissions from on-road vehicle trips generated by the proposed project or other changes to future traffic conditions due to a project. As discussed in **Attachment A, "Project Description,"** two reasonable worst-case development scenarios (RWCDSs) are being assessed for environmental review purposes: the Proposed Project, which would comprise a 150,753 gross square feet (gsf), two-building mixed-use commercial/residential development, and the Alternate Residential Scenario, a 135,438 gsf mixed-use commercial/residential building containing 100 total DUs and 21,007 gsf of local retail space.

As detailed in **Attachment B, "Supplemental Screening,"** the Proposed Actions would not exceed the screening threshold for a mobile source analysis ($PM_{2.5}$ and CO), nor would the Alternate Residential Scenario have the potential to result in significant adverse impacts on nearby existing buildings of equal or greater height. However, as the Proposed Project would include two buildings with dissimilar rooftop heights that would be located in close proximity (less than 30 feet) to one another, the heating, ventilation, and air conditioning (HVAC) emissions from the Proposed Project's shorter building have the potential to significantly impact the Proposed Project's taller building, and a detailed project-on-project HVAC analysis was warranted. In addition, a review of area land uses and industrial permits identified one existing, operational industrial emissions source located within a 400-feet radius of the Development Site, thereby warranting an industrial source analysis. The analyses presented herein were conducted in accordance with 2014 *City Environmental Quality Review* (CEQR) *Technical Manual* methodology.

II. PRINCIPAL CONCLUSIONS

The analyses presented herein conclude that neither the Proposed Project nor the Alternate Residential Scenario would result in significant adverse air quality impacts, and neither development scenario would be adversely affected by existing sources of air emissions in the surrounding neighborhood. The Proposed Project and the Alternate Residential Scenario would not exceed the screening thresholds for a mobile source analysis, nor would the Alternate Residential Scenario exceed the screening threshold for a detailed HVAC analysis. The results of the detailed HVAC analysis for the Proposed Project demonstrate that, with adherence to the minimum stack setback location and the exclusive use of natural gas (to be required pursuant to an (E) Designation (E-599)), no significant adverse air quality impacts from the project-on-project HVAC emissions would occur. The results of the detailed parking garage analysis conducted for the Proposed Project's 156-space parking garage indicate that no significant adverse air quality impacts would result. In addition, the results of a detailed industrial source analysis demonstrated that maximum estimated impacts from the identified nearby industrial emission source would be less

than the CEQR significant impact thresholds and National Ambient Air Quality Standards (NAAQS) under future conditions with both the Proposed Project and the Alternate Residential Scenario.

III. MOBILE SOURCE SCREENING

As stated in the *CEQR Technical Manual*, a project—whether site-specific or generic—may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic, create any other mobile sources of pollutants, or add new users near mobile sources. According to the *CEQR Technical Manual* screening threshold criteria for the Project Area, if 170 or more project-generated vehicles pass through an intersection in any given peak period for CO impact, or if a project would result in greater than 12 to 23 heavy-duty diesel vehicle (HDDV) trips or its equivalent vehicle emissions based on the type of road (for $PM_{2.5}$ impact), there is the potential for mobile source air quality impacts and a detailed analysis is required.

As discussed in **Attachment B, "Supplemental Screening,"** the Proposed Actions are not anticipated to result in a substantial number of diesel vehicle trips. As the entrances and exits to the Proposed Project's garage, as well as the main hotel entrance, would be located on Arthur Avenue, a $PM_{2.5}$ screening was conducted for this street segment pursuant to *CEQR Technical Manual* guidance. Arthur Avenue is classified as a major collector road (Functional Class 17) by the New York State Department of Transportation. The trip generation, travel demand forecast, and associated vehicle trip assignments (refer to **Figure B-1** located in **Attachment B "Supplemental Screening"**) indicate that the Proposed Project would generate a maximum increment of 48 vehicle trips through the intersection of Arthur Avenue. All incremental project-generated trips were conservatively assigned to this frontage for $PM_{2.5}$ screening purposes. Based on the New York City Department of Environmental Protection's (DEP's) Equivalent Truck Calculation Matrix, the Proposed Project would not exceed the *CEQR Technical Manual* screening criteria for $PM_{2.5}$ analysis (the screen value being 19 and the truck equivalent of 48 vehicles being 10). Therefore, a detailed mobile source air quality analysis for $PM_{2.5}$ emissions is not warranted. The Proposed Project would introduce a maximum of 110 vehicle trips through any intersection, well below the CO screening threshold of 170 vehicle trips. Therefore, the Proposed Actions would not exceed the *CEQR Technical Manual* screening thresholds and a detailed mobile source air quality analysis is not warranted.

In addition, as stated in the *CEQR Technical Manual*, a project that would result in parking facilities may require a microscale air quality analysis. The Proposed Project would result in the development of a below-grade parking garage containing 156 parking spaces, while the Alternate Residential Scenario would result in the development of a below-grade parking garage containing 28 parking spaces. As such, further analysis is warranted for the Proposed Project and has been provided in this attachment.

IV. INDUSTRIAL SOURCE SCREENING

In accordance with *City Environmental Quality Review* (CEQR) *Technical Manual* methodology, "projects that would result in new uses (particularly schools, hospitals, and residences) located within 400 feet of manufacturing or processing facilities" may result in potentially significant air quality impacts, and therefore require stationary source analyses.

As discussed in **Attachment B, "Supplemental Screening,"** a field survey and property record search were conducted in February 2020. The field survey and property record search revealed that no major or large emission sources, such as Title V facilities, are located within 1,000-feet of the Development Site. The field survey and property record search revealed that one nearby industrial property is a potential source of industrial emissions within 400-feet of the Development Site. However, in consultation with the New York City Department of City Planning (NYCDCP) and the New York City Department of Environmental Protection (NYCDEP), it was determined that the identified industrial property would not warrant a detailed air toxics analysis in accordance with *CEQR Technical Manual* methodology. In addition, during the field survey, no unpermitted sources of industrial emissions were observed within the surrounding area. Therefore, no significant adverse stationary air quality impacts are expected in the future with the Proposed Actions.

V. PARKING GARAGE AIR QUALITY ANALYSIS

The Proposed Project would include a parking garage, which would be located in an approximately 22,253 gsf space located on a portion of the ground floor and in the cellar of the Proposed Project. As shown in **Figure G-1**, approximately 156 total parking spaces would be provided, inclusive of 28 accessory parking spaces for the residential component of the Proposed Project, as well as 128 accessory spaces intended for use by the full-service hotel component of the Proposed Project. To achieve greater efficiency, the parking garage is expected to utilize stackers. Vehicles would enter and exit the parking garage via a new curb cut located on Arthur Avenue.

Figure G-1: Illustrative Parking Garage Plans



Emissions from the vehicles using the parking garage could potentially affect pollutant levels at nearby sensitive land uses. A detailed analysis was conducted to determine whether the potential air quality impacts of parking garage-generated emissions would be significant.

Traffic Data

Traffic data on weekday parking accumulation included vehicular trips in and out associated with Proposed Project's commercial and residential uses. The data for weekday period (i.e., the period with the highest numbers) are provided in **Table G-1**.

Table G-1: Weekday Parking Accumulation

Time	In	Out	Total Accumulation
12:00 AM	0	0	**82**
1-2	0	0	**82**
2-3	0	0	**82**
3-4	0	0	**82**
4-5	0	0	**82**
5-6	0	0	**82**
6-7	5	6	**80**
7-8	8	10	**76**
8-9	10	14	**70**
9-10	7	13	**63**
10-11	5	12	**56**
11-12	7	11	**51**
12:00 PM	29	14	**65**
1-2	8	13	**60**
2-3	6	10	**56**
3-4	10	8	**58**
4-5	10	10	**60**
5-6	24	17	**69**
6-7	10	7	**73**
7-8	7	6	**75**
8-9	7	3	**80**
9-10	2	1	**82**
10-11	1	1	**82**
11-12	0	0	**82**
Total	156	156	
24-hour Average	**12**	**12**	
8-hour Average	**13**	**11**	

The 24-hour average number of vehicles projected to enter and exit the parking garage was used for evaluating 24-hour $PM_{2.5}$ impacts, and the 8-hour highest average number of vehicles projected to enter and exit the parking garage was used for evaluating 8-hour CO impacts. As shown in **Table G-1**, the average 24-hour number of 12 vehicles in and 12 vehicles out was used for $PM_{2.5}$ analysis and the highest average 8-hour number of 13 vehicles in and 11 vehicles out was used for CO analysis.

The design of the parking garage is preliminary and no detailed transportation analysis was warranted for the Proposed Project. Limited traffic data was collected along the Development Site's three street frontages during the collection of noise data (refer to **Attachment H, "Noise"**): Arthur Avenue, East 188th Street, and Hughes Avenue. The highest hourly traffic volumes were present on Arthur Avenue: 492 vehicles per hour for the morning (8-9AM) peak period (plus the number of projected incoming vehicles into the parking garage). These 492 vehicular trips were added to the parking garage-generated vehicular trips, and the total volume was modeled to estimate contributions from on-street vehicular traffic.

Table G-2: Peak Hour Volumes on Arthur Avenue (One-Hour)

Arthur Avenue	Auto	Bus	Heavy Truck	Medium Truck	Light Truck	Totals
AM	459	0	3	3	27	492
Midday (MD)	342	0	3	0	12	357
School Dismissal (2:30-3:30PM)	300	0	0	0	21	321
PM	324	0	0	0	36	360

Although the locations of the exhaust vent(s) from the parking garage are undetermined at this time, the highest impact is likely to occur at the parking garage exit. For conservative analysis purposes, it was assumed the parking garage exhaust vent would be located on the Proposed Project's Arthur Avenue frontage, for which background traffic data is highest. While ramp lengths were provided, the other parking garage parameters (lengths and widths) were estimated based on preliminary ground floor plan dimensions.

Methodology

The pollutants of concern for parking facilities are carbon monoxide (CO) and particulate matter smaller than 2.5 microns ($PM_{2.5}$). This analysis was conducted following guidance provided in the 2014 *CEQR Technical Manual* Air Quality Appendix for parking facilities.

The parking garage was assumed to be enclosed with mechanical ventilation. To estimate pollutant concentrations, the parking garage's exhaust vent was analyzed as a "virtual point source" using the computational procedure provided in EPA's Workbook of Atmospheric Dispersion Estimates (AP-26), as referenced in the *CEQR Technical Manual* on page 17-30. This methodology estimates concentrations at various distances from the vent (using appropriate initial horizontal and vertical dispersion coefficients) assuming that the concentrations within the parking garage are equal to the concentrations in the vent exhaust.

In accordance with *CEQR Technical Manual* guidance, pollutant concentrations were estimated at locations on the near and far pedestrian sidewalks to ensure that the maximum cumulative effects from on-street vehicular traffic and parking garage emissions are estimated. Concentrations were also estimated at a window (receptors) located directly above the vent.

Contributions from on-street CO and $PM_{2.5}$ vehicular emissions at these receptor locations were calculated through dispersion modeling analyses using EPA's AERMOD dispersion model, which is currently recommended by EPA for mobile source (intersection or highway) modeling, and these values were added to parking garage-generated impacts and appropriate background levels to estimate the total cumulative pollutant concentrations. Pollutant concentrations within the parking garage were calculated assuming a minimum ventilation rate, as per New York City Building Code requirements, of one cubic foot per minute of fresh air per gross square feet of parking garage area.

To determine compliance with the 8-hour CO NAAQS and the 24-hour $PM_{2.5}$ CEQR significant incremental impact criteria, maximum CO concentrations were predicted for an 8-hour averaging period and maximum $PM_{2.5}$ concentrations were predicted for the 24-hour time period.

The significant 24-hour $PM_{2.5}$ impact criterion was estimated to be 7.7 $\mu g/m^3$. This incremental value was used as the threshold level to determine whether the $PM_{2.5}$ parking garage emissions combined with on-site mobile source emissions could cause exceedances of CEQR $PM_{2.5}$ significant impact criteria.

Emission Factors

The EPA MOVES2014 emission factor algorithm was used to estimate CO and $PM_{2.5}$ emission factors for entering, exiting, and idling vehicles within the parking garage, and vehicles travelling on nearby streets. Vehicles exiting the parking garage were assumed to idle for one minute before departing, and the speed within the parking garage was assumed to be five miles per hour (mph). Speeds on the nearby streets were assumed to be 25 mph.

Emission factors estimated by the MOVES model for moving and idling vehicles were used to estimate CO and $PM_{2.5}$ emission rates and model combined parking garage-generated and on-street traffic-generated emissions with the AERMOD dispersion model.

Modeling inputs for inspection/maintenance, fuel supply and formulation, age distribution, meteorology, etc., were applied for the borough of the Bronx. Running exhaust and crankcase running exhaust for $PM_{2.5}$, including brake and tire wear emissions, were all included in the emission factors estimates. Fugitive dust (i.e., from the re-entrainment of particles off the ground) emission factors for $PM_{2.5}$ were added to the emission factors calculated by MOVES.

Fugitive dust was estimated using equations from Section 13.2.1-3 of EPA's AP-42 for roadways with more than 5,000 vehicles a day, which is applicable for roadways in the vicinity of the parking garage, which can be classified as principal or minor arterials. The formulas are based on an average fleet weight, which varies according to the vehicular mix for a given roadway, and a silt loading factor. A silt loading factor of 0.1 gram per square meter, applicable for principal and minor urban arterials roads, was used, as recommended by the *CEQR Technical Manual*.

Because the parking garage is assumed to be fully operational by 2023, the 2023 year was used to generate pollutant emission factors with MOVES model. The MOVES model was run for the evening (PM) peak period of the 2023 year.

Post-processing was conducted using the MOVES MySQL Workbench data management software application to extract CO and $PM_{2.5}$ emission factors from MOVES output for each link included in the

analysis. These emission factors, together with traffic hourly volumes on each link, were used to model nearby roadway links in the AERMOD dispersion analysis.

Dispersion Analysis

The AERMOD dispersion model was used to estimate CO and $PM_{2.5}$ contributions from the vehicular traffic on the nearby roadway links as components of the total predicted pollutant concentrations. AERMOD is currently recommended by the EPA as the preferred model to estimate concentration from vehicular traffic at intersections and highways by simulating them as a line or of volume sources. The advantage of using AERMOD over the previously used model (CAL3QHCR) for mobile source modeling is associated with the ability to use five consecutive years of meteorological data in one modeling run and obtain maximum concentrations over the five-year period.

As shown in **Figures G-2** and **G-3**, roadway links along Arthur Avenue were modeled using the EPA line source algorithm represented by the array of adjacent volume sources. A release height of 0.152 meters for exhaust tailpipe and initial dispersion coefficient of 1.2 meters (as is typical for light-duty vehicles) were used. The adjusted roadway width included the width of the road plus six meters to account for dispersion in mixing zone.

Figure G-2: Line Source Modeling Geometry

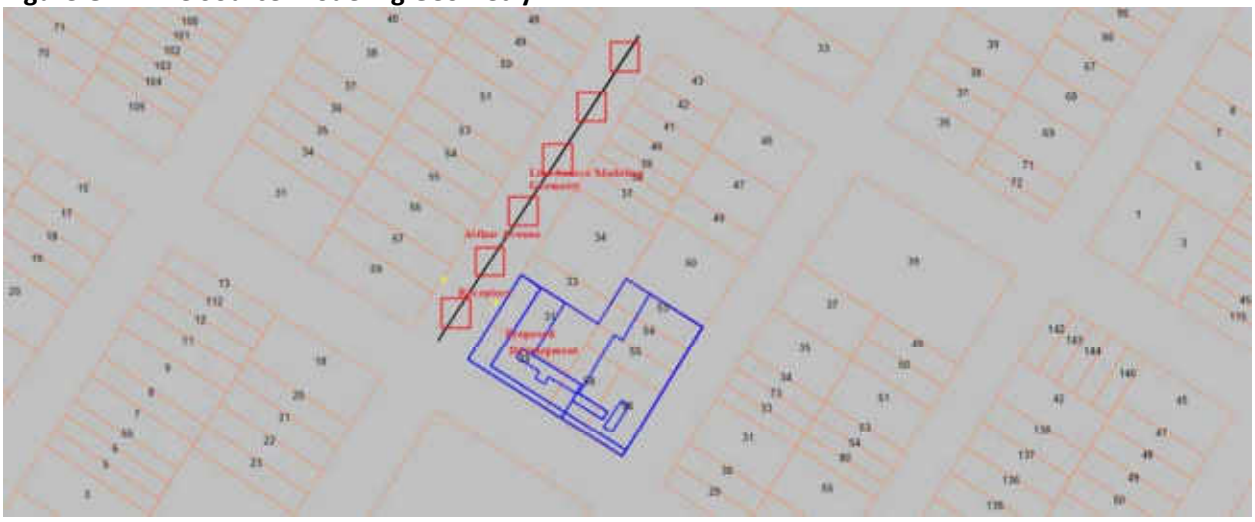
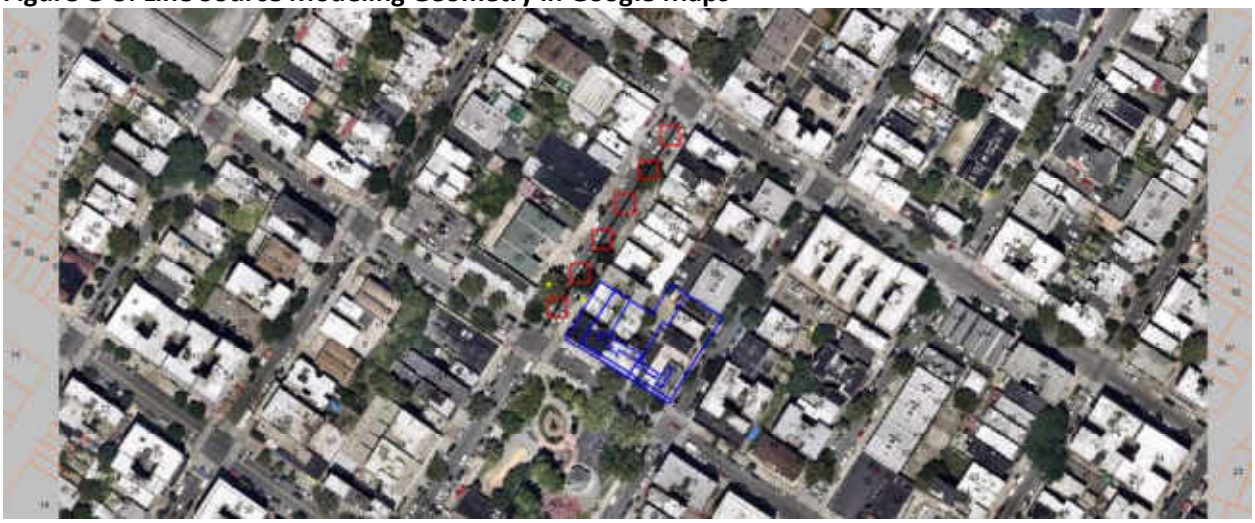


Figure G-3: Line Source Modeling Geometry in Google Maps



Inputs to the model included emission rate in grams per second of each adjacent area and link coordinates while dispersion parameters were calculated by the model, and total number of vehicles traveling on each link. The latest available meteorological data from LaGuardia Airport for the five-year (2015-2019) period were used for this analysis.

Concentrations were estimated at the vent near the parking garage exit and the receptor located across the street at the middle of the far sidewalk. Concentrations at the window receptors assumed to be above the exhaust vent were also estimated. The vent was assumed to be 12 feet above the ground and the window above the vent was assumed to be five feet higher than the vent (17 feet). A pedestrian on the adjacent sidewalk was assumed to be five feet from the parking garage vent while a pedestrian standing on the far sidewalk across Arthur Avenue was assumed to be approximately 60 feet from the vent.

The analysis for estimating pollutant concentrations was conducted based on the computational procedures provided in the *CEQR Technical Manual*, which uses spreadsheets that include parking garage dimensions and total parking garage area, vent height(s), receptor distances from the vent, number of vehicles entering and exiting the parking garage, emission factors for moving and idling vehicles, and pre-tabulated dispersion parameters to estimate concentrations at the near and far sidewalks and windows above the vent. CO and $PM_{2.5}$ concentrations from the on-street vehicular sources were added to parking garage impacts on far sidewalk receptors and the total cumulative CO and $PM_{2.5}$ concentrations were estimated by adding the contributions from the parking garage exhaust vent, on-street vehicular sources, and background levels together. The maximum estimated total 8-hour CO concentration was compared to the 8-hour CO NAAQS of 9 ppm and CEQR *de minimis* criteria and the maximum estimated 24-hour $PM_{2.5}$ impact was compared to the CEQR $PM_{2.5}$ significant incremental impact threshold and, with added background concentration, to the $PM_{2.5}$ 24-hour NAAQS.

All modeling inputs and emission factors determined by the MOVES model, AERMOD inputs, spreadsheets with estimated CO and $PM_{2.5}$ concentrations within the parking garage; at windows above the vent; near and far sidewalks, and on-street vehicular traffic as well as the cumulative pollutant concentrations at these locations and comparison to the NAAQS and *de minimis* criteria for CO and the CEQR threshold significant criteria for $PM_{2.5}$, are provided in the back-up documentation for the Proposed Project.

Results

The results of the parking garage air quality analyses are summarized in **Tables G-3** and **G-4**.

