Brownsville FAC

Environmental Assessment Statement

CEQR No.: 22HPD065K

ULURP No.: TBD

Prepared for:
FAC Brownsville Apartments LP (FAC)

Prepared by:
Philip Habib & Associates

March 2023

Brownsville FAC

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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* **Brownsville FAC**

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) **22HPD065K**	BSA REFERENCE NUMBER (if applicable)
ULURP REFERENCE NUMBER (if applicable) **TBD**	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*

NAME OF LEAD AGENCY
NYC Department of Housing Preservation and Development (HPD)

NAME OF LEAD AGENCY CONTACT PERSON
Anthony Howard, Director, Environmental Planning

ADDRESS **100 Gold Street**

CITY	STATE	ZIP
New York	**NY**	**10038**

TELEPHONE **(212) 863-7248** EMAIL **howarda@hpd.nyc.gov**

4b. *Applicant Information*

NAME OF APPLICANT
FAC Brownsville Apartments LP

NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON
William Yates, Director Housing Development

ADDRESS **621 Degraw Street**

CITY	STATE	ZIP
Brooklyn	**NY**	**11217**

TELEPHONE **(718) 237-2017** EMAIL **jmarcus@fifthave.org**

5. *Project Description*

The FAC Brownsville Apartments LP (the "Project Sponsor") is requesting approval of discretionary actions to facilitate development of new affordable housing (the "Proposed Project") on three sites (Development Sites A, B, and C) in the Brownsville neighborhood of Brooklyn Community District (CD) 16. Development Site A (Block 3743, Lot 12) is a 2,500-sf vacant City-owned lot located at 425 Mother Gaston Boulevard; it would be redeveloped with a four-story, 9,650-gsf mixed residential/commercial building containing six affordable dwelling units (DUs) and 2,500 sf of ground-floor restaurant space. Development Site B (Block 3518, Lot 63) is a 6,000-sf vacant city-owned lot located at 546 Thomas S. Boyland Street; it would be redeveloped with a six-story, 23,662-gsf residential building containing 21 affordable DUs. Development Site C (Block 1455, Lots 65, 66, 79) is a 6,558-sf vacant city-owned property located at 1733 Saint Marks Avenue; it would be redeveloped with a nine-story, 32,285-gsf residential building containing 34 affordable DUs. The five tax lots are owned by the NYC Department of Housing Preservation and Development (HPD) and are located within a 0.07-square mile area (see Figure 1).

To facilitate the Proposed Project, the Project Sponsor is seeking: (i) a zoning map amendment to rezone a portion of Block 1455 comprising the entirety or portions of 17 lots (Lots 46, 50, 56, 60, 61, 62, 64, 65, 66, 79 and portions of Lots 39, 41-44, 58, and 67; the "Proposed Rezoning Area") including Site C from M1-1 to R7A; (ii) a zoning text amendment to map a Mandatory Inclusionary Housing (MIH) area encompassing the Proposed Rezoning Area; (iii) disposition of City-owned property through Urban Development Action Area Project (UDAAP) designation and approval, including Lot 12 on Block 3743; Lot 63 on Block 3518; and Lots 65, 66, and 79 on Block 1455; and (iv) public financing and tax incentives via HPD's Neighborhood Construction Program (NCP) and Article XI, respectively (collectively, the "Proposed Actions").

A reasonable worst-case development scenario (RWCDS) has been established for the Proposed Actions for an analysis year of 2026. In the future with the Proposed Actions, the proposed zoning map amendment, disposition of City-owned property through UDAAP, and provision of public financing would be approved, allowing the Project Sponsor to construct the Proposed Project at Development Sites A, B, and C. In addition, the proposed zoning changes are expected to facilitate the redevelopment of another projected development site (Projected Development Site 1; Block 1455, Lots 46 and 50). In total, under the RWCDS, the Proposed Actions would facilitate the development of up to approximately 146 DUs, including 83 affordable DUs, and 11,270 gsf of commercial space at Development Sites A, B, and C, and Site 1. A single potential development site (Potential Development Site 1; Block 1455, Lots 56 and 58) has also been identifed within the Proposed Rezoning Area, which is considered less likely to be developed by the analysis year of 2026, but will be reviewed for site-specific impacts. Refer to Attachment A, "Project Description" for details.

Project Location

BOROUGH **Brooklyn**	COMMUNITY DISTRICT(S) **16**	STREET ADDRESS **425 Mother Gaston Blvd (Site A), 546 Thomas S. Boyland St (Site B), 1733 St Marks Ave (Site C), 2148 Bergen St, 2152, 2154, 2156, and 2158 Bergen Sts, 266 Mother Gaston Blvd, E New York Ave, 1589 E New York Ave, 1591 E New York Ave, 1611 E New York Ave, St Marks Ave, 1725, 1733, 1735, 1737 St Marks Aves**
TAX BLOCK(S) AND LOT(S) **Block 3743, Lot 12; Block 3518, Lot 63; Block 1455, Lots p/o 39, p/o 41-44, 46, 50, 56, p/o 58, 60-62, 64, 65, 66, p/o 67, 79**		ZIP CODE **11212 and 11233**

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS
Development Site A: On Mother Gaston Boulevard, midblock between Belmont Ave to the north and Sutter Ave to the south.
Development Site B: On Thomas S. Boyland Street, midblock between Pitkin Ave to the north and Sutter Ave to the south.
Development Site C and Rezoning Area: On Saint Marks Avenue, between East New Yok Ave to the east, Eastern Pkwy to the west, and Bergen St to the north.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY
Development Site A: R6/C1-3
Development Site B: R6
Development Site C/Rezoning Area: M1-1

ZONING SECTIONAL MAP NUMBER **17d, 17b, 17c**

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 **Zoning text amendment to Appendix F**

Board of Standards and Appeals: ☐ YES ☒ NO
☐ VARIANCE (use)
☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

Department of Environmental Protection: ☐ YES ☒ NO ☐ Cogeneration Facility ☐ Title V Permit

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

☐ LEGISLATION	☐ FUNDING OF CONSTRUCTION, specify:
☐ RULEMAKING	☐ POLICY OR PLAN, specify:
☐ CONSTRUCTION OF PUBLIC FACILITIES	☒ FUNDING OF PROGRAMS, specify: **HPD NCP, HPD/HCR LITC, Resolution A Funding, Article XI Tax Incentive**
☐ 384(b)(4) APPROVAL	☐ PERMITS, specify:
☐ OTHER, explain:	

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

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

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

7. *Site Description:*

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

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

☒ SITE LOCATION MAP	☒ ZONING MAP	☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP	☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)	

☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): **43,521 sf (Sites A, B, C, and Proposed Rezoning Area)**
Waterbody area (sq. ft) and type: **N/A**
Roads, buildings, and other paved surfaces (sq. ft.): **43,521 sf**
Other, describe (sq. ft.): **N/A**

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): **162,977 gsf**
NUMBER OF BUILDINGS: **4**
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): **Development Site A: 9,650 gsf, Development Site B: 23,662 gsf, Development Site C: 32,285 gsf, Projected Development Site 1: 97,380 gsf**
HEIGHT OF EACH BUILDING (ft.): **Development Site A: 42 ft, Development Site B: 63 ft, Development Site C: 91 ft, Projected Development Site 1: 95 ft**
NUMBER OF STORIES OF EACH BUILDING: **Development Site A: 4, Development Site B: 6, Development Site C: 9, Projected Development Site 1: 9**

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: **6,558 sf (Site C)**

The total square feet not owned or controlled by the applicant: **28,463 sf (Proposed Rezoning Area without Site C; refer to Table A-2 in Attachment A, "Project Description")**

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): **TBD**

AREA OF TEMPORARY DISTURBANCE: **31,762** sq. ft. (width x length)

VOLUME OF DISTURBANCE: **Development Site A: 25,000, Development Site B: 60,000, Development Site C: 65,580, Projected Site 1: 167,040** cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: **31,762** 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.)	**151,707 gsf (includes cellar space)**	**11,270 gsf**	**N/A**	**N/A**
Type (*e.g.,* retail, office, school)	**146 DUs**	**Local retail, Restaurant**	**N/A**	**N/A**

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: **402** NUMBER OF ADDITIONAL WORKERS: **17**

Provide a brief explanation of how these numbers were determined: **Number of residents is based on the average household size of 2.75 for Brownsville Neighborhood Tabulation (NTA) (2020 US Census). The number of workers is based on 3 workers per 1,000 SF of local retail space and 1 worker per 25 DUs.**

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

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

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

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): **2026**

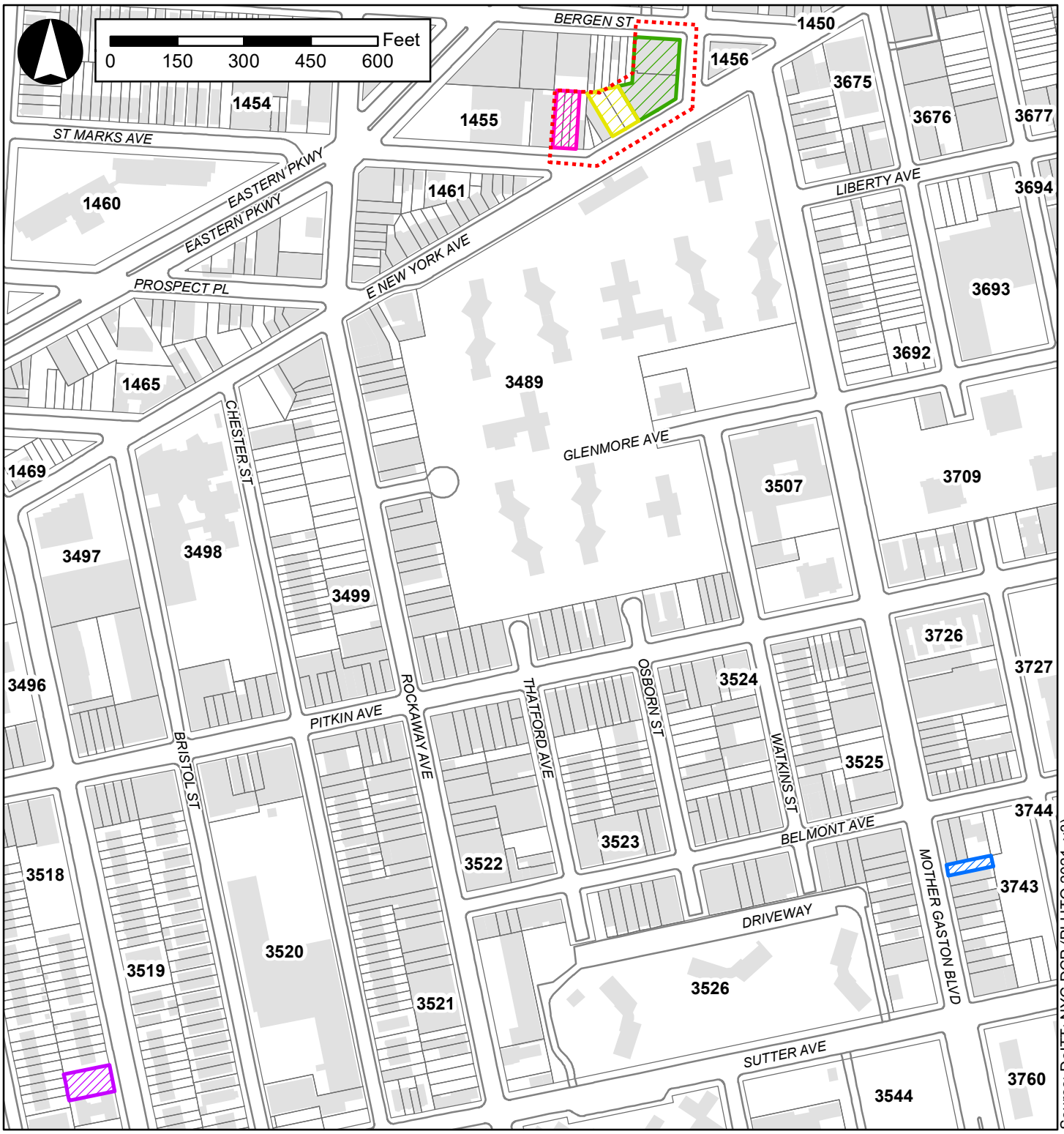
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: **18**

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

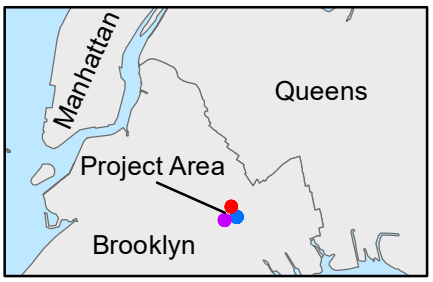
10. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

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



Legend

- Development Site A
- Development Site B
- Development Site C
- Proposed Rezoning Area
- Projected Development Site 1
- Potential Development Site 1
- 3743 Block
- Building Footprints





Brownsville FAC EAS

Figure 2a
Tax Map - Development Site A


FINANCE
NEW • YORK
MARTHA E. STARK
COMMISSIONER
NYC Digital Tax Map
Effective Date : 12-05-2008 18:47:43
End Date : Current
Brooklyn Block: 3518
Legend
Streets
Miscellaneous Text
Possession Hooks
Boundary Lines
Lot Face Possession Hooks
Regular
Underwater
Tax Lot Polygon
Condo Number
Tax Block Polygon
Development Site B
3494
3495
3516
3517
3518
3519
3520
3521
3541
3542
PITKIN AV
HERZL ST
AMBOY ST
HOPKINSON AV
BRISTOL ST
CHESTER ST
Street Widening
STRAUSS ST
SUTTER AV
63
R 66
70
1
5
8
9
10
11
12
13
14
15
16
17
18
19
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21
22
23
24
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131
132
40
50
51
52
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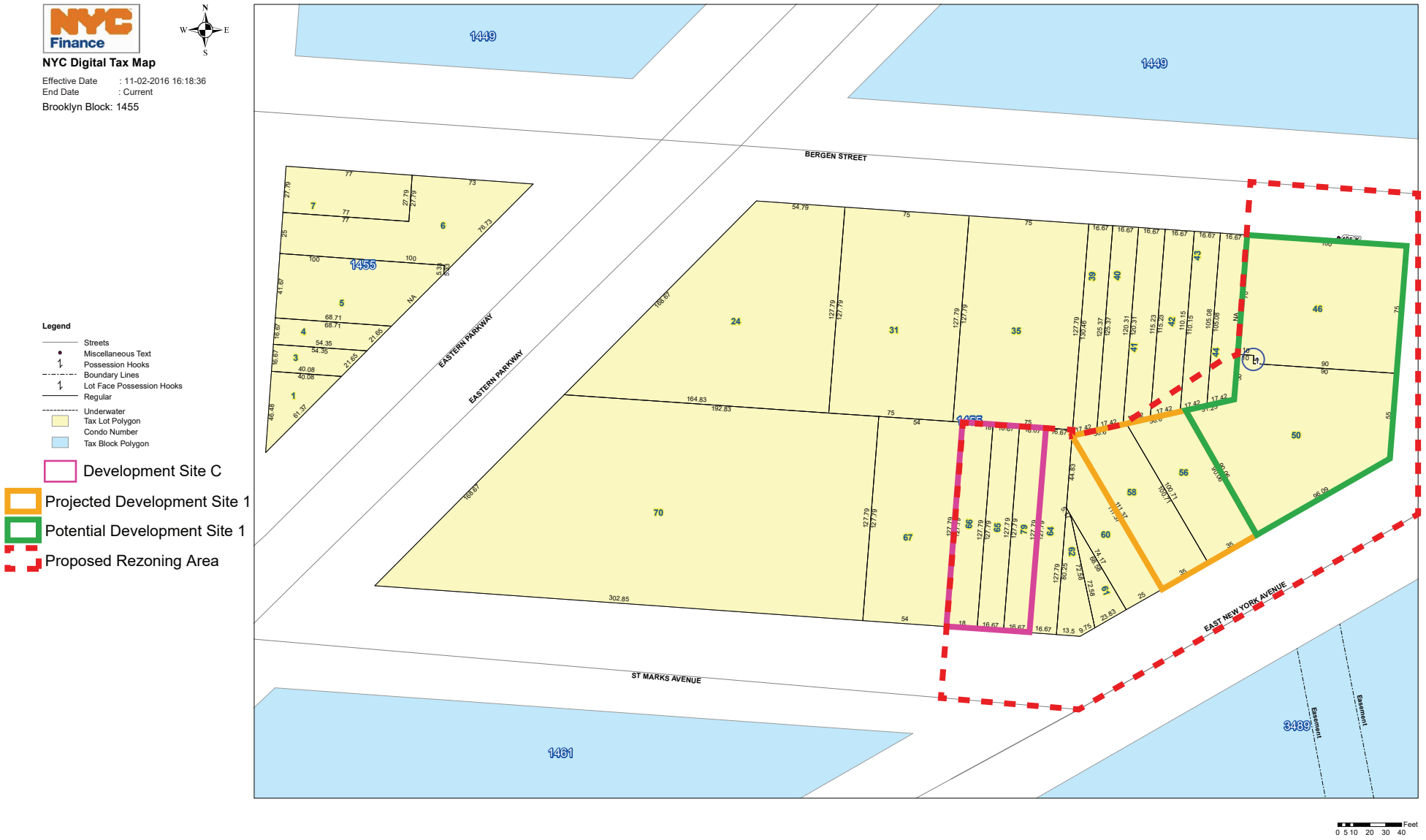
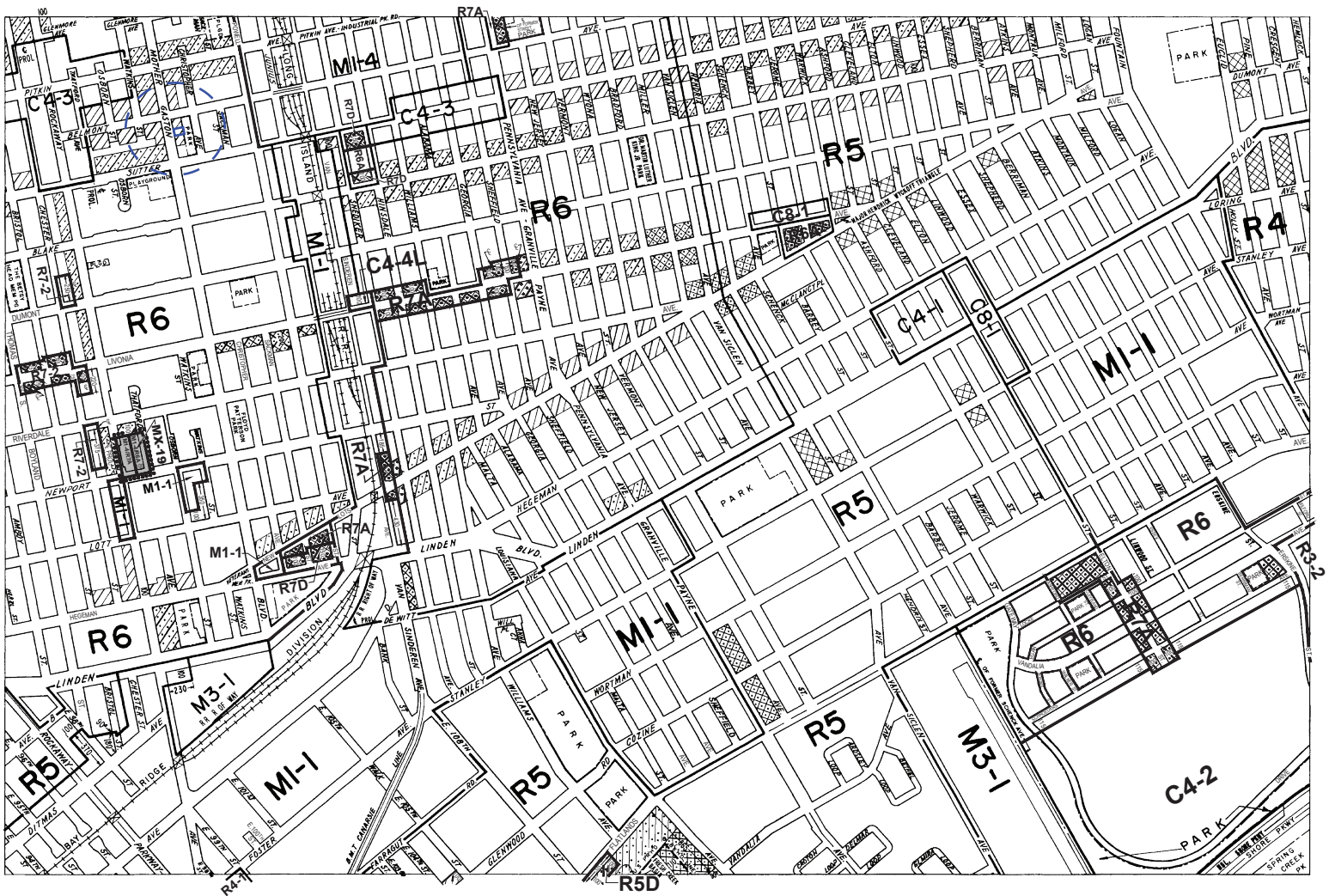
34
33
Feet
0 50 100 200 300 400



Brownsville FAC EAS

Figure 2c
Tax Map - Development Site C



C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5

NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.

ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

Major Zoning Classifications:

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

R – RESIDENTIAL DISTRICT

C – COMMERCIAL DISTRICT

M – MANUFACTURING DISTRICT

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

AREA(S) REZONED

Effective Date(s) of Rezoning:

12–10–2020 C 200056 ZMK

Special Requirements:

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

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

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

MAP KEY

N

17a	17c	18a
17b	**17d**	18b
23a	23c	24a

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ZONING MAP **17d**

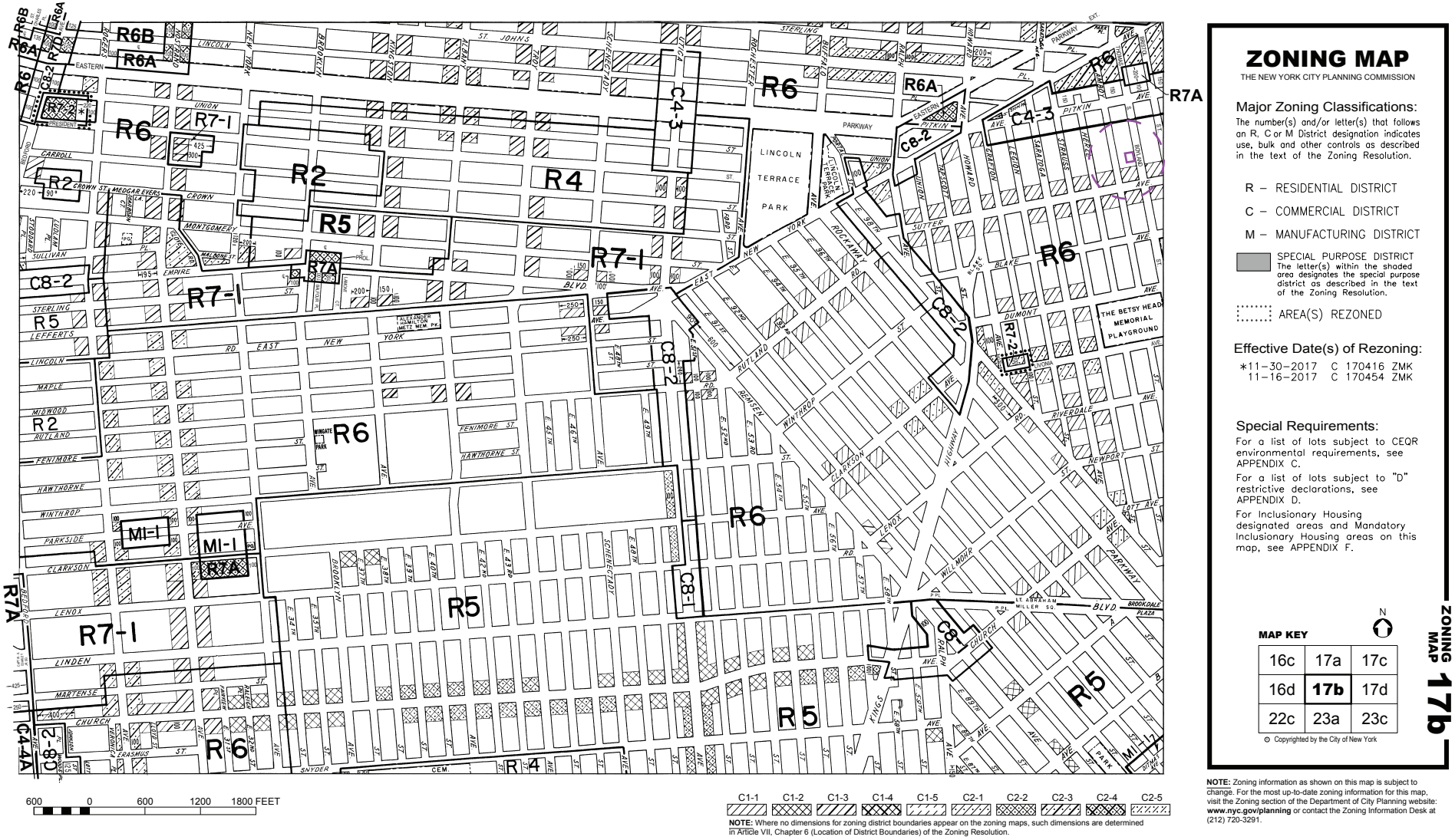
NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: **www.nyc.gov/planning** or contact the Zoning Information Desk at (212) 720-3291.

Development Site A

400-Foot Radius

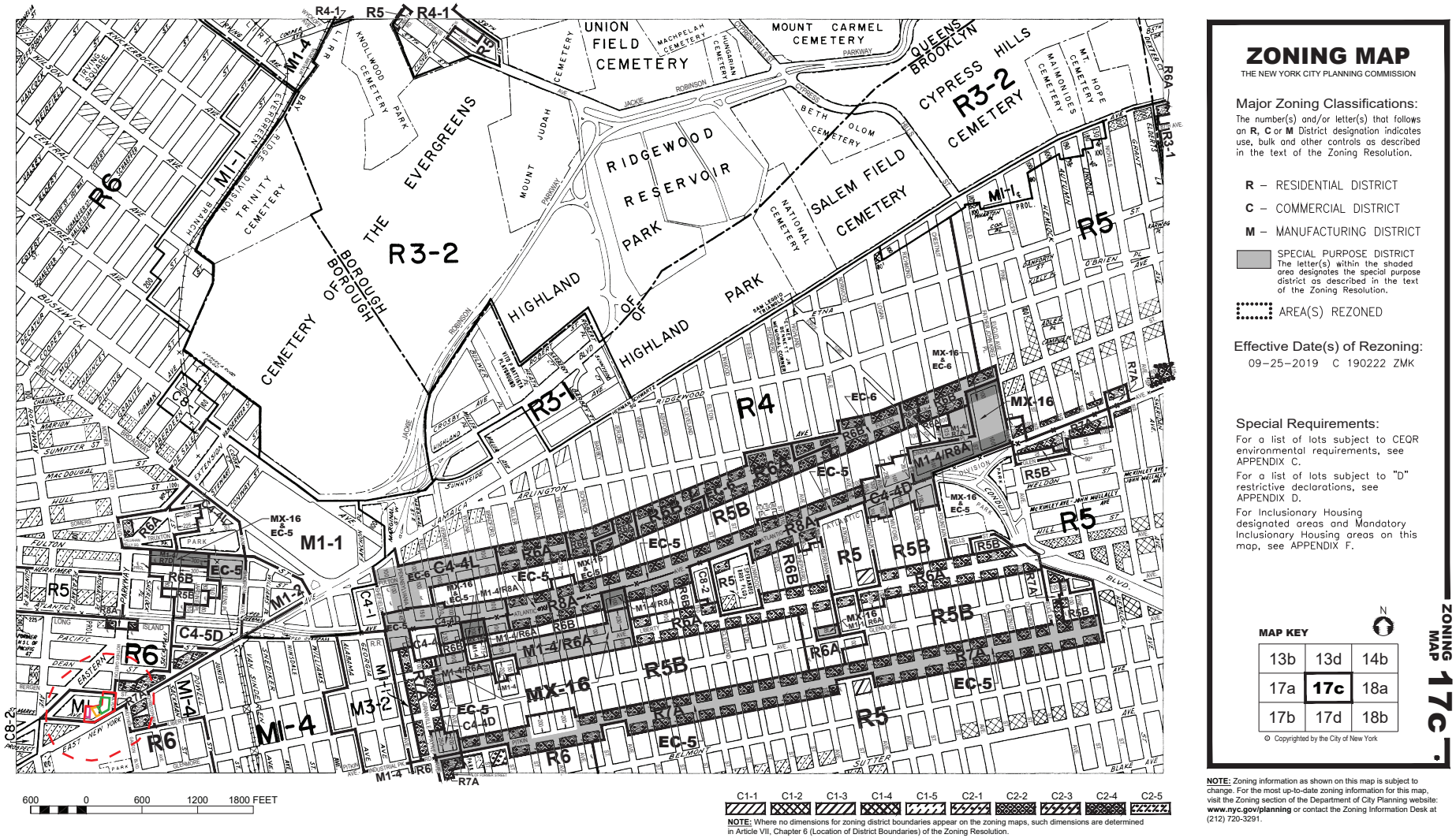
Brownsville FAC EAS

Figure 3a
Zoning Map - Development Site A



Brownsville FAC EAS

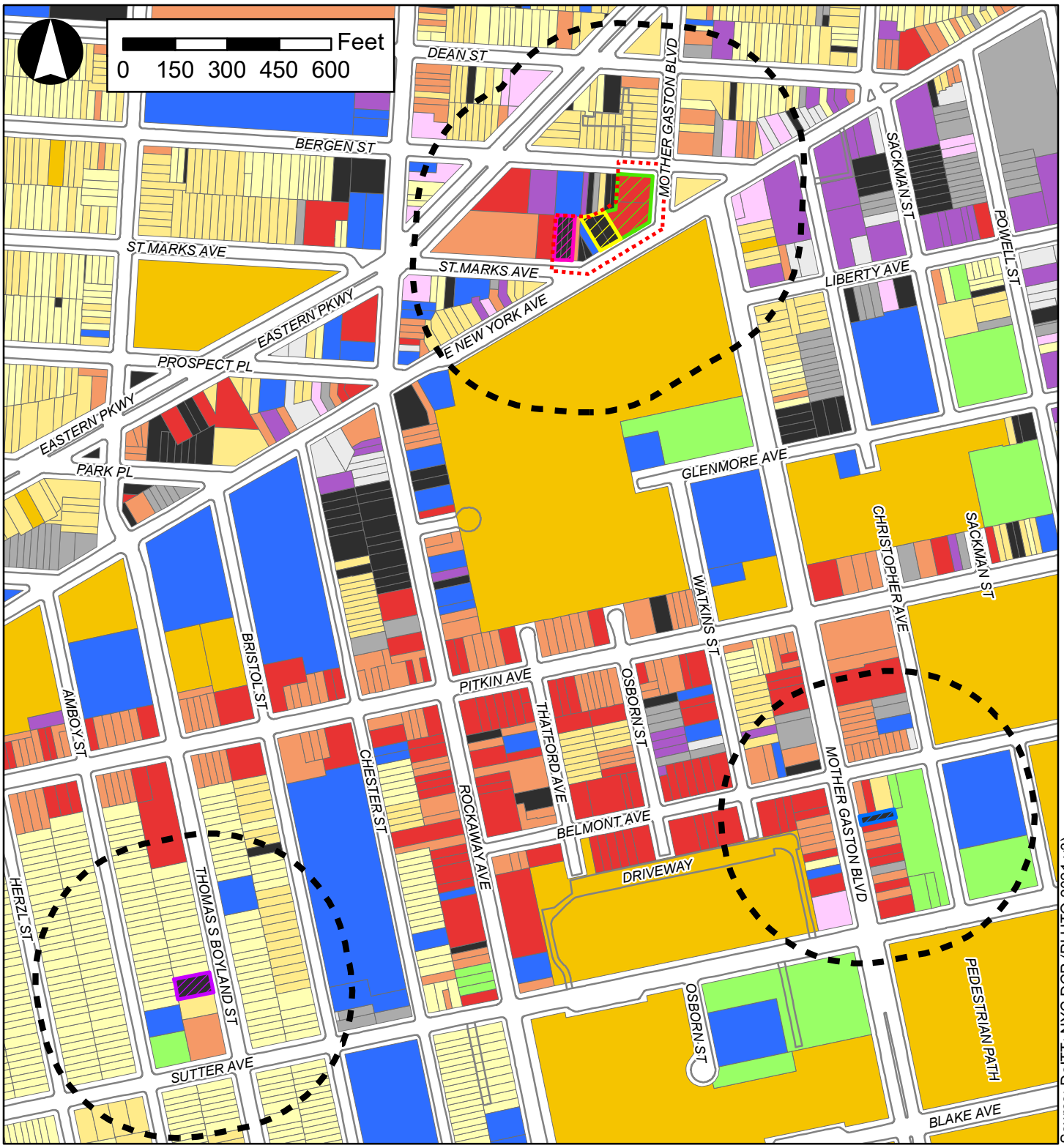
Figure 3b
Zoning Map - Development Site B



Brownsville FAC EAS

Figure 3c
Zoning Map - Development Site C

Land Uses - Development Sites A, B, C and Proposed Rezoning Area



Source: DoITT; NYC DCP (PLUTO 2021 v3)

Legend

- 400-Foot Radius
- Development Site A
- Development Site B
- Development Site C
- Proposed_Rezoning_Area
- Potential Development Site 1
- Projected Development Site 1

Land Use

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



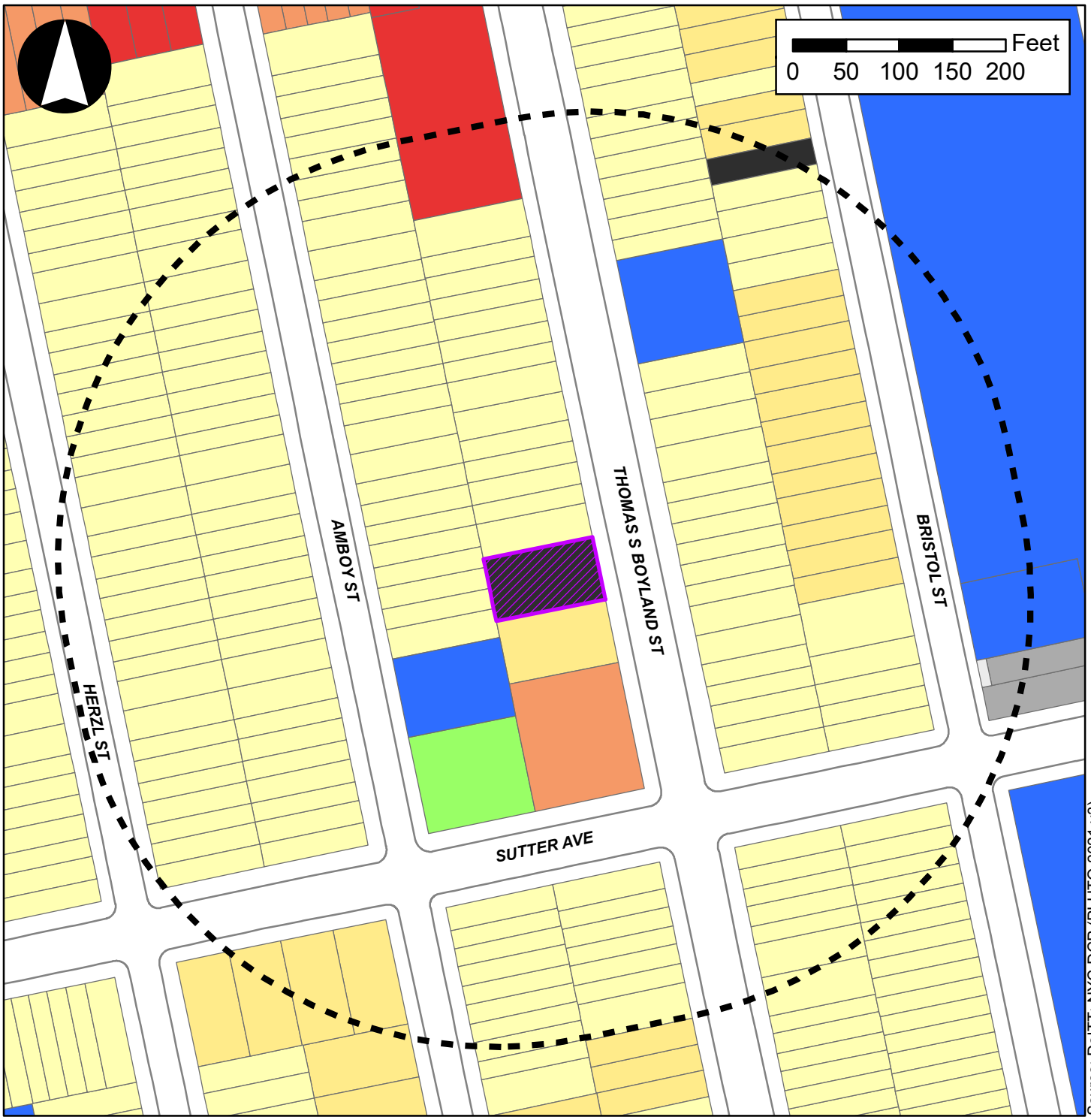
Legend

- Development Site A
- 400-Foot Radius

Land Use

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

Land Use - Development Site B



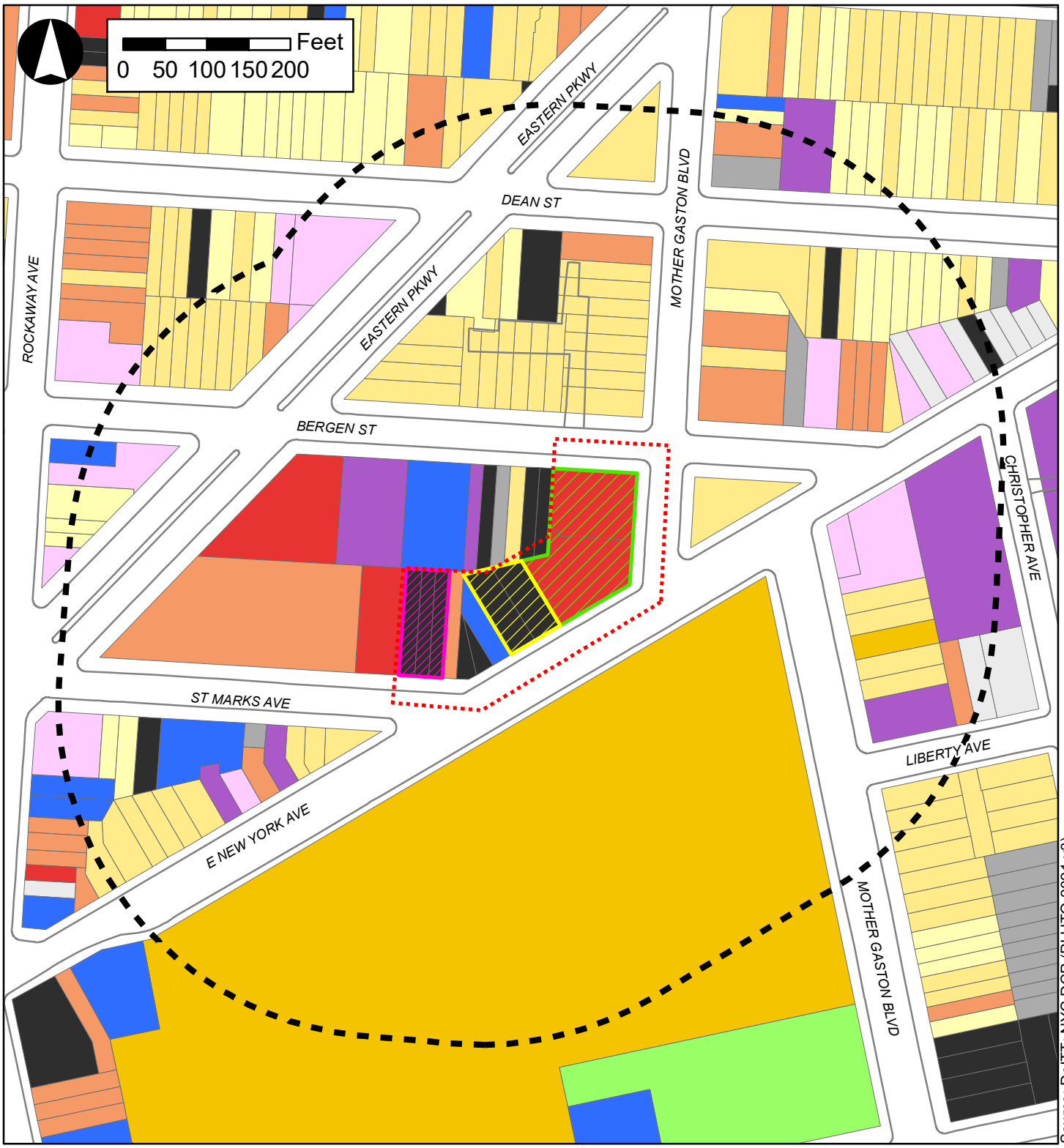
Legend

- Development Site B
- 400-Foot Radius

Land Use

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

Land Use - Proposed Rezoning Area + Development Site C



Legend

- 400-Foot Radius
- Development Site C
- Proposed_Rezoning_Area
- Potential Development Site 1
- Projected Development Site 1

Land Use

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



1) Development Site A at 425 Mother Gaston Boulevard (Block 3743, Lot 12)



2) View of Development Site B at 546 Thomas S. Boyland Street (Block 3518, Lot 63)



3) View of Development Site C at 1733 Saint Mark's Avenue (Block 1455, Lots 65, 66, 79)



Photos taken September 14, 2021



1) Projected Development Site 1 at 1591 East New York Avenue (Block 1455, Lots 56, 58).



2) Projected Development Site 2 at 1611 East New York Avenue (Block 1455, Lot 50).



3) View of Development Site C in relation to both Projected Development Sites.



Photos taken September 14, 2021

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 **See Attachment C, "Land Use, Zoning, and Public Policy"**		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☒	☐
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Early Childhood Programs:** 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)	☐	☒
○ **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)	☐	☒
○ **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)	☐	☒
○ **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 **See Attachment D, "Open Space"**		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees?	☒	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8 **See Attachment E, "Shadows"**		
(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 **See Attachment B, "Supplemental Screening"**		

	YES	NO
(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. **See Appendix 1**		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10 **See Attachment F, "Urban Design and Visual Resources"**		
(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 Protection Plan Project Tracking Form, and submit according to its instructions. **See Appendix 2**		
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) Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure?	☐	☒
(c) 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?	☒	☐
(d) 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 the Hazardous Materials Appendix (including nonconforming uses)?	☒	☐
(e) 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?	☒	☐
(f) 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)?	☐	☒
(g) 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?	☐	☒
(h) 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?	☒	☐
(i) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: **A REC was identified for Site C (see Attachment B)**	☒	☐
(j) Based on the Phase I Assessment, is a Phase II Investigation needed? **Refer to 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): **14,481**		
○ 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): **18,328,795**		
(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, bus trips, or 50 Citywide Ferry Service ferry 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), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☐
○ 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, or Citywide Ferry Service landing?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17 **See Attachment G, "Air Quality"**		
(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 **See Attachment H, "Noise"**		
(a) Would the proposed project generate or reroute vehicular traffic?	☐	☒
(b) Would the proposed project introduce new or additional receptors (see Section 114 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. **As discussed in the EAS, the Proposed Actions are not anticipated to result in any significant adverse impacts to Air Quality, Noise, or Hazardous Materials. As such, a detailed assessment of Public Health is not warranted.**		
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. **Refer to Attachment B, "Supplemental Screening"**		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☒	☐
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. **See Attachment B, "Supplemental Screening"**		

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
William Yates	**February 23, 2024**

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:

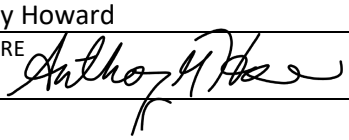
☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental 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
Director, Environmental Planning - HPD	City of New York - Department of Housing Preservation and Development
NAME	DATE
Anthony Howard	March 21, 2024

SIGNATURE 

NEGATIVE DECLARATION (Use of this form is optional)

Statement of No Significant Effect

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

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds that the proposed project:

22HPD065K - Brownsville NCP - would not result in any significant adverse impacts.

Please refer to the attached Negative Declaration dated March 21, 2024

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

TITLE	LEAD AGENCY
Director, Environmental Planning - HPD	City of New York - Department of Housing Preservation and Development
NAME	DATE
Anthony Howard	March 21, 2024

SIGNATURE 

ATTACHMENT A

PROJECT DESCRIPTION

I. INTRODUCTION

This Environmental Assessment Statement (EAS) considers the discretionary actions being requested by the Project Sponsor, the FAC Brownsville Apartments LP, which would facilitate the development of new affordable housing (the "Proposed Project") on three sites (Development Sites A, B, and C) in the Brownsville neighborhood of Brooklyn Community District (CD) 16. Development Site A (Block 3743, Lot 12) is a 2,500-square feet (sf) vacant lot located at 425 Mother Gaston Boulevard; it would be redeveloped with a four-story, approximately 9,650-gross square feet (gsf) mixed-use residential/commercial building containing six affordable dwelling units (DUs) and roughly 2,500 sf of ground-floor restaurant space. Development Site B (Block 3518, Lot 63) is a 6,000-sf vacant lot located at 546 Thomas S. Boyland Street; it would be redeveloped with a six-story, approximately 23,661-gsf residential building containing approximately 21 affordable DUs. Development Site C (Block 1455, Lots 65, 66, 79) is a 6,558-sf vacant area located at 1733 Saint Marks Avenue; it would be redeveloped with a nine-story, approximately 32,285-gsf residential building containing 34 affordable DUs. The five tax lots are owned by the City of New York under the NYC Department of Housing Preservation and Development's (HPD's) jurisdiction and are located within an approximately 0.07-square mile area of Brownsville (see **Figure 1** from the **EAS Form Figures**). Site C is currently zoned M1-1 and would need to be rezoned to allow residential uses.

To facilitate the Proposed Project, the Project Sponsor is seeking the following discretionary approvals (collectively, the "Proposed Actions"):

(i) A zoning map amendment to rezone a portion of Block 1455, including Lots 65, 66, and 79, which comprise Site C, and Lots 46, 50, 56, 60, 61, 62, and 64, and part of Lots 39, 41 to 44, 58 and 67 (the "Proposed Rezoning Area") from M1-1 to R7A with a C2-4 commercial overlay mapped to a depth of 100 feet along Saint Marks Avenue, East New York Avenue, and Mother Gaston Boulevard (see **Figure A-1**);

(ii) A zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to map a Mandatory Inclusionary Housing (MIH) area over the Proposed Rezoning Area;

(iii) Disposition of City-owned property, including Lot 12 on Block 3743 (Development Site A); Lot 63 on Block 3518 (Development Site B); and Lots 65, 66, and 79 on Block 1455 (Development Site C) through Urban Development Action Area Project (UDAAP) designation and project approval; and

(iv) Provision of public financing and tax incentives via HPD, and other sources.

As the Proposed Actions involve zoning changes that would affect a larger area than Development Site C on a portion of Brooklyn Block 1455, a reasonable worst-case development scenario (RWCDS) has been established for the Proposed Actions for an analysis year of 2026. In the future with the Proposed Actions, the proposed zoning changes and other associated actions would be approved, allowing the Project Sponsor to construct the Proposed Project at Development Sites A, B, and C, which would consist of approximately 65,596 gsf of new development, including 61 affordable DUs and 2,500 gsf of local retail. In addition to the Proposed Project, the proposed zoning changes are expected to facilitate the development of one projected development site ("Projected Development Site 1" comprising Lots 46 and 50 on Block 1455) and a potential development site ("Potential Development Site 1" comprising Block

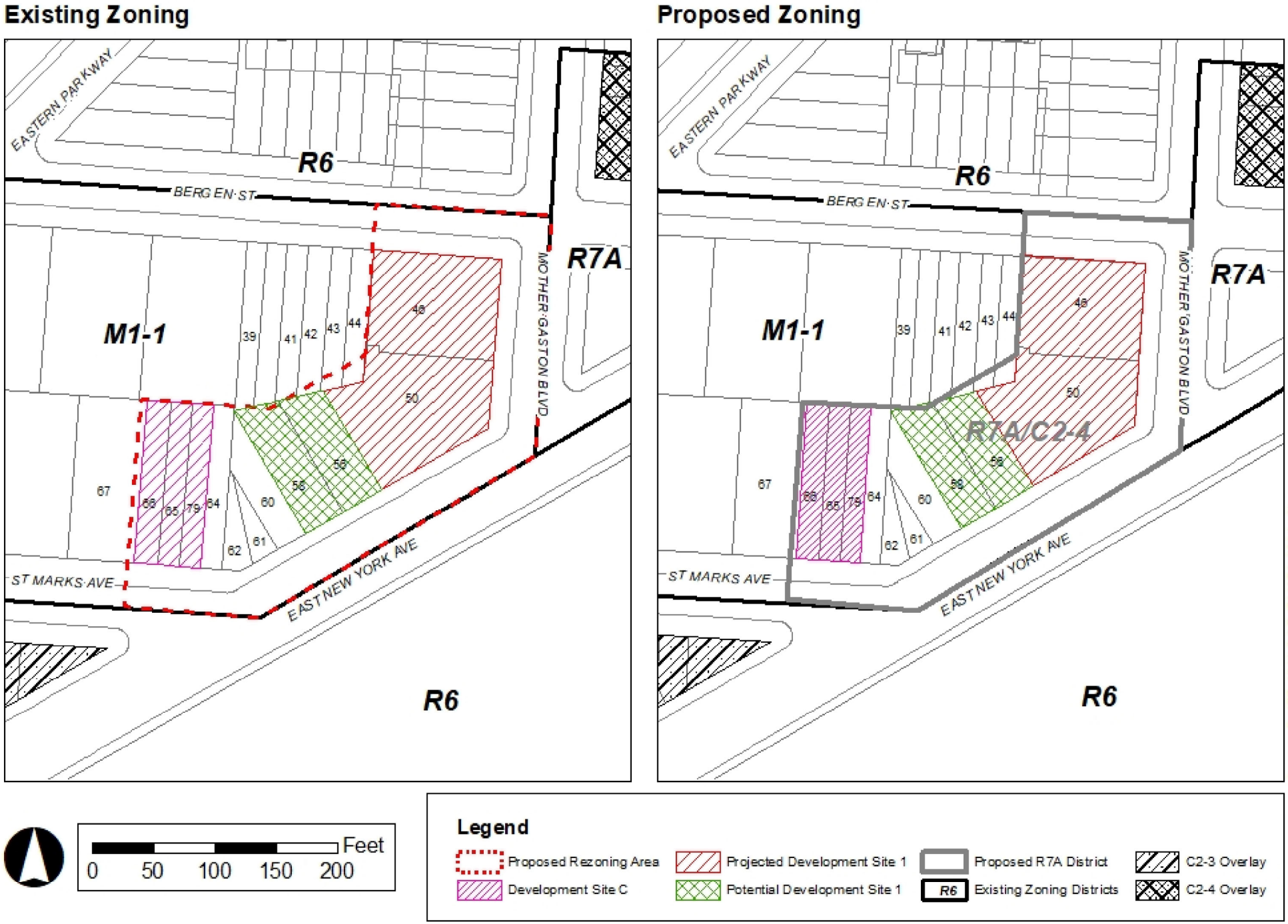


Figure A-1
Existing and Proposed Zoning

1455, Lots 56 and 58), which is less likely to be developed by the analysis year of 2026. The Project Area includes Development Sites A, B, and C, as well as the larger Proposed Rezoning Area.

This attachment provides a detailed description of the Proposed Actions, including project background, project purpose and need, site description, the Proposed Project, the RWCDS and the discretionary approvals required. The supplemental analyses following this attachment examine the potential for the Proposed Actions to result in significant adverse environmental impacts in any technical area of the 2021 *City Environmental Quality Review (CEQR) Technical Manual*.

II. BACKGROUND AND EXISTING CONDITIONS

Development Sites

As described above, Development Sites A, B, and C consist of five, vacant, City-owned tax lots located at three separate sites in the Brownsville neighborhood of Brooklyn CD 16 (refer to **Table A-1**). **Figure 5** in the **EAS Form** shows existing site conditions for each development site.

TABLE A-1: Proposed Development Site Exsiting Conditions

Development Site A					
Block	**Lot**	**Address**	**Zoning District**	**Land Use**	**Lot Area (SF)**
3743	12	425 Mother Gaston Boulevard	R6/C1-3	Vacant	2,500
Development Site B					
3518	63	546 Thomas S. Boyland Street	R6	Vacant	6,000
Development Site C					
1455	65, 66 & 79	1733 St. Marks Avenue	M1-1	Vacant	6,558
				Total	***15,058***

Development Site A (425 Mother Gaston Boulevard)

Development Site A is a rectangular-shaped tax lot located at 425 Mother Gaston Boulevard (Block 3743, Lot 12). The undeveloped site occupies approximately 2,500 sf and has approximately 25 feet of frontage on the east side of Mother Gaston Boulevard between Belmont and Sutter Avenues. Carter G. Woodson Children's Park abuts the site to the east. Site A is zoned R6 with a C1-3 commervial overlay. As shown in **Figure 5a, Photo #1**, the site is currently undeveloped, overgrown with weeds, and enclosed by fencing.

Development Site B (546 Thomas S. Boyland Street)

Development Site B is a rectangular-shaped tax lot located at 546 Thomas S Boyland Street (Block 3518, Lot 63). The undeveloped site occupies approximately 6,000 sf and has approximately 60 feet of frontage on the west side of Thomas S. Boyland Street between Pitkin and Sutter Avenues. The site is zoned R6. As shown in **Figure 5a, Photo #2**, the site is currently vacant, overgrown with weeds, and enclosed by fencing.

Development Site C (1733 Saint Marks Avenue)

Development Site C is comprised of three narrow rectangular-shaped tax lots at 1733 St. Marks Avenue (Block 1455, Lots 65, 66, and 79). Together, the three lots occupy approximately 6,558 sf of lot area and have approximately 51 feet of frontage on the north side of Saint Marks Avenue between East New York Avenue and Eastern Parkway. The site is zoned M1-1, which would be rezoned as a part of the Proposed

Actions. As shown in **Figure 5a, Photo #3**, the three lots are currently vacant, overgrown with weeds, and enclosed by fencing. Development Site C is included within the Proposed Rezoning Area, described below.

Proposed Rezoning Area

As shown in **Figure A-1**, the proposed zoning map and text amendments would affect the southeastern portion of Brooklyn Block 1455, including the City-owned Development Site C (Lots 66, 65, and 79). The Proposed Rezoning Area would encompass portions of 17 tax lots (Lots 46, 50, 56, 60-62, 64,65, 66 79 and p/o Lots 39, 41 to 44, 58 and 67) with approximately 85 feet of frontage along Saint Marks Avenue, approximately 225 feet of frontage along East New York Avenue, approximately 130 feet of frontage along Mother Gaston Bouelvard, and approximately 100 feet of frontage along Bergen Street. The Proposed Rezoning Area measures approximately 35,021 sf and is zoned M1-1.

Table A-2 provides a description of each of the lots included in the Proposed Rezoning Area. Lot 60 (as well as Lots 56 and 58) is owned by the Brownsville A.M.E. Zion Church—the church is housed in a two-story structure on Lot 60. Lots 56 and 58 (**Figure 5b, Photo #1**) are vacant lots; they are currently used as an informal fenced-in surface parking lot and event space for the adjacent church. Lot 50 is occupied by a one-story building that was once a grocery store; it is currently vacant. Lot 46 is a one-story building that contains a medical office and a discount store (**Figure 5b, Photo #2**). Lots 61 and 62 are currently vacant, overgrown with weeds, and enclosed by fencing; these lots are City-owned. Lot 64 is occupied by a two-story building with office space on the ground floor and two residential DUs on the second floor. Lot 67 is improved and occupied by a three-story, 15-room transient hotel. Development Site C (Lots 65, 66, 79) is also part of the Proposed Rezoning Area (**Figure 5b, Photo #3**), as described above.

TABLE A-2: Proposed Rezoning Area - Existing Conditions

Block	Lot	Address	Zoning	Land Use	Lot Area (SF)	Lot Area included in Rezoning Area (approx. SF)
1455	39*	2148 Bergen St.	M1-1	Storage/Warehouse	2,132	30
	41*	2152 Bergen St.		Parking Facilities	1,964	19
	42*	2154 Bergen St.		Residential	2,091	127
	43*	2156 Bergen St.		Vacant	1,794	215
	44*	2158 Bergen St.		Vacant	1,709	322
	46	226 Mother Gaston Blvd.		Commercial	7,450	7,450
	50	1611 East New York Ave.		Commercial	9,254	9,254
	56	1595 East New York Ave.		Vacant- informal parking	6,449	3,338
	58*	1593 East New York Ave.				3,069
	60	1591 East New York Ave.		House of Worship	2,319	2,319
	61	1589 East New York Ave.		Vacant	1,792	817
	62					975
	64	1737 Saint Marks Ave.		Residential/Commercial	2,129	2,129
	65	**1733 Saint Marks Ave. (Development Site C)**		**Vacant**	**6,558**	**6,558**
	66					
	79					
	67*	1725 Saint Marks Ave.		Commercial	6,899	528
				Total	***52,540***	***35,021***

Notes: * Only part of Lots 39, 41-44, 58 and 67 are located within the Proposed Rezoning Area.
Develoment Site C is highlighted in Bold text and shaded.

Surrounding Area Land Use Context

Existing land uses within roughly 400 feet of each development site and the Proposed Rezoning Area are discussed below and shown in **Figures 4a** through **4c** in the EAS Short Form.

Development Site A (425 Mother Gaston Boulevard)

Land uses within a 400-foot radius of Development Site A are varied, and include a mix of residential, commercial, mixed-use commercial and residential buildings, open space, parking, and public facilities and institution uses (see **Figure 4a** in EAS Short Form). Most commercial and mixed-use buildings are concentrated along Mother Gaston Boulevard and Belmont Avenue. Cater G. Woodson Children's Park abuts Development Site A to the east and extends along the west side of Christopher Avenue between Belmont and Sutter Avenues. The Brownsville Collegiate Charter School and associated play yard occupy Block 3744, bound by Belmont Avenue to the north, Sackman Street to the east, Sutter Avenue to the south, and Christopher Avenue to the west. The B14 (Spring Creek - Crown Heights) bus route travels along Mother Gaston Boulevard with two stops, in both directions, on the same block as Development Site A.