Table G-3: Estimated Cumulative CO Concentrations from Garage and On-Street Traffic

	Near Sidewalk	Far Sidewalk	Window Above
Distance from Vent (feet)	5	60	5
Averaging Period	**8-hour**	**8-hour**	**8-hour**
Garage CO (ppm)	0.02	0.01	0.06
Line Source (ppm)		0.12	
Cumulative Garage impact ($\mu g/m^3$)	0.02	0.13	0.06
NYC *de minimis* ($\mu g/m^3$)	3.9	3.9	3.9
Significant Garage Impact?	**No**	**No**	**No**
Background Value (ppm)	1.3	1.3	1.3
Total CO Concentration (ppm)	1.3	1.4	1.4
NAAQS, CO (ppm)	9	9	9
Significant Impact?	**No**	**No**	**No**

Table G-4: Estimated Cumulative $PM_{2.5}$ Concentrations from Garage and On-Street Traffic

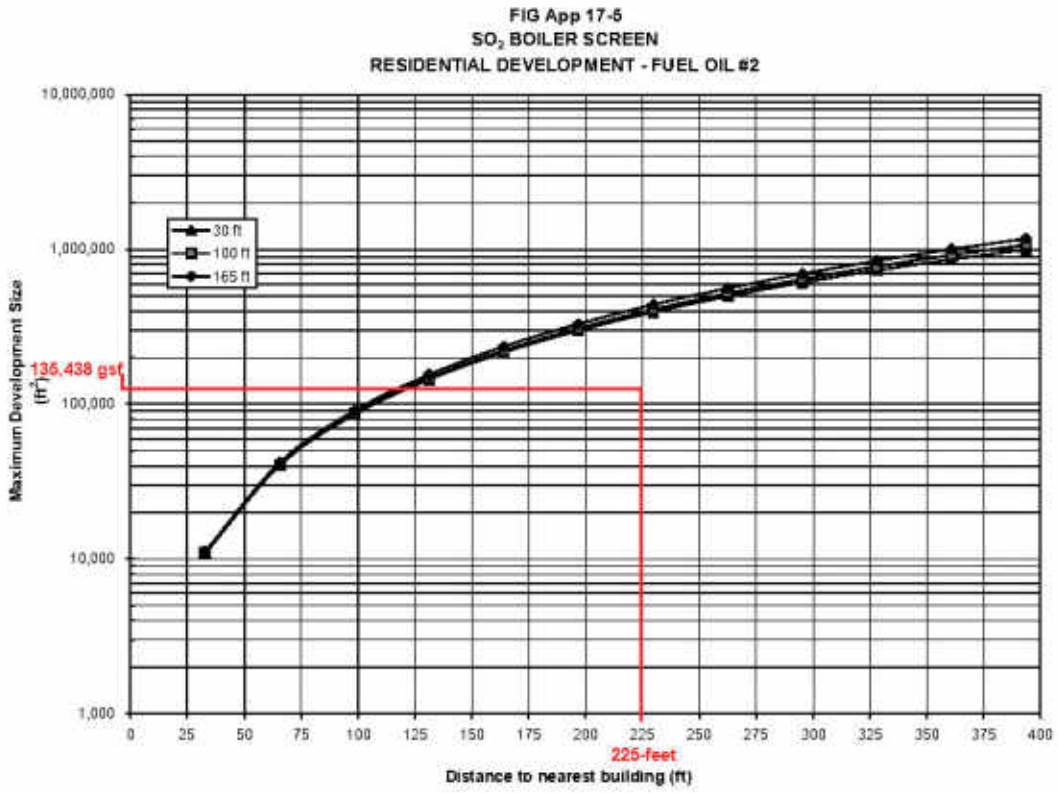
	Near Sidewalk	Far Sidewalk	Window Above
Distance from Vent (feet)	5	60	5
Averaging Period	**24-hour**	**24-hour**	**24-hour**
Garage $PM_{2.5}$ ($\mu g/m^3$)	0.94	1.29	0.88
Line Source ($\mu g/m^3$)	-	3.1	-
Cumulative Garage impact ($\mu g/m^3$)	0.94	4.39	0.88
CEQR Significant Impact Criterion ($\mu g/m^3$)	7.6	7.6	7.6
Significant Garage Impact?	**No**	**No**	**No**
Background Value ($\mu g/m^3$)	19.7	19.7	19.7
Total $PM_{2.5}$ Concentration ($\mu g/m^3$)	20.6	24.1	20.6
NAAQS, 24-hr $PM_{2.5}$ ($\mu g/m^3$)	35.0	35.0	35.0
Exceeds NAAQS?	**No**	**No**	**No**

As shown in the tables, the maximum estimated total 8-hour CO concentrations, including the background concentration, for the near sidewalk, far sidewalk, and the window above the vent are all less than the CEQR *de minimis* criteria and the 8-hour CO NAAQS of 9 ppm. The maximum 24-hour $PM_{2.5}$ impact and total concentration are less than the CEQR significant impact criterion and respective NAAQS. As such, the proposed parking garage impact together with on-street mobile source emissions would not cause a significant adverse air quality impact.

VI. HVAC EMISSION AIR QUALITY ANALYSES

As discussed in **Attachment A, "Project Description,"** two RWCDSs were identified for the Proposed Actions: (1) the Proposed Project, which would comprise a two-building development containing 150,753 gsf of combined commercial and residential floor area; Building A would contain seven floors (75-feet tall) and Building B would contain 13 floors (135-feet tall); (2) the Alternate Residential Scenario, which would comprise one 75-feet tall predominantly residential building totaling 135,438 gsf. Emissions from the HVAC systems of the proposed buildings could potentially impact nearby existing buildings that are taller than or as tall as the proposed buildings.

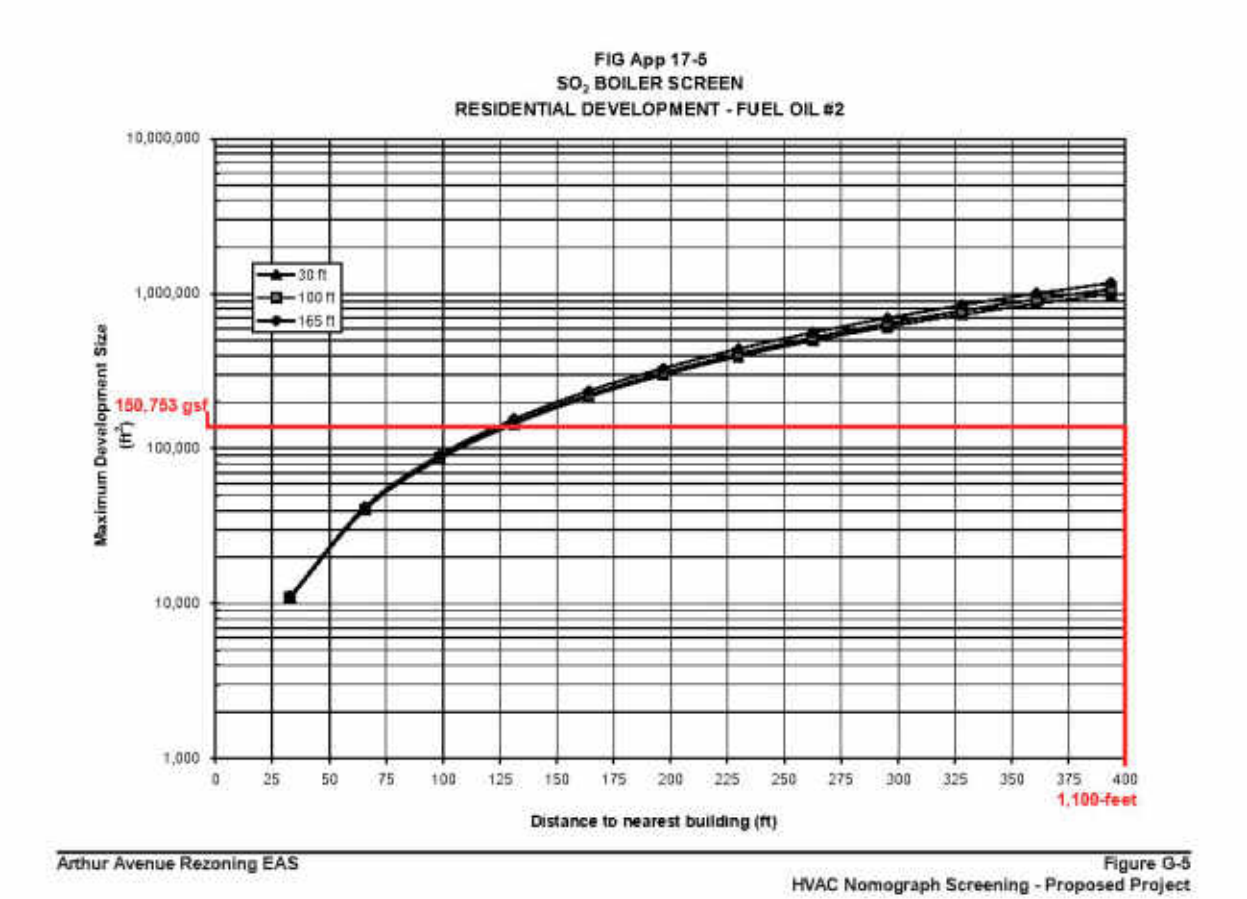
As described in **Attachment B, "Supplemental Screening,"** the closest building of similar or greater height to the Alternate Residential Scenario is a mixed-use commercial/residential building located at 2415 Arthur Avenue (Block 3066, Lot 7501), which features a maximum building height of 75-feet, approximately 225-feet to the southwest of the Development Site. However, as shown in **Figure G-4**, a screening analysis, which was conducted using Figure 17-5 of the Air Quality Appendix of the *CEQR Technical Manual,* illustrated that the HVAC emissions from the Alternate Residential Scenario on this existing building would not be significant and no further analysis of the impacts of the Alternate Residential Scenario's HVAC system would be warranted.



Arthur Avenue Rezoning EAS

Figure G-4
HVAC Nomograph Screening - Alternate Residential Scenario

As described in **Attachment B, "Supplemental Screening,"** the closest building of similar or greater height to the Proposed Project is a residential building located at 2410 Washington Avenue (Block 3057, Lot 11), which features a maximum building height of 147-feet, approximately 1,100-feet to the northwest of the Development Site. However, as shown in **Figure G-5**, a screening analysis, which was conducted using Figure 17-5 of the Air Quality Appendix of the *CEQR Technical Manual,* illustrated that the HVAC emissions from the Proposed Project on this existing building would not be significant and no further analysis of the impacts of the Proposed Project's HVAC system on existing buildings would be warranted. However, as the Proposed Project would include two buildings with dissimilar rooftop heights that would be located in close proximity (less than 30 feet) to one another (refer to **Figure A-5** provided in **Attachment A, "Project Description"**), the HVAC emissions from the Proposed Project's shorter building have the potential to significantly impact the Proposed Project's taller building, and a detailed project-on-project HVAC analysis was warranted.



Applicable Air Quality Standards and Significant Impact Criteria

As required by the Clean Air Act (CAA), NAAQS have been established for the criteria pollutants by the United States Environmental Protection Agency (EPA). The NAAQS are concentrations set for each of the criteria pollutants in order to protect public health and the nation's welfare, and New York has adopted the NAAQS as the State ambient air quality standards. This analysis addressed compliance of the potential impacts associated with the two pollutants associated with natural gas combustion – nitrogen dioxide

(NO_2) and particulate matter smaller than 2.5 microns ($PM_{2.5}$). The standards considered are one-hour and annual NO_2 NAAQS and the 24-hour and annual $PM_{2.5}$ NAAQS.

In addition to the $PM_{2.5}$ NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply the City's de minimis criteria to determine whether potential adverse $PM_{2.5}$ impacts would be significant. If the estimated impacts of a 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 G-5**.

Table G-5: Applicable NAAQS and CEQR Threshold Values

Pollutant	Averaging Period	NAAQS	CEQR Thresholds
NO_2	One-Hour	0.10 ppm (188 µg/m^3)	-
	Annual	.053 ppm (100 µg/m^3)	-
$PM_{2.5}$	24-Hour	35 µg/m^3	7.7
	Annual	12 µg/m^3	0.3

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

NO_2 NAAQS

Nitrogen oxide (NOx) 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 one-hour NO_2 NAAQS standard of 0.100 ppm (188 µg/m^3) is the three-year average of the 98th percentile of daily maximum one-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating one-hour NO_2 concentrations that is comprised of three 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 percent 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 the eighth highest daily maximum one-hour NO_2 concentrations or total one-hour NO_2 concentrations (if hourly NO_2 background concentrations are added within the model) and averages these values over the number of years modeled. Total estimated concentrations are generated in the statistical form of the one-hour NO_2 NAAQS format and can be directly compared with the one-hour NO_2 NAAQS standard. Based on DEP recommendations, the in-stack NOx/NO_2 ratio for PVMRM module of 0.5 and single missing ozone background value of 0.04 ppm were applied.

Based on 2014 *CEQR Technical Manual* guidance, Tier 1, as the most conservative approach, should initially be applied as a preliminary screening tool to determine whether violations of the NAAQS are likely to occur. If exceedances of the one-hour NO_2 NAAQS are estimated, a Tier 2 approach should be applied.

Following the application of the Tier 2 approach, the less conservative (but more accurate) Tier 3 approach should be applied.

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

$PM_{2.5}$ CEQR Significant Impact Criteria

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

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

A 24-hour $PM_{2.5}$ background concentration of 19.6 µg/m^3 was obtained from the Bronx Botanical Garden-Pfizer monitoring station is 19.7 µg/m^3 (2017= 18.7 µg/m^3, 2018= 21.5 µg/m^3, 2019= 19 µg/m^3). Half the difference between the 24-hour $PM_{2.5}$ NAAQS of 35 µg/m^3 and the background value of 19.7 µg/m^3 is 7.7 µg/m^3. As such, a significant impact threshold of 7.7 µg/m^3 was used for determining whether the potential 24-hour $PM_{2.5}$ impact for the proposed development is considered to be significant.

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

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

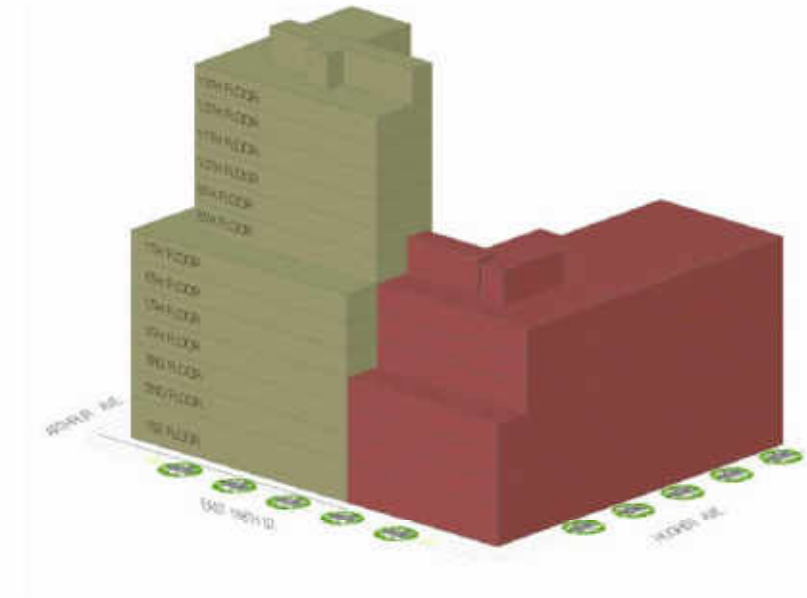
The annual $PM_{2.5}$ background concentration from Bronx Botanical Garden-Pfizer monitoring station for the same period is 7.8 µg/m^3 (2017= 8.0 µg/m^3, 2018= 8.3 µg/m^3, 2019= 7.0 µg/m^3). These 24-hour and annual significant impact criteria were used to evaluate the significance of predicted $PM_{2.5}$ impacts.

<u>The Proposed Project</u>

As shown in **Figure G-6**, the Proposed Project's two buildings (Building A is colored red and Building B is colored yellow) would be attached and each building would feature rooftop bulkheads; the rooftop bulkheads would be approximately 25-feet in height. One of the two bulkheads located on the rooftop of Building A (i.e., the nearest bulkhead to Building B) is expected to be perpendicular to and attached to Building B. Building A's second bulkhead is expected to be parallel to, and roughly 40-feet from Building B. According to the preliminary design, the HVAC stack for Building A would be located on the nearest bulkhead to Building B.

Both buildings would maintain separate, independent HVAC systems. Building A would likely use a traditional boiler that would provide heat and hot water to the residential building. The HVAC system of Building B (the full-service hotel), which does not require detailed analysis because it is taller than Building A, would likely feature some combination of traditional boilers with a variable refrigerant flow (VRF) system. The residential building (Building A) would have a total of 58,091 gsf of area to be heated. This area figure was used to estimate HVAC emission rates for the pollutants of concern from Building A.

Figure G-6: Northern Perspective Illustrative Rendering of the Proposed Project



Dispersion Analysis

A detailed dispersion modeling analysis was conducted using the latest version of the EPA's AERMOD dispersion model (EPA version 19191). AERMOD is a steady-state plume model that is an applicable in rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD can be used to calculate pollutant concentrations from one or more points (e.g., exhaust stacks) based on hourly meteorological data, and has the capability of calculating pollutant concentrations at locations when the plume from the exhaust stack is affected by the aerodynamic wakes and eddies (downwash) produced by nearby structures.

In accordance with *CEQR Technical Manual* guidance, this analysis was conducted assuming stack tip downwash, urban dispersion surface roughness length and elimination of calms. Analyses were conducted with and without the effects of wind flow around the proposed buildings (i.e., with and without downwash) and both sets of results are reported.

Emissions

Emission rates of the Proposed Project were estimated as follows:

- As the proposed residential building (Building A) would be heated by natural gas, emission rates of NOx and $PM_{2.5}$ were calculated based on annual natural gas usage corresponding to the gsf of the building served by the boiler, and EPA AP-42 emission factors for firing natural gas in boilers with less than 100 MMBtu/hr;
- $PM_{2.5}$ emission rates 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 using, based on recent DCP guidance, a seasonal emission factor for the winter season of 1 and 0.5 for each of the three other seasons of the year; and
- The natural gas fuel usage factor of 58.5 cubic feet per square foot per year (scf/sf/year) was obtained from the *CEQR Technical Manual* Air Quality Appendix, Table US1, Total Energy Consumption, Expenditures, and Intensities, 2005, Part I: Housing Unit Characteristics and Energy Use Indicators for New York using a conservative factor for residential uses.

Stack Parameters

The stack diameter and exit velocity for Building A were obtained from DEP's "CA Permit" database that contains data for the various boiler sizes (i.e., rated heat input or MMBtus per hour). The maximum boiler size was estimated based on the assumption that all fuel (natural gas) would be consumed during the 100-days (or 2,400-hour) heating season. The stack exit temperature was assumed to be 300°F (423°K), which is appropriate for building boilers. **Table G-6** provides the estimated $PM_{2.5}$ and NO_2 emission rates for the Proposed Project.

Table G-6: Estimated Pollutant Emission Rates for the Proposed Project

Building ID	Block/Lots	Receptor Building	Stack Height[1] feet	Gross Floor Area ft^2	$PM_{2.5}$ Emission Rate[2] g/sec		NO_2 Emission Rate g/sec	
					24-hr	Annual	One-hr	Annual
Building A	3077/53-56, 58	Building B	103	58,091	1.36E-03	3.71E-04	1.78E-02	4.89E-03

Notes:
[1]Stack height is located on bulkhead of 100-feet above grade plus 3-feet.
[2]$PM_{2.5}$ emission factor for natural gas combustion of 7.6 lb/10^6 cubic feet included filterable and condensable particulate matter (Filterable $PM_{2.5}$ =1.9 lb/10^6 ft^3 and condensable $PM_{2.5}$ = 5.7 lb/10^6 ft^3 (AP-42, Table 1.4-2).

Meteorological Data

All analyses were conducted using the latest five consecutive years (2015-2019) of meteorological data. Surface data was obtained from LaGuardia Airport and upper air data was obtained from Brookhaven station, New York. The data were processed by Trinity Consultants, Inc. using the current EPA AERMET and EPA procedures. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the five-year period.

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

Background Concentrations

For the purpose of conducting a Tier 3 one-hour NO_2 analysis, hourly NO_2 and hourly ozone background concentrations were developed using available monitoring data collected by the New York State Department of Environmental Conservation (DEC) for the five-year period (2015-2019), and compiled into

AERMOD's required hourly emission (NO_2) and concentration (ozone) data format. Due to the fact that Bronx monitoring stations do not collect hourly data for ozone, these values were obtained from the nearest monitoring station, located at Queens College #2.

The other background data were obtained from the Bronx Botanical Garden-Pfizer monitoring station. The maximum three-year (2017-2019) average of the 98th percentile of daily maximum one-hour NO_2 concentrations is 53.3 parts per billion (ppb), and the maximum annual average annual NO_2 background concentration is 14.05 ppb.

Stack Location

Based on preliminary project design, the stack for Building A would be located on the bulkhead closest to Building B. The stack, for this analysis, was placed 25-feet from the façade of Building B (which was set by the bulkhead length of roughly 35 feet and a 10-feet setback from the far edge of the bulkhead) to provide as much distance from Building B as possible and thereby lessen potential impacts.

Receptor Locations

Receptors were placed around all façades of the 13-story, 135-feet tall Building B, including the seven-story base of Building B, in 10-feet increments on all building levels, beginning aboveground and extending up to the height of the uppermost windows (i.e., 125-feet, which is five feet below the roof level). Nearly 1,000 receptors were placed on Building B to ensure that maximum impacts would be estimated.

Because the stack located on Building A would be approximately 103-feet high, the receptors just below and above the tenth floor of Building B would be located near or at the height of Building A's stack, and, as such, would be near the plume centerline where the highest impacts would likely occur. **Figures G-7** and **G-8** illustrate the Proposed Project's two buildings and the location of Building A's stack and bulkhead.

Figure G-7: View of the Proposed Project and the Location of Building A's Stack and Bulkhead

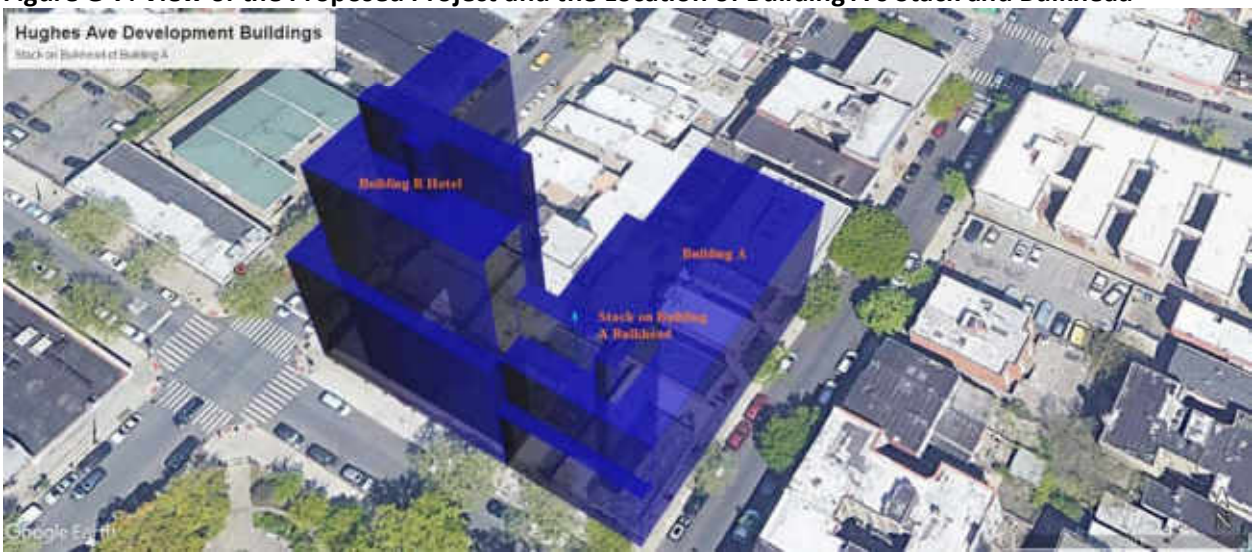
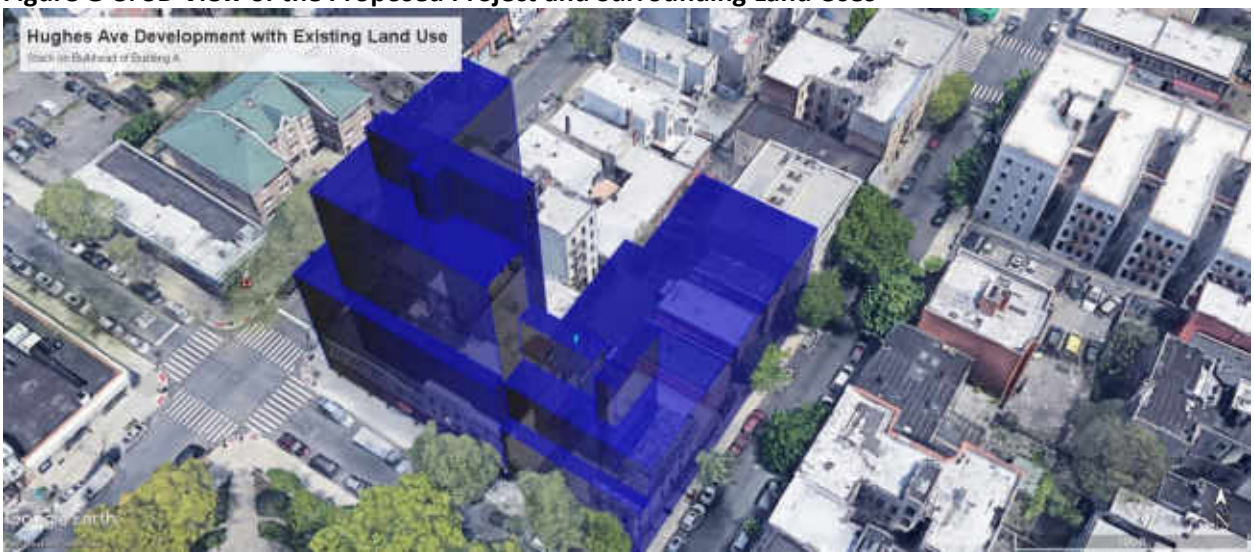


Figure G-8: 3D View of the Proposed Project and Surrounding Land Uses



Results

According to *CEQR Technical Manual* guidance, the dispersion analysis should be conducted both with downwash (if exhaust from the stack is affected by nearby structures) and without downwash. Building downwash occurs as wind flows over and around buildings and impacts the dispersion of pollution from the exhaust stack. The presence of buildings can substantially affect the initial dispersion of pollutants within the atmosphere. Turbulent zones can be created around these buildings that change the trajectory of the plume instead of allowing it to flow freely within the atmosphere.

Under the proposed configuration, downwash is a critical factor affecting the results of this particular HVAC analysis because the difference in heights of the two proposed buildings (i.e., the impacted building is taller than the building where the emission source is located) and the close proximity of the buildings to each other create conditions for substantial downwash effects. Therefore, the predicted maximum pollutant concentrations with and without downwash are therefore considerably different.

Results with downwash comply with all applicable guidelines (i.e., CEQR significant thresholds and the NAAQS), while the results without downwash exceed both CEQR significant thresholds and the NAAQS. Without downwash, exceedances are estimated with the stack located either on the nearest bulkhead or far bulkhead.

Results Without Downwash

If Building A's stack were located on the nearest bulkhead (located 25-feet from the façade of Building B) and downwash effects were not incorporated into the dispersion analysis (i.e., no physical buildings are assumed to exist), both the CEQR significant impact criteria and the one-hour NO_2 NAAQS would be exceeded – 2.5 times compared to NO_2 NAAQS and 1.5 times compared to $PM_{2.5}$ CEQR significant impact thresholds. Locating the stack on the far bulkhead, located further away from Building B, or even splitting emissions into two stacks on either bulkhead would not result in compliance.

To comply with the guidelines, Building A's stack would have to be setback further from Building B – on the flat rooftop. Based on the results of an iterative analysis, this setback distance would need to be at

least 60-feet from Building B (which is about 15-feet from Hughes Avenue) to eliminate potentially significant impacts. Without downwash, an (E) Designation would include restrictions on both the stack location and the fuel type, requiring the exclusive use of natural gas as the fuel type.

Based on this result, all AERMOD runs without downwash were conducted with the stack located at a 60-feet distance from Building B. Results of this analysis with and without downwash for both $PM_{2.5}$ and NO_2 are provided in **Table G-9**, located on page G-20.

Results with Downwash

$PM_{2.5}$ Results

With the stack located on the nearest bulkhead, located approximately 25-feet from the eastern façade of Building B (which is located 45-feet from Hughes Avenue), the maximum estimated 24-hour $PM_{2.5}$ impact is 1.24 µg/m^3, which is less than the 24-hour CEQR significant impact value of 7.7 µg/m^3, and the total concentration (with added background concentration) is less than 24-hour $PM_{2.5}$ NAAQS of 35 µg/m^3. As shown in **Table G-7**, the maximum annual average $PM_{2.5}$ impact and the maximum total concentration (which includes a background value of 7.8 µg/m^3) are less than both the *CEQR* annual significant impact value of 0.3 µg/m^3 and the annual $PM_{2.5}$ NAAQS of 12 µg/m^3.

Table G-7: $PM_{2.5}$ Analysis Results (with Downwash)

Building ID	Receptor Building	Maximum 24-hour Impact	Maximum Annual Impact	CEQR Significant Impact Criteria	
				24-hour	Annual
Building A	Building B	µg/m^3	µg/m^3	µg/m^3	µg/m^3
		1.24	0.05	7.7	0.3
		24-hour Average Conc.[1]	Annual Average Conc.[1]	NAAQS	
				24-hour	Annual
		µg/m^3	µg/m^3	µg/m^3	µg/m^3
		20.9	7.9	35	12

Note:
[1]Includes 24-hr and annual $PM_{2.5}$ background concentrations of 19.7 µg/m^3 and 7.8 µg/m^3, respectively.

Based on results of the analysis, $PM_{2.5}$ emissions from Building A's HVAC system, if downwash is incorporated into the analysis, would not cause significant impacts to Building B receptors with the stack located on the nearest bulkhead – at a distance of 25-feet from the eastern façade of Building B, or 45-feet from Hughes Avenue (refer to **Figure G-9**). Therefore, with downwash effects incorporated, the stack could be located on the nearest bulkhead, as currently designed. However, an (E) Designation would still need to be imposed on Building A to confine the stack location on the bulkhead, as well as require the use of natural gas for the HVAC system of Building A.

Figure G-9: Proposed Stack Location on Building A With and Without Downwash



NO_2 Results

Because a Tier 1 analysis was not sufficient to demonstrate compliance with the one-hour NO_2 NAAQS, a Tier 3 analysis was employed. As shown in **Table G-8**, with downwash and with the stack located on the nearest bulkhead located 25-feet from the eastern façade of Building B, as in the $PM_{2.5}$ analysis, the maximum estimated one-hour NO_2 concentration (133 µg/m^3) is less than the one-hour NO_2 NAAQS of 188 µg/m^3; the maximum annual NO_2 concentration is less than the annual NO_2 NAAQS of 100 µg/m^3 (refer to **Table G-8**). Therefore, NO_2 emissions from Building A's HVAC system, with downwash, would not cause significant impacts to Building B receptors.

Table G-8: NO_2 Analysis Results (with Downwash)

Building ID	Receptor Building	1-hour Conc.[1]	Annual Conc.[2]	NAAQS One-hr/Annual
		µg/m^3	µg/m^3	µg/m^3
Building A	Building B	133	26.9	188/100

Notes:
[1]Tier 3 Analysis.
[2]Includes annual NO_2 background concentrations of 26.4 µg/m^3 (14.05 ppb).

A summary of the HVAC analysis, both with and without downwash, is provided in **Table G-9**. Without downwash, exceedances of the 24-hour $PM_{2.5}$ and one-hour NO_2 standards are estimated, and the stack would have to be relocated on the flat rooftop at least 60-feet from the eastern façade of Building B (refer to **Table G-9**).

Table G-9: Summary of HVAC Analysis Results (µg/m³)

Pollutant	Impact	Background Conc.	Total Conc.	Evaluation Criteria		Exceed
				CEQR	NAAQS	Yes/No
$PM_{2.5}$						
No DWN, Stack on Bulkhead (103-feet) at 25-feet Setback Distance from Building B						
24-hr $PM_{2.5}$[1]	11.2	-	-	7.7	-	**Yes**
	8.5	19.7	28.2	-	35	No
Annual $PM_{2.5}$	0.27	7.8	8.1	0.3	12	No
No DWN, Stack on Flat Roof (78-feet) at 60-feet Setback Distance from Building B						
24-hr $PM_{2.5}$[1]	2.15	-	-	7.7	-	No
	1.8	19.7	21.5	-	35	No
Annual $PM_{2.5}$	<0.1	7.8	7.8	0.3	12	No
With DWN, Stack on Bulkhead (103-feet) at 25-feet Setback Distance from Building B						
24-hr $PM_{2.5}$[1]	1.24	-	-	7.7	-	No
	1.0	19.7	20.7	-	35	No
With DWN, Stack on Bulkhead (103-feet) at 25-feet Setback Distance from Building B						
Annual $PM_{2.5}$	0.05	-	-	0.3	-	No
	0.05	7.8	7.9	-	12	No
NO_2						
No DWN, Stack on Bulkhead (103-feet) at 25-feet Setback Distance from Building B						
One-hr NO_2[2]	-	-	463.5	-	188	**Yes**
With DWN, Stack on Bulkhead (103-feet) at 25-feet Setback Distance from Building B						
One-hr NO_2[2]	133	-	133	-	188	No
Annual NO_2	0.5	26.4[3]	26.9	-	100	No
No DWN, Stack on Flat Rooftop (78-feet) at 60-feet Setback Distance from Building B						
One-hr NO_2[2]	157	-	157	-	188	No
Annual	0.6	26.4[3]	27.5	-	100	No

Notes:

[1]The maximum 24-hr $PM_{2.5}$ impact is compared to the CEQR significant impact threshold while the five-year average $PM_{2.5}$ concentration is compared to the NAAQS.

[2]Tier 3 Analysis.

[3]Annual background concentration is 26.4 µg /m3 (14.05 ppb).

Conclusions

The result of the detailed HVAC analysis is that, with adherence to the minimum stack setback location and the exclusive use of natural gas (to be required pursuant to an (E) Designation, as outlined below), no significant adverse air quality impacts from the HVAC emissions of the Proposed Project's shorter Building A on the Proposed Project's taller Building B would occur.

(E) Designations

Due to its height (75-feet) and distance to any nearby taller buildings, the Alternate Residential Scenario does not require an (E) Designation. However, in order to ensure that there would be no significant air quality impacts from the HVAC emissions from the Proposed Project's 75-feet tall Building A on the Proposed Project's 135-feet tall Building B, any future construction on the Applicant-owned Development Site (Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58) would be required to comply with one of the following (E) Designations (E-599):

> **Block 3077, Lots 53, 54, 55, 56, and p/o 58 (Building A): Any new residential and/or commercial development on the above-referenced property must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and hot water equipment, and ensure that the HVAC and hot water equipment stack is located at the highest tier and at least 103 feet above grade, at most 15 feet away from the eastern lot line facing Hughes Avenue, and at least 64 feet away from the lot line facing East 188 Street, to avoid any potential significant adverse air quality impacts**.
>
> **Block 3077, Lots 31, 29, p/o 58 (Building B): Any new residential and/or commercial hotel development on the above-referenced property must ensure the heating, ventilating, and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 160 feet above grade, to avoid any potential significant adverse air quality impacts.**

ATTACHMENT H

NOISE

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions to result in significant adverse noise impacts. As described in **Attachment A, "Project Description,"** 2461 Hughes Associates LLC (the "Applicant") is seeking two discretionary actions, a zoning map amendment and a zoning text amendment, to facilitate the development of an approximately 150,753 gross square foot (gsf) mixed-use commercial/residential development in the Belmont/Little Italy neighborhood of Bronx Community District (CD) 6 (the "Proposed Project"). Although the Applicant intends to develop the Proposed Project, as the Proposed Actions would increase the maximum permitted residential FAR to 4.6, a second RWCDS (the "Alternate Residential Scenario") is also being analyzed to encompass all potential environmental impacts that could occur as a result of the Proposed Actions. The Proposed Project is expected to be constructed, occupied, and fully operational by 2023.

The Proposed Actions are expected to change traffic volumes in the general vicinity of the Development Site. As such, a mobile source noise analysis was conducted under 2014 *City Environmental Quality Review* (CEQR) *Technical Manual* guidance to determine whether there are any noise-sensitive locations where project-generated traffic would have the potential to result in significant adverse noise impacts. Additionally, as the Proposed Actions would introduce new noise-sensitive uses within the Development Site, an analysis was conducted to determine the level of building attenuation required to ensure that future interior noise levels would satisfy applicable noise criteria. The East 188th Street frontage of the Development Site is located approximately 60 feet from Ciccarone Park, a public park containing playground equipment. As such, a stationary noise source analysis was conducted to determine whether stationary noise from the Ciccarone Park would have the potential to result in significant 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 61.9 dBA to a maximum of 69.0 dBA. When compared to the future without the Proposed Actions, the relative increases in noise levels are expected to be well below 3.0 dBA at the three analyzed receptor locations. Therefore, no significant adverse mobile source noise impacts due to action-generated vehicular traffic would occur.

Based on predicted future With-Action exterior noise levels and *CEQR Technical Manual* criteria, With-Action noise levels at Receptors 1 and 2 would remain in the "marginally acceptable" CEQR noise exposure category and With-Action noise levels at Receptor 3 would remain in the "acceptable" CEQR noise exposure category. As such, no special noise attenuation measures beyond standard construction practices would be required for residential or community facility uses on any of the Development Site's frontages to achieve the required residential or community facility interior noise level of 45 dBA or lower. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation requirements.

Due to the proximity of Ciccarone Park's playground equipment to the southern and eastern frontages of the Development Site, future sensitive receptors located on the Development Site's East 188th Street frontage would experience hourly L_{10} noise levels of up to 68.2 dBA and future sensitive receptors located on the Development Site's Hughes Avenue frontage would experience hourly L_{10} noise levels of up to 67.5 dBA. These noise levels would fall in the "marginally acceptable" CEQR Noise Exposure category. Therefore, the future sensitive receptors located on the Development Site's southern and eastern frontages would not experience significant adverse noise impacts due to the proximity of the outdoor playground equipment in Ciccarone Park.

III. NOISE FUNDAMENTALS

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

A-Weighted Sound Level (dBA)

Noise is typically measured in units called decibels (dB), which are ten times the logarithm of the ratio of the sound pressure squared to a standard reference pressure squared. Because loudness is important in the assessment of the effects of noise on people, the dependence of loudness on frequency must be taken into account in the noise scale used in environmental assessments. Frequency is the rate at which sound pressures fluctuate in a cycle over a given quantity of time and is measured in Hertz (Hz), where one Hz equals one cycle per second. Frequency defines sound in terms of pitch components.

Table H-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

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

In the measurement system, one of the simplified scales that accounts for the dependence of perceived loudness on frequency is the use of a weighting network (known as A-weighting) that simulates the response of the human ear. For most noise assessments, the A-weighted sound pressure level in units of dBA is used due to its widespread recognition and its close correlation to perception. In this analysis, all measured noise levels are reported in dBA or A-weighted decibels. Common noise levels in dBA are shown in **Table H-1**.

Community Response to Changes in Noise Levels

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

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

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

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

Noise Descriptors Used in Impact Assessment

Because the sound pressure level unit (dBA) describes a noise level at just one moment and very few noises are constant, other ways of describing noise over extended periods of time have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level" (L_{eq}) can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., one hour [denoted by $L_{eq(1)}$] or 24 hours [denoted as $L_{eq(24)}$]), conveys the same sound energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x are sometimes used to indicate noise levels that are exceeded one, ten, fifty, ninety, 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 ten or more decibels. Thus the relationship between L_{eq} and the levels of exceedance will depend on the character of the noise. In community noise measurements it has been observed that the L_{eq} is generally between L_{10} and L_{50}. The relationship between L_{eq} and exceedance levels has been used in this analysis to characterize the noise sources and to determine the nature and extent of their impact at all receptor locations.

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

The Day-Night sound level (L_{dn}) describes a receptor's cumulative noise exposure from all events over 24 hours. It may be thought of as a noise dose totaled after increasing all nighttime L_{eq} noise levels between 10 PM and 7 AM by ten dBA to reflect the greater intrusiveness of noise experienced during these hours. Pursuant to Federal Transit Authority (FTA) noise impact analysis methodology, the L_{dn} is adopted to assess noise generated by trains.[1] 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.

Applicable Noise Codes and Impact Criteria

New York City Noise Code

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

CEQR Technical Manual Noise Standards

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

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

Impact Criteria

In addition, the *CEQR Technical Manual* uses the following criteria to determine whether a proposed residential and/or community facility development would be subject to a significant adverse noise impact:

- If the No-Action levels are less than 60 dBA $L_{eq(1)}$ and the analysis period is not a nighttime period, the threshold for a significant impact would be an increase of at least five dBA $L_{eq(1)}$ (for the 5 dBA threshold to be valid, the resultant With-Action condition noise level would have to be equal to or less than 65 dBA);

[1] "Transit Noise and Vibration Impact Assessment," 2006, FTA, Office of Planning and Environment.

- If the No-Action noise level is equal to or greater than 62 dBA $L_{eq(1)}$ or if the analysis period is a nighttime period (defined under CEQR standards as being between 10 PM and 7 AM), the incremental significant impact threshold would be three dBA $L_{eq(1)}$;
- If the No-Action noise level is 61 dBA $L_{eq(1)}$, the maximum incremental increase would be four dBA, since an increase higher than this would result in a noise level higher than the 65 dBA $L_{eq(1)}$ threshold.

Table H-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 office uses		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas only[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

Source: DEP (adopted policy 1983).

Notes:

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

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

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

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

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

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

	Marginally Unacceptable				Clearly Unacceptable
Noise level with Proposed Actionss	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
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)

Sources: DEP; *CEQR Technical Manual*

Notes:

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

[B] Required attenuation values increase by one dBA increments for L_{10} values greater than 80 dBA.

IV. NOISE PREDICTION METHODOLOGY

Future noise levels resulting from traffic were calculated with a proportional modeling technique used as a screening tool to estimate changes in noise levels. The proportional modeling technique is an analysis methodology recommended for analysis purposes in the *CEQR Technical Manual*.

Proportional Modeling

Using this technique, the prediction of future noise levels (where traffic is the dominant noise source) is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine No-Action and With-Action noise levels. Vehicular traffic volumes (counted during the noise recording), are converted into passenger car equivalent (PCE) values, for which one medium-duty truck (defined as vehicles with two axles and six tires having a gross weight between 9,900 and 26,400 pounds[2]) is assumed to generate the noise equivalent of thirteen cars, one heavy-duty truck (defined as vehicles with three or more axles having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles having two or three axles designed to carry more than nine passengers) is assumed to generate the noise equivalent of eighteen cars. Future noise levels are calculated using the following equation:

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

where:

FNA NL = Future No-Action Noise Level
NA PCE = No-Action PCEs
E PCE = Existing PCEs
E NL = Existing Noise Level

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

[2] The State of New York (DOT and DMV) defines school buses as having a gross vehicle weighting rate (GVWR) of between 10,000 and 36,000 pounds, depending on the class of bus (e.g., "A," "B," "C," or "D"). The most common bus types utilized throughout City are, but not limited to, Types B and C, which typically have two axles and six tires, school buses included in the proportional modeling were classified "medium trucks" for the mobile source noise analysis.

by 1.8 dBA. Similarly, if the future traffic were increased by 100 PCEs, or doubled to a total of 200 PCEs, the noise level would increase by 3.0 dBA.

CEQR annual background growth rates were used to calculate the No-Action PCE values, and the With-Action traffic increments were used to calculate the With-Action PCE values.

V. EXISTING CONDITIONS

The Rezoning Area measures 24,650 sf, consisting of the 20,462 sf Applicant-owned Development Site (Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58), as well as approximately 4,188 sf of property not owned or controlled by the Applicant, which includes the 2,038 sf Lot 33 and an approximately 2,150 sf portion of Lot 34.

Applicant-Owned Development Site

The Applicant-owned Development Site measures 20,462 sf in size and encompasses Lots 29, 31, 53, 54, 55, 56, and 58 on Block 3077.