Development Site B (546 Thomas S. Boyland Street)

Predominant land uses within a 400-foot radius of Development Site B primarily include residential uses and a few institutional uses (see **Figure 4b** in EAS Short Form). The majority of residential buildings are one- and two-family homes, and there is a clustering of multi-family walkup residential buildings along the west side of Bristol Street between Pitkin and Sutter Avenues. Institutional uses include houses of worship, public schools, and the Brownsville Station U.S. Post Office. Commercial and mixed-use commercial/residential buildings are concentrated further from the site along Pitkin Avenue. The 0.21-acre Jes Good Rewards Children's Garden is located at the corner of Amboy Street and Sutter Avenue.

Proposed Rezoning Area, including Development Site C (1733 Saint Marks Avenue)

Land use within a 400-foot radius of the Proposed Rezoning Area is varied, and includes residential, commercial, mixed residential/commercial, public facilities and institutions, industrial/manufacturing, transportation/utility, and vacant land; there are four lots with parking facilities uses (see **Figure 4c** in EAS Short Form). Residential and mixed residential/commercial uses are generally concentrated in the northern portion of the 400-foot radius with a few small lots in the southern portion; the Howard Houses NYCHA development and public Howard Pool are located directly south, across the street from Development Site C. There are several lots with transportation/utility and industrial/manufacturing uses on the periphery of the 400-foot radius. In the central portion of the 400-foot radius, there exists a variety of uses, including houses of worship, office space, convenience stores, and auto repair shops. The B12 (Lefferts Gardens - East New York) bus route runs in both directions along East New York Avenue, and the B60 (Williamsburg - Canarsie) bus route runs in both directions along Rockaway Avenue.

Zoning

As shown in **Figures 3a** through **3c** in the EAS Form, Development Sites A and B are mapped within R6 zoning districts and Development Site C lies within a M1-1 zoning district. Development Site A is also

located within a C1-3 commercial overlay that extends along portions of the east and west sides of Mother Gaston Boulevard between Pitkin and Sutter Avenues.

R6 Residential District

R6 districts are medium-density apartment house districts that permit buildings to be constructed pursuant to either height factor regulations, or the Quality Housing Program. Under Height Factor regulations, the maximum residential FAR ranges from 0.78 to 2.43 and the open space ratio (OSR) ranges from 27.5 to 37.5. These regulations encourage tall buildings on large lots set within large swathes of open space. The maximum FAR is achieved at a height factor of 13, which requires and OSR of 33.5. Buildings developed in R6 districts pursuant to Height Factor regulations must be set within a sky exposure plane that begins at a height of 60 feet, or six stories, whichever is less, above the street line and then slopes inward over the zoning lot. Quality Housing regulations in R6 districts permit a maximum residential FAR of 3.0 on wide streets outside Manhattan Core, with a maximum base height of 40 to 60 feet and a maximum building height of 65 feet with a qualifying ground floor (a ground floor with a height of 13 feet). On narrow streets, the maximum residential FAR for buildings using the Quality Housing option is 2.43, with a maximum base height of 40 to 55 feet and a maximum building height of 65 feet. Community facilities are permitted at a maximum FAR of 4.8 in R6 districts, and if they are located in a non-Quality Housing building, may utilize sky exposure regulations and may construct a community facility tower that penetrates the sky exposure plane. Parking is required for 70 percent of DUs in R6 districts, which may be reduced to 30 percent on zoning lots less than 15,000 square feet and waived on lots less than 10,000 square feet. No parking is required for affordable housing units[1]. If the total amount of residential parking required is less than 15 spaces, the requirement may be waived.

C1-3 Commercial Overlay

C1 commercial overlays are typically mapped in residential neighborhoods along streets that serve local retail needs. They are found extensively throughout the City's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants, and beauty parlors. The maximum commercial FAR for C1 overlays is 2.0 when mapped in R6 zoning districts or higher. This typically produces a commercial ground floor in an otherwise residential building.

M1-1 Manufacturing District

M1-1 districts are intended for high performance manufacturing and commercial uses at a maximum FAR of 1.0 and permit community facility uses at a maximum FAR of 2.40. No new residential uses are permitted. Parking requirements are based on the type of use and size of an establishment. M1 districts generally allow one- or two-story warehouses for light- industrial uses, including repair shops and wholesale service facilities. M1 districts have a base height limit of 30 feet, above which a structure must fit within a sloping sky exposure plane. These districts are intended for light industry; however, heavy industrial uses are permitted in M1 districts as long as they meet strict performance standards set forth in the Zoning Resolution.

[1] Referred to as "income-restricted" units in the NYC Zoning Resolution.

III. THE PROPOSED ACTIONS

As noted above, the Project Sponsor is requesting a zoning map amendment, zoning text amendment, the disposition of City-owned property through UDAAP designation and project approval, and the provision of public financing to facilitate the development of new affordable housing at three development sites in the Brownsville neighborhood of Brooklyn CD 16. All five lots, which comprise the three development sites, are owned by HPD, and would be disposed of to the Project Sponsor through UDAAP designation and project approval. Development of the Proposed Project is also expected to be facilitated by HPD financing through the Neighborhood Construction Program (NCP), and Low-Income Tax Credits, as well as Resolution A Funding, New York State Affordable Housig Corporation Grant Funds, and potentially Low-Income Tax Credits from HCR.

Zoning Map and Text Amendments

The proposed zoning map amendment would rezone the Proposed Rezoning Area from M1-1 to R7A with a C2-4 commercial overlay mapped to a depth of 100 feet along Saint Marks Avenue, East New York Avenue, and Mother Gaston Boulevard. As shown in **Figure 3d** of the EAS Short Form and described in **Table A-2**, the proposed zoning map amendment would affect the 35,951-sf Proposed Rezoning Area, or portions of 17 tax lots, including the three tax lots that comprise Development Site C, on Brooklyn Block 1455. **Table A-3** compares the use and bulk requirements under the existing and proposed zoning districts.

R7A is a contextual residential zoning district that allows for development of medium-density housing and community facilities. As shown in **Table A-3**, in MIH Areas, R7A permits a residential maximum FAR of 4.6. The maximum FAR for community facility use is 4.0. C2-4 overlays are usually mapped along streets in residential districts that serve local retail needs. Typical uses in C2 overlays include neighborhood grocery stores, restaurants, beauty parlors, funeral homes, and repair services. A maximum commercial FAR of 2.0 is permitted in C2-4 overlays mapped in R7A districts, and in mixed buildings, commercial uses must always be located below residential uses, and are limited to one or two floors.

TABLE A-3: Comparison of Existing and Proposed Zoning

	Existing	Proposed	
	M1-1	**R7A**	**R7A/C2-4**
Use Groups	3-17	1-4	1-9, and 14
Maximum Permitted FAR			
Residential	Not permitted	4.0 (QH), 4.60 (IH)	
Community Facility	2.40[1]	4.0	
Commercial	1.0	0.0	2.0
Manufacturing	1.0	Not Permitted	

Source: *Zoning Resolution of the City of New York.*
Notes: HF=Height Factor; IH=Inclusionary Housing; QH=Quality Housing
[1] Certain community facility uses are permitted as-of-right (such as houses of worship) and some require special permits (such as hospitals).

The Project Sponsor is seeking a zoning text amendment to Appendix F of the ZR to establish the entirety of the Proposed Rezoning Area as a Mandatory Inclusionary Housing (MIH) area. The establishment of the MIH designated area would require a share of new housing to be permanently affordable where significant new housing capacity would be created. The MIH area sets a new maximum permitted residential FAR, which supersedes the FAR permitted by the underlying zoning district. The MIH Area would require affordable housing to be provided pursuant to Option 1, 2, 3, and/or 4.

- Option 1 requires 25 percent of residential floor area must be permanently affordable housing for residents with incomes averaging 60 percent of AMI;
- Option 2 requires 30 percent of residential floor area must be affordable housing for residents with incomes averaging 80 percent of AMI; and
- In conjunction with Option 1 and/or 2, Option 3 (Deep Affordability Option), which requires that 20 percent of the residential area be affordable to households earning 40 percent AMI, and/or Option 4 (Workforce Option), which requires that at least 30 percent of the residential area be provided as housing affordable to households at an average of 115 percent AMI with no unit targeted to a household exceeding 135 percent of AMI, could also be established.

Through the land use process, the City Planning Commission (CPC) and City Council will work together to apply a set of income level requirements for the affordable housing units created through MIH in the Proposed Rezoning Area, which would mandate that a provision of at least 25 to 30 percent of new residential development in the proposed R7A and R7A/C2-4 districts as permanently affordable to achieve the maximum permitted floor area.

UDAAP

The Project Sponsor is also seeking Urban Development Action Area Project (UDAAP) designation and project approval for Development Sites A, B, and C, including Lot 12 on Block 3743 ("Development Site A"), Lot 63 on Block 3518 ("Development Site B"), and Lots 65, 66, and 79 on Block 1455 ("Development Site C"). Development Sites A, B, and C, which are owned by the City of New York, would be conveyed to the Project Sponsor in the future with the Proposed Actions.

Public Financing

The Project Sponsor would seek approval for financing for the Proposed Project from a variety of sources via HPD. These sources include the Neighborhood Construction Program (NCP), the Open Door Program, and Low-Income Tax Credits. It is anticipated that the Proposed Project will also be financed through NYS Affordable Housing Corporation (AHC) Grant Funds and Resolution A Funding. Potential financing may come from Low-Income Tax Credits through New York State Homes and Community Renewal (HCR). There would also be a tax credit through the Article XI Tax Incentive.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The Proposed Actions would facilitate the development of 61 affordable DUs and 2,500 sf of local retail space. The Project Sponsor's key goal is to create opportunities for new affordable housing developments on vacant lots, in an area where a strong demand for affordable housing exists. The Proposed Project would bring new development to the neighborhood at an appropriate density and scale, improving underutilized land and providing affordable living opportunities to longtime residents.

The proposed zoning map and text amendments would create additional zoning capacity in a transit accessible area to support new housing creation and increase the number of affordable housing units available in New York City. The creation of new affordable housing supply is also expected to help alleviate the upward pressure on housing prices and contribute to housing affordability in Brownsville and larger City. The MIH program would promote and retain neighborhood economic diversity in the area and create a considerable amount of affordable housing near public transit.

The Proposed Actions would be consistent with existing land uses, as most of the area surrounding the development sites is largely residential. For Development Site C and the Proposed Rezoning Area, specifically, the proposed zoning map amendment would replace part of an existing M1-1 district with mixed residential/commercial uses, which is more in line with the existing uses on this part of the block. It would also be consistent with the adjoining residential districts with commercial overlays: R7A to the east and R6 to the north and south. In general, introduction of affordable housing would help to address goals set forth by the City in *Housing Our Neighbors* plan and align with one of Community Board 16's top three pressing issues. The creation of new affordable housing supply at various income levels helps to alleviate the upward pressure on housing prices and contributes to housing affordability in the surrounding area and in New York City as a whole.

V. DESCRIPTION OF PROPOSED PROJECT

In the future with the Proposed Actions, the Project Sponsor would develop three development sites with affordable housing, containing a combined 65,596 gsf of new development, including 61 affordable DUs (57,260 gsf of residential space) and 2,500 gsf of local retail space (the "Proposed Project"). Each of the three developments are described below.

Development Site A (425 Mother Gaston Boulevard)

Development Site A (Block 3743, Lot 12) would be developed with a four-story (42 feet roof height), approximately 9,650-gsf mixed-use commercial and residential building containing six affordable DUs and ground-floor restaurant space (see **Figures A-2a to Figure A-2d**). The proposed building would have a 2,500-gsf cellar level used for restaurant storage and containing the building's mechanical equipment. The ground floor would contain 2,500 gsf of restaurant space, including outdoor green space; there would be a separate residential entrance containing a vestibule, mailroom, and stair entrance. Floors two through four would be comprised of 1,550 gsf of residential space, containing two, one-bedroom apartments each. The proposed building would contain six one-bedroom units.

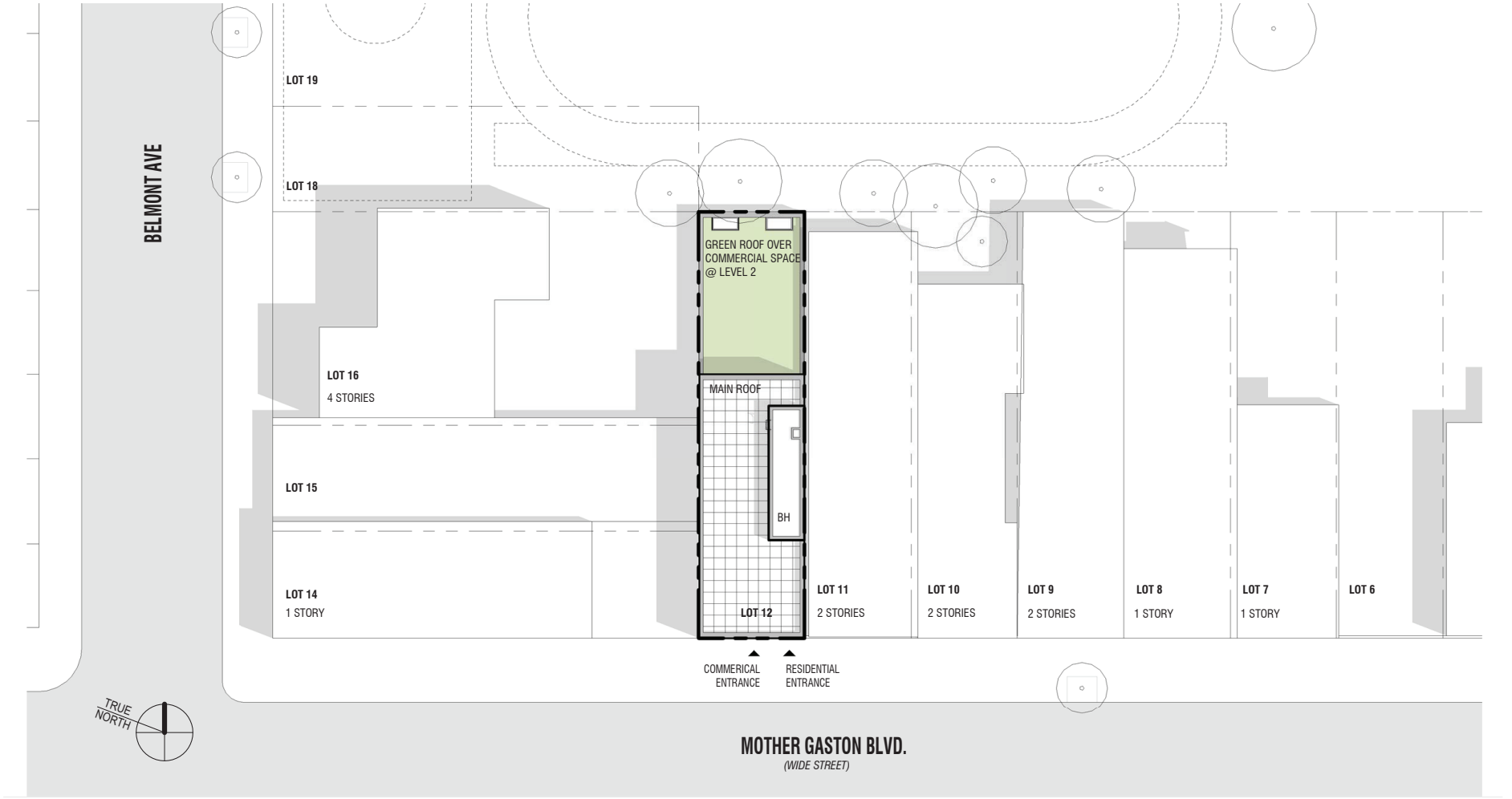
Development Site B (546 Thomas S. Boyland Street)

Development Site B (Block 3518, Lot 63) would be developed with a six-story (63 feet roof height), approximately 23,661-gsf elevator building containing 21 affordable DUs (see **Figures A-3a to Figure A-3d**). The approximately 3,748-gsf cellar would contain a community room, laundry room, bicycle storage, and mechanical equipment. The approximately 3,585-gsf ground floor would be comprised of three DUs, a sitting area near the elevator bank, and an outdoor seating area. Floors two through five would each contain approximately 3,605 gsf, comprised of four DUs, an elevator bank, and trash room. The 1,906-gsf floor six would contain two DUs, an elevator bank, trash room, and a green roof. In total, the proposed building would contain 12 one-bedroom units, eight two-bedroom units, and one three-bedroom unit.

Development Site C (1733 Saint Marks Avenue)

Development Site C (Block 1455, Lots 65, 66, 79) would be developed with a nine-story (91 feet roof height), approximately 32,258-gsf elevator building containing 34 affordable DUs (see **Figure A-4a to Figure A-4d**). The approximately 3,337-gsf cellar level would contain a laundry room, bicycle storage, management office, and provide access to the rear yard. The 3,337.1-gsf ground floor would contain a small elevator lobby, trash room, and mailroom, as well as four DUs. The second floor (3,337.1 gsf) would contain four DUs, an elevator bank, and trash room. Floors three through seven (each 3,314 gsf) would

Development Site A, 425 Mother Gaston Boulevard
Site Plan



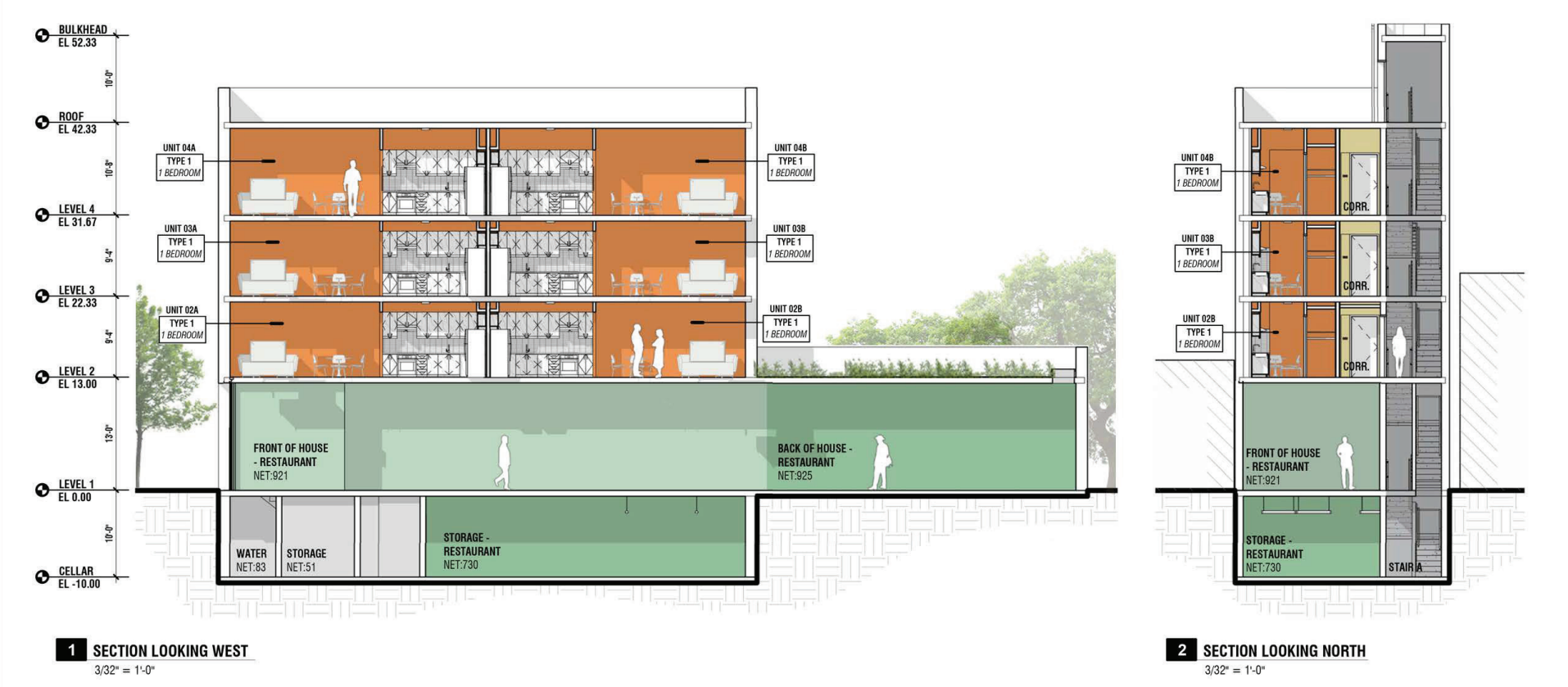
Courtesy of Think! Architecture + Design

Development Site A, Elevations



Courtesy of Think! Architecture + Design

Development Site A, Section



Courtesy of Think! Architecture + Design

Development Site A, Street Perspectives



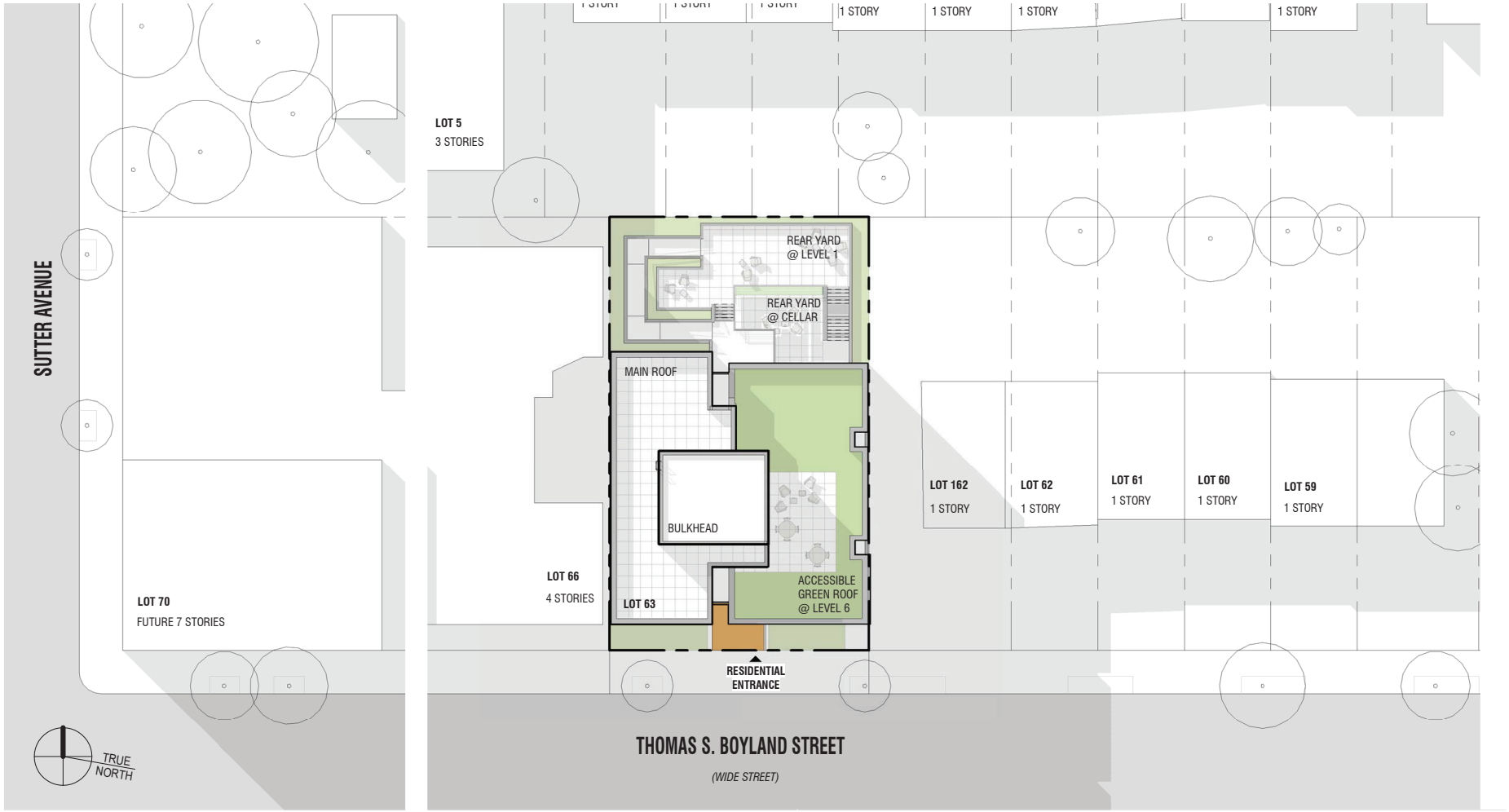
1 STREET VIEW LOOKING NORTH FROM MOTHER GASTON



2 STREET VIEW LOOKING WEST FROM MOTHER GASTON

Courtesy of Think! Architecture + Design

Development Site B, 546 Thomas S. Boyland Street
Site Plan



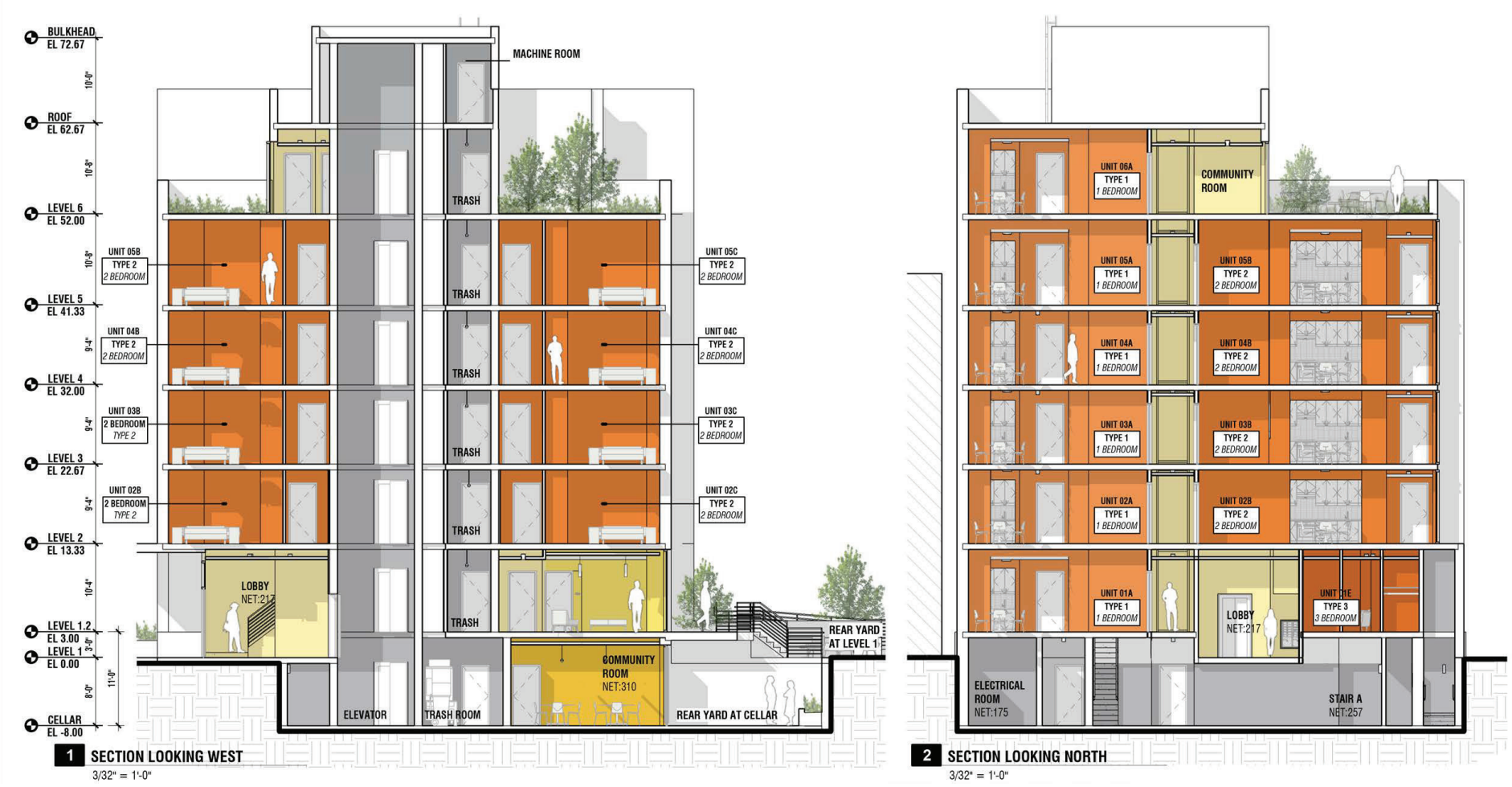
Courtesy of Think! Architecture + Design

Development Site B, 546 Thomas S. Boyland Street
Elevations



Courtesy of Think! Architecture + Design

Development Site B, 546 Thomas S. Boyland Street
Section



Courtesy of Think! Architecture + Design

Development Site B, 546 Thomas S. Boyland Street
Street Perspectives



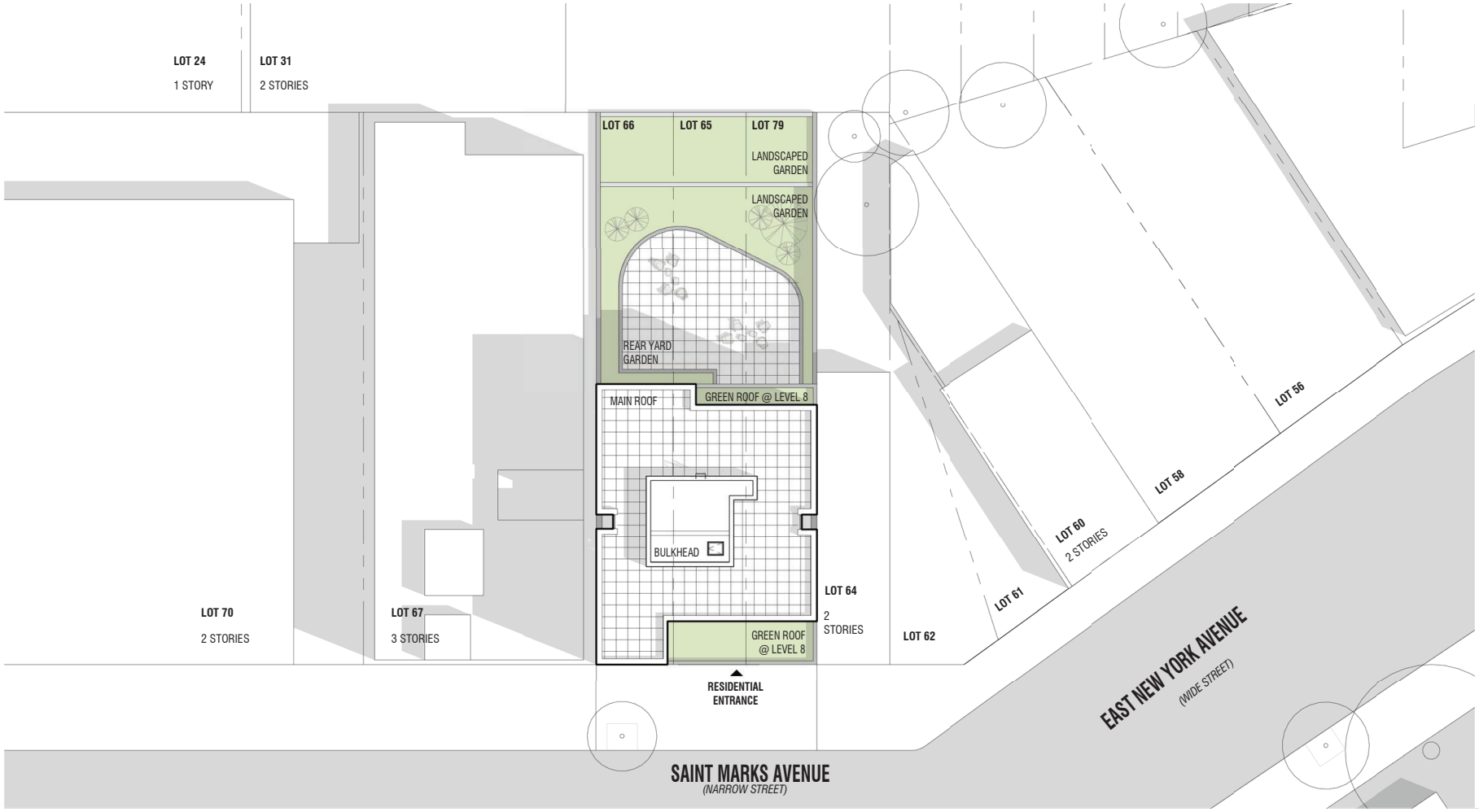
2 STREET VIEW LOOKING WEST FROM THOMAS S BOYLAND



1 STREET VIEW LOOKING SOUTH FROM THOMAS S BOYLAND

Courtesy of Think! Architecture + Design

Development Site C, 1733 Saint Marks Avenue
Site Plan



Courtesy of Think! Architecture + Design

Development Site C, 1733 Saint Marks Avenue
Elevations



2 ELEVATION LOOKING NORTH
1/16" = 1'-0"



1 ELEVATION LOOKING SOUTH
1/16" = 1'-0"

Courtesy of Think! Architecture + Design

Development Site C, 1733 Saint Marks Avenue
Section



Courtesy of Think! Architecture + Design

Development Site C, Street Perspectives



2 STREET VIEW LOOKING EAST FROM ST MARKS AVE



1 STREET VIEW LOOKING NW FROM E NEW YORK AVE

Courtesy of Think! Architecture + Design

contain four DUs, an elevator bank, and trash room. Floors eight and nine (each 2,840.6 gsf) would contain three DUs, an elevator bank, a trash room, and green roof. In total, the proposed building would contain 17 studio units, two one-bedroom units, 13 two-bedroom units, and two three-bedroom units.