Table H-5: Rezoning Area – Existing Conditions

Lot	Total Lot Area SF	Address	Owner	Zoning	Land Use	Building SF	Built FAR
Applicant-Owned							
29	3,279	2450 Arthur Avenue	Musli Bajraktari Realty Corp	R6/C2-4	Mixed Commercial/Residential	7,510	2.29
31	4,492	2452 Arthur Avenue	Halilarifi Realty Corp		Residential	3,398	0.76
53	2,185	2461 Hughes Avenue	2461 Hughes Associates LLC	R6	Residential	1,428	0.65
54	2,185	2459 Hughes Avenue	2457 Hughes Realty, LLC		Residential	1,890	0.86
55	2,185	2457 Hughes Avenue	2457 Hughes Realty LLC		Residential	2,835	1.30
56	3,080	617 East 188th Street	Prieren Realty Corp		Mixed Commercial/Residential	5,580	1.81
58	3,039	609 East 188th Street	605 East Realty, LLC		Mixed Commercial/Residential	4,696	1.55
Non-Applicant Owned							
33	2,038	2456 Arthur Avenue	2456 Arthur Ave HDFC	R6/C2-4	Residential	5,640	2.77
p/o 34	6,081	2458 Arthur Avenue	Maria Ciavarello		Mixed Commercial/Residential	4,312	0.71
Total SF	**24,650**						

Note: Properties owned and controlled by the Applicant (comprising the Development Site) are highlighted in gray.
Sources: New York City Department of City Planning (DCP) 2020 PLUTO Data (Version I); PHA Site Visit (April 2020).

The Development Site contains approximately 170 feet of frontage on East 188th Street, approximately 95 feet of frontage on Arthur Avenue, and approximately 145 feet of frontage on Hughes Avenue. The Development Site contains six existing curb cuts: four along Hughes Avenue, one along East 188th Street, and one along Arthur Avenue. As shown in **Table H-5**, the Development Site contains several low-rise buildings totaling 27,337 gsf.

Surrounding Area

The area surrounding the Rezoning Area is a dense urban setting consisting predominantly of residential and mixed-use commercial/residential land uses, which are reflective of the residential and commercial (overlay) zoning districts mapped throughout the neighborhood of Belmont/Little Italy. Residential buildings, of which multi-family walkup buildings are the predominant building type, are located throughout the surrounding area. Mixed-use commercial/residential buildings are also located throughout the surrounding area, but many of these uses are primarily clustered along Arthur Avenue and East 187th Street, which serve as commercial corridors near the Rezoning Area. Along these commercial thoroughfares, commercial uses are typically local restaurant and retail establishments located on the ground floors of low-rise buildings with residential uses located above the commercial uses. Several public facility/institutional uses are also located throughout the surrounding area and include Thomas C. Giordano Middle School (I.S. 45) and multiple houses of worship. Open space uses in the surrounding area include the 1.45-acre "Doc" Serpone Field, located two blocks to the west of the Rezoning Area, and the 0.55-acre Ciccarone Park, located across East 188th Street from the Rezoning Area. The surrounding area also features several parking facilities and multiple parcels of vacant land.

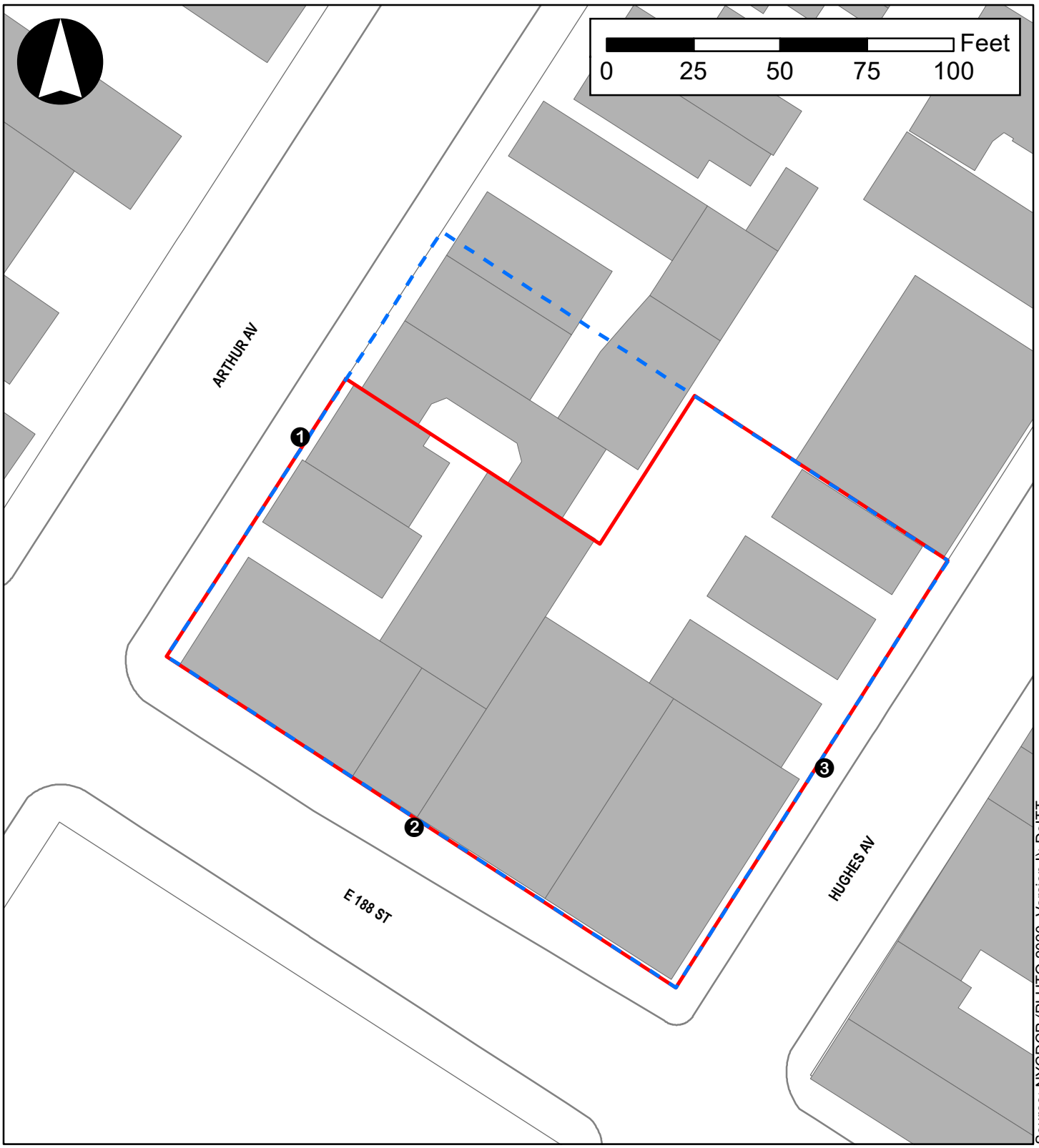
Selection of Noise Receptor Locations

To collect existing baseline volumes at the Rezoning Area, existing noise levels were measured at three locations. Receptor 1 was located on the east side of Arthur Avenue along the Rezoning Area's western frontage to measure noise resulting from traffic along Arthur Avenue. Receptor 2 was located on the north side of East 188th Street along the Rezoning Area's southern frontage to measure noise resulting from traffic along East 188th Street. Receptor 3 was located on the west side of Hughes Avenue along the Rezoning Area's eastern frontage to measure noise resulting from traffic along Hughes Avenue. For reference, the noise monitoring receptor locations are identified in **Figure H-1**.

Noise Monitoring

Noise monitoring at the receptor locations was performed on Thursday, February 14, 2019. The weather was partly cloudy, partly sunny with temperatures in the mid-30s to low-40s and an average wind speed of 11 miles per hour (mph). Twenty-minute spot measurements of existing noise levels were performed at the receptor locations for each of the three noise analysis periods – weekday AM peak hour (8 AM to 9 AM), weekday midday peak hour (12 PM to 1 PM), and weekday PM peak hour (5 PM to 6 PM) – to establish existing noise levels. An additional noise measurement was performed during the school dismissal/bus departure (School PM) peak period (2:30 PM to 3:30 PM), due to the location of several public schools in the area surrounding the Rezoning Area, to determine whether ambient noise levels were higher during this period than during the other standard weekday peak periods. For the purpose of this analysis, during the noise recordings, vehicles were counted and classified.

Figure H-1
Noise Monitoring Locations



Legend

- Rezoning Area 1
- Development Site
- 1 Noise Monitoring Locations
- Building Footprints
- Open Space

Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by ANSI) sound level meter. This assembly was mounted at a height of five feet above the ground surface on a tripod and at least six feet away from any sound-reflecting surfaces to avoid major interference with source sound level that was being measured. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. Only traffic-related noise was measured; noise from other sources (e.g., emergency sirens, aircraft flyovers, etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at Monitoring Locations

The noise monitoring results for the receptor locations are shown in **Table H-6**. As indicated in the table, existing L_{eq} noise levels at the receptor locations range from 58.3 dBA to 65.4 dBA in the weekday peak hours. The highest overall L_{10} value (68.1 dBA) was measured in the weekday midday peak period at Receptor 1, along Arthur Avenue. Pursuant to *CEQR Technical Manual* guidelines, this L_{10} value places Receptor 1 in the "marginally acceptable" CEQR Noise Exposure category, as noise levels are between 65.0 dBA and 70.0 dBA under existing conditions. The highest L_{10} for Receptor 2 was measured in the weekday PM peak period (66.2 dBA), placing Receptor 2 in the "marginally acceptable" CEQR Noise Exposure category under existing conditions. The highest L_{10} for Receptor 3 was measured in the weekday AM peak period (63.4 dBA), placing it in the "acceptable" CEQR Noise Exposure category under existing conditions.

Table H-6: Existing Noise Levels (dBA) at the Rezoning Area

#[1]	Noise Receptor Location	Time[2]	L_{eq}	L_{max}	L_{min}	L_1	L_{10}[3]	L_{50}	L_{90}	*CEQR* Noise Exposure Category
1	Arthur Avenue	AM	63.2	86.1	49.6	71.8	65.6	59.7	56.0	Marginally Acceptable
		MD	64.5	94.8	46.7	71.6	**68.1**	58.7	52.7	
		SC	58.3	85.5	46.0	65.2	60.6	56.3	51.0	
		PM	60.4	79.4	48.8	68.1	63.2	58.8	54.0	
2	East 188th Street	AM	62.6	84.8	51.4	73.0	64.8	58.9	55.2	Marginally Acceptable
		MD	59.4	79.4	48.3	68.6	62.4	56.5	52.6	
		SC	61.7	82.9	50.1	71.0	63.7	58.0	54.1	
		PM	65.4	90.9	50.6	78.0	**66.2**	60.2	55.3	
3	Hughes Avenue	AM	60.1	81.1	47.8	68.5	**63.4**	56.4	51.5	Acceptable
		MD	58.7	81.2	45.8	66.5	62.4	55.0	50.4	
		SC	59.0	76.9	48.7	70.5	60.6	55.5	53.0	
		PM	59.1	82.5	46.9	67.7	62.1	56.5	51.6	

Notes: Field measurements were performed by Philip Habib & Associates on February 14, 2019.

[1] Refer to **Figure H-1** for receptor locations.

[2] AM = weekday AM peak hour; MD = weekday midday peak hour; SC = weekday school dismissal peak hour; PM = weekday PM peak hour

[3] Highest L_{10} at each receptor is shown in **bold**.

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

In the future without the Proposed Actions, it is expected that there would be no new development on any of the lots located within the Rezoning Area. As such, the Development Site would continue to be occupied by several low-rise residential and mixed-use commercial/residential buildings totaling 27,337 gsf. An as-of-right six-story, approximately 22,604 gsf residential building containing 10 DUs and 21 parking spaces is under construction at 2406 Hoffman Street, located approximately one block to the southwest of the Rezoning Area. [3] The project is expected to be completed and occupied by 2023. It was determined that this No-Action development project would not generate a significant number of vehicle trips by 2023. As there are no additional anticipated developments expected to generate a significant number of vehicle trips by 2023 within 400 feet of the Rezoning Area, consistent with *CEQR Technical Manual* guidance, estimates of peak hour noise levels for the No-Action scenario were developed by applying an annual background growth rate of 0.25 percent from 2019 to 2023 to the existing traffic levels measured at the receptor locations.

In the future without the Proposed Actions, noise levels at the Rezoning Area would be similar to existing conditions, apart from slight increases (0.04 dBA) associated with minor increases in traffic along Arthur Avenue, East 188th Street, and Hughes Avenue due to general background growth. As indicated in **Table H-7**, noise levels at Receptors 1 and 2 would remain in the "marginally acceptable" noise exposure category and noise levels at Receptor 3 would remain in the "acceptable" noise exposure category.

Table H-7: 2023 No-Action Noise Levels (dBA) at the Rezoning Area

#	Time	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change[1]	No-Action L_{10}[2]	*CEQR* Noise Exposure Category
1	AM	666.0	672.7	63.2	63.2	0.04	65.6	Marginally Acceptable
	MD	495.0	500.0	64.5	64.5	0.04	**68.2**	
	SC	321.0	324.2	58.3	58.3	0.04	60.7	
	PM	360.0	363.6	60.4	60.4	0.04	63.2	
2	AM	369.0	372.7	62.6	62.7	0.04	64.8	Marginally Acceptable
	MD	210.0	212.1	59.4	59.4	0.04	62.5	
	SC	282.0	284.8	61.7	61.7	0.04	63.7	
	PM	477.0	481.8	65.4	65.5	0.04	**66.3**	
3	AM	267.0	269.7	60.1	60.1	0.04	**63.4**	Acceptable
	MD	189.0	190.9	58.7	58.7	0.04	62.5	
	SC	207.0	209.1	59.0	59.0	0.04	60.6	
	PM	264.0	266.6	59.1	59.1	0.04	62.2	

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**.

[3] Source: New York City Department of Buildings (DOB) Building Information System (BIS) New Building (NB) Job No. 220445481.

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

As outlined in **Attachment A, "Project Description,"** in the 2023 With-Action scenario, the Applicant-owned Development Site would be redeveloped with a 150,753 gsf, two-building mixed-use commercial/residential development. The Proposed Project's full-service hotel would contain an unenclosed recreation area above the first floor within the courtyard of the Proposed Project. The outdoor recreation area is intended to be utilized as amenity space for the proposed full-service hotel use. Although the design and programming of the outdoor recreation area is undetermined at this time, potential amenities would likely include passive features like seating. The outdoor recreation area would not contain noise-generating amenities, such as a play area or playground. In addition, as the Proposed Actions would increase the maximum permitted residential FAR, a second RWCDS (the "Alternate Residential Scenario") is also being analyzed. Under the Alternate Residential Scenario, the Applicant could construct a 135,438 gsf mixed-use commercial/residential building containing 100 total DUs, 21,007 gsf of commercial space, and 28 accessory parking spaces. Future With-Action noise levels at the receptor locations were calculated using the noise prediction methodology described in Section IV, "Noise Prediction Methodology," above. **Table H-8** displays the projected With-Action noise levels.[4]

As indicated in **Table H-8**, in the 2023 With-Action scenario, as under the 2023 No-Action scenario, noise levels at Receptors 1 and 2 would remain in the "marginally acceptable" noise exposure category and noise levels at Receptor 3 would remain in the "acceptable" noise exposure category.

Table H-8: 2023 With-Action Noise Levels (dBA) at the Rezoning Area

#	Time	No-Action PCEs	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change[1]	With-Action L_{10}[2]	*CEQR* Noise Exposure Category
1	AM	672.7	746.7	63.2	63.7	0.5	66.1	Marginally Acceptable
	MD	500.0	606.0	64.5	65.4	0.8	**69.0**	
	SC	324.2	434.2	58.3	59.6	1.3	61.9	
	PM	363.6	473.6	60.4	61.6	1.1	64.4	
2	AM	372.7	446.7	62.7	63.4	0.8	65.6	Marginally Acceptable
	MD	212.1	318.1	59.4	61.2	1.8	64.2	
	SC	284.8	394.8	61.7	63.1	1.4	65.1	
	PM	481.8	591.8	65.5	66.4	0.9	**67.1**	
3	AM	269.7	343.7	60.1	61.1	1.1	**64.5**	Acceptable
	MD	190.9	296.9	58.7	60.6	1.9	64.4	
	SC	209.1	319.1	59.0	60.9	1.8	62.4	
	PM	266.6	376.6	59.1	60.6	1.5	63.7	

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**.

[4] As indicated in the **TPF/TDF Technical Memorandum**, the Proposed Actions and the resultant Proposed Project would generate approximately 74, 106, and 110 incremental vehicle trips (in and out combined) as a result of the proposed development program during the weekday AM, midday (MD), and PM peak periods. The vehicle trips generated during the PM peak period (110) were also utilized for the School PM (SC) peak period.

Playground Noise

While people are not usually thought of as sources of stationary noise, children in playgrounds or spectators at outdoor sporting events or concerts can introduce additional sources of noise within communities. According to the *CEQR Technical Manual*, noise generated by children in playgrounds or people using parks is considered a stationary source of noise. As noted in **Attachment A, "Project Description,"** Ciccarone Park, a public park containing playground equipment, is located across East 188th Street from the Development Site.

Due to the proximity of Ciccarone Park's playground equipment to the southern and eastern frontages of the Development Site (approximately 60 feet from the southern and eastern frontages of the Development Site), future sensitive receptors located on the Development Site's East 188th Street frontage would experience hourly L_{10} noise levels of up to 68.2 dBA and future sensitive receptors located on the Development Site's Hughes Avenue frontage would experience hourly L_{10} noise levels of up to 67.5 dBA[5]. As shown in **Table H-9**, after calculating the predicted L_{10} noise levels from the existing playground equipment in Ciccarone Park, the future southern and eastern façades of either the Proposed Project or the Alternate Residential Scenario would fall in the "marginally acceptable" CEQR Noise Exposure category. As such, the future sensitive receptors located on the Development Site's southern and eastern frontages would not experience significant adverse noise impacts due to the proximity of the outdoor playground equipment in Ciccarone Park.

Table H-9: Noise Levels due to Proximity of Outdoor Playground (dBA)

Sensitive Receptor	Distance to Playground (in feet)	Estimated Playground Noise at Receptor (L_{eq}) (in dBA)	Predicted L_{10} Noise Level[1] (in dBA)
Future Southern Façade of Sensitive Receptor (Corresponding to Receptor 2)	60	60.8	68.2
Future Eastern Façade of Sensitive Receptor (Corresponding to Receptor 3)	60	60.8	67.5

VIII. ATTENUATION REQUIREMENTS

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

[5] SCA Playground Noise Study, AKRF, Inc., October 23, 1992.

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 heating, ventilation, and air conditioning (HVAC) systems in various ratios of area. Since the Proposed Project would most likely be of masonry construction, which typically provides a high level of sound attenuation, the attenuation requirements for CEQR purposes apply primarily to the windows, but may also represent a composite window/wall attenuation value. 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. The U.S. Department of Housing and Urban Development (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. DEP uses the OITC when identifying the required sound attenuation for a façade.

Based on the predicted future With-Action exterior noise levels and *CEQR Technical Manual* criteria, With-Action noise levels at Receptors 1 and 2 would remain in the "marginally acceptable" CEQR noise exposure category and noise levels at Receptor 3 would remain in the "acceptable" CEQR noise exposure category. As such, no special noise attenuation measures beyond standard construction practices would be required for residential or community facility uses on any of the Development Site's frontages to achieve the required residential or community facility interior noise level of 45 dBA or lower. Therefore, according to *CEQR Technical Manual* guidelines, no significant adverse noise impacts would occur as a result of the Proposed Actions.

IX. OTHER NOISE CONCERNS

Aircraft Noise

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

Mechanical Equipment

It is assumed that building mechanical systems (i.e., heating, ventilation, and air conditioning [HVAC] systems) for all buildings associated with the proposed actions would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in any significant increase in ambient noise levels in the vicinity of the Development Site or the surrounding neighborhood.

Train Noise

An initial train noise impact screening analysis would be warranted if a new receptor would be located within 1,500-feet of existing rail activity and have a direct line of sight to that activity. As the Development Site is not within 1,500-feet of an existing rail line nor does the site have a direct line of sight to existing rail activity, no initial train noise impact screening analysis is warranted.

APPENDIX 1

HAZARDOUS MATERIALS

McFarland Johnson

PHASE I ENVIRONMENTAL SITE ASSESSMENT

For:

Bajraktari Realty Management Corporation

Seven Parcels:
Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58

Bronx, Bronx County, New York

July 2020

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EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment (ESA) was conducted by McFarland-Johnson, Inc. (MJ) for seven parcels of land, identified as Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58, and located at 2450, 2452, and 2454 Arthur Ave, 2457, 2459, and 2461 Hughes Ave, and 609, 611, and 617 East 188th Street, Bronx, New York (Site). The 0.47-acre Site includes a total of 10 commercial and residential buildings.

The seven parcels of land include the following:

- Lot # 29, owned by Musli Bajraktari Realty Corporation, 4 residential units and 1 commercial unit
- Lot # 31, owned by Halil Arifi Realty Corporation, 4 residential units
- Lot # 53, owned by 2461 Hughes Associates LLC, one family residence
- Lot # 54, owned by 2457 Hughes Realty LLC, 2 family residential units
- Lot # 55, owned by 2457 Hughes Realty LLC, 2 family residential units
- Lot # 56, owned by Pieren Realty Corporation, 2 residential units and 5 commercial units
- Lot # 58, owned by 605 East Realty LLC, 3 residential units and 6 commercial units

The Phase I ESA was completed in accordance with American Society for Testing and Materials- Standard Practice E 1527-13 (ASTM E 1527-13). This Phase I ESA included: a site visit, a review of regulatory databases pertaining to hazardous wastes and contaminated materials, a review of resources that provided historical information about the property; and interviews with the property owner, and other appropriate person or persons with knowledge of the property.

Environmental Data Resources, Inc. (EDR), a nationwide database search and report service, was used to access information from numerous federal, state, and local government databases on environmentally sensitive sites contained in records. The report provided by EDR was propagated based on ASTM E 1527-13 and is compliant with Environmental Protection Agency's (EPA) All Appropriate Inquiry (AAI) standards. The accuracy of the FSEI EDR Report is limited to those incidences that were recorded with the proper regulatory authorities. It is possible that there were incidents on or near the subject property involving hazardous materials that were not reported.

The following is a summary of the facts regarding the site gathered during this Phase I ESA:

- The current owners are listed above.
- The size of the Site is 0.47 acre and consists of 7 parcels.
- The property consists of built commercial and residential lands.
- The parcels were purchased by the current owners between 10-33 years ago.
- There are currently two heating oil aboveground storage tanks (ASTs) in use on the site, in the basement of Lot 29.
- Prior owners are listed in Section 5.2

- The Site was developed in at least 1896 with one residential structure on Lot 31.
- There are no known environmental liens on the site.
- There are no known Activity or Use Limitations (AULs) on the site.
- Observable signs of Recognized Environmental Conditions (RECs) were not identified during the site reconnaissance.
- Historical records indicate potentially upgradient or cross gradient properties that may use and or store hazardous materials or petroleum products. If a release were to occur, the site may have been impacted.
- The target property was not listed in any of the databases searched by EDR.
- The EDR Report revealed 433 geocoded records located within approximately 1 mile of the subject property.
- An additional 3 non-geocoded or orphan site records where identified in the EDR Report within the same subject property zip code.
- A review of the 433 geocoded and 3 non-geocoded records indicated several listings with the potential to impact the site based on their geographical locations and nature of their record.
- Interviews with Owner representatives and occupants did not indicate the potential for any RECs on the site.

The findings of this Phase I ESA are based on the EDR Report, readily observable conditions present at the time of the site reconnaissance, Owner provided information, and information provided by other resources, as referenced and subject to the limitations identified here within this report. No sub-surface investigations or sampling efforts were completed as part of this Phase I ESA. Given the limited scope of this Phase I ESA, MJ makes no warranty, guarantee, or impression, expressed or implied, that the site is subject to or free of environmental impacts.

Based on a review of the records found in databases compliant with ASTM E 1527-13, the site reconnaissance, and other available information it is MJ's opinion that there are no RECs associated with onsite current or historical use of the site. Several potentially upgradient or cross gradient properties were identified as potentially impacting the site if a release were to occur. If this is a concern, MJ recommends that a limited Phase II ESA be conducted to further evaluate the site for the potential presence of environmental contamination associated with offsite use.

1 INTRODUCTION

1.1 PURPOSE

This report has been prepared by McFarland-Johnson, Inc. (MJ) to serve as a Phase I ESA for seven parcels of land managed by the Bajraktari Realty Management Corporation (Owner), identified as the following:

- Lot # 29, 2450 Arthur Avenue, 605-607 East 188th Street, Bronx, NY,
  Combined Building Area: 7510 SF
- Lot # 31, 2452 -2454 Arthur Ave, Bronx, NY
  Combined Building Area: 3398 SF
- Lot # 53, 2461 Hughes Avenue, Bronx, NY,
  Building Area: 1428 SF
- Lot # 54, 2459 Hughes Avenue, Bronx, NY,
  Building Area: 1890 SF
- Lot # 55, 2457 Hughes Avenue, Bronx, NY,
  Building Area: 2835 SF
- Lot # 56, 617 East 188th Street, Bronx, NY,
  Building Area: 5580 SF
- Lot # 58, 609-611 East 188th Street, Bronx, NY,
  Combined Building Area: 4696 SF

The parcels consist of residential and commercial buildings. This Phase I ESA has been performed in an effort to identify Recognized Environmental Conditions (RECs) associated with the site. The information reviewed in this Phase I ESA is intended to facilitate the process of rezoning and redeveloping the seven parcels of land owned by the Bajraktari Realty Management Corporation.

ASTM E 1527-13 defines RECs as: "*the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.*".

1.2 DETAILED SCOPE-OF-SERVICES

The Scope-of-Services includes the preparation of a Phase I ESA in accordance with ASTM E 1527-13, and the agreement between McFarland-Johnson, Inc. and the Bajraktari Realty Management Corporation, which was signed by the Bajraktari Realty Management Corporation on June 12, 2020.

1.3 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

Readily accessible topographic, wetlands, floodplains, soil survey, surficial geology, and bedrock mapping of the site were reviewed for this Phase I ESA. See Section 5.1 and Appendix B for further information.

1.4 SPECIALIZED KNOWLEDGE

MJ has no specialized knowledge of the subject property, its past or current use, or the potential presence of environmental impact.

1.5 SIGNIFICANT ASSUMPTIONS

MJ assumes that the information provided in the EDR Report was current and accurate at the date of the data request. It is also assumed that the answers given on the environmental questionnaires sent to the Owner's representative were given accurately and truthfully to the best of their knowledge.

1.6 LIMITATIONS AND EXCEPTIONS

Data Gaps were encountered during the preparation of this Phase I ESA. ASTM E 1527-13 defines Data Gaps as "…*a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information*." According to ASTM E 1527 Data Gaps may result from: "…*incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.).*"

The Data Gaps identified during the preparation of the Phase I ESA are listed below.

1. Historical aerial photographs of the site from 1924, 1951, 1954, 1962, 1966, 1974, 1976, 1984, 1991, 1995, 2006, 2009, 2013 and 2017 were reviewed as part of this Phase I ESA. There were no available aerial photographs prior to 1924 and there are significant gaps in years between those that were available. The site was developed in the 1924 photo.

2. Historical topographical mapping of the site from 1897, 1898, 1900, 1947, 1955, 1956, 1966, 1979, 1995, 1997, 1998 and 2013 were reviewed as part of this Phase I ESA. The topographical map from 1897 revealed a structure on the parcel. Historical topographical maps before 1902 were not available for review.

3. Sanborn® maps of the site location from 1896, 1901, 1914, 1945, 1950, 1977-1981, 1984, 1986, 1989, 1991-1993, 1995, 1996, 1998, and 2001-2007 were reviewed. The site was developed in 1896 with one residential building; therefore, first developed use was not established.

4. Historical city directories of the subject parcels from 1927, 1931, 1940, 1949, 1956, 1961, 1965, 1971, 1976, 1983, 1993, 1994, 1999, 2000, 2004, 2005, 2009, and 2014. Historical city directories before 1927 were not available for review. In addition, not all addresses were listed for each of the years.

5. Interviews with the previous owners and all occupants were not conducted for this Phase I ESA.

6. A property appraisal was for this site was not provided by the Owner for this Phase I ESA.

7. The following areas were inaccessible during the time of the site visit:

    a. Basement of funeral home
    b. Several occupied apartment interiors
    c. Lot 53, 2461 Hughes Avenue interior

The aforementioned Data Gaps are not considered significant limitations in determining RECs based on the nature of the site and surrounding area and given the availability of other current and historical resources.

The accuracy of the EDR Report is limited to those incidences that were recorded with the proper regulatory authorities. It is possible that there were incidents on or near the subject property involving hazardous materials that were not reported.

The findings of this Phase I ESA are based on the EDR Report, readily observable conditions present at the time of the site reconnaissance, Owner, and information provided by other resources, as referenced and subject to the limitations identified here within this report.

No subsurface investigations or environmental sampling efforts were completed as part of this Phase I ESA. Given the limited scope of this Phase I ESA, MJ makes no warranty, guarantee, or impression, expressed or implied, that the site is subject to or free of environmental impacts.

1.7 SPECIAL TERMS AND CONDITIONS

The Standards and Conditions listed the agreement between McFarland-Johnson, Inc. and the Bajraktari Realty Management Corporation, and signed by the Bajraktari Realty Management Corporation on June 12, 2020, apply to this Phase I ESA. In accordance with ASTM E 1527-13, this report is considered valid for 1 year from the date of the site survey, interviews, and records review (whichever is earlier), providing that the data contained in this report is reviewed and updated as needed within 180 days prior to the property transaction. Per ASTM E 1527-13, the items that need to be reviewed and/or updated include:

1. Interviews with owners, operators, and occupants;
2. Searches for recorded environmental cleanup liens;
3. Reviews of federal, tribal, state, and local government records;

4. Visual inspections of the property and of adjoining properties; and
5. The declaration by the E*nvironmental Professional* responsible for the assessment or update.

In addition, given that no User was defined in the preparation of this Phase I ESA, any future identified User seeking Landowner Liability Protections (LLPs) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) must comply with the User's Responsibilities as specified in Section 6 of ASTM E 1527-13 within 180 days of the property transaction.

1.8 USER RELIANCE

This Phase I ESA has been prepared for the exclusive use by McFarland-Johnson, Inc., and the Bajraktari Realty Management Corporation. The forenamed entities may provide copies of this report to affiliates, subsidiaries, regulatory agencies, and to potential property purchasers and their agents. Distribution of this Phase I ESA to other entities not identified within this section requires written approval from McFarland-Johnson, Inc. and the Bajraktari Realty Management Corporation.

2 SITE DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The site is currently owned by the entities listed above, and is identified as Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58, and located at 2450, 2452, and 2454 Arthur Ave, 2457, 2459, and 2461 Hughes Ave, and 605, 607, 609, 611, and 617 East 188th Street, Bronx, New York (Site).

2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The site consists of several commercial and residential buildings, a garage and parking area. The site is located in an urban setting, surrounded by a mix of commercial and residential properties and parkland (Appendix B – Figure 2).

Based on local topography noted during the site walkover, surficial sheet flow drainage is directed towards the streets and also towards the east off of Arthur Avenue down the driveway. Based on interpretation of USGS topographical maps (Appendix B – Figure 1 and Appendix C), groundwater is inferred to flow generally in an easterly direction below the site towards the Bronx River.

2.3 CURRENT USE OF THE PROPERTY

The site consists of seven parcels and are described below (Appendix B – Figure 2).

- Lot # 29 – Occupied by Botti Funeral Home and four-family residential units
- Lot # 31 – Occupied by two, two-family residential buildings, one storage garage, and a driveway

- Lot # 53 – Occupied by one, two-family residential building
- Lot # 54 – Occupied by one, two-family residential building
- Lot # 55 – Occupied by one, two-family residential building
- Lot # 56 – Occupied by two residential apartments and BRMC office space
- Lot # 58 – Occupied by two residential apartments, a BRMC filing room, and commercial space leased by an insurance company and a beauty salon.

2.4 DESCRIPTIONS OF STRUCTURES, ROADS, OTHER IMPROVEMENTS ON THE SITE

There are 10 buildings located on the subject parcels. The buildings consist of mixed residential and commercial use and a garage. There is a paved access driveway off Arthur Avenue on Lot 31 that leads to the garage. There is also a paved access driveway off Hughes Avenue on Lot 54 that leads to parking located on Lots, 53, 54, and 55. There are two stormwater drains located on Lot 31 to the west of the garage and to the east of the residential buildings.

2.5 CURRENT USES OF THE ADJOINING PROPERTIES

There are currently 10 buildings located on the properties. The site is bordered by Arthur Avenue to the west, East 188th Street to the south and Hughes Avenue to the east. The property use to the west includes medical offices, Fordham University buildings, and a laundromat/dry cleaner. Ciccarone Park is located to the south across East 188th Avenue. The site is bordered by residential use immediately to the north and east. There is a deli and a salon also located to the south and southeast of the site.

3 USER PROVIDED INFORMATION

There was no specified User for this Phase I ESA. This Phase I ESA is being conducted by the Owner.

4 OWNER PROVIDED INFORMATION

4.1 TITLE RECORDS

Parcel deeds for all seven parcels were provided by the Owner and included as Appendix A.

4.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

No chain of title documents where provided by the Owner.

4.3 SPECIALIZED KNOWLEDGE

The Owner was interviewed via User Questionnaires. The questionnaires were completed by the Owner's representative, Naim Bajraktari, Esq. See Section 7.1 and 8.6 for further information. The User Questionnaire is included as Appendix I.

4.4 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

A property appraisal was for this site was not provided by the Owner for this Phase I ESA.

4.5 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The site is a mixture of commercial and residential use that is currently owned by various entities described above. The Bajraktari Realty Management Corporation contact for this parcel is Gani Bajraktari.

4.6 REASON FOR PERFORMING PHASE I ESA

It is MJ's understanding that this Phase I ESA is being conducted by the Owner prior to rezoning and redevelopment.

5 RECORDS REVIEW

5.1 PHYSICAL SETTING SOURCES

Based on the United States Geological Survey (USGS) topographical map (Figure 1- Appendix B), the site is at approximately 88 feet above mean sea level (amsl) in elevation (EDR Historical Topo Map Report- Appendix C). Based on interpretation of the topography, groundwater is inferred to flow towards the east beneath the site towards the Bronx River. The topographical mapping did not indicate the presence of any surficial waterbodies (wetlands, streams, ponds, or lakes) within the site boundary.

Review of the New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetland mapping (Figure 4- Appendix B) of the site indicates that there are no State-regulated wetlands on or adjacent the subject parcels. The United States Fish and Wildlife Service National Wetlands Inventory Map (Figure 5- Appendix B) of the subject parcels did not indicate the potential presence of federally regulated wetlands on the subject parcels. A site walkover by MJ confirmed that no wetlands were present on the site.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (Figure 6- Appendix B) depicting the subject parcels, the properties are not located within a 100-year floodplain.

Based on soil mapping (Figure 7- Appendix B) provided by the Natural Resources Conservation Service (NRCS), the subject parcels are mapped as Urban land, till substratum - 0 to 3% slopes. Available surficial geology mapping of the site indicates the original site surface soils are comprised of till (Figure 8- Appendix B). Based on soil mapping and surficial geology mapping, soils at the site likely are comprised of asphalt over human transported material (NRCS Soils Report- Appendix B).

The available bedrock geology mapping of the site indicates that the entire site is mapped as pelitic schist (Figure 9- Appendix B).

5.2 TITLE RECORDS

The deeds for all seven properties are located in Appendix A.

Lot 29: Joseph Botti Funeral Home sold to Musli Bajraktari, June 1995
Lot 31: Louis and Mary Crea sold to Halil Arifi Realty Corp, November 1989
Lot 53: LI Bronx Rentals LLC sold to 2461 Hughes Ave LLC, October 2015
Lot 54: Ramon Mateo sold to 2457 Hughes Realty LLC, March 2012
Lot 55: Carmela Ari sold to 2457 Hughes Realty LLC, April 2008
Lot 56: Juan Santana sold to Prieren Realty Group, July 1987
Lot 58: Ekrem Sefuloski sold to 605 East Realty LLC, March 2006

5.3 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

A review of title records by EDR indicates that there are no known Activity or Use Limitations (AULs) or environmental liens on the subject parcels. In addition, according to available state and federal databases listed in the EDR Report, the site is not listed as having any engineering or institutional controls in place.

5.4 HISTORICAL USE INFORMATION ON THE PROPERTY

5.4.1 Historical Topographic Maps

Historical topographical mapping of the subject parcels from 1897, 1898, 1900, 1947, 1955, 1956, 1966, 1979, 1995, 1997, 1998 and 2013 were reviewed as part of this Phase I ESA. The earliest historical topographical maps available dated 1897 and 1898 show that the roads (Arthur Avenue, Hughes Avenue, and East 188th Street) have been constructed and there is at least one structure on the site adjacent to Arthur Avenue.

By 1947, the historical topographical map depicts structures on most, if not all, of the seven parcels. There is no indication as to what the structures might have been used for.

In 1995 and 1996 the historical topographical maps indicate the site and the majority of surrounding areas are developed.

There can be no conclusions drawn on the historical land use of the subject parcels based on a review of the available topographic maps of the site. The available historical topographical maps of the site included in Appendix C.

5.4.2 Historical Sanborn® Maps

Available Sanborn® maps of the subject parcels from 1896, 1901, 1914, 1945, 1950, 1977-1981, 1984, 1986, 1989, 1991-1993, 1995, 1996, 1998, and 2001-2007 were reviewed as part of this Phase I ESA. The earliest Sanborn® map, dated 1896, shows one dwelling on current Lot 31 which is 2452 Arthur Avenue. The remainder of the site is vacant. East 188th Street is not developed to the south of the site. The residential building at 2454 Arthur Avenue was present in

the 1901 Sanborn® map. The map also shows by that 1901 three parcels were created within the site with the following Lot numbers: 29, 53, and 56.

The 1914 Sanborn® map depicts the building at 617 East 188th Street as a dwelling.

The residential buildings at 2457, 2459, and 2461 Hughes Avenue are present in the 1945 Sanborn® map. Lot 56 is occupied by a shed and the current building. There is a clothing company located at 607 East 188th, Street and the building located at 2450 Arthur Avenue is present. The garage on Lot 31 is also developed. Lots 53, 54, and 55, located on Hughes Ave all have automobile parking in the basement. The buildings located at 2454 Arthur Avenue and 607 East 188th Street are shown as clothing manufacturing in the 1950 Sanborn® map.

By 1977, the respective Sanborn® map identifies that both clothing manufacturing stores were reclassified as dwellings. The structure on the corner of Arthur Ave and East 188th Street (Lot 29) is classified as a funeral home and dwelling which still exists today. This map shows a mix of residential and store structures. These characteristics remain consistent on the Sanborn® maps through 1981.

The following Sanborn® maps: 1984, 1986, 1989, 1991-1993, 1995-1996, 1998 and from 2001-2007 remain consistent with little to no changes.

Based on a review of the available Sanborn® Maps provided by EDR, there has been a funeral home on the site for a minimum of 43 years, there have previously been clothing manufacturing facilities on site, and many of the structures on the site have been present for longer than 50 years. Although the Sanborn® maps provide good insight to the structures present, no conclusions can be made on the details of the historical uses of the properties. The available Sanborn® maps of the subject parcels are included in Appendix D.

5.4.3 Historical Aerial Photographs

Historical aerial photographs of the subject parcels from 1924, 1951, 1954, 1962, 1966, 1974, 1976, 1984, 1991, 1995, 2006, 2009, 2013 and 2017 were reviewed as part of this Phase I ESA. The earliest data available, the 1924 historical aerial photograph, shows that the site has already been densely developed with multiple structures within the site boundaries. Each year of historical aerial photographs reviewed show slight changes in structure density and appearance. We can assume the area went through multiple rounds of construction to keep up with the infrastructure located on site. The available aerial photography gives little insight to the historical use of the structures or the land on site, however, it is clear that the area has been heavily disturbed by human development. No further conclusions can be drawn on the historical land use of the property from the available historical aerial photographs. Available aerial photographs are included in Appendix E.

5.4.4 Historical City Directories

Historical city directories of the subject parcels from 1927, 1931, 1940, 1949, 1956, 1961, 1965, 1971, 1976, 1983, 1993, 1994, 1999, 2000, 2004, 2005, 2009, 2014, and 2017. Available city

directories are located in Appendix F. The site was developed since 1927; not all of the addresses had records for each of the years reviewed. Below is a summary of the findings:

- 2461, 2459, and 2457 Hughes Avenue – city directories were available from the 1990s to 2017 as residential
- 2450 Arthur Avenue – city directories were available for 1927 to 2017. A dress shop was listed in the 1927 directory; the site was listed as residential since this time.
- 2450 Arthur Avenue – city directories were available for 1927 to 2017. An importing company was listed in the 1927 directory; the site was listed as residential since this time.
- 2454 Arthur Avenue - city directories were available for 1931 to 2017. The address was listed as residential in each of the directories.
- 605 East 188th Street – city directories were available for 1927 to 2017. A delivery service occupied the building in 1927 and a funeral home has been located at this address since at least 1961.
- 607 East 188th Street – city directories were available for 1931 to 2017. The address was listed as residential in 1931 through 2017. In addition, there was a clothing company listed in the 1949 and 1956 directories.
- 609 East 188th Street - city directories were available for 1949 to present. The listings were residential from 1949 through 2017. A & R Video was listed in the 1993 through the 1999 directories.
- 611 East 188th Street – city directories were available for 1949 to present. Calabria Olive Oil Company was listed in the 1949 city directory. The site was occupied by a coffee company from 1961 through at least 1983 and a salon from 1994 to present.
- 617 East 188th Street – city directories were available for 1961 to present. The listings were residential from 1961 until present. Commercial office use was noted starting in 1993 to present.

5.5 HISTORICAL USE INFORMATION ON ADJOINING PROPERTIES

5.5.1 Historical Topographic Maps

Historical topographical mapping from 1897, 1898, 1900, 1947, 1955, 1956, 1966, 1979, 1995, 1997, 1998 and 2013 was reviewed for insight on characteristics of the areas surrounding the site as part of this Phase I ESA. Arthur Avenue and Hughes Avenue are present since at least 1897. The area is developed with structures since at least this time. The topographical maps provided by EDR lack enough detail to determine further adjacent land uses, beyond that they appear to be developed. The buildings appear to be a mix of residential and commercial buildings.

There can be no further conclusions drawn on the historical land use of the adjoining parcels based on a review of the available historical topographic maps. The available historical topographical maps of the subject parcels are included in Appendix C.

5.5.2 Historical Sanborn® Maps

Available Sanborn® maps of the area surrounding the site location from 1896, 1901, 1914, 1945, 1950, 1977-1981, 1984, 1986, 1989, 1991-1993, 1995, 1996, 1998, and 2001-2007 were

reviewed as part of this Phase I ESA. The available Sanborn® maps of the subject parcels area are included in Appendix D.

The adjacent site use was primarily developed with residential use from at least 1896. A wagon maker is shown at 2451 Arthur Avenue, adjacent to the site to the west in the 1914 Sanborn® map. War Memorial Park is shown in the 1945 through the 2007 Sanborn® maps directly to the south of the site across East 188th Street. There is a health center located at 2447-2449 Arthur Avenue from 1996 to 2007. There is a Fuel Oil Company at 2467 and 2469 Arthur Avenue and an auto repair shop located at 2465 Arthur Avenue Sanborn® maps until at least 2007. There is a Coal Yard shown on the 1977 through the 2007 Sanborn® maps at 570 East 188th Street. Each of these properties are located potentially upgradient or cross gradient from the site.

5.5.3 Historical Aerial Photographs

Historical aerial photographs of the subject parcels from 1924, 1951, 1954, 1962, 1966, 1974, 1976, 1984, 1991, 1995, 2006, 2009, 2013 and 2017 were reviewed as part of this Phase I ESA. The adjacent site use has been developed since at least 1924. Available aerial photographs are included in Appendix E.