VI. ANALYSIS FRAMEWORK

The Proposed Actions would change the regulatory controls governing land use and development to varying degrees at three development sites. The 2021 *CEQR Technical Manual* will serve as the general guide on the methodologies and impact criteria for evaluating the Proposed Actions' potential effects on the various environmental areas of analysis.

Analysis Year

It is anticipated that the Proposed Project would be certified in ULURP in early 2024. Assuming the completion of the ULURP process in late 2024, and a period of approximately 18 months for construction, completion and occupancy of the Proposed Project at all three of the development sites is expected to occur by 2026. As such, it is anticipated that with approval of the Proposed Actions, the Proposed Project would be developed by 2026.

In addition to the Proposed Project, one additional projected development site has been identified in the Proposed Rezoning Area that is likely to be developed because of the proposed zoning changes. Although no formal redevelopment plans exist for Projected Development Site 1, the site meets the CEQR soft site criteria and, as such, is assumed to be redeveloped by 2026. This reflects a reasonable estimate of the time needed for the property owners of Projected Development Site 1 to demolish the existing structures, design the project, obtain design approvals, and construct the new development.

Accordingly, this environmental review will use 2026 as the Build Year for analysis of future conditions consistent with *CEQR Technical Manual* guidance. A single potential development site (Potential Development Site 1) has also been identified, which is considered less likely to be developed within the analysis period.

Identification of Development Sites

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

- The uses and bulk allowed: Lots located in areas where changes in use would be permitted and/or contain buildings built to substantially less than the maximum allowable floor area ratio (FAR) under the existing zoning are considered "soft" enough such that there would likely be sufficient incentive to develop in the future, depending on other factors specific to the area (e.g., the amount and type of recent as-of-right development in the area, recent real estate trends, site specific conditions that make development difficult, and issues relating to site control or site assemblage that may affect redevelopment potential); and
- Size of the development site: Lots must be large enough to be considered "soft." Generally, lots with a small lot size are not considered likely to be redeveloped, even if currently built to substantially less than the maximum allowable FAR. A small lot is often defined for this purpose

as 5,000 square feet or less, but the lot size criteria is dependent on neighborhood specific trends, and common development sizes in the study area should be examined prior to establishing these criteria.

However, the following uses and types of buildings that meet the soft site criteria are typically excluded from development scenarios because they are unlikely to be redeveloped because of the proposed action(s):

- Full block and newly constructed buildings with utility uses, as these uses are often difficult to relocate;
- Lots where construction is actively occurring, or has recently been completed, as well as lots with recent alterations that would have required substantial capital investment, unless recently constructed or altered lots were built to less than or equal to half of the maximum allowable FAR under the proposed zoning;
- Lots whose location or irregular shape would preclude or greatly limit future as-of-right development. Generally, development on irregular lots does not produce marketable floor space;
- Long-standing institutional uses with no known development plans; or
- Residential buildings with six (6) or more units constructed before 1974. These buildings are likely to be rent-stabilized and difficult to demolish due to tenant re-location requirements.

Definition of Projected and Potential Development Sites

As discussed below, in addition to Development Site C, portions of 14 other tax lots are included in the Proposed Rezoning Area. To help determine the eligibility of each lot as a soft site, **Table A-4** provides the existing lot area, ownership, use, existing FAR, and compares the existing and proposed maximum allowable floor areas under the No-Action and With-Action conditions for each of the lots included in the Proposed Rezoning Area.

Table A-4: Proposed Rezoning Area Tax Lots – Existing and Proposed Maximum Allowable FAR

Lot	Lot Area (sf)	Ownership	Existing Use	Existing Zoning	Maximum Allowable FAR			Existing FAR
					Existing	Proposed	Increment	
39*	2,132	Drini Banushi	Storage/Warehouse	M1-1	R: 0.0 CF: 2.4 C: 1.0 M: 1.0	R: 4.6 CF: 4.0 C: 2.0 M: 0.0	R: +4.6 CF: +1.6 C: +1.0 M: -1.0	0.0
41*	1,964	Tony Ogbeide	Parking Facilities					0.0
42*	2,091	Udy Tropp	Multi-Family Walk-Up Building					0.98
43*	1,794	Banos Realty	Vacant					0.0
44*	1,709	Banos Realty	Vacant					0.0
46	7,450	Banos Realty	Dollar General / Medical Office					1.0
50	9,254	Ryan & Nicole LLC	Vacant grocery store/unoccupied					0.96
56	3,388	Brownsville Zion Church	Vacant					0.0
58	3,111		Vacant					0.0
60	2,319	AFR Methodist Church	Church					1.49
61	975	HPD	Vacant					0.0
62	817	HPD	Vacant					0.0
64	2,129	The Tattooed Lady LLC	Mixed-Use					1.01
65	2,129	HPD	Vacant					0.0

66	2,129	HPD	Vacant					0.0
67*	6,899	1725 St Marks Ave LLC	Transient Hotel					2.3
79	2,300	HPD	Vacant					0.0

Notes: Rows highlighted with grey at part of Development Site C.
*Less than 50 percent of Lots 39, 41-44 and 67 are located within the Proposed Rezoning Area.

As shown in **Table A-4**, several of the lots, including Lots 39, 41-44, and 67, would only have a small portion of rezoned as a result of the Proposed Actions, and would not be considered soft sites. A few of the lots (Lots 61, 62, and 64) included in the Proposed Rezoning Area are irregularly shaped, comprise 2,500 sf or less of lot area, and are narrow lots with 25 feet of street frontage or less, and would not be considered soft site. Lots 61 and 62 are also City-owned and would require a disposition action (such as UDAAP) to be redeveloped. Lot 60 is occupied by a long-standing institutional use, a house of worship, with no known development plans, and therefore, not a soft site.

To produce a reasonable, conservative estimate of future growth identified development sites are typically divided into two categories: projected development sites and potential developments. Projected development sites are considered more likely to be developed within the analysis period for the proposed actions (i.e., by 2026), while potential sites are considered less likely to be developed over the same period. Although no development is planned for the remainder of the Proposed Rezoning Area, for conservative analysis purposes it is assumed that Lots 46 and 50 on Block 1455 could be redeveloped as Projected Development Site 1; and Lots 56 and 58 on Block 1455 could be combined to form Potential Development Site 1 as a consequence of the proposed zoning changes

Projected Development Site 1 (Block 1455, Lots 46 and 50)

Lot 46 comprises a 7,450-sf rectangular-shaped corner lot currently occupied by a single-story, approximately 7,450-gsf discount store and medical office. With a built FAR of 1.0, it falls well below 50 percent of the maximum allowable 4.6 FAR in the future with the Proposed Actions. Lot 50 comprises a 9,254-sf irregularly shaped corner lot currently occupied by a single-story, approximately 8,897-gsf vacant storefront formerly used by a grocery store. With a build FAR of 0.96, it also falls well below 50 percent of the maximum allowable 4.6 FAR in the future with the Proposed Actions. As such, for RWCDS purposes, it is projected that the lots would be combined and developed as a result of the With-Action conditions. Under the Proposed Actions, Block 1455, Lots 46 and 50 would be combined to form Projected Development Site 1. Projected Development Site 1 would be developed with a nine-story (95 feet roof height), approximately 97,380-gsf mixed-use building (4.6 FAR). The projected development would contain approximately 8,770-gsf of ground floor retail and 85 DUs (approximately 71,911-gsf), of which 22 DUs (25 percent) would be permanently affordable pursuant to MIH.

Potential Development Site 1 (Block 1455, Lots 56 and 58)

Lot 56 comprises a 3,338-sf irregularly shaped lot that is currently vacant. Lot 58 is adjacent to and southwest of Lot 56. It comprises a 3,111-sf, irregularly shaped lot that is currently vacant. As both lots are vacant, share common ownership, and when combined would comprise more than 5,000 sf in lot area, these lots would meet the criteria of a soft site. However, both lots are under the ownership of the adjacent Brownsville A.M.E. Zion Church and are currently used as informal parking facilities and outdoor event space. As such, they are less likely to be developed because of the Proposed Actions.

For RWCDS purposes, Lots 56 and 58 would be combined to form Potential Development Site 1. Development is not expected on Potential Development Site 1 in the foreseeable future. For analysis purposes, it is assumed that the site could potentially be constructed up to the maximum permitted 4.6 FAR under the proposed R7A/C2-4 zoning district with Inclusionary Housing, totaling 31,149 gsf, including approximately 3,386 gsf of ground floor local retail and 33 DUs on the upper floors (31,149 gsf of residential). The potential building would include 9-stories (95-feet tall). The EAS assesses the potential for site-specific impacts related to the development of the Potential Development Site 1 alongside all of the potential environmental impacts of the Proposed Actions at Development Sites A, B, and C and Projected Development Site 1, as set forth by the *CEQR Technical Manual*.

Reasonable Worst-Case Development Scenario (RWCDS)

In order to assess the possible effects of the Proposed Actions, a RWCDS was established for both the future without the Proposed Actions (the "No-Action condition") and the future with the Proposed Actions (the "With-Action condition") for the 2026 analysis year. The incremental difference between the No-Action and With-Action conditions will serve as the basis of the impact category analyses.

The Proposed Project described above in Section V would have built FARs of approximately 3.67, 2.94, and 4.19 at Development Sites A, B, and C, respectively, and would nearly maximize the allowable FAR for their respective sites under the Proposed Actions. In addition, a single projected development site has been identified in the Proposed Rezoning Area. Therefore, the proposed developments on Development Sites A, B, and C, as well as Projected Development Site 1 described above, represent the RWCDS for analysis purposes.

Future without the Proposed Actions (No-Action Condition)

In the 2026 future without the Proposed Actions (No-Action condition), it is expected that there would be no new development at any of the development sites, and all five lots on Development Sites A, B, and C would remain vacant and under City ownership. The Proposed Rezoning Area would maintain the existing M1-1 zoning. Under the existing zoning, no changes are anticipated, and existing buildings and uses within the area would remain unchanged from existing conditions.

Future with the Proposed Actions (With-Action Condition)

In the 2026 future with the Proposed Actions (With-Action condition), the proposed zoning map and text amendments as well as other associated actions would be approved. As such, an R7A/C2-4 zoning district would be mapped on a portion of Block 1455. Under the With-Action conditions, residential uses would be allowed with a maximum allowable FAR of 4.6 in the Proposed Rezoning Area.

Table A-5 describes the development programs at Development Sites A, B, and C, as well as at Projected Development Site 1.

Table A-5: RWCDS With-Action Development

Site	Block	Lot	Lot Area (sf)	FAR	Residential		Commercial (gsf)	Total (gsf)[2]	Building Height
					GSF	DUs[1]			
A	3743	12	2,500	3.67	4,650	6	2,500	9,650	42.83’
B	3518	63	6,000	2.94	19,913	21	0	23,662	62.67’
C	1455	65, 66, 79	6,558	4.19	28,949	34	0	32,285	90.67’
Projected Site 1	1455	46, 50	16,704	4.6	71,911	85	8,770	97,380	95’
Total			***31,762***	**-**	***125,423***	***146***	***11,270***	***162,977***	**-**

Notes:
[1] Average DU size of 850 gsf for Projected Development Site 1
[2] Includes cellar space

Development Site A (425 Mother Gaston Boulevard)

Development Site A (Block 3743, Lot 12) would be redeveloped with a mixed-use building at a total built FAR of 2.72, comprised of a 1.86 residential FAR and 0.95 commercial FAR. The 9,650-gsf, four-story proposed development would include 4,650 gsf of residential space (six affordable DUs) and 2,500 gsf of commercial space.

Development Site B (546 Thomas S. Boyland Street)

Development Site B (Block 3518, Lot 63) would be redeveloped with a residential building at a total built FAR of 3.15. The 23,662-gsf, six-story proposed development would include 19,913 gsf of residential space, containing 21 affordable DUs.

Development Site C (1733 Saint Marks Avenue)

Development Site C (Block 1455, Lots 65, 66, 79) would be redeveloped with a residential building at a total built FAR of 4.19. The 32,285-gsf, nine-story residential building would include 28,949-gsf of residential uses, containing 34 affordable DUs. Additionally, the site would be rezoned from M1-1 to R7A/C2-4.

Projected Development Site 1 (1611 East New York Avenue/226 Mother Gaston Boulevard)

Projected Development Site 1 (Block 1455, Lots 46 and 50) would be redeveloped with a mixed-use building at a total built FAR of 4.6. The 97,380-gsf, nine-story proposed development would include 71,911-gsf of residential space (85 DUs) and 8,770-gsf of retail space.

Possible Effects of the Proposed Actions

Table A-6 provides a comparison of the No-Action and With-Action conditions. As shown, the incremental (net) change that would result from the Proposed Actions and associated RWCDS would be the net addition of 125,423 gsf of residential space (146 DUs) and a net loss of 5,077 gsf of commercial space (assumes that the 8,897-gsf vacant commercial space on Lot 50, comprising a portion of Projected Development Site 1, would be reoccupied in the No-Action condition).

TABLE A-6: Comparison of RWCDS No-Action and With-Action Conditions

Use	No-Action Condition [1]	With-Action Condition [2]	Increment
Land Use			
Residential	0 gsf	125,423 gsf	**+125,423 gsf**
Dwelling Units (DUs)	0	146 DU	**+146 DUs**
Commercial	16,347 gsf	11,270 gsf	**-5,077 gsf**
Cellar	0 gsf	26,284	**+26,284 gsf**
TOTAL DEVELOPMENT	***16,347 gsf***	***162,977 gsf***	***+146,630 gsf***

Notes:
[1] Assumes the reoccupation of local retail space at Lot 50 (a portion of Projected Development Site 1) in the No-Action condition
[2] Average DU size of 850 gsf for Projected Development Site 1

VI. REQUIRED APPROVALS

The Project Sponsor requires a zoning map amendment, zoning text amendment, disposition of City-owned properties through UDAAP, and public funding to facilitate development of the Proposed Project. The proposed zoning map and text amendments and UDAAP are discretionary public actions that are subject to both ULURP and CEQR. The public funding is subject to 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 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 Brooklyn Community Board (CB) 16). 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. CPC then has up to 60 days, during which time a public hearing is held on the ULURP application. If approved by the CPC, the application is then forwarded to the City Council, which has 50 days to review the ULURP application. In the event the Council seeks to modify the application, the modifications are referred to the CPC for consideration, and the time for City Council action is extended to 65 days.

CEQR is a process by which agencies review discretionary actions for 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*. The SEQRA and CEQR rules guide environmental review through the following steps:

- *Establish a Lead Agency*. Under CEQR, the "lead agency" is the public entity responsible for conducting environmental review. The environmental review for the Proposed Actions is a coordinated review, with DCP serving as the lead agency.
- *Environmental Review and Determination of Significance*. The lead agency determines whether the proposed actions may have a significant impact on the environment. To do so, an Environmental Assessment Statement (EAS) must be prepared. This EAS is reviewed by the lead agency, which determines if the Proposed Actions and development have the potential to result in any significant adverse impacts on the environment. As the Proposed Actions are classified as a "Type I Action" and the EAS identified the potential for significant adverse impacts on the environment in certain impact categories, an EIS is required and must be prepared.

ATTACHMENT B

SUPPLEMENTAL SCREENING

I. INTRODUCTION

This Environmental Assessment Statement ("EAS") has been prepared in accordance with the guidance and methodologies presented in the 2021 *City Environmental Quality Review ("CEQR") Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a technical analysis be undertaken. Using this guidance, preliminary screening assessments were conducted for the Proposed Actions to determine whether further analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the EAS Form, including Land Use, Zoning, and Public Policy; Open Space; Shadows; Historic and Cultural Resources; Urban Design and Visual Resources; Natural Resource; Hazardous Materials; Air Quality; Noise; and Neighborhood Character, supplemental screening assessments are provided in this attachment.

The remaining technical areas detailed in the 2021 *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. Those areas screened out from any further assessment include: Socioeconomic Conditions; Community Facilities; Water and Sewer Resources; Solid Waste and Sanitation Services; Energy; Transportation; Greenhouse Gas Emissions; and Public Health.

The supplemental screening assessments contained herein identified that additional analyses are required in the areas of Land Use, Zoning, and Public Policy; Open Space; Shadows; Urban Design and Visual Resources; Air Quality; and Noise. These analyses are provided in Attachments C to H, respectively, and are summarized in this attachment. Per the supplemental screening assessments provided in this attachment, further analyses of the following technical areas are not required: Historic and Cultural Resources; Natural Resources; Hazardous Materials; and Neighborhood Character. **Table B-1** presents a summary of analysis screening information for the Proposed Actions.

As described in **Attachment A, "Project Description,"** the Project Sponsor is requesting a zoning map and text amendments, the disposition of City-owned property through Urban Development Action Area Project (UDAAP) designation and project approval, and the provision of public financing from the New York City Housing Preservation and Development (HPD) (and potentially other sources) to facilitate the development of affordable housing at three development sites ("Development Site A, B, and C"[1]) in the Brownsville neighborhood of Brooklyn Community District (CD) 16. The Proposed Project at Development Sites A, B, and C would consist of approximately 65,596 gross square feet (gsf) of new development, including 61 affordable dwelling units (DUs) and 2,500 gsf of local retail. For CEQR analysis purposes, the proposed zoning changes are also assumed to facilitate the development of a nine-story (95-foot-tall), approximately 97,380-gsf building, including 85 DUs (approximately 22 affordable units under the Mandatory Inclusionary Housing (MIH) program) and 8,770 gsf of ground floor retail use at Projected Development Site 1 (Block 1455, Lots 46 and 50). In addition, Lots 56 and 58 on Block 1455 would be

[1] Development Site A at 425 Mother Gaston Boulevard includes Lot 12 on Block 3743. Development Site B at 546 Thomas S. Boyland Street includes Lot 63 on Block 3518. Development Site C at 1733 Saint Marks Avenue includes Lots 65, 66, and 79 on Block 1455.

combined to form Potential Development Site 1. Although development is not expected on Potential Development Site 1 in the foreseeable future, for analysis purposes, it is assumed that the site could potentially be constructed up to the maximum permitted 4.6 FAR and maximum allowable building envelope under the proposed R7A/C2-4 zoning district. None of the other tax lots affected by the proposed zoning map and text changes are expected to be redeveloped or enlarged in the future with the proposed zoning changes, nor would these other tax lots be expected to transfer developments rights. The incremental (net) change that would result from the Proposed Actions and associated reasonable worst-case development scenario (RWCDS) would be the net increase of 146 DUs and a net loss of 5,077 gsf of commercial space at Development Sites A, B, C, and Projected Development Site 1.

TABLE B-1: Summary of CEQR Technical Areas Screening

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

II. SUPPLEMENTAL SCREENING AND SUMMARY OF DETAILED ANALYSES

Land Use, Zoning, and Public Policy

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

loss of a particular use. Land use analyses are required when an action would substantially affect land use regulation.

As the Proposed Actions involve zoning map and text amendments, and have the potential to affect applicable public policies, an assessment of land use, zoning, and public policy is provided in **Attachment C, "Land Use, Zoning and Public Policy."** As discussed therein, the Proposed Actions and associated RWCDS would not result in any significant adverse land use, zoning, or public policy impacts. The Proposed Actions would facilitate new residential and mixed-use development in appropriate locations that are well served by public facilities and infrastructure, and that are characterized by similar uses.

Open Space

Based on the *CEQR Technical Manual*, an open space assessment is typically warranted if an action would directly affect an open space, or if it would increase the population by more than 200 residents or 500 employees or other nonresidential users. The Proposed Actions and RWCDS are expected to result in an estimated 402 new residents and 17 employees as compared to the No-Action Condition. As the Proposed Actions would generate an increase in residents above the *CEQR Technical Manual* threshold for analysis, a residential open space analysis is provided in **Attachment D, "Open Space."** As discussed in detail in **Attachment D**, no significant adverse impacts to open space are expected because of the Proposed Actions.

Shadows

A shadows assessment considers proposed actions that result in new shadows long enough to reach any sunlight-sensitive resource as defined in the *CEQR Technical Manual* (except within an hour and a half of sunrise or sunset). For proposed actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight). According to the 2021 *CEQR Technical Manual*, some open spaces contain facilities that are not sunlight-sensitive, and do not require a shadow analysis including paved areas (such as handball or basketball courts) and areas without vegetation.

Under the RWCDS, the Proposed Actions would facilitate the construction of new buildings with heights that exceed 50 feet on Development Site C, Projected Development Site 1, and Potential Development Site 1. In addition, the Proposed Actions would facilitate the construction of a 43-foot tall mixed-use residential and commercial building on Development Site A, which abuts Carter G. Woodson Children's Park. As such, per *CEQR Technical Manual* guidance, a shadows assessment is warranted, and is provided in **Attachment E, "Shadows."** As detailed in **Attachment E**, the extent and duration of the incremental shadows would not: (a) significantly reduce or completely eliminate direct sunlight exposure on any of the sunlight-sensitive features; and (b) significantly alter the public's use of the playgrounds or threaten the viability of vegetation or other elements located within the open spaces, incremental shadows resulting from the Proposed Actions and associated RWCDS would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

Historic and Cultural Resources

The 2021 CEQR *Technical Manual* identifies historic and cultural resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes

properties that that have been designated New York City Landmarks (NYCL) or Scenic Landmarks; properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed in the State/National Registers of Historic Places (S/NR) or contained within a district listed in or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHL); and properties not identified by one of the programs listed above, but that meet their eligibility requirements. An assessment of historic/archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures or within historic districts, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

As detailed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of three affordable housing buildings at 425 Mother Gaston Boulevard (Site A), 546 Thomas S. Boyland Street (Site B) and 1733 Saint Marks Avenue (Site C), as well as mixed-use residential and commercial developments at Projected Development Site 1 and Potential Development Site 1, which is less likely to be developed. According to *CEQR Technical Manual* guidance, impacts on historic resources are considered on those sites affected by the Proposed Actions, and in the area surrounding the identified development sites. According to LPC's comment letter dated January 24, 2022, (**Appendix 1**), none of the development sites contain any resource of architectural significance. Therefore, the Proposed Actions would not result in any significant adverse direct impacts related to historic resources.

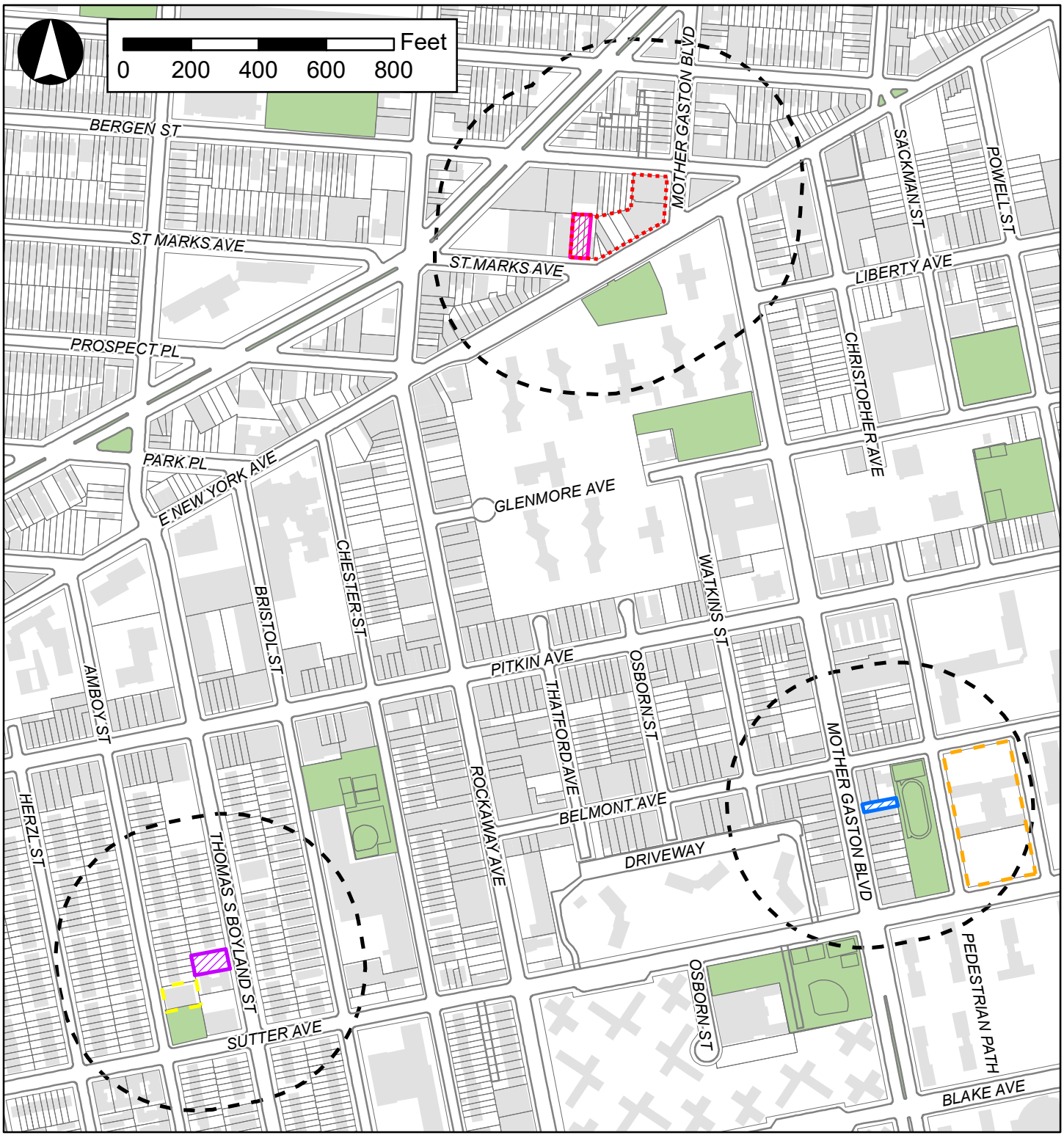
Pursuant to CEQR guidance, a radius of 400 feet from the boundaries of the development sites is typically adequate to assess potential impacts on any historic/architectural resources. Archaeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance compared to No-Action conditions; these are limited to sites that may be developed, and include the 5 development sites (Site A, B, C, and Projected Development Site 1 and Potential Development Site 1). As the Proposed Actions would induce new construction that would result in new in-ground disturbance, they have the potential to affect archaeological resources, and therefore an assessment of the potential effects on archaeological resources is warranted.