5.5.4 Historical City Directories

Historical city directories of the subject parcels from 1927, 1931, 1940, 1949, 1956, 1961, 1965, 1971, 1976, 1983, 1993, 1994, 1999, 2000, 2004, 2005, 2009, and 2014. Available city directories are located in Appendix F. The site was developed since 1927; not all of the addresses had records for each of the years reviewed. The adjacent site use was a mixture of residential, commercial and medical use.

5.6 ENVIRONMENTAL RECORD SOURCES

EDR, a nationwide database search and report service, was used to access information from numerous federal, state, and local government databases on environmentally sensitive sites contained in records. The information and reporting provided by EDR is based on ASTM E 1527-13, and is compliant with Environmental Protection Agency (EPA) *All Appropriate Inquiry Standard* (AAI). The EDR Report included with this Phase I ESA covers the subject property and other properties within the standard search distances set in ASTM E 1527-13. The EDR Report included a review of the standard available federal, State, and local government environmental databases in accordance with ASTM E 1527-13. Additional available federal, State, and local government environmental databases were also reviewed by EDR. A complete listing of the federal, State, and local government environmental databases reviewed as part of this Phase I ESA and the searches distances applied to each database is listed in the EDR Report. A copy of the EDR report is contained in its entirety in Appendix G.

The EDR Report indicated 433 geocoded within approximately 1 mile of the site and 3 non-geocoded records that had the potential to occur in the vicinity of the site. The details of the geocoded sites located upgradient from the site and identified as potentially affecting the site are listed in Appendix G.

6 SITE RECONNAISSANCE

6.1 METHODOLOGY AND LIMITING CONDITIONS

A site reconnaissance of the site was conducted by MJ on June 29, 2020. Owner representative, Gani Bajraktari, was present during the site reconnaissance. The site photographs are contained in Appendix H. During the site reconnaissance the property was searched for evidence of contamination by visually inspecting the grounds for surface staining and stressed or dead vegetation and structures, devices, or objects typically associated with hazardous substances (e.g., fuel storage tanks, metal drums).

6.2 GENERAL SITE SETTING

The site is developed with residential and commercial buildings, a garage and drive through areas. The site is bordered by paved sidewalks and roads on the west south and east sides. The general vicinity of the site is considered a mix of residential and commercial properties.

6.3 EXTERIOR OBSERVATIONS

The exterior of the site was accessed via sidewalks adjacent to Arthur Avenue, East 188th Street and Hughes Avenue. The center of the site was accessed through a driveway located on Lot 61 off of Arthur Avenue and a driveway located on Lot 54. In addition, roofs were observed via Lot 56. Stormwater drains were observed on Lot 61, 54, and 55. Photographs of the exterior of the site are located in Appendix H.

6.4 INTERIOR OBSERVATIONS

The building interiors consisted of residential, office space, a funeral home, an insurance company, and a beauty salon. All basements were accessed except for Lot 29 and Lot 53. There are two 275-gallon heating oil ASTs currently in use in the basement of Lot 29. One additional out of use heating oil tank was recently removed from the site. There were no signs of spills or leaks associated with the tanks.

7 INTERVIEWS

7.1 INTERVIEW WITH THE PROPERTY OWNER

The Owner's representative was interviewed via the User Questionnaires. The questionnaires were completed by the Owner's representative, Naim Bajraktari. A copy of the questionnaires is contained in Appendix I.

7.2 INTERVIEW WITH THE USER

The Owner is considered the User of the Phase I ESA. A copy of the questionnaires is contained in Appendix I.

7.3 INTERVIEWS WITH NEIGHBORS AND OCCUPANTS

No interviews were conducted with adjacent landowners. Mia Arce, the occupant of the funeral home on Lot 29 was interviewed. They store small amounts of formaldehyde and cleaning supplies on the premises. No embalmings take place on the property. There were no known environmental concerns associated with the parcel.

7.4 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

Interviews with local government officials were limited to the Owner. See Section 6.1 for further information.

8 FINDINGS

8.1 TOPOGRAPHICAL MAPS

Review of the historical topographical mapping from did not indicate the presence of any land use activities on or adjacent the site that would be cause for environmental concern.

8.2 SANBORN MAPS

Review of the Sanborn® maps did not indicate the presence of any land use activities on the subject parcels that would be cause for environmental concern. Several land use activities on properties located potentially upgradient and cross gradient were identified.

8.3 HISTORICAL AERIAL PHOTOGRAPHS

Review of the historical aerial photographs did not indicate the presence of any land use activities on or adjacent the subject parcels that would be cause for environmental concern.

8.4 ENVIRONMENTAL DATABASES

The non-geocoded sites were found not to have the potential to affect the site. Careful review of the geo-coded sites, taking into consideration the nature of the records and the locations of the sites, indicates that there are listings with the potential to affect the site.

8.5 SITE RECONNAISSANCE

No on-site RECs were observed during the June 29, 2020 site reconnaissance. One dry cleaner located potentially upgradient from the site, to the southwest has the potential to impact the site if a release were to occur.

8.6 INTERVIEWS

Interviews with the Owners representative and tenant did not indicate the potential for any RECs on or adjacent to the site.

9 OPINION

Based on a review of the records found in databases compliant with EPA AAI and ASTM E 1527-13, the site reconnaissance, and other available information, it is MJ's opinion that there are no RECs associated with current or historical on site use. However, environmental contamination may be present within the site due to upgradient current and former use.

10 CONCLUSION

The site has been residential, office and commercial use since at least 1896. No on site current or historical use RECs were identified on the site; however, based on the assumed direction of groundwater flow the east/southeast, several potentially upgradient properties were identified as potentially impacting the site. It this is a concern; MJ recommends that a Phase II ESA be completed. The Phase II ESA should include a limited subsurface investigation (SSI).

11 DEVIATIONS

There were no significant deviations from the ASTM E 1527-13 during completion of this Phase I ESA.

12 ADDITIONAL SERVICES

Additional services were not provided for this Phase I ESA.

13 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

Individual:

Georgeanna Nugent
Regional Division Manager
McFarland-Johnson, Inc.
60 Railroad Place
Saratoga Springs, NY 12866

Education:

SUNY Plattsburgh
Plattsburgh, New York
Bachelor of Science, May 1998
Major: Environmental Science and Geology

Colorado School of Mines
Golden, Colorado
Master of Science, December 1999

Major: Environmental Science and Engineering

Experience

Ms. Nugent is the Regional Environmental Division Director with 20 years of environmental consulting experience. She has performed more than 50 Phase I environmental site investigations and Phase II subsurface investigations to assess hydrogeology and extent of groundwater and subsurface contamination. In addition, Ms. Nugent is a certified hazardous materials manager.

14 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

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

Signed: _____

Name/Title: Georgeanna Nugent, Regional Environmental Division Manager

Date: _____

APPENDIX 2

TRANSPORTATION

Philip Habib & Associates
Engineers and Planners • 102 Madison Avenue • New York, NY 10016 • 212 929 5656 • 212 929 5605 (fax)

DRAFT

TECHNICAL MEMORANDUM

TO: **NYCDCP**

FROM: **Philip Habib & Associates**

DATE: **November 16, 2020**

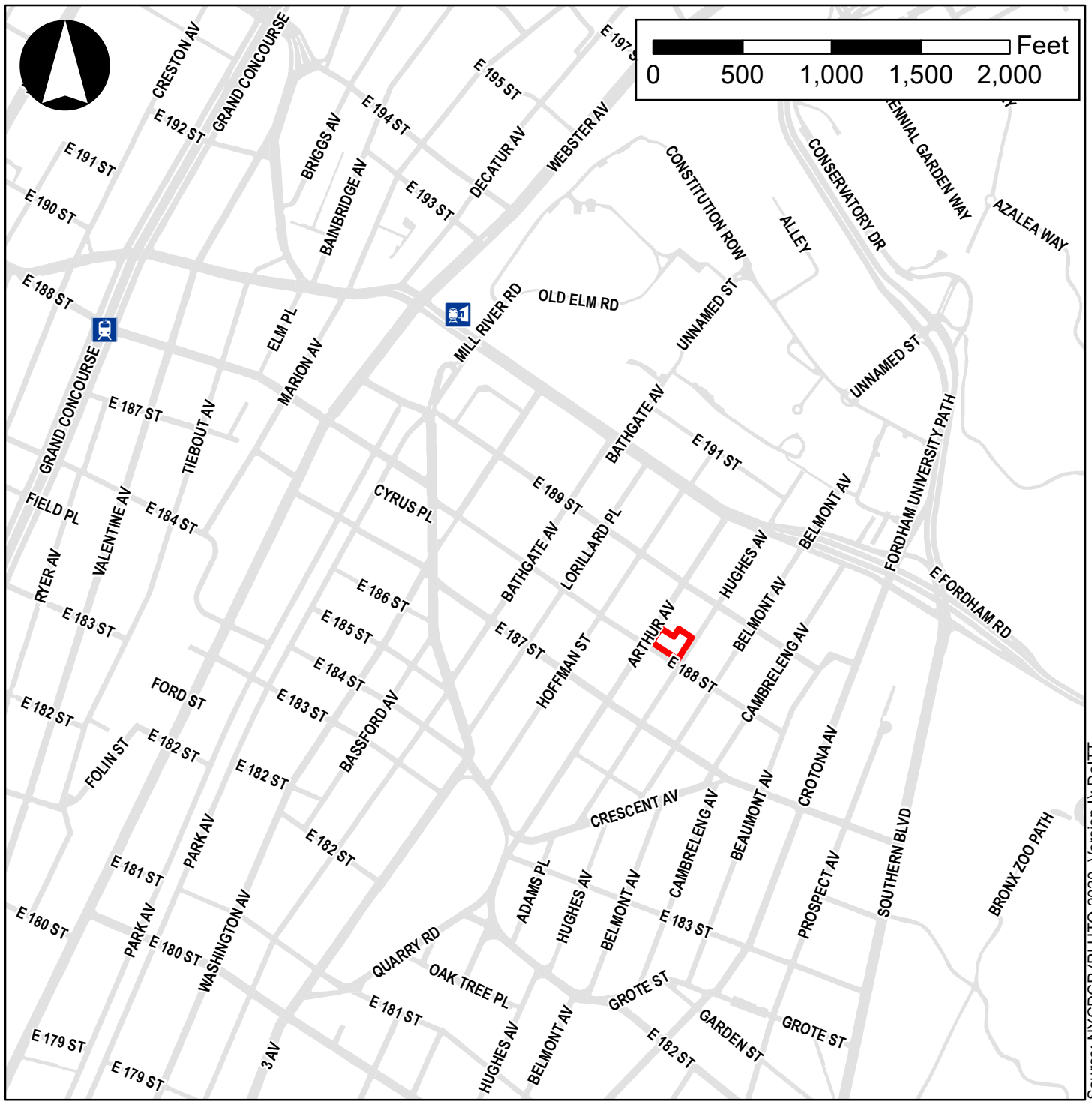
PROJECT: **Arthur Avenue Rezoning EAS (PHA No. 1901)**

RE: **Transportation Planning Factors and Travel Demand Forecast**

This memorandum summarizes the transportation planning factors used to forecast travel demand for the Arthur Avenue Rezoning project. Estimates of peak hour travel demand for the Proposed Actions' reasonable worst-case development scenario (RWCDS) and an Alternate Residential Scenario are provided, along with screening analyses to determine the need for further detailed impact analyses. As described below, significant adverse impacts to transportation systems and services are considered unlikely to occur under either scenario based on 2014 *CEQR Technical Manual* guidance, and further detailed analyses are not warranted.

THE PROPOSED ACTIONS

The Applicant, 2461 Hughes Associates LLC, is seeking approval for two discretionary actions to facilitate the redevelopment of 2457 Hughes Avenue (Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58) (the "Development Site") with a mixed-use commercial/residential development of approximately 150,753 gross square feet (gsf) in the Belmont/Little Italy neighborhood of Bronx Community District (CD) 6 (the "Proposed Project"). The discretionary actions include: (1) a zoning map amendment to rezone the following tax lots on Bronx Block 3077 in their entirety: Lots 29, 31, 33, 53, 54, 55, 56, and 58, as well as a portion of (p/o) Lot 34 (the "Rezoning Area") from R6 and R6/C2-4 zoning districts to a C6-1 (R7-2 equivalent) zoning district; and (2) a zoning text amendment to Appendix F of the *Zoning Resolution of the City of New York* (ZR) to designate the Rezoning Area as a Mandatory Inclusionary Housing (MIH) Area (collectively known as the "Proposed Actions"). As shown in **Figure 1**, the Development Site, which contains approximately 20,462 square feet (sf) of lot area and is currently occupied by several low-rise buildings totaling 27,337 gsf, is bounded by East 188th Street on the south, Hughes Avenue on the east and Arthur Avenue on the west.



Source: NYCDCP (PLUTO 2020, Version I); DoITT

Legend

- Development Site
- Fordham Metro-North Station
- Fordham Road Subway (B,D) Station



The proposed actions would facilitate the construction of new housing, including affordable housing, providing opportunities for those that work or go to school in the surrounding area to live in the neighborhood. In addition, the Proposed Actions would facilitate the construction of the only hotel in the Belmont/Little Italy neighborhood, and one of the few full-service hotels in the Bronx.

THE REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDS)

In order to assess the potential effects of the Proposed Actions, a RWCDS for both "future without the Proposed Actions" (No-Action) and "future with the Proposed Actions" (With-Action) conditions is analyzed for an analysis year of 2023. Under the No-Action condition, the Applicant would not proceed with the Proposed Project and it is anticipated that none of the lots within the Rezoning Area would be redeveloped. As shown in **Table 1**, existing uses on these lots would remain, including a total of 18 dwelling units (DUs) and 11,574 gsf of commercial space comprised of local retail uses and a funeral home.

In the future with the Proposed Actions, the Applicant-owned Development Site would be redeveloped in accordance with the proposed C6-1 zoning district and MIH Area applicable to the Development Site. The Applicant intends to construct two new buildings on the Development Site totaling approximately 150,753 gsf (refer to **Table 1**). One building, known as Building A, would contain approximately 58,091 gsf of residential uses, comprised of approximately 56 dwelling units (DUs) including approximately 11 affordable DUs. Building A would have an entrance on East 188th Street, near the northwest corner of East 188th Street and Hughes Avenue.

In addition to Building A, an approximately 70,409 gsf hotel containing approximately 176 rooms would be located in a second building, known as Building B. Building B would have two entrances, one on East 188th Street and one on Arthur Avenue, near the northeast corner of East 188th Street and Arthur Avenue. Approximately 156 parking spaces would be provided in an approximately 22,253 gsf parking garage located on a portion of the ground floor and in the cellar of the Proposed Project. These spaces would include 28 accessory parking spaces for the residential component of the Proposed Project, as well as 128 accessory spaces intended for use by the Proposed Project's hotel component. The parking garage would utilize stackers, and vehicle access would be via a new curb cut on Arthur Avenue.

In addition to the Proposed Project, a second RWCDS, the Alternate Residential Scenario will also be assessed in the EAS. As shown in **Table 2**, under this scenario a 135,438 gsf mixed-use building would be constructed on the Development Site containing a total of 100 DUs, 21,007 gsf of local retail space, and 28 accessory parking spaces for the residential component.

TRANSPORTATION PLANNING FACTORS

The trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies and truck trip factors used to forecast travel demand for local retail, office, general light industrial/manufacturing, restaurant and warehousing land uses are summarized in **Table 3**. They were based on factors cited in the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, *2014-*

2018 American Community Survey (ACS) journey-to-work data for census tracts in proximity to the Development Site, New York City Department of Transportation (DOT) mode choice and vehicle occupancy survey data, and factors developed for previous environmental reviews including the 2018 *Jerome Avenue Rezoning FEIS* and the 2018 *M1 Hotel Text Amendment FEIS.* Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand).

It should also be noted that the operators of the existing funeral home use on the Development Site have indicated that they plan to move their business to another location approximately 0.4 miles away irrespective of the Proposed Actions. Therefore, the forecast conservatively assumes that no travel demand will be generated by this use in the No-Action condition.

TABLE 1

2023 No-Action and With-Action Land Uses Under the Proposed Project's RWCDS

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential			
Residential	18 DU	56 DU	38 DU
Commercial			
Hotel	0 gsf	70,409 gsf 176 rooms	70,409 gsf 176 rooms
Local Retail	5,664 gsf	0 gsf	-5,664 gsf
Funeral Home*	5,910 gsf	0 gsf	-5,910 gsf
Total Commercial	***11,574 gsf***	***70,409 gsf***	***58,835 gsf***
Parking			
Parking Spaces	0 spaces	156 spaces	156 spaces

Notes: *For conservative analysis purposes, it is assumed that no travel demand will be generated by the funeral home in the No-Action condition.

TABLE 2

2023 No-Action and With-Action Land Uses Under the Alternate Residential Scenario

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential			
Residential	18 DU	100 DU	82 DU
Commercial			
Hotel	0 gsf	0 gsf	0 gsf
Local Retail	5,664 gsf	21,007 gsf	15,343 gsf
Funeral Home*	5,910 gsf	0 gsf	-5,910 gsf
Total Commercial	***11,574 gsf***	***21,007 gsf***	***9,433 gsf***
Parking			
Parking Spaces	0 spaces	28 spaces	28 spaces

Notes: *For conservative analysis purposes, it is assumed that no travel demand will be generated by the funeral home in the No-Action condition.

TABLE 3: Transportation Planning Factors

Land Use:	**Residential**		**Local Retail**		**Hotel**	
Trip Generation:	(1)		(1)		(1)	
Weekday	8.075		205		9.4	
Saturday	9.600		240		9.4	
	per DU		per 1,000 gsf		per room	
Temporal Distribution:	(1)		(1)		(1)	
AM	10.0%		3.0%		8.0%	
MD	5.0%		19.0%		14.0%	
PM	11.0%		10.0%		13.0%	
Saturday	8.0%		10.0%		9.0%	
	(2)		(5)		(5)	
Modal Splits:	All Periods		All Periods		Weekday	Weekend
Auto	18.4%		11.0%		46.0%	53.0%
Taxi	1.2%		0.0%		31.0%	43.0%
Shuttle	0.0%		0.0%		1.0%	0.0%
Subway	35.0%		3.0%		7.0%	2.0%
Railroad	2.7%		0.0%		0.0%	0.0%
Bus	23.1%		2.0%		8.0%	1.0%
Walk/Other	19.6%		84.0%		7.0%	1.0%
	100.0%		100.0%		100.0%	100.0%
	(3)		(3)		(4)	
In/Out Splits:	In	Out	In	Out	In	Out
AM	15.0%	85.0%	50%	50%	41%	59%
MD	50.0%	50.0%	50%	50%	68%	32%
PM	70.0%	30.0%	50%	50%	59%	41%
Saturday	50.0%	50.0%	50%	50%	56%	44%
Vehicle Occupancy:	(2,3)		(5)		(5)	
	AM/PM	MD/SAT	All Periods		Weekday	Weekend
Auto	1.13	1.13	2.10		2.10	2.70
Taxi	1.40	1.40	2.10		2.20	2.20
Shuttle					8.00	8.00
Truck Trip Generation:	(1)		(1)		(4)	
Weekday	0.06		0.35		0.06	
Saturday	0.02		0.04		0.01	
	per DU		per 1,000 sf		per room	
	(1)		(1)		(4)	
AM	12.0%		8.0%		12.0%	
MD	9.0%		11.0%		9.0%	
PM	2.0%		2.0%		2.0%	
Saturday	9.0%		11.0%		9.0%	
	In	Out	In	Out	In	Out
AM/MD/PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes :

(1) Based on 2014 *City Environmental Quality Review (CEQR) Technical Manual.*

(2) Based on *2014-2018 American Community Survey (ACS) Means of Transportation Journey to Work* table for Bronx Census Tract 387, 389, 391, 393 and 397.

(3) Based on data from *Jerome Avenue Rezoning FEIS* , 2018.

(4) *M1 Hotel Text Amendment FEIS* , 2018.

(5) Based on survey data provided by NYCDOT.

TRIP GENERATION

The net incremental change in person and vehicle trips expected to result from the Proposed Project and from the Alternate Residential Scenario by the 2023 analysis year was derived based on the net change in land uses shown in **Tables 1 and 2** and the transportation planning factors shown in **Table 3**. **Table 4** shows estimates of the net incremental change in peak hour person trips and vehicle trips (versus the No-Action condition) that would occur in 2023 with the Proposed Project, and these data are further summarized in **Table 5**. **Tables 6 and 7** show the corresponding data for the Alternate Residential Scenario. As shown in **Tables 4 and 5**, the Proposed Project would generate a net increase of approximately 130 person trips (in + out combined) in the weekday AM peak hour, 26 in the weekday midday, 132 in the weekday PM and 44 in the Saturday peak hour. Peak hour vehicle trips (including auto, taxi and truck trips) would increase by a net total of approximately 74, 106, 110 and 87 (in + out combined) during these same periods, respectively. (The numbers of taxi trips have been balanced to reflect taxis arriving empty to pick up passengers or departing empty after dropping-off passengers.) Subway and commuter rail trips in each peak hour would increase by a combined total of approximately 21, 16, 25 and 11, respectively, while trips by bus would increase by 17, 19, 22 and 6, respectively. Lastly, trips made entirely on foot (walk-only trips) would decrease by 14, 168, 78 and 108 during the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively.

As shown in **Tables 6 and 7**, the Alternate Residential Scenario would generate a net increase of approximately 164 person trips in the weekday AM peak hour, 632 in the weekday midday, 390 in the weekday PM and 434 in the Saturday peak hour. Peak hour vehicle trips would increase by a net total of approximately 18, 38, 31 and 30 during these same periods, respectively. Subway and commuter rail trips in each peak hour would increase by a combined total of approximately 28, 32, 38 and 38, respectively, while trips by bus would increase by 17, 20, 23 and 22 in each period, respectively. Lastly, trips made entirely on foot (walk-only trips) would increase by 95, 508, 280 and 322 during the weekday AM, midday and PM peak hours, and the Saturday peak hour, respectively.