Architectural Resources

There are two historic architectural resources within 400 feet of a development site. As shown in **Figures B-1**, there are identified historical resources within 400-feet of Sites A and B, respectively. Therefore, further assessment of the potential indirect impacts of the Proposed Actions on architectural resources was conducted. There are no known historical sites within 400 feet of the Proposed Rezoning Area, which includes Site C, Projected Development Site 1, and Potential Development Site 1.

As described in **Table B-2,** Saint Timothy Holy Church (the former Amboy Street Schul), located at 139 Amboy Street, is a S/NR-listed historic site near Site B, and P.S. 150 Christopher School, located at 364 Sackman Street, is a S/NR-eligible historic site near Site A. Saint Timothy Holy Church, originally constructed in 1930s as a Jewish temple, is a three-story, approximately 20,640 gsf brick institutional building constructed along Amboy Street between Pitkin and Sutter Avenues. P.S. 150, constructed in 1907, is a four-story, approximately 95,550 gsf brick, public school building, which occupies the block bounded by Belmont Avenue to the north, Sackman Street to the east, Sutter Avenue to the south, and Christopher Avenue to the west.

Historic Resources Map



Source: NYCDCP (PLUTO 2021, Version II); DoITT (2020); LPC & SHPO (2020)

Legend

- Development Site A
- Development Site B
- Development Site C
- Proposed Rezoning Area
- S/NR-Eligible Resource
- S/NR-Listed Resource
- 400-Foot Radius
- Open Space
- Building Footprints

TABLE B-2: Historic Resources within 400-feet of Development Sites A and B

Resource Name	Address/ Location	Block/Lot	S/NR-Listed	S/NR-Eligible	LPC-Designated	LPC-Eligible	Project Area or 400-foot Study Area
Saint Timothy Holy Church	139 Amboy Street	3518/5	X				Site B (Thomas S. Boyland Street)
P.S. 150 Christopher School	364 Sackman Street	3744/9		X			Site A (425 Mother Gaston Boulevard)

Assessment

According to the *CEQR Technical Manual*, generally, if a project would affect those characteristics that make a resource eligible for LPC designation or S/NR listing, this could be a significant adverse impact. The identified historic resources within 400 feet of the development sites are significant both for their architectural quality as well as for their historical value as part of the city's development.

The Proposed Actions were assessed in accordance with methodologies established in the *CEQR Technical Manual* (Chapter 9, Part 420) to determine: (i) whether there would be a physical change to any designated or listed property as a result of the Proposed Actions; (ii) whether there would be a physical change to the setting of any designated resource, such as context or visual prominence, as a result of the Proposed Actions; and (iii) if so, whether the change is likely to diminish the qualities of the resource that make it important.

The Proposed Actions would also not result in any types of visual or contextual impacts to the known historic resources. The proposed developments on Sites A and B would be constructed in accordance with the respective site's existing zoning and are not expected to significantly alter the setting or visual context of any historic resource. The proposed buildings heights and bulk would be consistent with the surrounding context.

The proposed buildings on Sites A and B would all be low-rise and include four- and six-stories, respectively, and would be built in accordance with underlying R6 zoning. The Proposed Actions would not introduce any incompatible visual, audible, or atmospheric elements to the settings of historic resources. As neither of the historic resources contains sunlight-sensitive features, such as stained glass or polychromatic detailing, any incremental shadows generated by the proposed developments would not result in any significant adverse impacts on historic resources. Further, the Proposed Actions would not alter the relationship of any identified historic architectural resources to the streetscape as all streets would remain open and each resource's relationship with the street would remain unchanged. The proposed developments on Sites A and B would not eliminate or substantially obstruct important views of architectural resources. The Proposed Actions would not result in development that would adversely affect those characteristics that make P.S. 150 Christopher School eligible for S/NR listing nor adversely affect the designated Saint Timothy Holy Church. Therefore, the Proposed Actions would not result in any significant adverse indirect or contextual impacts on historic architectural resources.

P.S. 150 Christopher School is located more than 90 feet from Site A. As Saint Timothy Holy Church is a S/NR-listed historic resource and is within 90 feet of Site B (546 Thomas S. Boyland Street), the designated historic resource would be subject to the protections of the New York City Department of Buildings (DOB's) Technical Policy and Procedure Notice (TPPN) #10/88 beyond standard protection under DOB regulations applicable to all buildings located adjacent to construction sites. With adherence to the supplemental requirements of DOB's TPPN #10/88, any development at Site B would not cause any significant adverse construction-related impacts to this S/NR-listed resource.

The Proposed Actions would not result in any significant adverse impacts to architectural resources.

Archaeological Resources

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

The Proposed Actions would result in new in-ground construction and site excavation at five development sites. LPC reviewed all five of the development sites that have the potential to experience new or additional in-ground disturbance because of the Proposed Actions. In a comment letter dated January 24, 2022, (**Appendix 1**), LPC determined that, based on a review of archaeological sensitivity models and historic maps, none of the development sites have the potential for archaeological significance and, therefore, no additional archaeological analysis of is warranted. The Proposed Actions would not result in any significant adverse impacts to archaeological resources.

Urban Design and Visual Resources

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

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

The Proposed Actions involve zoning map and text amendments that would facilitate the development that would differ from what is currently permitted as-of-right, and as such, an analysis of urban design and visual resources is appropriate. This analysis is provided in **Attachment F, "Urban Design and Visual Resources."** As discussed in **Attachment F**, there would be no significant adverse impacts to urban design and visual resources due to the Proposed Actions.

Natural Resources

The *CEQR Technical Manual* defines natural resources as (1) the City's biodiversity (plants, wildlife, and other organisms); (2) any aquatic or terrestrial areas capable of providing suitable habitat to sustain the life processes of plants, wildlife, and other organisms; and (3) any areas capable of functioning in support of the ecological systems that maintain the City's environmental stability. In determining if a natural resources assessment is appropriate, there are two possibilities that are considered in evaluating the needs for a more detailed assessment: (a) the presence of a natural resource on or near the project site;

and (b) disturbance of that resource caused by the project. Due to the development sites' locations within the Jamaica Bay Watershed, a preliminary assessment of natural resources is warranted.

The Jamaica Bay Watershed is a source of freshwater and brackish water to the Hudson-Raritan Estuary and extends deep into Brooklyn, Queens, and Nassau County. Jamaica Bay is one of the largest and most productive coastal ecosystems in the northeast United States and includes the largest tidal wetland complex in New York City and the surrounding metropolitan areas. Connecting to the Atlantic Ocean via the Rockaway Inlet, Jamaica Bay's wetlands serve as flood protection and shoreline erosion control for the homes and businesses of the encircling neighborhoods.

The New York State Department of Environmental Conservation (NYSDEC) has included Jamaica Bay on its Section 303(d) impaired water list since 1998 because of violations of water quality standards related to pathogens, nitrogen, and oxygen demand. The primary causes of the impairment are combined sewage overflows (CSOs) and wastewater discharges. In June 2006, The Jamaica Bay Watershed Protection Plan Advisory Committee issued preliminary recommendations for improving the water quality and ecology of Jamaica Bay, which included best management practices to minimize and control soil erosion and stormwater and reduce point and nonpoint source pollution.

Pursuant to Local Law 71, enacted in July 2005, the New York City Department of Environmental Protection (DEP) was required to develop the Jamaica Bay Watershed Protection Plan (JBWPP) to assess the legal, technical, environmental, and economic feasibility of possible measures to protect the Bay. The final JBWPP, submitted in October 2007, outlines a set of objectives and recommended strategies to address current and future threats to the Bay and ensure that comprehensive watershed protection is coordinated, focused, and cost-effective. The plan also includes a schedule, with interim and final milestones, to implement the plan's measures and meet the specific objectives and methods for monitoring progress.

The Jamaica Bay Watershed Form was completed as per *CEQR Technical Manual* requirements and is provided in **Appendix 2**. While the Proposed Actions would facilitate construction of three affordable housing developments and a single projected development site, replacing vacant and underutilized land, the development sites are located in urbanized area of Brownsville. Additionally, the affected area (31,762 sf) represents a very small portion of the entire watershed draining to Jamaica Bay. Lastly, storm water management would be required by DEP for new construction. Therefore, significant adverse impacts are not expected to Jamaica Bay, and a more detailed analysis of natural resources is not required.

Hazardous Materials

As defined in the 2021 *CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semivolatile organic compounds (VOCs and SVOCs), methane, polychlorinated biphenyls (PCBs) and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). According to the *CEQR Technical Manual*, the potential for significant adverse impacts from hazardous materials can occur when: (a) hazardous materials exist on a site, and (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials. The Proposed Actions would result in new in-ground disturbance and site excavation at Sites A, B, C, and Projected Development Site 1 to facilitate new housing and/or local retail uses. In addition, although development is not expected on Potential Development Site 1 in the foreseeable

future, for conservative analysis purposes, it is assumed that the site could potentially be developed with residential and commercial uses under the RWCDS.

Phase I Environmental Site Assessments (ESAs) were prepared for Development Sites A, B, and C by CA RICH Consultants, Inc. in May and June 2020 (refer to the Executive Summary in **Appendix 3**) in conformance with the guidelines described in ASTM International's Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process – E1527-13. The purpose of a Phase I ESA is to determine whether any type of environmental hazard exists within or adjacent to the site. Environmental hazards may include, but are not limited to, hazardous/toxic wastes or raw chemicals stored, dumped, or spilled on the site, underground and above ground storage of petroleum or hazardous materials; asbestos within the building materials/structures; and identification of potential off-site sources of hazardous waste contamination, such as industrial facilities adjacent to the subject property.

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release, or a material threat of a release into structures on the property or into the ground, groundwater or surface waters of the property. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency.

Each of the Phase I's are summarized below. The Phase I ESAs have been submitted to HPD and the New York City Mayor's Office of Environmental Remediation (OER) for review. If HPD/OER determines that further investigation is required for any of the sites, a Phase II Work Plan would be prepared, and submitted to OER for review and approval.

Phase I ESA Summaries for Development Site A, B, and C

Development Site A (425 Mother Gaston Boulevard)

Development Site A (Block 3743, Lot 12) comprises an approximately 2,500 sf vacant parcel with overgrown vegetation occupying the entire site.

According to the Phase I, the earliest record is from 1887, when the site is described as vacant in a largely developed area. In 1907, the site first appears improved with a two-story structure that occupies its western half. The site no longer contained a structure by 2007 and has been vacant since then. The Phase I ESA indicates that the site is located in a historically well-developed area consisting of residential and commercial buildings; the site itself has been used for commercial (store) purposes. Nearby historical uses have included two photo shops, two dry cleaners, and a filling station. According to the Phase I, based on the relative distances, lower elevations, and/or oversight by EPA, these uses are not expected to have a direct negative impact on Development Site A.

According to the Phase I ESA, no environmentally detrimental building practices were observed at the site or nearby properties during inspection, and no evidence of Recognized Environmental Conditions (RECs) surfaced. Based upon the information reviewed, the former structure at the site was demolished no later than 2007, and it is possible that material related to this former structure will be encountered during redevelopment. The Phase I included a Tier 1 vapor encroachment survey and based upon the field inspection and pertinent information reviewed, it was determined that a vapor encroachment condition is unlikely to exist at the site. The Phase I did not recommend any further investigation for Site A.

Development Site B (546 Thomas S. Boyland Street)

Development Site B (Block 3518, Lot 63) is an approximately 6,000 sf vacant parcel with overgrown vegetation occupying the entire site. According to the Phase I ESA, the property was undeveloped as early as 1887 and first appears improved with a four-story residential building by 1928. The site retained this structure until 1986 and has been vacant since then. The site has historically been used for residential purposes.

According to the Phase I ESA, no environmentally detrimental building practices were observed at the site or nearby properties during inspection, and no evidence of Recognized Environmental Conditions (RECs) surfaced. The Phase I included a Tier 1 vapor encroachment survey and based upon the field inspection and pertinent information reviewed, a vapor encroachment condition is unlikely to exist at the site. The Phase I did not recommend any further investigation for Site B.

Development Site C (1733 Saint Marks Avenue)

Development Site C (Block 1455, Lots 65, 66, 79) is an approximately 6,000 sf site, comprised of three adjacent tax lots occupied with overgrown vegetation. According to the Phase I ESA, the site was used for residential and commercial purposes from 1888 through 1990. After 1990, the structures on the site were demolished and has been vacant since then. According to the Phase I ESA, no environmentally detrimental building practices were observed at the site or nearby properties during inspection.

The Phase I included a Tier 1 vapor encroachment survey. Based upon the field inspection and pertinent information reviewed, the Phase I could not rule out a vapor encroachment condition at the site. No Historical Recognized Environmental Conditions (HRECs) were identified in connection with the site. However, one REC was identified:

- In 1980, 1733 Saint Marks Avenue is identified as a two-story manufacturer. Because the former property at the site is listed as manufacturing, is the Phase I recommended that a Phase II ESA investigation be conducted for the site.

Phase II Work Plan Summary for Development Site C

Based on the findings of the Phase I ESA for Development Site C (Block 1455, Lots 65, 66, and 79), a Phase II Work Plan was prepared by CA RICH Consultants, Inc., in January 2022 (refer to Executive Summary in **Appendix 4**). The purpose of the Phase II Work Plan is to address potential onsite contamination from previous usage of Development Site C, which was identified in the Phase I ESA prepared by CA RICH dated June 2020.

The work plan proposes to determine the environmental integrity of the development site through the sampling of soil, soil vapor, and groundwater. The site will be assessed via the installation of ten soil borings located throughout the site, with one location proposed for conversion to a temporary groundwater monitoring well. Two soil samples will be collected from each of the test borings within the proposed footprint of the building from surface grade to two feet below surface and a second sample shall be collected from between seven and nine feet below grade. Should signs of contamination be observed between two and seven feet below grade, additional samples may be collected. A groundwater sample will be collected from one of the soil borings that will be converted to a temporary well. The well will be purged of three to five well volumes implementing low flow purging methods. Soil and groundwater samples will be analyzed for VOCs, SVOCs, pesticides, PCBs, and total and dissolved metals.

Five soil vapor implants will be installed to a depth of eight feet below grade. Soil vapor will be analyzed for VOCs.

Assessment

Prior to starting excavation, subsurface characterization and testing would be performed for Site C. All activities involving disturbance of existing soil would be conducted in accordance with a Construction Health and Safety Plan (CHASP), which would document measures to identify and manage unexpectedly encountered contamination (e.g., petroleum storage tanks or contaminated soil). Removal of any hazardous materials discovered in the subsurface on-site, such as petroleum storage tanks and associated equipment, would be carried out in accordance with all applicable regulations. Any excess soil at Site C would be (stockpiled, transported, and disposed of or reused) in accordance with all applicable regulations. A Remedial Action Plan (RAP) and CHASP were submitted to DEP. In a letter dated March 2024 (see **Appendix 1**), DEP finds the RAP and CHASP acceptable. With these measures included as part of the proposed development, and required through the Land Disposition Agreement (LDA) between HPD and the Project Sponsor for Site C, no significant adverse impacts related to hazardous materials would occur at Site C.

In addition, an (E) designation pursuant to ZR Section 11-15 is recommended be also placed on Block 1455, Lots 46, 50, 56, and 58, based on historic manufacturing and automotive-related uses on the subject block, and to ensure the sites are properly remediated before any development and/or site disturbance as a result of the proposed zoning change

The (E) designation for Projected Development Site 1 and Potential Development Site 1 would be the following:

Brooklyn Block 1455, Lots 46, 50, 56 and 58:

The (E) designation text related to hazardous materials is as follows:

> **Task 1-Sampling Protocol**
>
> **The applicant submits to OER, for review and approval, a Phase I and Phase II of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum-based contamination and non-petroleum-based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.**
>
> **Task 2-Remediation Determination and Protocol**
>
> **A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is**

necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

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

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

With the requirements of the (E) designation to be met before any construction activity or new development could occur on the Projected Development Site 1 and Potential Development Site 1, there would be no impact from the potential presence of contaminated materials. The (E) designation will ensure that testing and remediation will be provided as necessary before any future development and/or soil disturbance on Projected Development Site 1 and Potential Development Site 1.

The implementation of the preventative and remedial measures outlined in the LDA and (E) designation would preclude the potential for significant adverse hazardous materials impacts from Proposed Actions. Moreover, no new activities or processes using hazardous materials would be introduced by the Proposed Actions. Following construction there would be no potential for significant adverse hazardous materials impacts. Therefore, no further analysis is warranted.

Air Quality

According to the guidance provided in the 2021 *CEQR Technical Manual*, air quality analyses are conducted in order to assess the effect of an action(s) on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the 2021 *CEQR Technical Manual*, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts. Per the EAS Form, further analysis of air quality mobile sources from action-generated vehicle trips has been screened out. Per the EAS Form, the Proposed Actions and RWCDS would not generate peak hour vehicle volumes in exceedance of the CEQR threshold of 170 vehicle trips and would not generate peak hour vehicle volumes in exceedance of the CEQR thresholds for heavy-duty diesel vehicle (HDDV) traffic or the vehicular emissions equivalent on adjacent roadways.[2] The development sites are spread out over three separate areas within roughly 0.07-square mile of each other.

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

[2] Refer to Chapter 17, "Air Quality," Section 210 of the *CEQR Technical Manual* for applicable HDDV thresholds.

new structures are added near such stacks and those structures change the dispersion of emissions from the stacks so that they affect surrounding uses.

The Proposed Actions and associated RWCDS were analyzed for potential stationary source impacts, which is provided in **Attachment G, "Air Quality."** As discussed in detail **Attachment G**, no significant adverse air quality impacts would occur as a result of the Proposed Actions. To ensure that the proposed development's HVAC system at Development Site C (Block 1455, Lots 65, 66, and 79) would not cause any significant adverse impacts to existing uses, restrictions to fuel type, and exhaust stack location would be required through a regulatory agreement or other legally binding agreement between the Project Sponsor and HPD. In addition, an (E) designation (E-736) will need to be placed on Projected Development Site 1 (Block 1455, Lots 46 and 50) and on Potential Development Site 1 (Block 1455, Lots 56 and 58), which will restrict the location of each building's associated HVAC stack, as well as limit the HVAC system's fuel to natural gas. With these restrictions in place, there would not be any adverse air quality impacts due from fossil fuel-fired HVAC systems emissions. If the application for the approval of construction documents for these development sites are past the applicable date noted under Article 506 of Local Law 154, the building(s) must abide by the restrictions of Local Law 154 and will use electric power for the HVAC system(s).

In addition, based on a review of area land uses, there are two existing industrial/processing facilities within 400 feet of Development Site C, Projected Development Site 1, and Potential Development Site 1 that have DEP light industrial air permits, therefore, **Attachment G** includes an air toxics analysis. The analysis of emissions from nearby industrial sources provided in **Attachment G** determined that no significant adverse impacts would result from air toxics related to industrial sources.

As discussed therein, no significant adverse stationary air quality impacts are expected in the future with the proposed actions.

Noise

The purpose of a noise analysis is to determine both a proposed action's potential effects on sensitive noise receptors and the effects of ambient noise levels on new sensitive uses introduced by the proposed action(s). 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 HVAC systems) and construction noise (e.g., trucks, bulldozers, power tools, etc.).

The Proposed Actions would introduce new sensitive uses, and therefore, a detailed noise analysis was conducted in compliance with *CEQR Technical Manual* guidance. As discussed in **Attachment H, "Noise,"** the Proposed Actions and associated RWCDS would not generate sufficient traffic to result in a significant noise impact (i.e., doubling of Noise PCEs), therefore, an assessment of mobile source noise impacts is not provided.

The Proposed Actions would result in residential uses. Consistent with the 2021 *CEQR Technical Manual*, existing noise levels should be measured and compared to the Noise Exposure Guidelines for these types of uses presented in Table 19-2 of the Manual. As such, a detailed noise analysis has been prepared and is provided in **Attachment H, "Noise."**

As discussed in **Attachment H**, the noise analysis determined that Site A would require a Regulatory Agreement (or other legally binding document to be determined by HPD) between the HPD and the

Project Sponsor that would specify the required noise attenuation measures to ensure acceptable interior noise levels for any future development at Development Site A (Block 3743, Lot 12). In addition, Projected Development Site 1 (Block 1455, Lots 46 and 50) and Potential Development Site 1 (1455, Lots 56 and 58) would require an (E) designations to be mapped because of the proposed zoning change. The (E) designation would specify the required noise attenuation measures to ensure acceptable interior noise levels for any future residential, community facility and commercial office development at the sites. Therefore, the Proposed Actions would not result in any significant adverse noise impacts.

With the implementation of the attenuation requirements at Development Site A, pursuant to the Regulatory Agreements between HPD and the Project Sponsor, and the (E) designation for Projected Development Site 1 and Potential Development Site 1, the Proposed Actions would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation requirements.

Neighborhood Character

According to the 2021 *CEQR Technical Manual*, an assessment of neighborhood character may be appropriate if a proposed action(s) has the potential to result in significant adverse impacts on land use, zoning, public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise, or when an action may have moderate effects on several of the elements that define a neighborhood's character. As the EAS provides assessments of land use, zoning, and public policy (**Attachment C**), open space (**Attachment D**), shadows (**Attachment** E), urban design and visual resources (**Attachment F**), and noise (**Attachment H**), a preliminary screening analysis is necessary to determine if a detailed neighborhood character analysis is warranted.

Neighborhood character is an amalgam of various elements that give neighborhoods their distinct "personality." According to the *CEQR Technical Manual*, a preliminary assessment may be appropriate if a project has the potential to result in any significant adverse impacts on any of the technical areas mentioned. Per the analyses provided in this EAS, although the Proposed Actions required supplemental screening or assessment of some of these technical areas, there would be no action-generated significant adverse impacts.

The *CEQR Technical Manual* also states that for projects not resulting in significant adverse impacts to any technical areas related to neighborhood character, additional analyses may be required to determine if the Proposed Actions would result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. However, the *CEQR Technical Manual* indicates that neighborhood character impacts are rare and it would be unusual that, in the absence of a significant adverse impact in any of the relevant technical areas, a combination of moderate effects in the neighborhood would result in any significant adverse impact to neighborhood character.

The Proposed Actions would not adversely affect any component of the surrounding area's neighborhood character, conflict with the surrounding activities, or significantly affect land use patterns. The development facilitated by the Proposed Actions would bring occupancy and activity to vacant and underutilized development sites. The proposed residential and local retail uses would add affordable housing and amenities to the neighborhood and are expected to further enhance the mixed-use character of the area. As the Proposed Actions would not be considered to have any significant effects on any of the technical areas relating to neighborhood character, a neighborhood character assessment can be

screened out, and no significant adverse neighborhood character impacts would occur. Therefore, no additional analysis is warranted for neighborhood character.

ATTACHMENT C

LAND USE, ZONING, & PUBLIC POLICY

I. INTRODUCTION

Under 2021 *CEQR Technical Manual* guidance, a land use analysis evaluates the uses and development trends in the area that may be affected by a proposed action(s) and determines whether the action(s) would be compatible with those conditions or potentially adversely affect them. Similarly, the analysis considers the proposed action's compliance with, and effect on, the area's zoning and other applicable public policies.

As discussed in **Attachment A, "Project Description,"** the Proposed Actions involve discretionary approvals, including a zoning map and text amendments, disposition of City-owned property through Urban Development Action Area Project (UDAPP) designation and project approval, and provision of public financing, that would affect three sites across five tax lots in the Brownsville neighborhood of Brooklyn Community District (CD) 16. The Proposed Actions would facilitate the development of new affordable housing and commercial uses (the "Proposed Project"):

- Development Site A (Block 3743, Lot 12) would be redeveloped with a four-story, approximately 9,650-gross square foot (gsf) mixed residential/commercial building containing six affordable dwelling units (DUs) and 2,500 gsf of ground-floor restaurant space.
- Development Site B (Block 3518, Lot 63) would be redeveloped with a six-story, approximately 23,662-gsf residential building containing 21 affordable DUs.
- Development Site C (Block 1455, Lots 65, 66, and 79) would be redeveloped with a nine-story, approximately 32,285-gsf residential building containing 34 affordable DUs.

The Project Sponsor's Proposed Project would total approximately 65,596 gsf of new development, including 61 affordable DUs and 2,500 gsf of local retail space. The Proposed Project is expected to be complete and fully operational by 2026. Absent the Proposed Actions, the Proposed Project would not occur, and Sites A, B, and C would remain vacant and under City ownership, as under existing conditions.

As a Reasonable Worst Case Development Scenario (RWCDS), in addition to developments facilitated by the Proposed Project, the proposed zoning changes are expected to facilitate the development of an additional development site ("Projected Development Site 1"). Projected Development Site 1 would total approximately 97,380-gsf, of which approximately 71,911-gsf would be residential uses (85 DUs), and 8,770-gsf of local retail. Under the RWCDS, the Proposed Actions would result in an increase of approximately 146 total DUs, of which 61 would be made permanently affordable, and approximately 11,270-gsf of local retail uses.

According to the *CEQR Technical Manual*, a land use and zoning analysis is warranted for actions facilitating a change in land use or zoning. As the Proposed Actions involve zoning map and text amendments affecting a portion of Brooklyn Block 1455, an analysis of land use and zoning are warranted. Furthermore, the *CEQR Technical Manual* recommends that if a preliminary assessment cannot succinctly describe land use conditions in the study area, or if a detailed assessment is required in the technical analyses of socioeconomic conditions, neighborhood character, transportation, air quality, noise, infrastructure, or hazardous materials, a detailed land use assessment is appropriate. As such, a detailed

land use and zoning assessment is warranted for the Proposed Actions.

II. METHODOLOGY

The purpose of this attachment is to examine the effects of the Proposed Actions and determine whether they would result in any significant adverse impacts on land use, zoning, or public policy. The analysis methodology is based on the guidance of the *CEQR Technical Manual* and examines the Proposed Actions' consistency with land use patterns and development trends, zoning regulations, and other applicable public policies.

This attachment includes a description of existing land uses and zoning within the directly affected area and the broader study area. Following the guidance of the *CEQR Technical Manual*, the analysis describes existing and anticipated future conditions to a level necessary to understand the relationship of the Proposed Actions to such conditions, assesses the nature of any changes on these conditions that would be created by the Proposed Actions, and identifies those changes, if any, that could be significant or adverse.

Existing land uses were identified through review of a combination of sources including field surveys and secondary sources, as well as the City's Primary Land Use Tax Lot Output (PLUTO™) data files for 2021 and websites, such as New York City's Zoning and Land Use Map (ZoLa, https://zola.planning.nyc.gov) and NYCityMap (http://gis.nyc.gov/doitt/nycitymap/). New York City Zoning Maps and the Zoning Resolution (ZR) of the City of New York were consulted to describe existing zoning districts and provided the basis for the zoning evaluation of the future No-Action and future With-Action conditions. Relevant public documents including 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 study areas.

Analysis Year

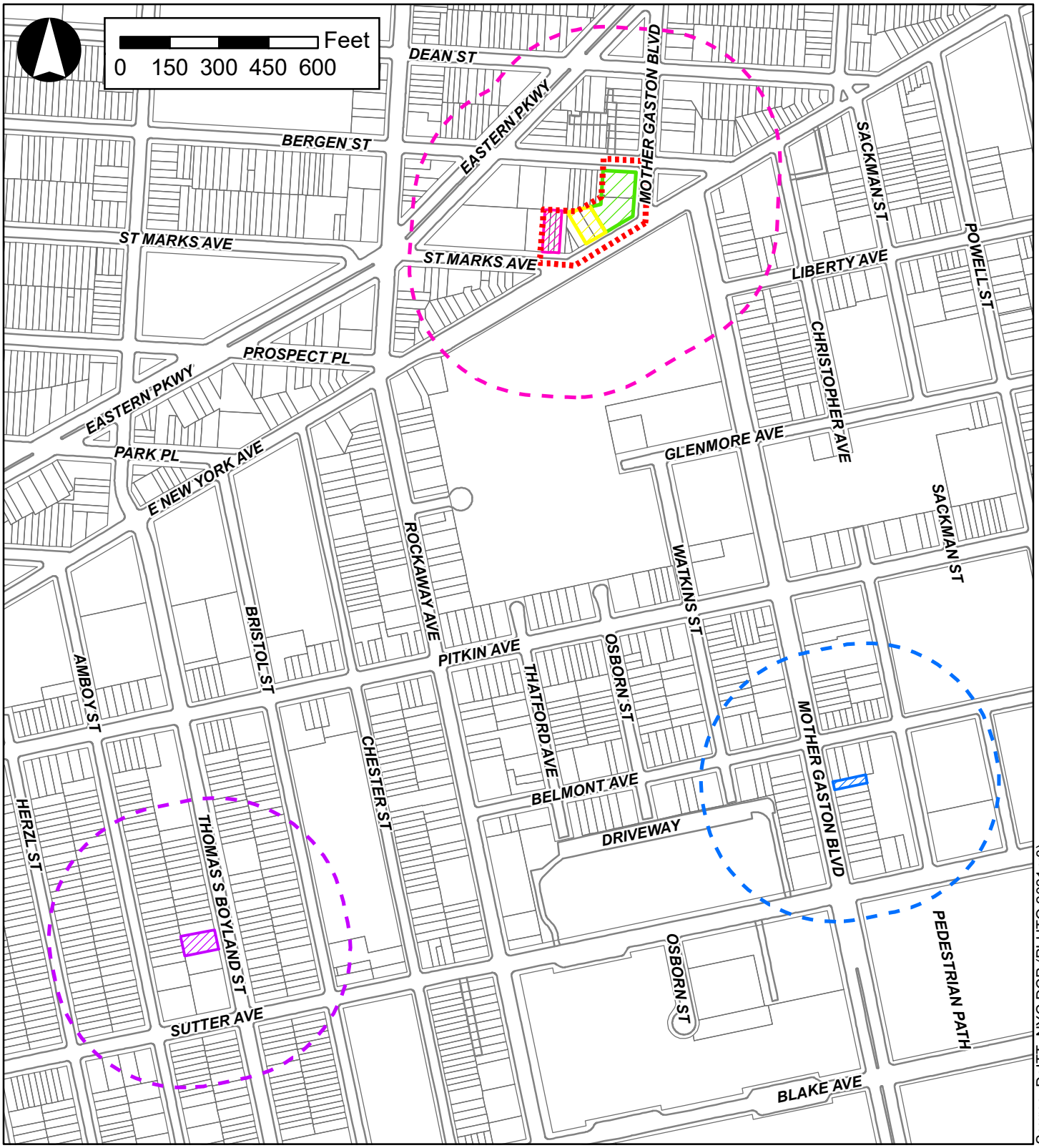
As discussed in **Attachment A, "Project Description,"** development under the Proposed Actions is expected to be completed by 2026. Therefore, for the purposes of determining potential impacts, this analysis assesses current conditions and forecasts those conditions to 2026. Future No-Action conditions account for planned land use and development projects, initiatives, and proposals that are anticipated to be completed by 2026.

Study Area Definition

According to the *CEQR Technical Manual*, the appropriate study area for land use, zoning, and public policy is related to the type and size of an action, as well as the location and context of the area that could be affected. Study area boundaries vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a very large project. The study areas for the Proposed Actions have been established in accordance with *CEQR Technical Manual* guidance and are shown in **Figure C-1**.

As shown in **Figure C-1**, land use, zoning, and public policy are addressed and analyzed for two geographical areas for the Proposed Actions. The study areas include: (1) the directly affected area (or "primary study area") comprising Development Sites A and B as well as the area to be rezoned on Block 1455; and (2) a secondary study area that encompasses an area that has the potential to experience

Study Areas



Source: DoITT; NYC DCP (PLUTO 2021 v3)

Legend

- Primary Study Area A
- Secondary Study Area A
- Primary Study Area B
- Secondary Study Area B
- Primary Study Area C
- Development Site C
- Projected Development Site 1
- Potential Development Site 1

indirect impacts because of the Proposed Actions. The secondary study areas extend an approximate 400-foot radius from the boundary of each of the primary study areas. **Table C-1** describes the primary and secondary study areas for Development Sites A and B and the Proposed Rezoning Area, which contains Development Site C, Projected Development Site 1, and Potential Development Site 1.

Table C-1: Primary and Secondary Study Areas

Site	Primary Study Area	Secondary Study Area (Bounding Streets)[1]
A	Block 3743, Lot 12	Pitkin Ave, Sackman St, Sutter Ave, Watkins St
B	Block 3518, Lot 63	Pitkin Ave, Bristol St, Sutter Ave, Herzl St
Proposed Rezoning Area	Block 1455, Lots 46, 50, 56, 58, 60-62, 65, 66, 79, p/o Lots 39, 41-44, 67	Eastern Parkway, Christopher Ave, Glenmore Ave, Rockaway Ave

Notes: [1] Order of bounding streets: north, east, south, west

III. DETAILED ANALYSIS

Existing Conditions

Land Use

Primary Study Areas (Directly Affected Areas)

Development Site A

As shown in **Figure C-2a**, Development Site A (Block 3743, Lot 12) is a rectangular-shaped tax lot located at 425 Mother Gaston Boulevard. The vacant lot occupies approximately 2,500 sf and has approximately 25 feet of frontage on the east side of Mother Gaston Boulevard between Belmont and Sutter Avenues.

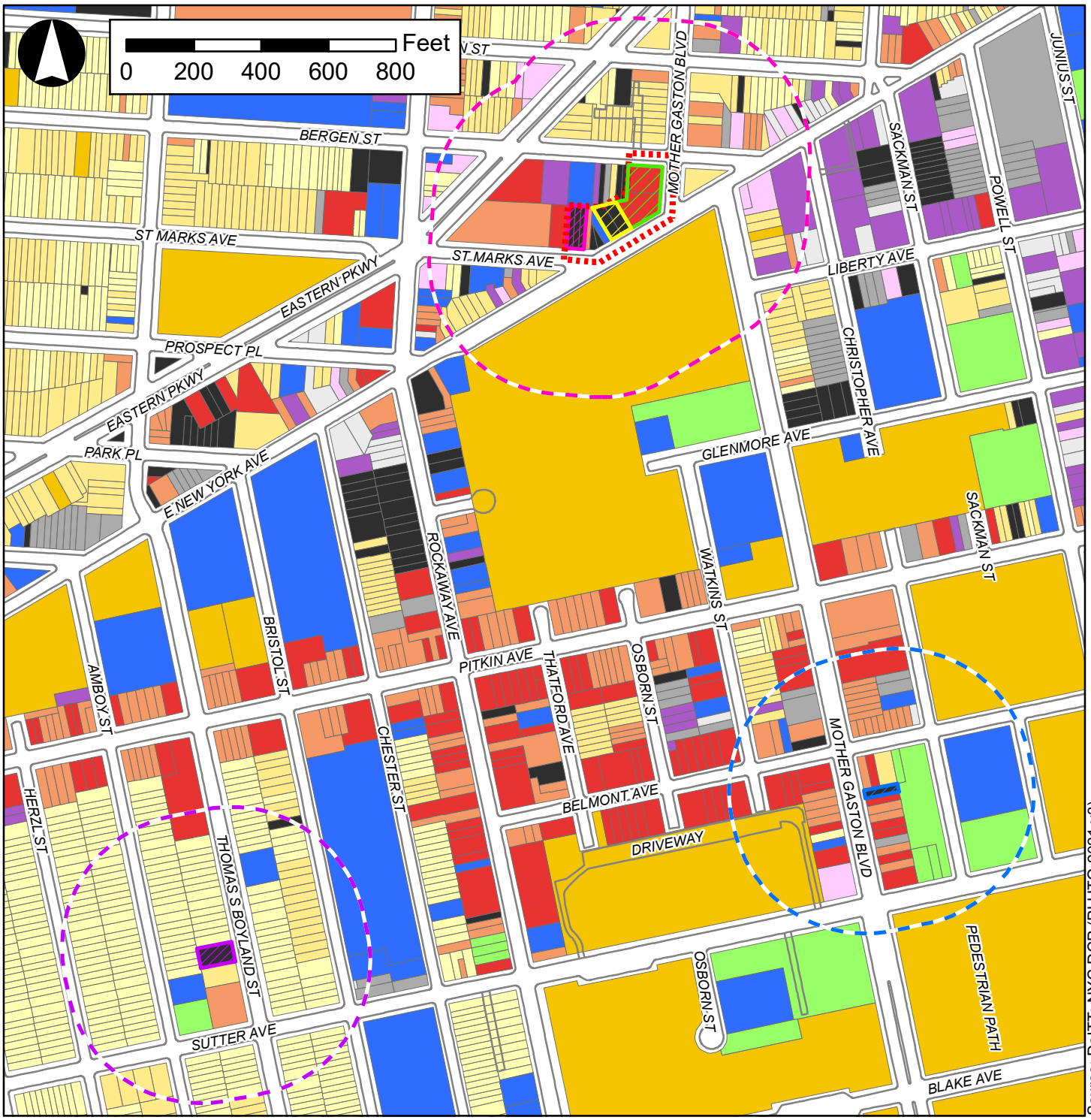
Development Site B

As shown in **Figure C-2b**, Development Site B (Block 3518, Lot 63) is a rectangular-shaped tax lot located at 546 Thomas S Boyland Street. The vacant lot occupies approximately 6,000 sf and has approximately 60 feet of frontage on the west side of Thomas S Boyland Street between Pitkin and Sutter Avenues.

Proposed Rezoning Area

The proposed zoning changes would affect the southeastern portion of Brooklyn Block 1455, and would encompass the entirety, or parts of 17 tax lots (Lots 46, 50, 56, 58, 60-62, 64-66, 79, p/o Lots 39, 41-44, and 67). The Proposed Rezoning Area occupies approximately 35,951 sf of lot area and includes the portion of the block within 100 feet of Mother Gaston Boulevard and within 100 feet of East New York Avenue, as well as within 82 feet west of East New York Avenue up to the mid-block. The Proposed Rezoning Area has approximately 82 feet of frontage along Saint Marks Avenue, approximately 225 feet of frontage along East New York Avenue, approximately 130 feet of frontage along Mother Gaston Bouelvard, and approximately 100 feet of frontage along Bergen Street.

As shown in **Figure C-2c**, Development Site C (Block 1455, Lots 65, 66, and 79) is comprised of three rectangular-shaped tax lots at 1733 St Marks Avenue. Together, the three vacant lots occupy



Source: DoITT; NYC DCP (PLUTO 2021 v3)

Legend

- Primary Study Area A
- Secondary Study Area A
- Primary Study Area B
- Secondary Study Area B
- Primary Study Area C
- Development Site C
- Potential Development Site 1
- Projected Development Site 1
- Secondary Study Area C

Land Use

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

Study Area Land Use - Development Site A



Source: DoITT; NYC DCP (PLUTO 2021 v3)

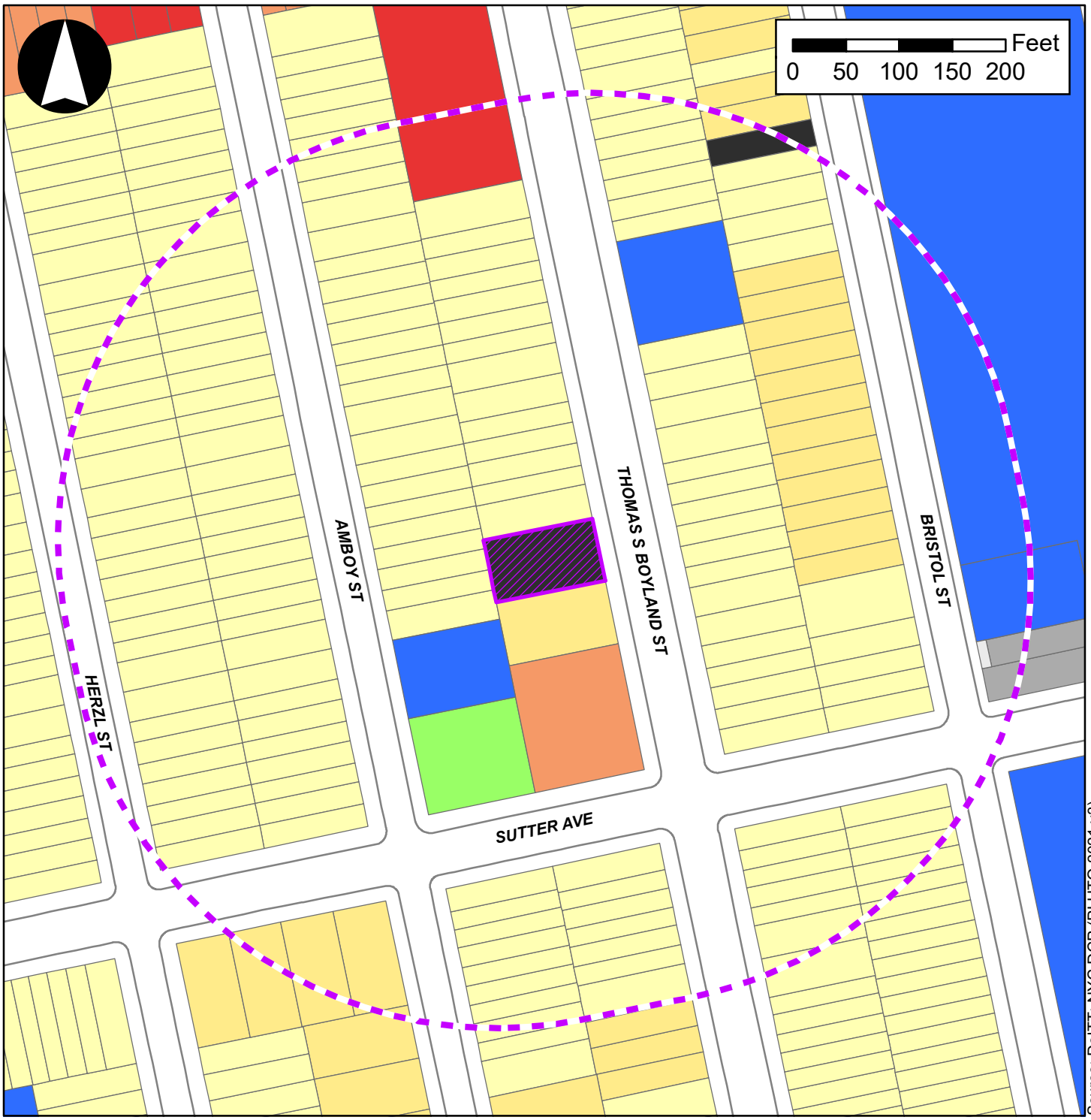
Legend

- Primary Study Area A
- Secondary Study Area

Land Use

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

Study Area Land Use - Development Site B



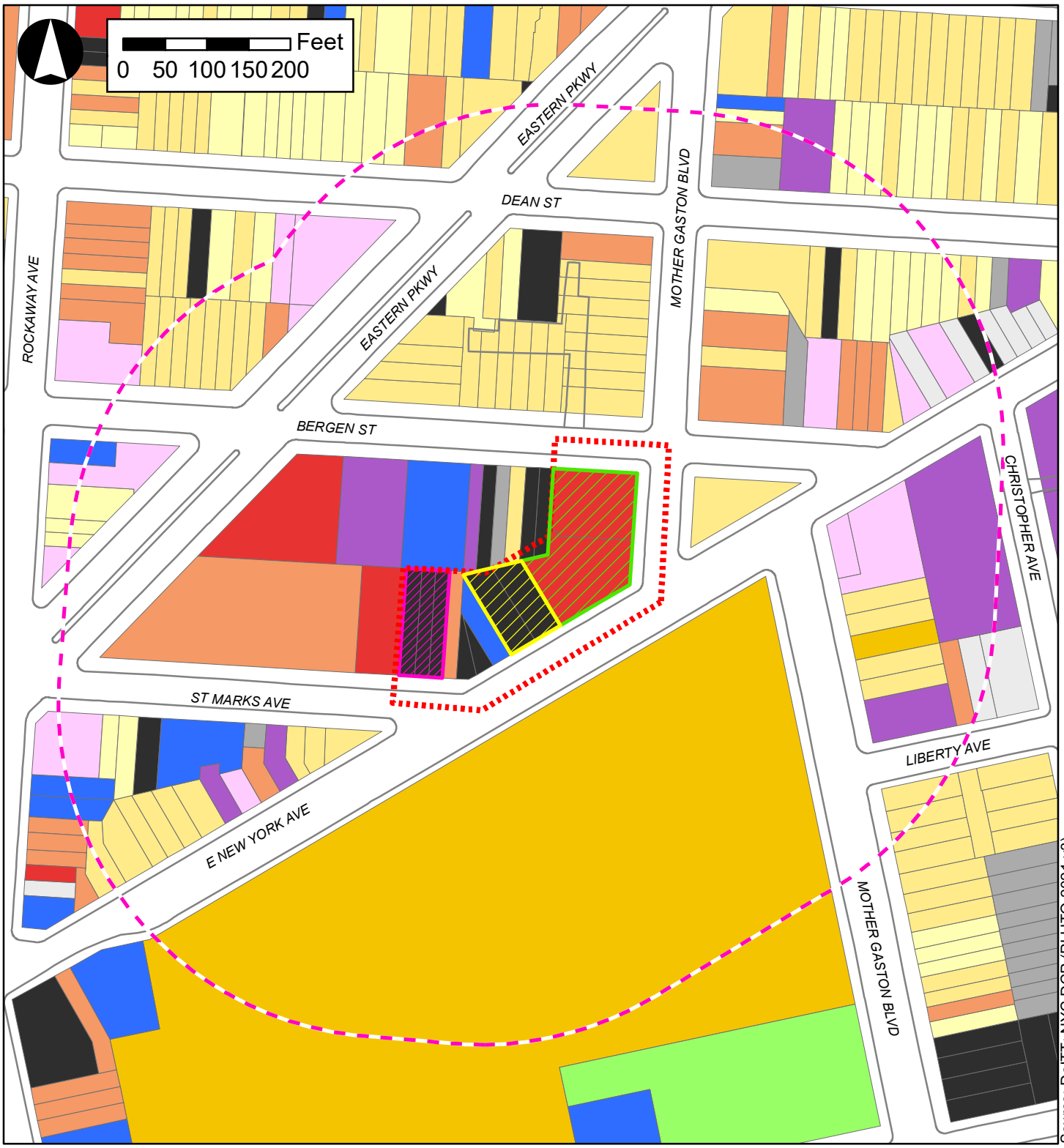
Legend

- Primary Study Area B
- Secondary Study Area

Land Use

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

Study Area Land Use - Proposed Rezoning Area + Development Site C



Legend

- Primary Study Area
- Development Site C
- Potential Development Site 1
- Projected Development Site 1
- Secondary Study Area

Land Use

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

approximately 6,558 sf and have approximately 51 feet of frontage on the north side of Saint Marks Avenue between East New York Avenue and Eastern Parkway.

Lots 43, 44, 56, 58, 61, and 62 are also vacant. Lots 56 and 58 are informally used for parking and event space for the adjacent community facility use, a church, at 1591 East New York Avenue (Lot 60), Lot 39 is occupied by a light industrial/manufacturing use, a marble, granite and quartz fabricator. Lot 64 is occupied by mixed commercial/residential uses. Lots 46, 50, and 67 are occupied by commercial uses including a transiet hotel and retail space (Lots 46 and 50 comprise Projected Development Site 1). Lot 41 is occupied by a parking facility. Lot 42 is occupied by a multi-family walk-up building.

Secondary Study Areas (400-Foot Radius)

400-feet within Development Site A

A variety of land uses are located within a 400-foot radius of Development Site A, including commercial, mixed-use commercial and residential buildings, residential, open space, and institutional uses. The majority of residential buildings are mixed use and multi-family walkup buildings. Notable uses include Brownsville Collegiate Charter School, Carter G. Woodson Children's Park, PS 284 Lew Walla School, and the Dr. Green Playground. The New York City Housing Authority (NYCHA)'s Brownsville, Hughes, and Van Dyke Houses are also located west and southwest of the Development Site. The Sutter Avenue station for the New York City Transit (NYCT) L subway line is located 0.23 miles east from Development Site A and the Junius Street Station 2/3/4 line is located 0.5 miles south from the site. The B14 NYCT bus routes serves Development Site A along Mother Gaston Boulevard.

Table C-2 provides a description of existing land use within the secondary study area. Mixed commercial/residential is the most prevalent land use throughout the study area and constitutes the highest percentage of tax lots and second highest percentage of building area (nearly 41 and 34 percent, respectively). Commercial/office buildings comprise the largest percentage of lot area (27 percent) within the secondary study area, as well as the second largest number of lots (approximately 24 percent). Public facilities and institutions account for the largest percentage of building area (nearly 35 percent) and second largest percentage of lot area (approximately 21 percent); this is in large part due to Brownsville Colligate Charter School and PS 284.

TABLE C-2: Existing Land Uses in the Secondary Study Area of Development Site A

Land Use Categories	Number of Lots	% of Total Lots	Lot Area (sf)	% of Total Lot Area	Building Area (sf)	% of Total Building Area
One- & Two-Family Buildings	1	1.5%	2,500	0.9%	1,800	0.6%
Multi-Family Walkup Buildings	3	4.5%	9,608	3.4%	22,379	7.2%
Multi-Family Elevator Buildings	0	0.0%	0	0.0%	0	0.0%
Mixed Commercial/Residential Buildings	27	40.9%	56,302	19.6%	104,278	33.5%
Commercial/Office Buildings	16	24.2%	77,250	27.0%	71,463	23.0%
Industrial/Manufacturing	1	1.5%	2,533	0.9%	2,406	0.8%
Transportation/Utility	1	1.5%	10,000	3.5%	1,572	0.5%
Public Facilities & Institutions	4	6.1%	59,000	20.6%	107,334	34.5%
Open Space	5	7.6%	44,167	15.4%	0	0.0%
Parking Facilities	5	7.6%	19,000	6.6%	0	0.0%
Vacant Land	2	3.0%	5,000	1.7%	0	0.0%
All Others or No Data	1	1.5%	1,200	0.4%	0	0.0%
Total	**66**	**100.0%**	**286,560**	**100.0%**	**311,232**	**100.0%**
Total Residential	4	6.1%	12,108	4.2%	24,179	7.8%

Source: NYC Department of City Planning (PLUTO 2021v3)

400-feet within Development Site B

As shown in **Figure C-2b**, residential uses make up the predominant land use within a 400-foot radius of Development Site B. The majority of residential buildings are one and two-family house, as well as some multi-family walk-up buildings. Other notable land uses include the Jes Good Rewards Children's Garden, Bethany Gospel Chapel, the Brownsville Station USPS, PS 327 Dr. Rose B English, and PS/IS 325. The Rockaway Avenue NYCT 2/3/4 subway line is located 0.5 miles south of Development Site B. The B14 NYCT bus routes serves Development Site B along Pitkin Avenue. The B60 bus routes is located to the east of Development Site B on Rockaway Avenue.

Table C-3 provides a description of existing land use within the secondary study area. One-and two-family buildings are the most prevalent land use throughout the study area and constitutes the highest percentage of tax lots, lot area, and building area (nearly 87, 77, and 55 percent, respectively). In the secondary study area, residential uses occupy almost 96 percent of tax lots, 88 percent of lot area, and 79 percent of building area.

TABLE C-3: Existing Land Uses in the Secondary Study Area of Development Site B

Land Use Categories	Number of Lots	% of Total Lots	Lot Area (sf)	% of Total Lot Area	Building Area (sf)	% of Total Building Area
One- & Two-Family Buildings	144	86.7%	317,862	77.3%	220,618	54.7%
Multi-Family Walkup Buildings	15	9.0%	46,000	11.2%	96,080	23.8%
Multi-Family Elevator Buildings	0	0.0%	0	0.0%	0	0.0%
Mixed Commercial/Residential Buildings	1	0.6%	12,292	3.0%	56,964	14.1%
Commercial/Office Buildings	0	0.0%	0	0.0%	0	0.0%
Industrial/Manufacturing	0	0.0%	0	0.0%	0	0.0%
Transportation/Utility	0	0.0%	0	0.0%	0	0.0%
Public Facilities & Institutions	2	1.2%	17,500	4.3%	29,440	7.3%
Open Space	1	0.6%	9,292	2.3%	0	0.0%
Parking Facilities	0	0.0%	0	0.0%	0	0.0%
Vacant Land	2	1.2%	8,500	2.1%	0	0.0%
All Others or No Data	1	0.6%	0	0.0%	0	0.0%
Total	**166**	**100.0%**	**411,446**	**100.0%**	**403,102**	**100.0%**
Total Residential	*159*	*95.8%*	*363,862*	*88.4%*	*316,698*	*78.6%*

Source: NYC Department of City Planning (PLUTO 2021v3)

400-feet within the Proposed Rezoning Area

Land uses within a 400-foot radius of the Proposed Rezoning Area are varied, and include commercial, manufacturing, industrial, vacant land, and residential uses. Notable land uses include the Brownsville Branch of the Brooklyn Public Library and the NYCHA Howard Houses. The Rockaway Ave NYCT station for the A/C subway line is located 0.5 miles north of Development Site C. The B60 NYCT bus route (along Rockaway Ave), the B12 (along East New York Avenue), and the B7 (along Eastern Parkway) serve Development Site C.

Table C-4 provides a description of existing land use within the secondary study area. Multi-family walkup buildings are the most prevalent land use throughout the study area and constitutes the highest percentage of tax lots (almost 40 percent), lot area (approximately 29 percent), and building area (roughly 43 percent). Residential/commercial uses account for the second largest percentage of lots, lot area, and building area (approximately 10, 12, and 19 percent, respectively).

TABLE C-4: Existing Land Uses in the Secondary Study Area of Proposed Rezoning Area

Land Use Categories	Number of Lots	% of Total Lots	Lot Area (sf)	% of Total Lot Area	Building Area (sf)	% of Total Building Area
One- & Two-Family Buildings	13	10.6%	27,023	7.0%	16,482	2.9%
Multi-Family Walkup Buildings	49	39.8%	113,460	29.4%	245,197	43.4%
Multi-Family Elevator Buildings	1	0.8%	3,000	0.8%	12,178	2.2%
Mixed Commercial/Residential Buildings	12	9.8%	46,699	12.1%	109,737	19.4%
Commercial/Office Buildings	4	3.3%	37,636	9.8%	44,285	7.8%
Industrial/Manufacturing	7	5.7%	48,325	12.5%	85,044	15.0%
Transportation/Utility	11	8.9%	42,853	11.1%	29,819	5.3%
Public Facilities & Institutions	4	3.3%	21,092	5.5%	22,628	4.0%
Open Space	0	0.0%	0	0.0%	0	0.0%
Parking Facilities	4	3.3%	8,511	2.2%	0	0.0%
Vacant Land	15	12.2%	31,011	8.0%	0	0.0%
All Others or No Data	3	2.4%	6,058	1.6%	0	0.0%
Total	**123**	**100.0%**	**385,668**	**100.0%**	**565,370**	**100.0%**
Total Residential	*63*	*51.2%*	*143,483*	*37.2%*	*273,857*	*48.4%*

Source: NYC Department of City Planning (PLUTO 2021v3)

Zoning

Primary Study Areas

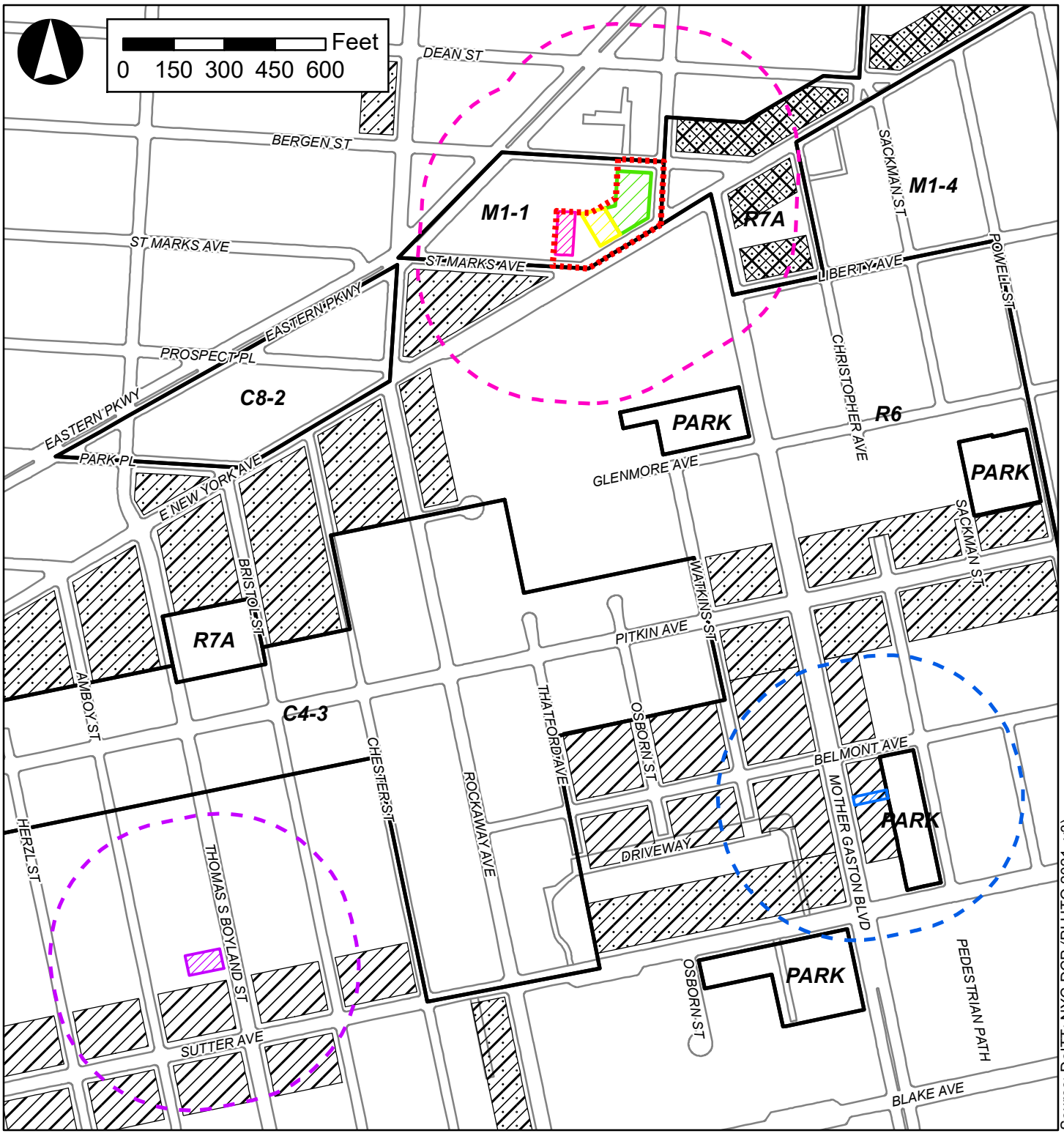
As shown in **Figure C-3**, Development Site A is zoned R6/C1-3, Development Site B is zoned R6, and the Proposed Rezoning Area (including Development Site C) is zoned M1-1.