TABLE 4: Travel Demand Forecast—Proposed Project

Land Use:		Residential		Local Retail		Hotel		Total	
Size/Units:		38 DU		-5,664 gsf		176 Rooms			
Peak Hour Person Trips:									
	AM	32		-36		134		130	
	MD	16		-222		232		26	
	PM	34		-118		216		132	
	Saturday	30		-136		150		44	
Person Trips:									
		In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
AM	**Auto**	1	5	-2	-2	25	35	24	38
	Taxi	0	0	0	0	17	25	17	25
	Shuttle	0	0	0	0	1	1	1	1
	Subway	2	10	-1	-1	4	6	5	15
	Railroad	0	1	0	0	0	0	0	1
	Bus	1	6	0	0	4	6	5	12
	Walk/Other	1	5	-15	-15	4	6	-10	-4
	Total	5	27	-18	-18	55	79	42	88
MD	**Auto**	1	1	-12	-12	72	34	61	23
	Taxi	0	0	0	0	49	23	49	23
	Shuttle	0	0	0	0	2	1	2	1
	Subway	3	3	-3	-3	11	5	11	5
	Railroad	0	0	0	0	0	0	0	0
	Bus	2	2	-2	-2	13	6	13	6
	Walk/Other	2	2	-94	-94	11	5	-81	-87
	Total	8	8	-111	-111	158	74	55	-29
PM	**Auto**	4	2	-6	-6	59	41	57	37
	Taxi	0	0	0	0	40	27	40	27
	Shuttle	0	0	0	0	1	1	1	1
	Subway	9	4	-2	-2	9	6	16	8
	Railroad	1	0	0	0	0	0	1	0
	Bus	5	2	-1	-1	10	7	14	8
	Walk/Other	5	2	-50	-50	9	6	-36	-42
	Total	24	10	-59	-59	128	88	93	39
Saturday	**Auto**	3	3	-7	-7	44	35	40	31
	Taxi	0	0	0	0	36	28	36	28
	Shuttle	0	0	0	0	0	0	0	0
	Subway	6	6	-2	-2	2	1	6	5
	Railroad	0	0	0	0	0	0	0	0
	Bus	3	3	-1	-1	1	1	3	3
	Walk/Other	3	3	-58	-58	1	1	-54	-54
	Total	15	15	-68	-68	84	66	31	13
Vehicle Trips :									
		In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
AM	**Auto (Total)**	1	4	-1	-1	12	17	12	20
	Taxi	0	0	0	0	8	11	8	11
	Taxi (Balanced)	0	0	0	0	19	19	19	19
	Shuttle	0	0	0	0	1	1	1	1
	Truck	0	0	0	0	1	1	1	1
	Total	1	4	-1	-1	32	37	33	41
MD	**Auto (Total)**	1	1	-6	-6	34	16	29	11
	Taxi	0	0	0	0	22	10	22	10
	Taxi (Balanced)	0	0	0	0	32	32	32	32
	Shuttle	0	0	0	0	1	1	1	1
	Truck	0	0	0	0	0	0	0	0
	Total	1	1	-6	-6	66	48	62	44
PM	**Auto (Total)**	4	2	-3	-3	28	20	29	19
	Taxi	0	0	0	0	18	12	18	12
	Taxi (Balanced)	0	0	0	0	30	30	30	30
	Shuttle	0	0	0	0	1	1	1	1
	Truck	0	0	0	0	0	0	0	0
	Total	4	2	-3	-3	58	50	60	50
Saturday	**Auto (Total)**	3	3	-3	-3	16	13	16	13
	Taxi	0	0	0	0	16	13	16	13
	Taxi (Balanced)	0	0	0	0	29	29	29	29
	Shuttle	0	0	0	0	0	0	0	0
	Truck	0	0	0	0	0	0	0	0
	Total	3	3	-3	-3	45	42	45	42

TABLE 5: Travel Demand Forecast Summary—Proposed Project

Peak Hour	Vehicle Trips[1]			Person Trips														
				Subway			Railroad			Bus			Walk/Other			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	33	41	74	5	15	20	0	1	1	5	12	17	-10	-4	-14	0	24	24
Midday	62	44	106	11	5	16	0	0	0	13	6	19	-81	-87	-168	-57	-76	-133
PM	60	50	110	16	8	24	1	0	1	14	8	22	-36	-42	-78	-5	-26	-31
Saturday	45	42	87	6	5	11	0	0	0	3	3	6	-54	-54	-108	-45	-46	-91

Notes:

[1]Includes auto, taxi and trucktrips.

[2]Includes walk-only trips and pedestrians walking to/from subway and commuter rail stations and bus stops.

TABLE 6:
Travel Demand Forecast—Alternate Residential Scenario

Land Use:		Residential		Local Retail		Total	
Size/Units:		82 DU		15,343 gsf			
Peak Hour Person Trips:							
	AM	68		96		164	
	MD	34		598		632	
	PM	74		316		390	
	Saturday	64		370		434	
Person Trips:							
		In	Out	In	Out	In	Out
AM	Auto	2	11	5	5	7	16
	Taxi	0	1	0	0	0	1
	Shuttle	0	0	0	0	0	0
	Subway	4	20	1	1	5	21
	Railroad	0	2	0	0	0	2
	Bus	2	13	1	1	3	14
	Walk/Other	2	11	41	41	43	52
	Total	10	58	48	48	58	106
MD	Auto	3	3	33	33	36	36
	Taxi	0	0	0	0	0	0
	Shuttle	0	0	0	0	0	0
	Subway	7	7	9	9	16	16
	Railroad	0	0	0	0	0	0
	Bus	4	4	6	6	10	10
	Walk/Other	3	3	251	251	254	254
	Total	17	17	299	299	316	316
PM	Auto	10	4	17	17	27	21
	Taxi	1	0	0	0	1	0
	Shuttle	0	0	0	0	0	0
	Subway	18	8	5	5	23	13
	Railroad	1	1	0	0	1	1
	Bus	12	5	3	3	15	8
	Walk/Other	10	4	133	133	143	137
	Total	52	22	158	158	210	180
Saturday	Auto	6	6	20	20	26	26
	Taxi	0	0	0	0	0	0
	Shuttle	0	0	0	0	0	0
	Subway	12	12	6	6	18	18
	Railroad	1	1	0	0	1	1
	Bus	7	7	4	4	11	11
	Walk/Other	6	6	155	155	161	161
	Total	32	32	185	185	217	217
Vehicle Trips :							
		In	Out	In	Out	In	Out
AM	Auto (Total)	2	10	2	2	4	12
	Taxi	0	1	0	0	0	1
	Taxi (Balanced)	1	1	0	0	1	1
	Shuttle	0	0	0	0	0	0
	Truck	0	0	0	0	0	0
	Total	3	11	2	2	5	13
MD	Auto (Total)	3	3	16	16	19	19
	Taxi	0	0	0	0	0	0
	Taxi (Balanced)	0	0	0	0	0	0
	Shuttle	0	0	0	0	0	0
	Truck	0	0	0	0	0	0
	Total	3	3	16	16	19	19
PM	Auto (Total)	9	4	8	8	17	12
	Taxi	1	0	0	0	1	0
	Taxi (Balanced)	1	1	0	0	1	1
	Shuttle	0	0	0	0	0	0
	Truck	0	0	0	0	0	0
	Total	10	5	8	8	18	13
Saturday	Auto (Total)	5	5	10	10	15	15
	Taxi	0	0	0	0	0	0
	Taxi (Balanced)	0	0	0	0	0	0
	Shuttle	0	0	0	0	0	0
	Truck	0	0	0	0	0	0
	Total	5	5	10	10	15	15

TABLE 7: Travel Demand Forecast Summary—Alternate Residential Scenario

Peak Hour	Vehicle Trips[1]			Person Trips														
				Subway			Railroad			Bus			Walk/Other			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	5	13	18	5	21	26	0	2	2	3	14	17	43	52	95	51	89	140
Midday	19	19	38	16	16	32	0	0	0	10	10	20	254	254	508	280	280	560
PM	18	13	31	23	13	36	1	1	2	15	8	23	143	137	280	182	159	341
Saturday	15	15	30	18	18	36	1	1	2	11	11	22	161	161	322	191	191	382

Notes:
[1]Includes auto, taxi and trucktrips.
[2]Includes walk-only trips and pedestrians walking to/from subway and commuter rail stations and bus stops.

LEVEL 1 SCREENING ASSESSMENT

The *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine if quantified operational analyses of transportation conditions are warranted. As discussed in the following sections, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the numbers of person and vehicle trips attributable to the Proposed Actions. According to the *CEQR Technical Manual*, if a proposed action is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (a Level 2 assessment) are to be performed to estimate the incremental trips that could occur at specific transportation elements and to identify potential locations for further analysis. If the trip assignments show that the proposed action would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area or crosswalk, then further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, vehicular and pedestrian safety, and parking.

Traffic

Based on *CEQR Technical Manual* guidance, a quantified traffic analysis is typically required if a proposed action would result in 50 or more vehicle trip ends in a peak hour at one or more intersections. As shown in **Table 5**, under the Proposed Actions' RWCDS, the net number of incremental vehicle trips—74, 106, 110 and 87 in the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively—would exceed the 50-trip threshold in all four periods, and a Level 2 screening analysis is therefore warranted to determine which, if any, intersections would require quantified analysis. As shown in **Table 7**, under the Alternate Residential Scenario, the net number of incremental vehicle trips—18, 38, 31 and 30 in the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively—would be less than the 50-trip threshold in all four periods. Therefore, significant adverse traffic impacts are considered unlikely to occur under this scenario based on *CEQR Technical Manual* guidance, and further analysis of traffic conditions under the Alternate Residential Scenario is not warranted.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus route in one direction, or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, detailed bus and/or subway analyses would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in **Tables 5 and 7**, the Proposed Actions are expected to generate approximately 20 and 24 incremental subway trips in the weekday AM and PM peak hours, respectively, while the Alternate Residential Scenario is expected to generate approximately 26 and 36 incremental subway trips during these same periods, respectively. As these numbers of trips would be less than the 200-trip threshold, significant adverse subway impacts are considered unlikely to occur based on *CEQR Technical Manual* guidance, and further analysis of subway conditions is not warranted for either the Proposed Actions or the Alternate Residential Scenario.

As also shown in **Tables 5 and 7**, the Proposed Actions are expected to generate approximately 17 and 22 incremental bus trips in the weekday AM and PM peak hours, respectively, while the Alternate Residential Scenario is expected to generate approximately 17 and 23 incremental bus trips during these same periods, respectively. As a total of seven NYC Transit bus routes operate within approximately ¼-mile of the Development Site—the Bx9, Bx12, BX12 SBS, Bx15, Bx17, Bx19 and Bx22—the number of incremental trips in one direction on any one of these routes is not expected to reach the 50-trip *CEQR Technical Manual* analysis threshold under either scenario. Therefore, further detailed analysis of bus conditions is not warranted.

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in **Table 5**, the Proposed Actions' RWCDS would generate a net incremental increase of approximately 24 pedestrian trips (including walk-only trips and pedestrians en route to and from nearby subway and commuter rail stations and bus stops) in the weekday AM peak hour, and net decreases of 133, 31 and 91 pedestrian trips in the weekday midday, PM and Saturday peak hours, respectively. As it would add fewer than 200 incremental pedestrian trips in all peak periods, the Proposed Actions' RWCDS is not expected to result in significant adverse pedestrian impacts, and further detailed analysis of pedestrian conditions under this scenario is not warranted.

As shown in **Table 7**, the Alternate Residential Scenario would result in a net incremental increase of approximately 140, 560, 341 and 382 pedestrian trips in the weekday AM, midday and PM peak hours,

and Saturday peak hour, respectively. As the numbers of trips in the weekday midday and PM peak hours and the Saturday peak hour would exceed the 200-trip threshold, a Level 2 screening analysis is warranted for these periods to determine which, if any, pedestrian elements would require quantified analysis.

LEVEL 2 SCREENING ASSESSMENT

Traffic

As shown in **Table 5** and discussed above, the Proposed Project is expected to result in a net incremental increase of approximately 74, 106, 110 and 87 vehicle trips during the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively. As these traffic volumes would exceed 50 trips in each peak hour (the *CEQR Technical Manual* Level 1 screening threshold for a detailed analysis), an assignment of net increment traffic volumes was prepared for each period to determine which, if any, individual intersections would require analysis (a Level 2 screening assessment).

Area Street Network

As discussed above, the Proposed Actions would facilitate the redevelopment of 2457 Hughes Avenue with approximately 150,753 gsf of mixed-use commercial/residential development in the Belmont/Little Italy neighborhood of the Bronx. As shown in **Figure 1**, the street network in the vicinity of the Development Site is generally comprised of an irregular grid pattern of collector and one-way local streets. Many of the intersections along local streets are stop-controlled, with traffic signals more common along collector streets and arterial roadways.

The Development Site itself has frontages along Hughes Avenue on the east, Arthur Avenue on the west and East 188th Street on the south. **Hughes Avenue** operates one-way northbound with one moving lane and parking along both curbs, while **Arthur Avenue** operates one-way southbound with one to two moving lanes and parking along both curbs. **East 188th Street** operates one-way eastbound with one moving lane and parking along both curbs. The primary arterial near the Development site is **East Fordham Road**. To the west of Hughes Avenue, East Fordham Road typically operates with two moving lanes and a dedicated curbside bus lane in each direction. Left-turn bays are also provided at some intersections. To the east of Hughes Avenue, East Fordham Road splits into at-grade eastbound and westbound services roads, each with two moving lanes, and a below-grade mainline with two moving lanes in each direction. Intersections in the immediately vicinity of the Development Site are stop-controlled, while intersections along East Fordham Road are typically signalized.

Traffic Assignment and Analyzed Intersections

The assignments of auto and taxi trips to the street network in proximity to the Development Site were based on the anticipated origins and destinations of vehicle trips associated with the residential, hotel and local retail land uses reflected in the Proposed Project. The assignments of trips associated with the proposed residential and hotel uses were based on 2012-2016 AASHTO CTPP[1] journey-to-work data for Bronx census tracts 387, 389, 391, 393 and 397 which are located in proximity to the Development Site. As local retail would generate mostly local trips, the origins/destinations for this No-Action use were based on population density in proximity to the Development Site and surrounding neighborhoods within a 1/4-mile radius.

Tables 8 and 9 show the directional distributions of auto and taxi trips by land use based on the origin/destination data. Using these distributions, auto and taxi trips were first assigned to various portals on the periphery of the Belmont/Little Italy neighborhood, and from there via the most direct route to the Development Site. As the Proposed Project would include on-site accessory parking, auto trips were assigned directly to/from the on-site parking entrance on Arthur Avenue. Taxi trips were assigned to the building frontages on Arthur Avenue, Hughes Avenue and East 188th Street. Lastly, trucks were assigned to East Fordham Road, which is a DOT-designated Local Truck Route, and then to the most direct paths to and from the Proposed Project's loading dock on Arthur Avenue.

TABLE 8: Directional Distribution of Auto/Taxi Trips for Residential/Hotel Uses

Land Use	Bronx	Brooklyn	Manhattan	Queens	Staten Island	Long Island	New Jersey	Upstate
Residential/Hotel	47.8%	0%	22.3%	2.2%	0%	0.9%	13.3%	13.5%

Notes: Based on 2012-2016 AASHTO CTPP journey-to-work data for Bronx census tracts 387, 389, 391, 393 and 397.

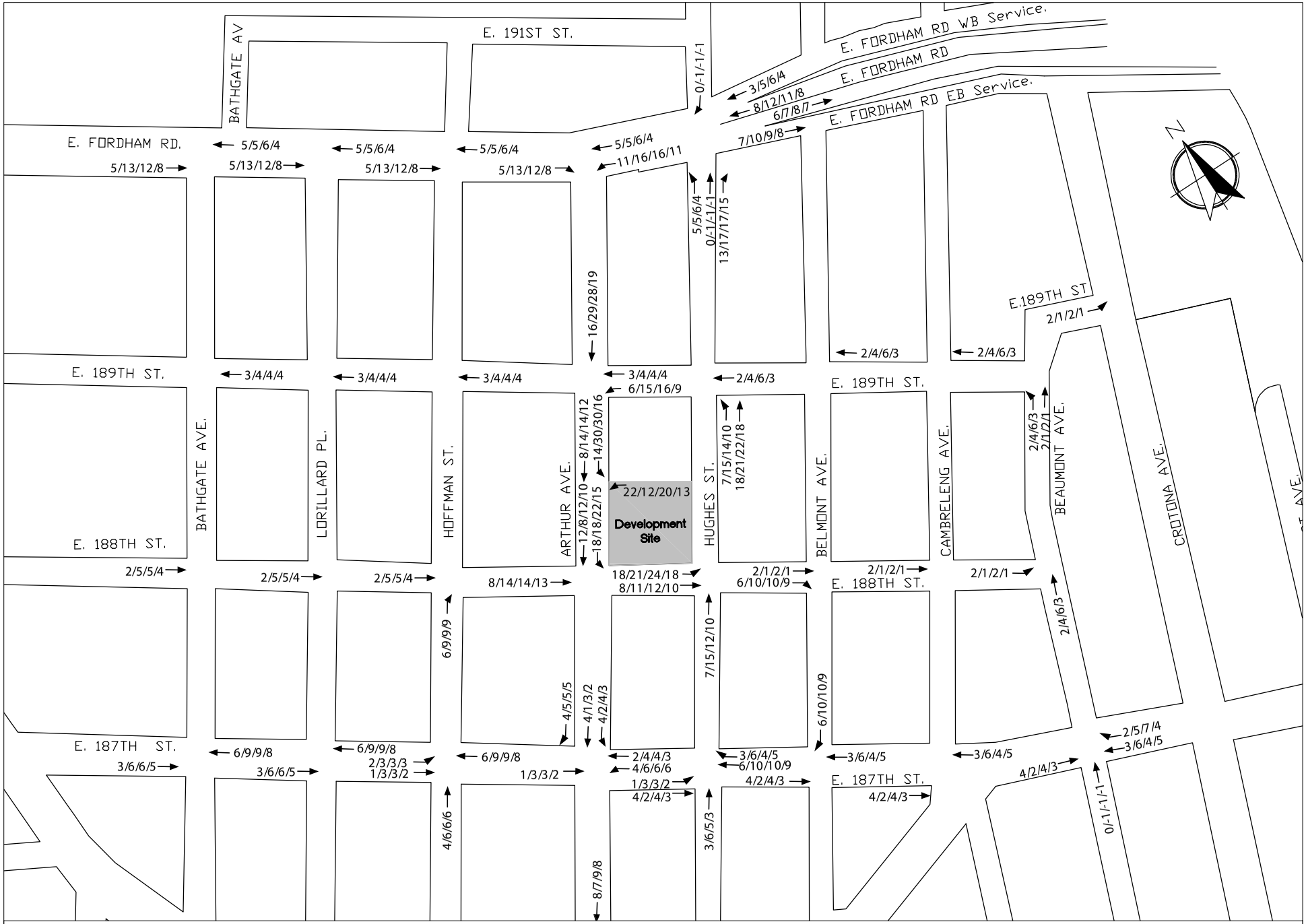
TABLE 9: Directional Distribution of Auto/Taxi Trips for the Local Retail Use

Land Use	North	South	East	West
Local Retail	20%	40%	20%	20%

Notes: Based on population density within ¼-mile of the Development Site.

Figure 2 shows the assignments of the net incremental peak hour vehicle trips generated by the Proposed Project at intersections in proximity to the Development Site. As discussed above, under *CEQR Technical Manual* guidance, a detailed traffic analysis is warranted if a trip assignment shows that a proposed action would generate 50 or more peak hour vehicle trips at an intersection. As shown in **Figure 2**, no intersection is expected to experience 50 or more incremental trips in any peak hour. Therefore, based on *CEQR Technical Manual* guidance, significant adverse traffic impacts are considered unlikely to occur as a result of the Proposed Actions, and a detailed traffic analysis is not warranted.

[1] American Association of State Highway and Transportation Officials Census Transportation Planning Products



Arthur Avenue Rezoning

Figure 2

Incremental Peak Hour Traffic Volumes - Proposed Project RWCDS

Pedestrians

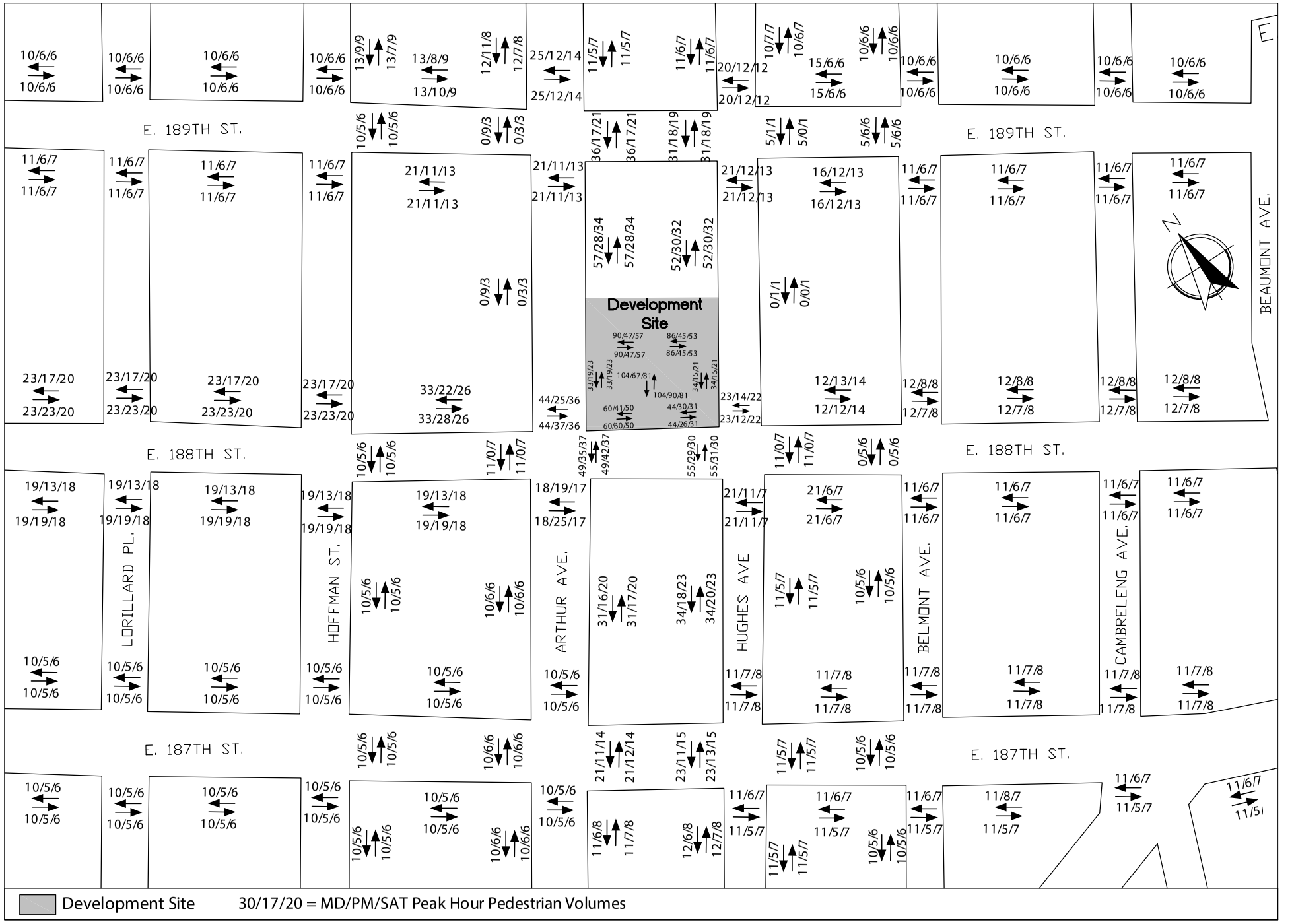
As discussed above, under *CEQR Technical Manual* guidance, detailed pedestrian analyses are generally warranted if a proposed action is projected to result in 200 or more new peak hour pedestrians at any sidewalk, corner area, or crosswalk. As shown in **Table 7**, the Alternate Residential Scenario is expected to generate approximately 508 incremental walk-only trips in the weekday midday peak hour, 280 in the weekday PM peak hour, and 322 in the Saturday peak hour. Persons walking to and from subway and commuter rail stations and bus stops would add approximately 52, 61 and 60 incremental pedestrian trips to sidewalks and crosswalks near the Development Site during these same periods, respectively. As the total number of trips during each of the weekday midday and PM and Saturday periods would exceed the 200-trip threshold, a Level 2 screening analysis is warranted for these periods to determine which, if any, pedestrian elements would require quantified analysis under the Alternate Residential Scenario.