R6 residential zoning districts are widely mapped in built-up, medium-density areas with a diverse mix of building types and heights. A developer can choose between two sets of bulk regulations. Standard height factor regulations in R6 districts allows a maximum floor area ratio (FAR) of 2.43 with no building height limits, while Quality Housing regulations allow for a maximum FAR between 2.20 and 3.60 dependent on the street width and housing program type. The optional Quality Housing program limits building heights to 55 feet on narrow streets and 70 feet on wide streets. Community facilities are permitted up to a maximum FAR of 4.8. R6 districts are subject to parking requirements based on the type of use and size of an establishment.

C1-3 commercial overlay districts are mapped along streets that serve local retail needs. Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. When mapped in R6 districts, the maximum commercial FAR is 2.0. One parking space for every 300 square feet of floor area is required in C1-3 districts.

M1 districts are often buffers between M2 and M3 districts and are frequently adjacent to residential or commercial districts. Nearly all industrial uses are allowed in M1 districts if they meet the M1 performance standards. Offices and most retail uses are also permitted. This zoning district permits Use Groups 4-14, 16, and 17 to develop within the district with as-of-right maximum floor area ratios (FARs) of 1.0 for manufacturing and commercial uses and 2.4 for community facility uses. Developments in M1-1 districts are governed by the sky exposure plane, which begins thirty feet above the street line. Within M1-1 districts, off-street parking is required and varies by use.

Figure C-3
Study Area Zoning



Source: DoITT; NYC DCP (PLUTO 2021, v3)

Legend

- Primary Study Area A
- Secondary Study Area A
- Primary Study Area B
- Secondary Study Area B
- Primary Study Area C
- Development Site C
- Secondary Study Area C
- Projected Development Site 1
- Potential Development Site 1
- R6 Existing Zoning Districts
- C1-3 Overlay
- C2-3 Overlay
- C2-4 Overlay

Secondary Study Areas

Zoning classifications within the secondary study areas are also shown in **Figure C-3** and described in **Table C-5** and consist of primarily residential and commercial zoning districts.

Table C-5: Primary and Secondary Study Area Zoning Districts

District	Definition/General Use	Maximum FAR
Commercial Overlays		
C1-3 (Overlay)	C1 commercial overlays are mapped in residential districts. C1-3 overlays permit neighborhood retail uses, such as grocery stores, restaurants and beauty parlors. Generally, the lower the numerical suffix, the greater the off-street parking requirement.	R/CF: Same as underlying R zone C: 2.0 in R6/R7A M: 0.0
C2-3 & C2-4 (Overlays)	C2 commercial overlays permit a slightly wider range of commercial uses than C1 districts, such as funeral homes and repair services. In mixed-use buildings, commercial uses are limited to the ground floor and must always be located below the first floor containing dwelling units.	R/CR: Same as underlying R zone C: 2.0 in R6/R7A M: 0.0
Residential Districts		
R6	R6 districts are widely mapped in built-up, medium-density areas with a diverse mix of building types and heights. Developers can choose between two sets of bulk regulations: standard height factor or Quality Housing. Standard height factor regulations that produce small multi-family buildings on small lots or tall buildings set back from the street and surrounded by open space and on-site parking. Quality Housing regulations produce high lot coverage buildings set at or near the street line. Allow Use Groups 1 to 4. Maximum building and streetwall heights depend on bulk regulation choice.	R: 3.0 (QH), 3.6 (IH); CF: 4.8; C/M: 0.0
R7A	R7A are contextual districts which mandate quality housing regulations. R7A districts that permit buildings of up to 85 feet in height, with a street minimum and maximum base height between 40 and 65 feet. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program.	R: 4.0-4.6 C: 4.0 CF: 4.0 M: Not permitted
Commercial Districts		
C4-3	C4 districts are mapped in regional commercial centers that are located outside of the central business districts. Typical uses include department stores, theaters, commercial and office uses. C4-3 districts are mapped in more densely built areas.	R: Equivalent to R6 zoning C: 3.4 CF: 4.80 M: Not permitted
C8-2	C8 districts bridge commercial and manufacturing uses and provide for automotive and other heavy commercial services that require a large amount of land. Typical uses are automobile showrooms and repair shops, warehouses, gas stations and car washes	R: Not permitted C: 2.0 CF: 4.80 M: Not permitted
Manufacturing Districts		
M1-1	M1 districts are often buffers between M2 or M3 districts and adjacent residential or commercial districts. M1 districts typically include light industrial uses, which must meet the stringent M1 performance standards.	R: 0.0 C: 1.0 CF: 2.4 M: 1.0

Notes: CF: community facility; R: residential; C: commercial; M: manufacturing; QH: Quality Housing Regulations

Development Site A

The majority of the secondary study area of Development Site A is zoned R6 with C1-3 and C2-3 commercial overlays mapped along both Mother Gaston Boulevard and Belmont Avenue, and on the north side of Sutter Avenue. The eastern half of Block 3743 within the study area is zoned park.

Development Site B

The secondary study area surrounding Development Site B is also zoned R6 with C1-3 commercial overlays mapped along the north and south sides of Sutter Avenue.

Proposed Rezoning Area

The M1-1 zoning district includes the entire subject block. An R7A zoning district is mapped to the east on either side of East New York Avenue. R6 mapped to the west, north and south of the subject block. There are C2-4 commercial overlays mapped in the eastern portion and a C2-3 commercial overlay in the western portion of the secondary study area.

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 and analysis of public policy. A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports, which pertain to the study area. If a proposed project could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary.

Public Policies Applicable to the Project Area and/or the Study Areas

The study areas are located within or nearby areas subject to two citywide policies considered under CEQR: Business Improvement Districts (BID) and *Housing Our Neighbors*. The Brownsville neighborhood also has a comprehensive plan. Of note, Development Site A is located within the boundaries of the Brownsville II Urban Renewal Plan and Development Site B is located within the boundaries of the Marcus Garvey Urban Renewal Area, which expired in September 2018. In addition, a portion of the secondary study area for the Proposed Rezoning Area is located within the East New York Industrial Business Zone (IBZ)

The study areas are not part of, or subject to, an adopted community 197-a Plan, or the New York City Landmarks Law. As the primary and secondary study areas are not located within the City's designated Coastal Zone, the project does not have to be assessed for consistency with the City's Waterfront Revitalization Program (WRP).

Pitkin Avenue Business Improvement District (BID)

A Business Improvement District (BID) is a geographical area where local stakeholders oversee and fund the maintenance, improvement, and promotion of their commercial district. BID services can include

street cleaning and maintenance, public safety and hospitality, marking and events, capital improvements, beautification, advocacy, and business development. Each BID is run by a not-for-profit organization with a Board of Directors, and BID programs and services are funded by a special assessment billed to property owners within a district.

As shown in **Figure C-4**, the northern edge of the secondary study area for Development Site B is located within the Pitkin Avenue BID, and the BID is located just outside the secondary study areas of Development Site A and the Proposed Rezoning Area. Founded in 1993, the Pitkin Avenue BID has provided services and programming along Pitkin Avenue to improve sanitation, enhance public safety, and provide services to the small business community. The BID is primarily funded through a special assessment that is paid by district business and property owners.

Housing Our Neighbors: A Blueprint for Housing and Homelessness

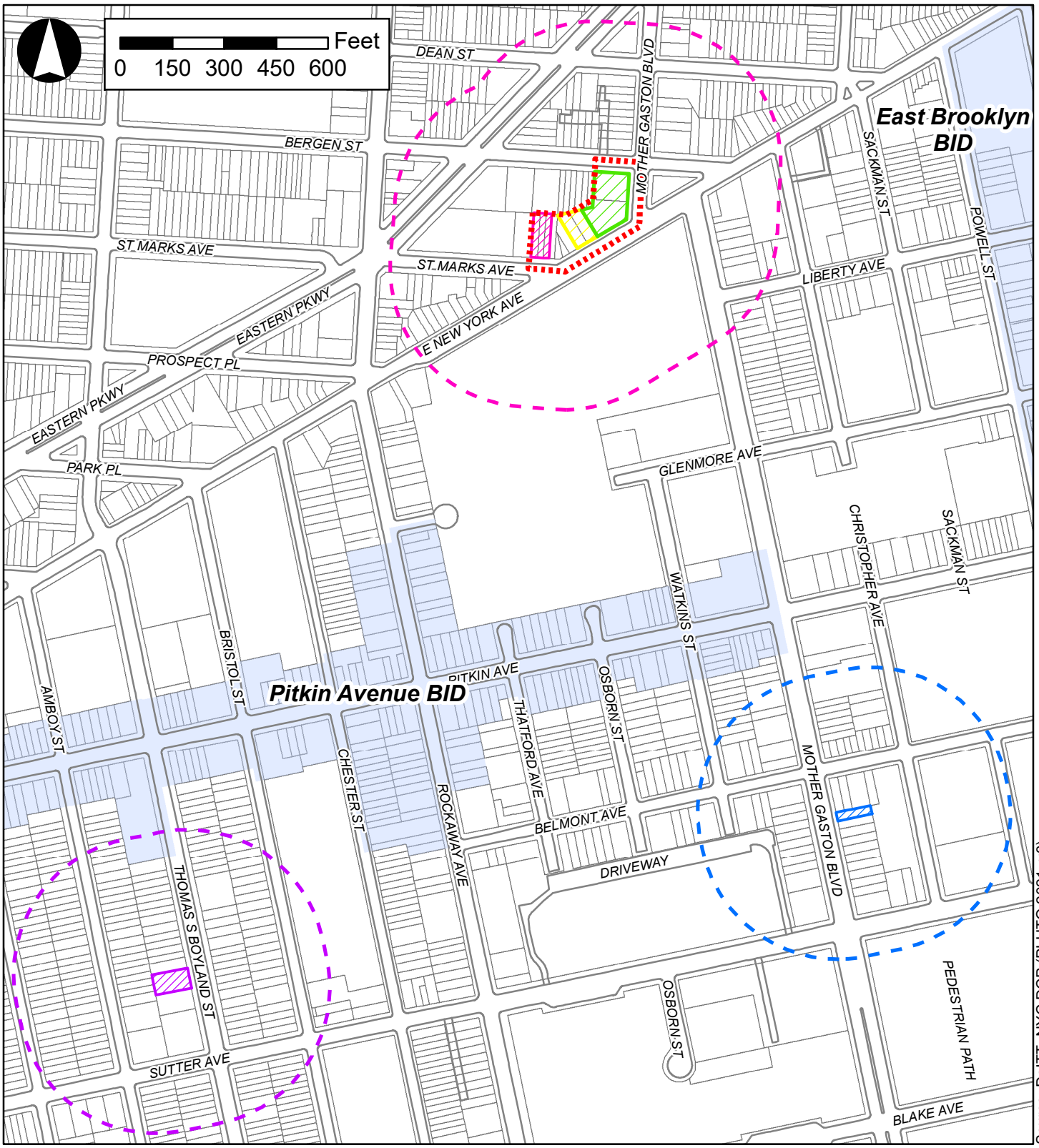
On June 14, 2022, the Adams administration released the *Housing Our Neighbors: A Blueprint for Housing and Homelessness,* a comprehensive plan intended to cover the entire spectrum of New Yorkers' housing needs and options, including City-subsidized affordable housing, public housing, private market-rate, and greater supports homelessness. The plan is the result of an extensive stakeholder industry, and community engagement process, which included direct engagement with New Yorkers who are experiencing or having experienced homelessness and outlines major steps the Adams administration will take up:

- Significantly expand affordable homeownership opportunities and help communities build and maintain wealth;
- Accelerate the creation of supportive housing by completing the 15,000 supportive homes promised by 2030 two years ahead of schedule;
- Transform the New York City Housing Authority (NYCHA) by both delivering much-needed resources for repairs and improving and streamlining the services NYCHA provides residents and the processes by which they do so;
- Break down government siloes to bolster transparency and address the full scope of the homelessness crisis, adding to the city's homeless count while creating a more even playing field to give more New Yorkers in all the city's shelter systems access to critical services and resources; and
- Get New Yorkers into safe, high-quality, affordable homes faster and without forcing them to relive past trauma by eliminating unnecessary paperwork and obstacles to obtaining housing.

The Brownsville Plan

Released in 2017, the Brownsville Plan is the result of a community-driven process to identify neighborhood goals, form strategies to address local needs, and find resources to fill gaps in service. The Brownsville Plan will result in the creation of over 2,500 new affordable homes, representing more than $1 billion of investment in housing in the neighborhood. In addition to housing, The Brownsville Plan coordinates over $150 million in City investments, including renovations of Brownsville's parks, improvements to the open spaces on NYCHA developments, a new community center for teens at Brownsville Houses, and a new Neighborhood Health Action Center. Progress updates are issued regularly.

Business Improvement Districts (BIDs)



Source: DoITT; NYC DCP (PLUTO 2021, v3)

Legend

- Primary Study Area A
- Secondary Study Area A
- Primary Study Area B
- Secondary Study Area B
- Primary Study Area C
- Development Site C
- Projected Development Site 1
- Potential Development Site 1
- Business Improvement Districts (BIDs)

Brownsville II Urban Renewal Plan (URP)

Originally adopted in 1984, the Brownsville II URP seeks to redevelop large portions of Brownsville in a comprehensive manner by removing blight and maximizing appropriate land uses. Objectives include the removal or rehabilitation of substandard structures, removing impediments to land assemblage and orderly development, and strengthening the tax base by encouraging development. The plan aims to provide new housing, community, retail, parking, and recreational uses in a stable environmental which will not be a blighting influence on surrounding neighborhoods. The plan also lays out certain controls on redevelopment related to zoning, appropriate land uses, and design objectives.

The URP was amended for the fourth time in 2022 and approved by Mayor Adams in February 2023. Areas identified in the URP that are to be disposed to HPD and developed are expected to be completed by 2040. Development Site A is located within the boundaries of the Brownsville II URP, while Development C, Projected Development Site 1, and Potential Development Site 1 are located directly north of the URP along its northern border. Development Site B is not located within the boundaries of the URP.

East New York Industrial Business Zone (IBZ)

The East New York IBZ was created in 2016 as a comprehensive plan to strengthen the historic industrial hub of East New York and secure its future as a thriving employment center and contribute to the local economy. The plan has five overall main strategies and twenty specific recommendations to foster economic growth, improve the overall business and physical environment, attract new employers, and create new jobs and job opportunities.

As shown in **Figure C-5**, the East New York IBZ is partially located within the secondary study area of the Proposed Rezoning Area. None of the development sites are located within the boundaries of the East New York IBZ.

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

Land Use

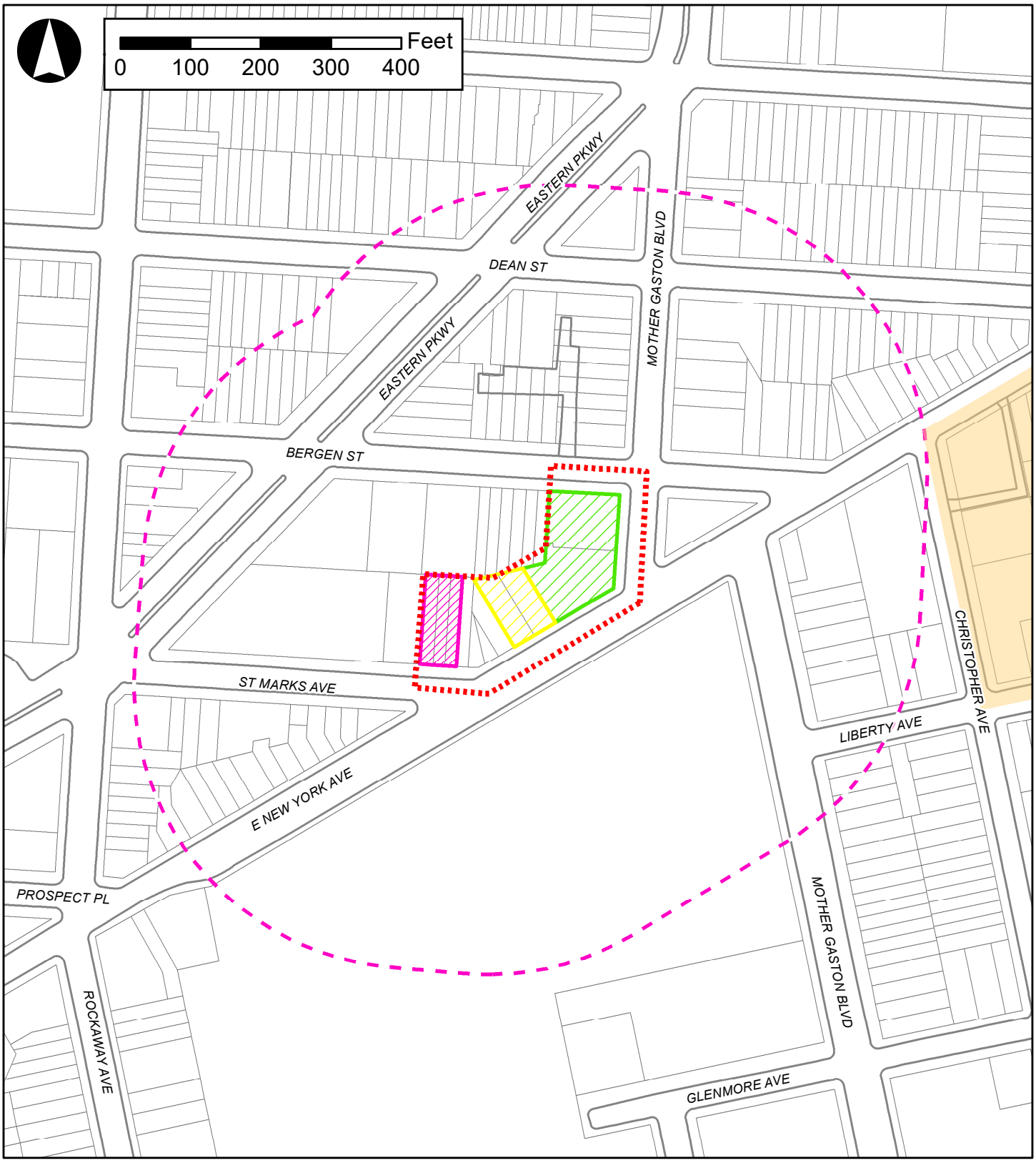
Primary Study Areas

As discussed in **Attachment A, "Project Description,"** in the future without the Proposed Actions, the No-Action scenario would retain the existing uses for each Development Site. Development Sites A, B, and C would remain vacant lots, while existing uses within the boundary of the Proposed Rezoning Area would also remain.

Secondary Study Areas/400-Foot Study Areas

There are no projects currently under construction within the 400 feet of the Development Site A or B, or within 400 feet of the Proposed Rezoning Area.

East New York Industrial Business Zone



Legend

- Primary Study Area C
- Development Site C
- Potential Development Site 1
- Projected Development Site 1
- Secondary Study Area C
- East New York IBZ

Zoning

Primary Study Areas

In the future No-Action condition, no zoning changes specifically applicable to the project areas are anticipated. As such, it is anticipated that the existing zoning districts would remain.

Secondary Study Areas/400-Foot Study Areas

There are currently no planned zoning map changes in the 400-foot study areas in the future without the Proposed Actions.

Public Policy

There are no anticipated changes to public policy applicable in the respective study areas in the future without the Proposed Actions.

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

Land Use

Primary Study Area

In the future with the Proposed Actions (the With-Action scenario), the proposed zoning changes, UDAAP designation and project approval, and provision of public financing would facilitate affordable housing development at three Development Sites- Sites A, B, and C. The proposed development at Site A would also include approximately 2,500 gsf of ground floor commercial use. In addition, under the RWCDS, the Proposed Actions would facilitate the redevelopment of Projected Development 1, comprising Lots 46 and 50 on Block 1455. The projected development would include approximately 8,770-gsf of ground floor retail and 85 DUs, of which 22 DUs (25 percent) would be permanently affordable pursuant to MIH. **Table C-2** summarizes the With-Action development scenarios for each site, and **Table C-3** shows the incremental net change between the future without and with the Proposed Actions.

Table C-2: With-Action Development Scenarios

Site	Address	Block	Lot	Lot Area (sf)	FAR	Residential		Commercial	Total	Bldg. Height
						gsf	DUs[1]	gsf	gsf[2]	
A	425 Mother Gaston Blvd.	3743	12	2,500	2.72	4,650	6	2,500	9,650	42’
B	546 Thomas S. Boyland St.	3518	63	6,000	3.15	19,913	21	0	23,661	63’
C	1733 St. Marks Ave.	1455	65, 66, 79	6,558	4.19	28,949	34	0	32,258	91’
Projected Site 1	1611 E New York Ave/226 Mother Gaston Blvd	1455	46, 50	16,704	4.6	71,911	85	8,770	97,380	95’
Total				***31,762***	-	***125,423***	***146***	***11,270***	***162,949***	-

Notes:
[1] Average DU size of 850 gsf for the Projected Development Sites
[2] Includes cellar space

Development Site A

Development Site A (425 Mother Gaston Boulevard) would contain a four-story, approximately 42-foot tall residential and commercial building with approximately 9,650 gsf, including 6 affordable DUs, 2,500 gsf of restaurant space, and 2,500 gsf of cellar space used for restaurant storage and mechanical equipment.

Development Site B

Development Site B (546 Thomas S. Boyland Street) would contain a six-story, approximately 63-foot-tall residential building with approximately 21 affordable DUs.

Proposed Rezoning Area

The proposed zoning changes would affect the southeastern portion of Brooklyn Block 1455, encompassing the entirety, or portions of 17 tax lots: Lots 46, 50, 56, 60-62, 64-66, and 79, p/o Lots 39, 41-44, 58 and 67. The Proposed Rezoning Area contains Development Site C, as well as one projected development site. Development Site C (1733 Saint Marks Avenue) would contain a nine-story, approximately 91-foot-tall residential building with approximately 34 affordable DUs. As a RWCDS, Projected Development Site 1 (Block 1455, Lots 46 and 50) would be redeveloped with a mixed-use building at a total built FAR of 4.6. The nine-story proposed development would include 85 DUs and 8,770-gsf of retail space.

Secondary Study Areas/400-Foot Study Areas

No additional changes to land use are anticipated within the 400-foot study areas as a result of the Proposed Actions, as ongoing trends would be expected to continue with or without the proposed developments and the Proposed Actions would not be expected to induce any new development.

TABLE C-3: Comparison of No-Action and With-Action Conditions

Use	No-Action Scenario[1]	With-Action Scenario[2]	Increment
Land Use			
Residential *Dwelling Units (DUs)*	0 gsf *0*	125,423 gsf *146*	**+125,423 gsf** ***+146 DUs***
Commercial	16,347 gsf	11,270 gsf	**-5,077 gsf**
Cellar	0 gsf	26,256	**+26,256 gsf**
TOTAL DEVELOPMENT	***16,347 gsf***	***162,949 gsf***	***+146,602 gsf***

Notes:
[1] Assumes the reoccupation of local retail space at Lot 50 in the No-Action Scenario
[2] Average DU size of 850 gsf for the Projected Development Sites

Assessment

The Proposed Actions would not result in significant adverse impacts to land use on the development sites or in the 400-foot study areas. The Proposed Actions would allow residential and commercial space on the development sites in an area where there is a strong demand for these particular uses. Such uses and densities are considered compatible for this area as reflected in the existing zoning. Furthermore, the

proposed developments would be built at a density and bulk compatible with the other properties in the area. As such, the Proposed Actions would result in developments that would complement the land use character of the respective 400-foot study areas as a whole.

Zoning

Primary Study Areas

In the future with the Proposed Actions, the existing zoning would remain on Development Site A and B. The proposed zoning map amendment would rezone the Proposed Rezoning Area from M1-1 to R7A with a C2-4 commercial overlay mapped to a depth of 100 feet along Saint Marks Avenue, East New York Avenue, and Mother Gaston Boulevard (refer to **Figure A-3** in **Attachment A, "Project Description"**).

The proposed zoning district would allow residential and community facility uses (Use Groups 1-3), which are not permitted under the existing M1-1, while no longer allowing certain commercial and light industrial/manufacturing uses (Use Groups 10-14, 16-17). It would permit residential uses up to 4.6 FAR, community facilities up to 6.5 FAR, and commercial uses up to 2.0 FAR. Buildings would have a maximum height of 95 feet (with MIH and qualifying ground floor). Buildings would have a maximum height of 95 feet (with MIH and a qualifying ground floor). Building would setback above a maximum base height of 75 feet (with MIH and a qualifying ground floor) to a depth of 15 feet (on a narrow street). Off-street accessory parking would be required for 50 percent of market-rate units and 15 percent of MIH units within the Transit Zone.

Secondary Study Areas/400-Foot Study Areas

No other changes to zoning are anticipated within the 400-foot study areas as a result of the Proposed Actions.

Assessment

The proposed zoning map change would bring into conformance existing residential uses within the Proposed Rezoning Area and permit new development consistent with land uses in the surrounding area, including R6 residential districts to the north, south, and west, and an existing R7A district mapped to the east with C2-4 overlays along East New York Avenue. The proposed zoning change would allow for the redevelopment of underutilized land for new affordable housing in an area that is well served by transit, as well as continue to permit commercial development.

The proposed R7A/C2-4 district is consistent with the City's policy to support additional development in transit accessible areas and would allow a mix of uses reflective of the broader East New York setting. It would increase allowable density and create additional zoning capacity to support new housing creation and increase the number of affordable housing units available in NYC. The proposed rezoning is also well suited for additional development given its proximity to public transit and as East New York Avenue is a major arterial roadway.

Public Policy

As discussed under "Existing Conditions," the project area and the larger study area fall within the geographic jurisdiction of a few public policies. These policies include Business Improvement Districts

(BID) and *Housing Our Neighbors*. The Brownsville neighborhood also has a comprehensive plan. Policy assessments of each these are provided below.

Pitkin Avenue BID

The Pitkin Avenue BID supports the following core programs: sanitation, marketing and placemaking, beautification, and retail attraction and retention. Since its founding in 1993, the BID has sought to provide the Pitkin Avenue community with services, enhancements, and quality of life initiatives that make the neighborhood a better place to live, work, and shop. The Proposed Project would provide 61 dwelling units, attracting new residents, and approximately 2,500 gsf of commercial space, which would introduce a new restaurant near the boundaries of the BID (refer to **Figure C-4**). For these reasons, this addition would be consistent with the goals of this public policy and the Pitkin Avenue BID.

Housing Our Neighbors: A Blueprint for Housing and Homelessness

The proposed zoning actions would be consistent with the *Housing Our Neighbors* plan and would result in a net increase of approximately 61 DUs across three development sites. The Proposed Actions would result in the creation of permanently affordable housing units, providing the area with new affordable housing units that would support the City's efforts to increase the overall amount of affordable housing. Therefore, the Proposed Actions would be supportive of this key public policy goal and further analysis is not warranted.

The Brownsville Plan

The Brownsville Plan is organized around eight strategies to guide City agencies and local organizations as they design and implement work in the neighborhood. These strategies include:

(1) Promote active mixed-use corridors
(2) Improve connections throughout the neighborhood
(3) Create active and safe public spaces
(4) Provide resources to support healthy lifestyles
(5) Connect Brownsville residents to jobs and job training
(6) Support small businesses and aspiring entrepreneurs
(7) Improve housing stability and support residents at risk of displacement
(8) Support capacity building for local organizations

The Proposed Actions and subsequent Proposed Project would be consistent with the strategies outlined. In particular, it would support the plan's goal to improve housing quality and provide support to local organizations. The Proposed Actions would facilitate the development of affordable housing on City-owned land and create new commercial spaces. The Proposed Project would produce two residential

buildings and one mixed-use residential building that would include a total of 61 units of affordable housing and 2,500 gsf of commercial space.

Brownsville II URP

The Proposed Actions would be consistent with the URP as they would develop vacant and underutilized lots and provide new housing and retail opportunities. As such, the Proposed Actions would support this policy, and no further analysis is required.

Overall, the Proposed Actions would not result in any significant adverse public policy impacts as per the analysis presented in this section.