Subway, commuter rail, bus and walk-only trips each have a different assignment pattern. Subway trips were assigned to the Fordham Road (B, D) subway station located on the Grand Concourse at East 188th Street, a 15-minute walk to the west of the Development Site (see **Figure 1**). Commuter rail trips were assigned to the Metro-North Fordham station on East Fordham Road near Third Avenue, while bus trips were assigned to stops for the multiple bus routes serving the Development Site along East Fordham Road, Crotona Avenue and Third Avenue. Walk-only trips were distributed throughout the local street network. In the weekday PM peak period, new pedestrian trips would be most concentrated on sidewalks and crosswalks adjacent to the Development Site and along corridors connecting the site to the nearby subway and Metro-North stations and to bus stops. In the weekday midday and Saturday periods, pedestrian trips would tend to be more dispersed, as people travel throughout the area for dining, shopping and/or running errands.

The assignment of incremental pedestrian trips in the weekday midday and PM peak hours and Saturday peak hour is shown in **Figure 3**. As shown in **Figure 3**, no sidewalk, corner area or crosswalk would experience 200 or more incremental trips in any of these peak hours. Therefore, based on *CEQR Technical Manual* guidance, significant adverse pedestrian impacts are considered unlikely to occur under the Alternate Residential Scenario, and a detailed analysis of pedestrian conditions under this scenario is not warranted.

Parking

Under *CEQR Technical Manual* guidance, on- and off-street parking analyses may be warranted if a quantified traffic analysis is necessary based on the Levels 1 and 2 screening analyses. Based on the screening analyses detailed above, a quantified traffic analysis was not found to be warranted for either the Proposed Project or the Alternate Residential Scenario. Therefore, based on *CEQR Technical Manual* guidance, quantified parking analyses are also not warranted for either scenario.



Arthur Avenue Rezoning

Figure 3

Incremental Peak Hour Pedestrian Volumes - Alternate Residential Scenario

SUMMARY OF FINDINGS

Based on the results of the Level 1 and Level 2 screening analyses, neither the Proposed Project nor the Alternate Residential Scenario would meet or exceed *CEQR Technical Manual* thresholds for detailed traffic, transit, pedestrian or parking analyses. Significant adverse impacts to transportation systems and services are therefore considered unlikely to occur based on *CEQR Technical Manual* guidance, and further detailed transportation analyses are not warranted.

APPENDIX 3

NEW YORK CITY LANDMARKS PRESERVATION COMMISSION CONSULTATION

NYC Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-X
Project: 2457 HUGHES AVENUE
Date received: 2/25/2019

Properties with no Architectural or Archaeological significance:

1) ADDRESS: 2450 Arthur Avenue, BBL: 2030770029
2) ADDRESS: 2452 Arthur Avenue, BBL: 2030770031
3) ADDRESS: 2456 Arthur Avenue, BBL: 2030770033
4) ADDRESS: 2458 Arthur Avenue, BBL: 2030770034
5) ADDRESS: 2461 Hughes Avenue, BBL: 2030770053
6) ADDRESS: 2459 Hughes Avenue, BBL: 2030770054
7) ADDRESS: 2457 Hughes Avenue, BBL: 2030770055
8) ADDRESS: 617 East 188 Street, BBL: 2030770056
9) ADDRESS: 609 East 188 Street, BBL: 2030770058

Gina Santucci 3/1/2019

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 34004_FSO_DNP_03012019.doc

APPENDIX 4

AGENCY CORRESPONDENCE

Philip Habib & Associates

Engineers and Planners • 102 Madison Avenue • New York, NY 10016 • 212 929 5656 • 212 929 5605 (fax)

MEMORANDUM

TO: New York City Department of City Planning

FROM: Philip Habib & Associates

DATE: November 16, 2020

PROJECT: Arthur Avenue Rezoning EAS (CEQR No. 21DCP079X)

RE: Response to Notice of Comments – Transportation (TDF/TPF Memo) and Air Quality

The following are responses to the New York City Department of City Planning's (NYCDCP's) November 13, 2020 comments on the Arthur Avenue Rezoning EAS (CEQR No. 21DCP079X). NYCDCP's comments are included in *bold italics*, followed by PHA's responses in plain text.

NYCDCP Transportation Comments:

1. ***Please fix the previous typo for the MD/Sat Residential Auto occupancy; it should be 1.13 and reference the following: Based on the 2014-2018 American Community Survey (ACS) Means of Transportation Journey to Worktable for Bronx Census Tract 387, 389, 391, 393, and 397.***

PHA Response: This comment has been addressed in the latest version of the TDF memo dated November 16, 2020. The revised memo and applicable backup data have been submitted with this memorandum.

NYCDCP Air Quality Comments:

HVAC Source Impact:

1. ***The proposed project would comprise a development with commercial and residential use. As a conservative approach, please revise Figure G-5 in the Air Quality Chapter and Figure B-3 in Attachment B Supplemental Screening, assuming all proposed uses are residential use, and use Figure 17-5 of the AQ Appendix in CEQR Technical Manual to conduct a HVAC nomograph screening.***

PHA Response:

This comment has been addressed in the latest version of Attachment B, "Supplemental Screening" and Attachment G, "Air Quality," dated November 16, 2020. The revised attachments have been submitted with this memorandum.

Industrial Source Impact:

2. ***The emission rates shown in the EAS Table G-10 are inconsistent as shown in the permits provided from the prototypical facilities (Permits PA016798R and PA016898Y). Please explain how the emission rates shown in Table G-10 and Table G-11 are derived. Also, the background concentrations for Annual $PM_{2.5}$ and NO_2 in Table G-11 are incorrect, please revise the background concentrations corresponds to the background concentrations used in HVAC source impact analysis (Table G-9).***

PHA Response:

This comment has been addressed in the latest version of Attachment G, "Air Quality," dated November 16, 2020. The revised attachment has been submitted with this memorandum.

Regarding these two datasets – one is for the emission rates that are listed in the permits for prototypical facilities and the second is for those that need to be estimated specifically for Prince Bakery, Inc. Unfortunately, the permit for Prince Bakery, Inc. contains neither the types of pollutants nor their emission rates.

To conduct the analysis for this industrial facility, the types of expected pollutants need to be determined first. Therefore, permits for prototypical facilities (Permits PA016798R and PA016898Y) were presented as part of the review process for a single purpose - to determine which pollutants could be associated with baking operations. Based on this review, it was determined that these operations are predominantly associated with natural gas or fuel oil firing in the baking ovens, and that three criteria pollutants – PM, NOx, and SO_2 – should be subject pollutants for industrial source analysis for baking operations. Emission rates for these three pollutants were then estimated assuming that they are emitted from the operations at Prince Bakery, Inc. The permit for Prince Bakery, Inc. contained the type of fuel burned, hourly and annual fuel consumption rates, and facility operating hours – all of which were used in the analysis.

The permit shows that Prince Bakery, Inc. operates nine hours per day for 365 days per year and uses three gallons of No. 2 fuel oil per hour. Using these permitted Prince Bakery, Inc. data and AP-42 emission factors for fuel oil combustion "Criteria Pollutant Emission Factors for Fuel Oil Combustion" (Tables 1.3-1 and 1.3-2), emission rates were calculated. All particulate matter was assumed to be 100 percent $PM_{2.5}$. With a $PM_{2.5}$ emission factor of 4.13 pounds per 1,000 gallons of fuel oil burned, a NOx emission factor of 20 pounds per 1,000 gallons of fuel oil burned, short-term emission rates for $PM_{2.5}$ and NO_2 were calculated as follows:

- $PM_{2.5}$ - 0.0124 lb/hr (4.13/1000 lb/galx3 gal/hr = **0.01240 lb/hr**)
- NO_2 - 0.06 lb/hr (20/1000lb/gal x 3 gal/hr = **0.06 lb/hr**)

These estimated emission rates for Prince Bakery, Inc. are provided in Table G-10 of the attachment. As explained, they are not the values presented in permits PA016798R and PA016898Y for prototypical facilities.

3. ***As shown in the prototypical facilities permits, Ethanol is one of the listed contaminants and its emission should be included in the calculations. Please assess Ethanol's possible emission for Prince Bakery, Inc. against DAR-1 and present the result in the chapter.***

PHA Response:

This comment has been addressed in the latest version of Attachment G, "Air Quality," dated November 16, 2020. The revised attachment has been submitted with this memorandum.

When conducting a conservative screening analysis using comparable data from prototypical facilities – not facility-specific data – it is common to consider only those critical pollutants that have the potential to determine whether a subject facility may have a potential significant impact. To conduct an analysis for a pollutant that may not be used in the operations at Prince Bakery, Inc., such as ethanol, which has a low toxicity ("C") rating with an annual AGC value of 45,000 µg/m^3 did not seem necessary. If an annual emission rate of 885 lb/year or 0.01273 g/sec (from PA016798R and PA016898Y) were used for ethanol, the maximum estimated actual impacts from Prince Bakery, Inc. would be about 1.1 µg/m^3. If this value were compared to ethanol's AGC of 45,000 µg/m^3, it would result in 0.002% of AGC. However, as requested, ethanol has been included in Table G-11 of the attachment.

4. ***The total annual concentrations of PM2.5 and NO2 shown in Table G-11 exceed the NAAQS thresholds, however, the EAS concludes that "toxic air pollutants from the industrial source (Prince Bakery, Inc.) located near the Proposed Project would not significantly impact the Proposed Project's sensitive uses". Please make sure the statement in the EAS corresponds to the estimated results.***

PHA Response:

This comment has been addressed in the latest version of Attachment G, "Air Quality," dated November 16, 2020. The revised attachment has been submitted with this memorandum.

This annual background concentrations provided in Table G-11 should be the same as those provided in Table G-9 for the detailed HVAC analysis. Table G-11 has been revised to include annual background concentrations of 7.8 µg/m^3 for $PM_{2.5}$ and 26.4 µg/m^3 for NO_2.

Estimated Pollutant Emission Rates			Annual impact for 1 g/sec	Actual Annual Impact	Annual Bkgd Conc.	Total Annual Conc.	CEQR Threshold	NAAQS	Exceed
Pollutant	lb/year	g/sec	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	Yes/No
PM2.5	40,73	0.00059	84	00492	7.8	7.8	0.3	12	No
NO2	197.1	0.00283	84	0.2331	26.4	26.6	-	100	No

As shown in the table, neither the annual CEQR threshold value of 0.3 µg/m^3 or the annual NO_2 NAAQS of 100 µg/m^3 are exceeded. Therefore, no significant adverse impact to air quality from the industrial source would occur.

5. ***An expired permit (PB517003) is identified in the DEP CATS database for Prince Bakery, Inc., DCP has informed DEP about the facility and requested to verify if any industrial processing is involved. Further comments may follow upon DEP's response.***

PHA Response:

PHA awaits further instruction on this comment, if warranted by NYCDCP.

Philip Habib & Associates

Engineers and Planners • 102 Madison Avenue • New York, NY 10016 • 212 929 5656 • 212 929 5605 (fax)

MEMORANDUM

TO: New York City Department of City Planning

FROM: Philip Habib & Associates

DATE: December 1, 2020

PROJECT: Arthur Avenue Rezoning EAS (CEQR No. 21DCP079X)

RE: Response to Notice of Comments – Noise

The following are responses to the New York City Department of City Planning's (NYCDCP's) November 30, 2020 comments on the Arthur Avenue Rezoning EAS (CEQR No. 21DCP079X). NYCDCP's comments are included in *bold italics*, followed by PHA's responses in plain text.

NYCDCP Noise Comments:

1. ***As noise PCE calculation seems to have used updated Transportation analysis, please make sure to provide noise PCE calculation in an excel spreadsheet and all related back-ups for review. Similarly, please provide excel spreadsheet that shows noise calculation for Table H-9.***

PHA Response:

The noise PCE calculations provided in the file titled "1901_Arthur Avenue Rezoning EAS_Noise Analysis_12.01.2020_Revision.xlsx" are the most up to date and are reflective of the trip generation approved by NYCDCP on 11/20/2020. The noise PCE calculations are provided in Tabs 6, 7, 8, and 9 of the excel file. Additionally, the calculations provided in Table H-9 are provided in the file titled "1901_Arthur Avenue Rezoning EAS_Playground Noise Analysis_12.01.2020_Revision.xlsx," specifically tabs 3, 4, and 5. These backup files have been provided with this memorandum.

2. ***Please confirm whether proposed outdoor recreational space proposed by the proposed building would include noise generating amenities or not. If not, include description of the potential use in the chapter specifying that it would not be a noise-generating facility.***

PHA Response:

This comment has been addressed in the latest version of Attachment H, "Noise," dated December 1, 2020. The revised attachment has been submitted with this memorandum. A description of the proposed outdoor recreational space is provided on page H-10. The text on page H-10 includes the following language: "The Proposed Project's full-service hotel would contain an unenclosed recreation area above the first floor within the courtyard of the Proposed Project. The outdoor recreation area is intended to be utilized as amenity

space for the proposed full-service hotel use. Although the design and programming of the outdoor recreation area is undetermined at this time, potential amenities would likely include passive features like seating. The outdoor recreation area would not contain noise-generating amenities, such as a play area or playground."

3. ***Page H-1 of the EAS writes "In the future with the Proposed Actions, the predicted peak period L10 values at the receptor locations would range from a minimum of 63.3 dBA to a maximum of 68.8 dBA." The lowest L10 of 61.9 dBA and the highest L10 of 69 dBA for future with-action noise levels are shown in Table H-8. Please revise above EAS text accordingly.***

PHA Response:

This comment has been addressed in the latest version of Attachment H, "Noise" (on page H-1) and Attachment B, "Supplemental Screening" (on page B-17), each dated December 1, 2020. The revised attachments have been submitted with this memorandum.

4. ***Page H-11 of the EAS writes "Recommended noise attenuation values for buildings are designed to maintain a maximum interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial uses and are determined based on exterior L10 noise levels." As commercial retail uses are not considered noise sensitive receptors, please revise above EAS text to state "Recommended noise attenuation values for buildings are designed to maintain a maximum interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial office uses and are determined based on exterior L10 noise levels" to be consistent.***

PHA Response:

This comment has been addressed in the latest version of Attachment H, "Noise" (on page H-11), dated December 1, 2020. The revised attachment has been submitted with this memorandum.

5. ***Page H-12 of the EAS writes "Based on predicted future With-Action exterior noise levels and CEQR Technical Manual criteria, maximum With-Action L10 noise levels at the receptor location would be greater than 70 dBA and would fall in the "Marginally Unacceptable (I)" CEQR Noise Exposure category, and would require special noise attenuation measures in order to achieve the required interior noise levels...As such, no special noise attenuation measures beyond standard construction practices would be required for residential or community facility uses on any of the Development Site's frontages to achieve the required residential or community facility interior noise level of 45 dBA or lower. Therefore, according to CEQR Technical Manual guidelines, no significant adverse noise impacts would occur as a result of the Proposed Actions." As analyzed future With-Action noise levels are below 70 dBA, please revise above EAS text accordingly.***

PHA Response:

This comment has been addressed in the latest version of Attachment H, "Noise" (on page H-12), dated December 1, 2020. The revised attachment has been submitted with this memorandum.

6. ***Please make sure to include "Playground Noise" section shown in Page H-13 of the EAS prior to "Attenuation Requirement" Section in Page H-11 of the EAS.***

PHA Response:

This comment has been addressed in the latest version of Attachment H, "Noise," dated December 1, 2020. The "Playground Noise" section is now located on pages H-11 and H-12, discussed prior to the "Attenuation Requirements" section. The revised attachment has been submitted with this memorandum.

7. ***Page H-13 of the EAS writes "As shown in Table H- 9, after calculating the predicted L10 noise levels from the existing playground equipment in Ciccarone Park, the future southern façade of either the Proposed Project or the Alternate Residential Scenario would fall in the "marginally acceptable" CEQR Noise Exposure category." Please make sure to analyze cumulative noise levels at eastern or western facades as well.***

PHA Response:

This comment has been addressed in the latest version of Attachment H, "Noise," dated December 1, 2020. Both the eastern and western façades of the Proposed Project were analyzed and included in the "Playground Noise" section provided on pages H-11 and H-12. The revised attachment has been submitted with this memorandum.

8. ***Footnote #1 on Table H-9 writes "For conservative analysis purposes, predicted L10 playground noise levels were calculated by combining the playground Leq and the most conservative difference between Leq and L10 monitored noise levels at Receptor Location 2 (3.0 dBA) under existing conditions." Please note that, while described approach is acceptable, generally L10 is thought of as 3 dBA louder than Leq noise levels. As measured relationship between Leq and L10 is specific to nearby traffic noise, if measurement shows difference between Leq and L10 less than 3 dBA, one must assume the difference between Leq and L10 as 3 dBA and not lower than 3 dBA.***

PHA Response:

Although no formal response is necessary for this comment, it should be noted that the referenced footnote was removed as this approach is not pertinent to the cumulative playground noise analysis performed and presented in Attachment H, "Noise" (refer to the file titled "1901_Arthur Avenue Rezoning EAS_Playground Noise Analysis_12.01.2020_Revision.xlsx," specifically tabs 3, 4, and 5).

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

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December 3, 2020

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

Re: Arthur Avenue Rezoning
Block 3077, Lots 4, 6, 29, 31, 33, 34, 53, 54, 55, 56, and 58
CEQR # 21DCP079X

Dear Ms. Glass:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the October 2020 Environmental Assessment Statement (EAS) prepared by Philip Habib & Associates and the July 2020 Phase I Environmental Site Assessment (Phase I) prepared by McFarland-Johnson, Inc. on behalf of 2461 Hughes Associates LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking the approval of two discretionary actions from the New York City Department of City Planning (DCP) to facilitate the redevelopment of Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58 (development site) with an approximately 150,753 gross square feet mixed-use commercial/residential development in the Belmont/Little Italy neighborhood of Bronx Community District 6. The discretionary actions include: (1) a zoning map amendment to rezone the following tax lots on Block 3077 in their entirety: Lots 29, 31, 33, 53, 54, 55, 56, and 58, as well as a portion of (p/o) Lot 34 (Rezoning Area 1) from R6 and R6/C2-4 zoning districts to a C6-1 (R7-2 equivalent) zoning district and to rezone Block 3077, portions of Lots 4 and 6 (Rezoning Area 2) from R6 zoning district to an R6/C1-4 zoning district; and (2) a zoning text amendment to Appendix F of the Zoning Resolution of the City of New York to establish a Mandatory Inclusionary Housing area coterminous with the area to be rezoned to a C6-1 district. Block 3077, Lots 33 and 34 within Rezoning Area 1 would not be considered projected or potential development sites. In addition, no sites within Rezoning Area 2 are considered projected or potential development sites. The development site is presently improved with occupied buildings.

The July 2020 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including residential buildings, a shed, clothing manufacturing, a garage, a funeral home, mixed-use residential and commercial buildings, medical offices, Fordham University buildings, a laundromat/dry cleaner, a park, a deli, a salon, a dress shop, an importing company, an olive oil company, a coffee company, a wagon maker, a war memorial park, a health center, a fuel oil company, a coal

yard, an auto repair shop, etc. Regulatory databases identified 21 spills, 1 historical auto site, and 5 historical cleaner sites within 1/8 mile; 14 underground storage tank sites, 109 aboveground storage tank sites, and 1 dry cleaner within 1/4 mile; 42 leaking storage tank sites, 5 voluntary cleanup program sites, and 1 brownfield site within 1/2 mile of the subject property.

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

Development Site: Block 3077, Lots 29, 31, 53, 54, 55, 56, and 58 (Site 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 and testing is not physically possible during the CEQR process, 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.

Future correspondence and submittals related to this project should include the following CEQR # **21DCP079X**. If you have any questions, you may contact me at (718) 595-4358.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
T. Estesen
R. Lucas
M. Wimbish
O. Abinader - DCP
M. Bertini - OER