G. CONCLUSIONS

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 expected in the 2026 future with the Proposed Actions in the primary and secondary study areas. The Proposed Actions would permit residential and community facility uses as-of-right on a portion of Block 1455 where they are not currently allowed in the proposed rezoning area. The Proposed Actions would result in changes to land use on four development sites, including two within the Proposed Rezoning Area. The Proposed Actions would not directly displace any land uses so as to adversely affect surrounding land uses, nor would they generate land uses that would be incompatible with surrounding land uses, zoning, or public policy in the secondary study area.

The Proposed Actions would permit residential and community facility uses as well as increase the allowable density in the Proposed Rezoning Area within the Primary Study Area. The proposed zoning change would create additional zoning capacity in a transit-accessible area by supporting new housing creation and increasing affordable housing units in New York City. The Proposed Actions would result in new development along East New York Avenue, which is a major corridor in the surrounding area that is suited for denser development near public transit.

The proposed mixed-use R7A/C2-4 zoning district would not create land uses or structures that would be incompatible with the underlying zoning in the surrounding area, nor would it cause existing structures to become nonconforming. The proposed uses would be consistent with uses already present in the surrounding area. The Proposed Actions would not result in land uses that conflict with public policies applicable to the primary or secondary study areas.

ATTACHMENT D

OPEN SPACE

I. INTRODUCTION

This attachment assesses the potential impacts of the Proposed Actions on open space resources. Open space is defined in the 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or serves to protect or enhance the natural environment. The *CEQR Technical Manual* indicates that an open space analysis should be conducted if a proposed action(s) would result in a direct effect, such as the physical loss or alteration of public open space, or an indirect effect, such as when a substantial new population could place added demand on an area's open spaces and overtaxes the capacity of the public open spaces.

Although the Proposed Actions would not have a direct effect on any existing open space resources, development facilitated by the Proposed Actions would result in an incremental increase of up to 146 dwelling units (DUs) and a net decrease of approximately 5,077 gross square feet (gsf) of commercial space over the 2026 No-Action condition, under the reasonable worst-case development scenario (RWCDS). This would result in an increase of approximately 402 residents[1], as compared to the No-Action condition, which would exceed the *CEQR Technical Manual* preliminary screening threshold for an indirect open space analysis for residential users. Both quantitative and qualitative assessments were conducted to determine whether the Proposed Actions would significantly affect the use and enjoyment of open space in an identified study area. The Proposed Actions fall well below the CEQR threshold of 500 or more employees or non-residential users. Therefore, the analysis of indirect open space impacts focuses exclusively on the open space needs of the area's residential population.

II. METHODOLOGY

The analysis of open space resources has been conducted in accordance with the methodology set forth in the 2021 *CEQR Technical Manual*. Using this 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 in the future, both without and with the Proposed Actions. In addition, qualitative factors are considered in assessing the Proposed Actions' effects on open space resources.

In accordance with *CEQR Technical Manual* methodologies*,* 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 significant worker population.

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 of the Project Area and all open

[1] The estimated number of residents is based on the average household size of 2.75 persons per household for the Brownsville Neighborhood Tabulation Area (NTA) for the 2020 US Census data rounded up. Estimates of workers are based on standard rates and are as follows: one worker per 25 DUs and three workers per 1,000 sf of retail space. The No-Action condition also assumes that the currently vacant Projected Development Site 1 would be occupied.

spaces within it that are publicly accessible.[2] As described above, residents typically walk up to a half-mile for recreational spaces.

As detailed in **Attachment A, "Project Description,"** the Project Area consists of Site A (Block 3743, Lot 12), Site B (Block 3518, Lot 63), and the proposed rezoning area, which comprises the southeastern portion of Block 1455, including Site C (Block 1455, Lots 65, 66, and 79) and Projected Development Site 1. The Project Area is located in the Brownsville neighborhood of Brooklyn Community District (CD) 16, and all the projected sites are within roughly a 0.07-square mile area of each other. As shown in **Figure D-1**, there are 20 census tracts with at least 50 percent of their area within a half-mile radius of the Project Area: census tracts 301, 303, 361, 363, 365.01, 365.02, 367, 369, 894, 898, 900, 902, 906, 908, 910, 912, 918, 924, 1134, and 1144. As shown in **Figure D-1**, the study area is roughly bounded by Broadway and Fulton Street to the north, Alabama Avenue to the east, Ralph Avenue to the west, and East 96th Street and Newport Street to the south.

Analysis Framework

Direct Effect Analysis

According to the 2021 *CEQR Technical Manual*, a project would directly affect open space conditions if it causes the loss of public open 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 results in 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 displaced as a result of the Proposed Actions, this attachment uses information from other attachments of this EAS to determine whether the Proposed Actions would directly affect any open spaces within, or in close proximity to, the Project Area. The direct effects analysis is included in the "The Future with the Proposed Actions (With-Action Condition)" section of this attachment.

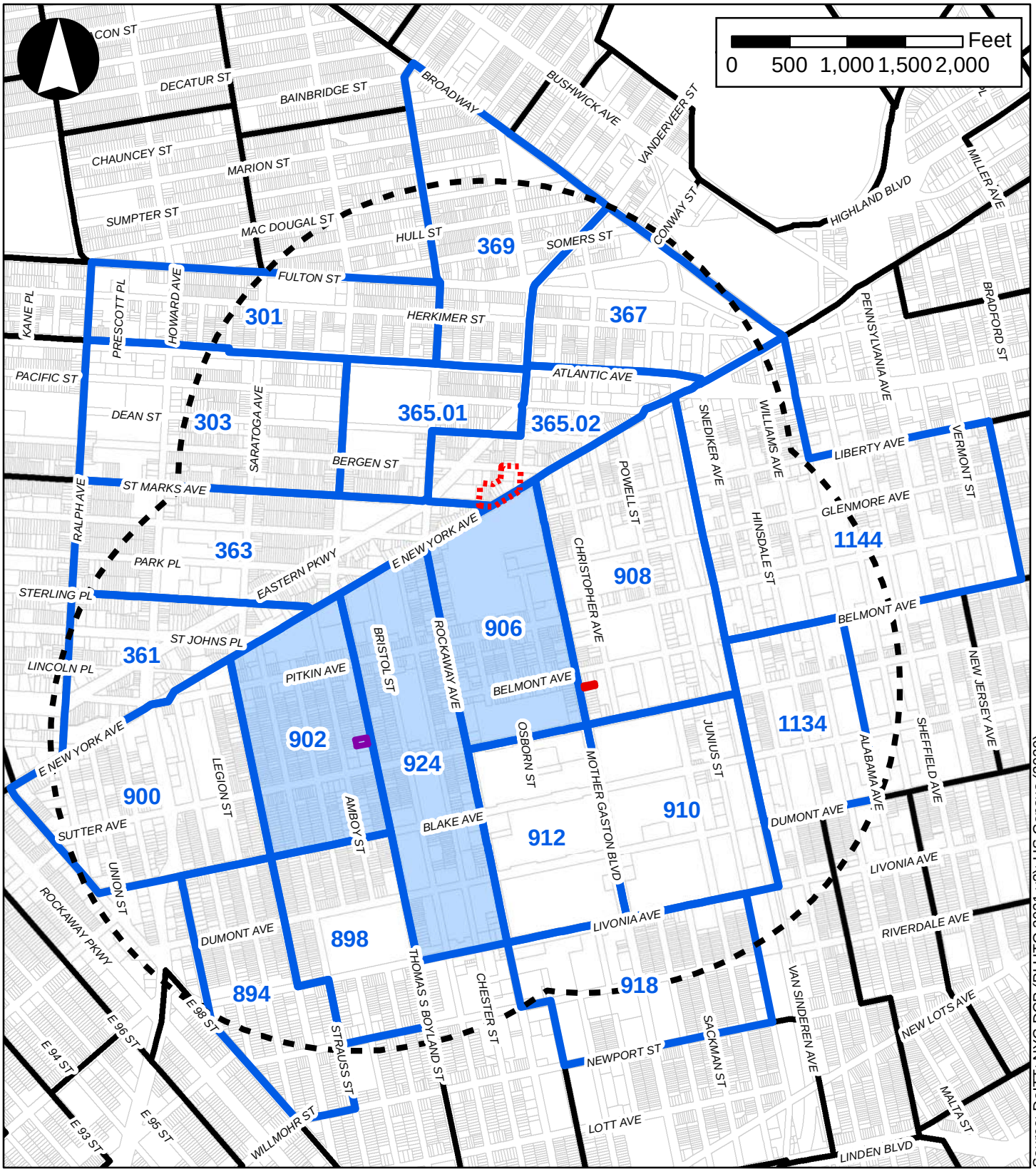
Indirect Effect Analysis

As described in the 2021 *CEQR Technical Manual*, open space can be indirectly affected by a proposed action(s) if the project would add enough population, either workers or residents, to noticeably diminish the ability of an area's open space to serve the existing or future population. Indirect effects may occur when the population generated by a proposed action(s) overtaxes the capacity of existing public open spaces so that the service provided to existing and future populations in the area would be diminished substantially or noticeably.

Per *CEQR Technical Manual* guidance, as part of the preliminary assessment for open space, a project should be reviewed to determine if it is located in an area of the City within a Walk to a Park Service Area. A Walk to a Park Service Area (WtPSA) is a part of the *OneNYC 2050 Building a Strong and Fair City* plan, in which New York City has laid out a goal for 85 percent of New York City residents living within a walking distance of a park by 2030. Existing areas located within a WtPSA are within a walking distance of a park (i.e., 0.5-miles). Areas not located within a WtPSA are considered "walk gaps" (i.e., they are areas of New York City that are not within walking distance to a park). As shown in **Figure D-2**, the Project Area and all

[2] Pursuant to the *CEQR Technical Manual,* "public" open space that is analyzed under CEQR is defined as open space that is accessible to the public on a constant and regular basis for active and passive recreation, including for designated daily periods. Public open space may be under government or private jurisdiction.

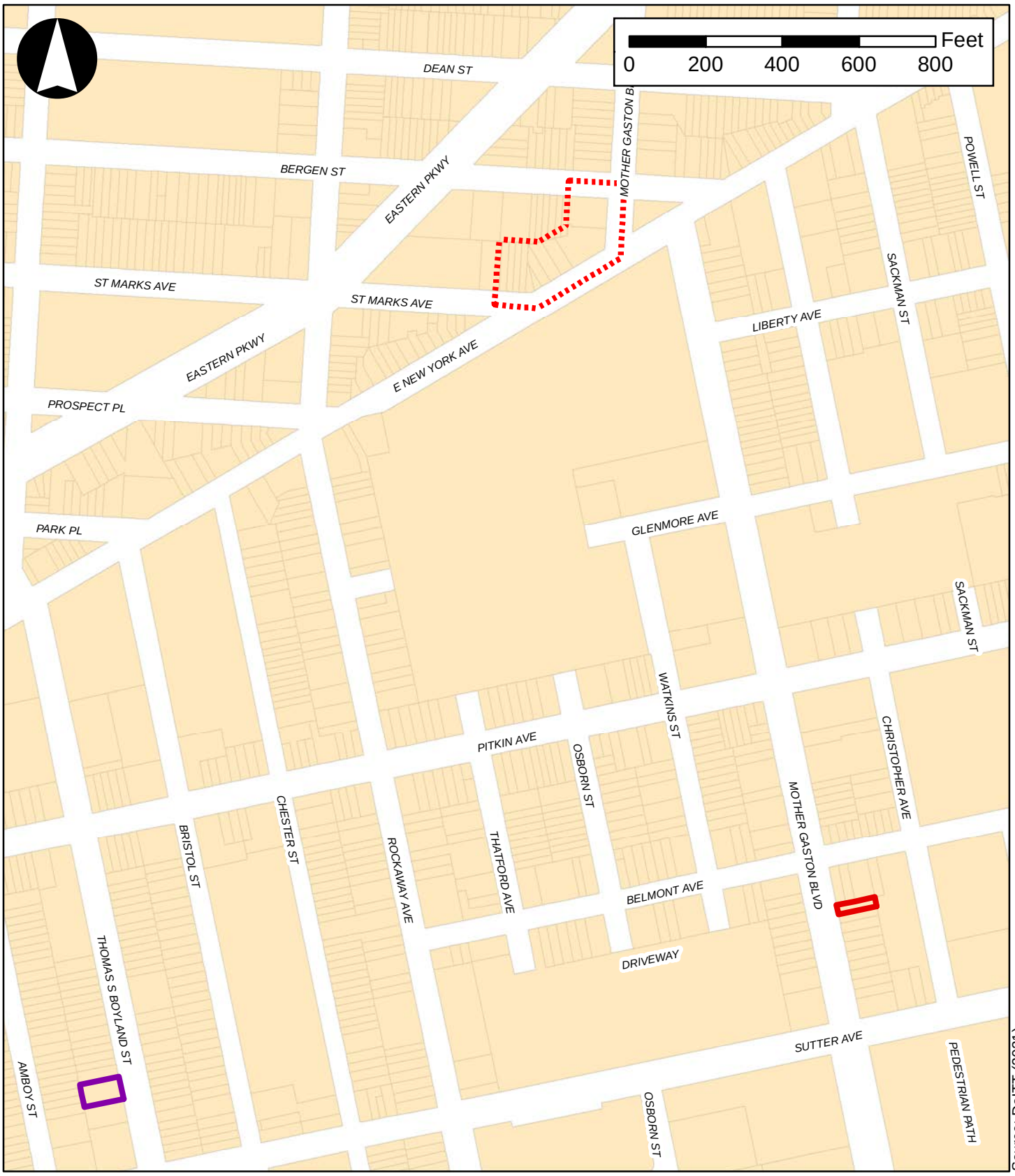
Figure D-1
Open Space Study Area



Legend

- Development Site A
- Development Site B
- Proposed Rezoning Area
- Half-Mile Study Area
- 906 Census Tracts
- Census Tracts in All Three 1/2-Mile Radii
- Open Space Study Area

Figure D-2
Walk to a Park Service Area



Source: DoITT (2021)

Legend

Development Site A | Development Site B | Proposed Rezoning Area | Walk to a Park Service Area

development sites are located within an area that has been identified as a walk to a park service area (i.e., not a walk gap area).

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 guidance. The qualitative assessment examines other factors that can affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this attachment includes:

- Characteristics of the open space users: residents. To determine the number of residents in the study area 2017-2021 5-year American Community Survey (ACS) data were compiled for the census tracts comprising the open space study area.

- An inventory of all publicly accessible passive and active recreational facilities in the residential 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 the City's planning goal. In New York City, the optimal open space ratio for residential populations is 2.5 acres of open space per 1,000 residents. Ideally, this would be 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 determination of the adequacy of open space in the non-residential and residential open space study area for existing, No-Action, and With-Action conditions.

Preliminary Assessment

According to the *CEQR Technical Manual*, a preliminary assessment may be useful to determine if a detailed open space analysis is necessary, or whether the open space assessment can be targeted to a particular user group. This initial assessment calculates an open space ratio by relating the existing residential and nonresidential populations to the total open space in the study area. It then compares that ratio with the open space ratio in the future with the proposed action(s). If there is a decrease in the open space ratio that would approach or exceed one percent in areas exhibiting low open space ratios that are 0.50 or less, a detailed analysis is warranted. The detailed analysis examines passive and active open space resources available to residents within the open space study area delineated in accordance with the *CEQR Technical Manual*, as outlined above. As the Proposed Actions would introduce a large residential population in an area with a limited amount of available open space, which exhibits a low open space ratio under existing conditions, a detailed open space analysis is warranted and is provided below.

Impact Assessment

As described in the *CEQR Technical Manual,* the significance of an action's effects on an area's open spaces is determined using both quantitative and qualitative factors, as compared to the No-Action condition. The determination of significance is based upon the context of a proposed action(s), including its location,

the quality and quantity of the open space in the future With-Action condition, the types of open space provided, and any new open space provided by the action.

An action's potential effects on an area's open space are based, in part, on how a project would change the open space ratios in the study area, as well as other qualitative considerations. According to the *CEQR Technical Manual*, an action(s) that would reduce the open space ratio by more than the general guidelines for the open space percentage change shown in **Table D-1** may be considered significant, as these reductions may result in overburdening existing facilities or further exacerbating a deficiency in open space. As shown in **Table D-1**, the guidance for tolerated percent change in open space ratio is determined based on the open space ratio ranges outlined in the *CEQR Technical Manual*. In areas that are within a WtPSA, a greater percentage of change (more than five percent) may be tolerated.

TABLE D-1: Guidance for Percentage Change in Open Space Ratio

Open Space Ratio Range	Percent Change in Open Space Ratio
2.01 to 2.50 or Greater	5%
1.51 to 2.0	4%
1.01 to 1.5	3%
0.51 to 1.0	2%
0.50 or Less	1%
*2.5 open space ratio is the planning goal in New York City.	

Source: Table 7-1 in Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual.*

In addition to the quantitative factors cited above, the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. These include the availability of nearby destination resources, the beneficial effects of new open space resources provided by a project, and the comparison of projected open space ratios with the City's established planning goal for open space.[3] The assessment should consider the balance of passive and active open space. A larger percent of active space is usually preferred; given the physical space requirement for active open space uses are significantly greater. It is recognized that the open space ratios of the City guidelines described above are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these benchmarks indicate how well an area is served by open space. Determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment. Qualitative considerations such as the distribution of open space, whether a site is within a WtPSA, the distance to regional parks, the connectivity of open space, and any additional open space provided by the proposed project, should be considered in a determination of significance.

III. DETAILED ANALYSIS

Existing Conditions

Study Area Population

To determine the residential population served by existing open space resources, 2021 ACS data were compiled for the census tracts comprising the half-mile study area. As mentioned above and shown in **Figure D-1**, the open space study area is comprised of 20 census tracts. As shown in **Table D-2,** the study

[3] The City planning goal for open space is 2.5 acres per 1,000 residents and optimally distributed as 80 percent active open space (or 2.0 acres per 1,000 residents) and 20 percent passive open space(or 0.5 acres per 1,000 residents).

area has a residential population of approximately 72,842 residents.

TABLE D-2: Residential Population in the Half-Mile Study Area

Census Tract	Total Population
301	3,350
303	5,007
361	2,914
363	5,861
365.01	3,299
365.02	1,655
367	1,942
369	5,840
894	3,369
898	2,227
900	4,542
902	3,509
906	3,476
908	5,498
910	4,613
912	5,312
918	2,340
924	2,673
1134	2,566
1144	2,849
0.50-Mile Study Area Total	72,842

Source: 2017-2021 5-yearACS data; NYC DCP Population FactFinder.

The residential population of the study area was also broken down by age groups. As shown in **Table D-3**, people between the ages of 20 and 64 make up the majority (approximately 63 percent) of the residential population in the study area. Children and teenagers (ages 0 to 19) account for nearly 25 percent of the study area population. Persons 65 year and older account for approximately 12 percent of the study area population. Given the range of age groups present in the study area population, the study area has a need for various kinds of active and passive open space recreational uses, including open space features that can be used by young children and adults.

TABLE D-3: Residential Population Age Distribution in the Half-Mile Study Area

Age Category	Persons	Percent of Population
4 and younger	5,004	6.87%
5-9 years	4,536	6.23%
10-14 years	4,594	6.31%
15-19 years	4,201	5.77%
20-64 years	46,035	63.20%
65 and older	8,472	11.63%

Source: 2017-2021 5-year ACS data; NYC DCP Population FactFinder
Note: Age groups are provided in the 2017-2021 5-year ACS data

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 aged ten through 14 use playground equipment, court spaces, 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

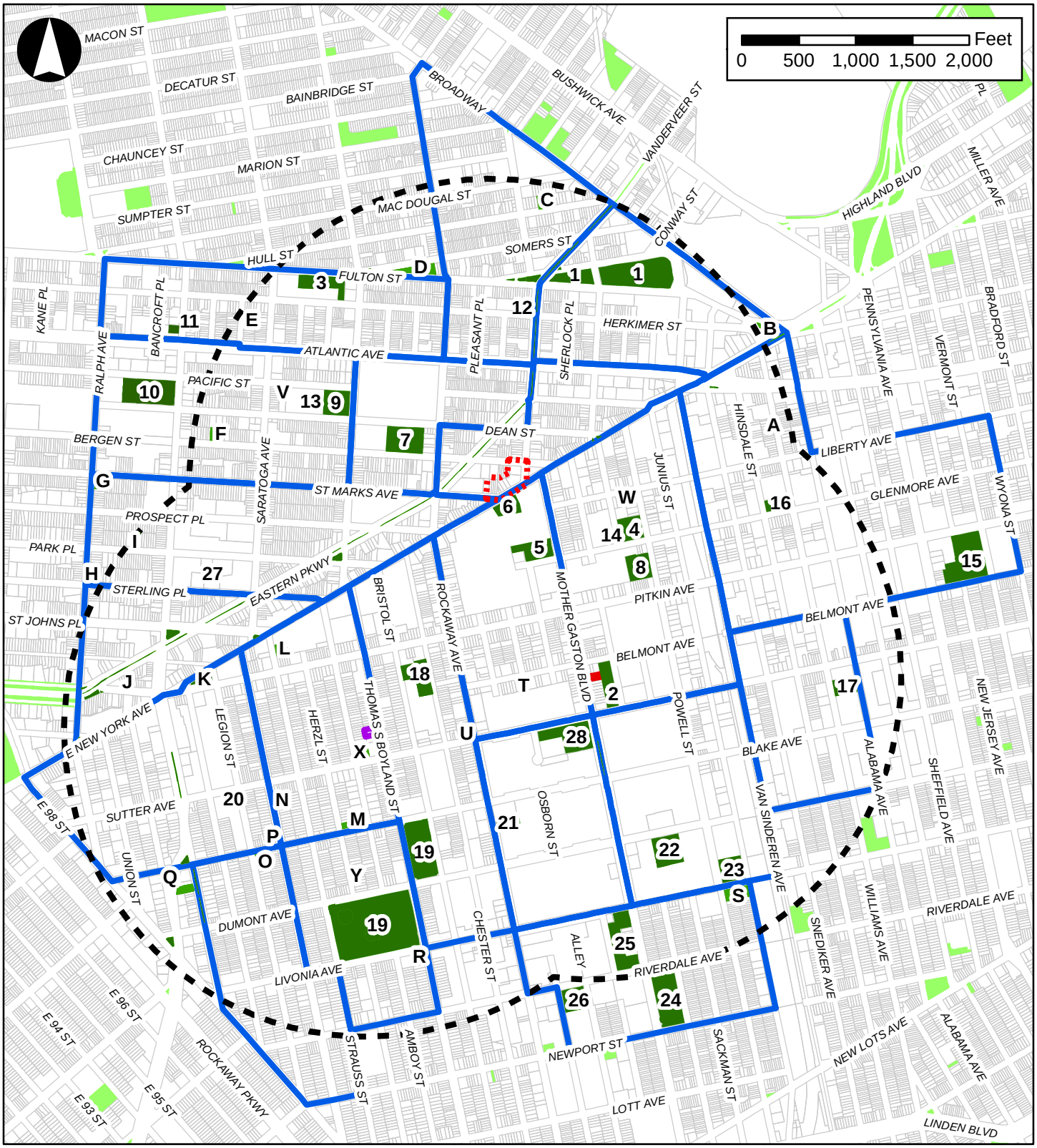
According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, a publicly accessible open space is defined as a recreational facility open to the public at designated hours on a regular basis and can be assessed for impacts using both a quantitative and a qualitative analysis, whereas a private open space facility is not accessible to the general public on a regular basis and may be 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 name, location, owner, amenities/equipment, user groups, hours of operation, and the amount of total, active, and passive acreage, as well as the condition and utilization of each resource. The information used for this analysis was gathered through field inventories conducted in February 2022; 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 with regard 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-4** identifies the address, ownership, features, and acreage of total, active, and passive open space resources in the half-mile study area, as well as their condition and utilization. **Figure D-3** maps their location within the study area.



Legend

- Development Site A
- Development Site B
- Proposed Rezoning Area
- Half-Mile Study Area
- Open Space Study Area
- Open Space Not Included in Analysis
- 1 Quantitative Open Space (Keyed to Table D-4)
- A Qualitative Open Space (Keyed to Table D-5)

Table D-4: Open Space Resources included in the Quantitative Analysis

Map No.[1]	Park Name	Address	Amenities	Hours	User Groups	Acres	Active		Passive		Condition + Utilization
							Acres	%	Acres	%	
1	Callahan-Kelly Playground	Fulton St. and Truxton St. bet. Eastern Parkway and Van Sinderen Ave.	Basketball Courts, Athletic Fields, Skate Park, Dog Park, Ping Pong Tables, Spray Showers, Playground, Seating Areas	6AM-9PM (under construction)	Children, Teenagers, Adults, Seniors	3.25	2.28	70.00%	0.975	30.00%	Under Construction/Closed
2	Carter G. Woodson Children's Playground	Christopher Ave. bet. Sutter Ave. and Belmont Ave.	Playground, Running track, Benches	6AM-9PM	Children, Teenagers	0.92	0.74	80.00%	0.184	20.00%	Good/Moderate
3	Fish Playground	Fulton St. bet. Saratoga Ave. and Hopkinson Ave.	Basketball Courts, Handball Courts, Playgrounds, Seating Areas	6AM-9PM	Children, Teenagers, Adults	1.03	1.03	100.00%	0	0.00%	Great/Low
4	Houston Playground	Glenmore Ave. bet. Powell St. and Sackman St.	Playground, Field, Sprinklers, Benches	6AM-9PM	Children, Teenagers	0.92	0.74	80.00%	0.184	20.00%	Good/Low
5	Howard Playground	Mother Gaston Blvd. and Glenmore Ave.	Playground, Benches, Basketball hoops, Sprinklers	6AM-9PM	Children, Teenagers	1.00	0.80	80.00%	0.2	20.00%	Good/Low
6	Howard Pool	East New York Ave. and St. Marks Ave.	Pool, Benches	11AM-7PM (Summer)	Children, Teenagers, Adults, Seniors	0.67	0.67	100.00%	0	0.00%	Fair/Low
7	Ocean Hill Playground	Dean St. and Bergen St. bet. Rockaway Ave. and Hopkinson Ave.	Basketball Courts, Handball Courts, Playgrounds, Spray Showers, Fitness Equipment, Chess Tables, Seating Areas	6AM-9PM	Children, Teenagers, Adults, Seniors	1.59	1.11	70.00%	0.477	30.00%	Good/High
8	Powell Playground	Powell St. bet. Pitkin Ave. and Glenmore Ave.	Fitness equipment, Benches, Basketball hoops, Handball courts, Sprinklers	6AM-9PM	Children, Teenagers, Adults, Seniors	1.02	0.61	60.00%	0.408	40.00%	Good/Low
9	Hilltop Playground	Hopkinson Ave. bet. Pacific St. and Dean St.	Playgrounds, Basketball Courts, Athletic Fields, Chess Tables, Seating Areas	6AM-9PM	Children, Teenagers, Adults, Seniors	1.09	0.76	70.00%	0.327	30.00%	Great/High
10	South Pacific Playground	Howard Ave. bet. Pacific St. and Dean St	Basketball Courts, Handball Courts, Playgrounds, Spray Showers, Chess Tables, Seating Areas	6AM-9PM	Children, Teenagers, Adults, Seniors	2.26	1.58	70.00%	0.678	30.00%	Good/Moderate
11	Weeksville Playground	Howard Ave. bet. Atlantic Ave. and Herkimer St.	Playgrounds, Spray Showers, Seating Areas	6AM-9PM	Children & Adults	0.29	0.23	80.00%	0.058	20.00%	Great/Low
12	P.S. 155	1355 Herkimer St.	Basketball Courts, Seating Areas	6AM-9PM Except school hours	Children	0.09	0.09	100.00%	0	0.00%	Great/Low
13	P.S. 178	2163 Dean St	Playgrounds, Basketball Courts, Athletic Fields, Chess Tables, Seating Areas	6AM-9PM Except school hours	Children	0.18	0.13	70.00%	0.054	30.00%	Good/Low

14	P.S. 332	51 Christopher Ave.	Basketball hoops, Playground, Handball courts	6AM-9PM Except school hours	Children	0.26	0.26	100.00%	0	0.00%	Great/High
15	Grace Playground	Vermont St. btwn. Pitkin Ave. and Belmont Ave.	Baseball field, Basketball hoops, Playground, Fitness equipment, Benches	6AM-9PM	Children, Teenagers, Adults, Seniors	2.73	1.91	70.00%	0.819	30.00%	Good/High
16	TLC Sculpture Park	Hinsdale St. and Glenmore Ave,	Art, Garden, Gazebo, Benches, Lawn	20 Hours/Week (4/1-10/31)	Children, Teenagers, Adults, Seniors	0.17	0.03	20.00%	0.136	80.00%	Fair/Low
17	P.S. 328	330 Alabama Ave.	Basketball hoops, Playground, Running track, Benches	6AM-9PM Except school hours	Children, Teenagers	0.64	0.58	90.00%	0.064	10.00%	Good/High
18	Chester Playground	Bristol St. and Chester St.	Softball field, Basketball hoops, Playground, Benches, Handball courts, Restrooms	6AM-9PM	Children, Teenagers	1.00	0.80	80.00%	0.2	20.00%	Good/Low
19	Betsy Head Park	Livonia Ave., Dumont Ave., Strauss St., Thomas Boyland St. and Blake Ave.	Baseball field, Football field, Running track, Fitness equipment, Pool, Handball courts, Basketball hoops, Sprinklers, Restrooms, Climbing wall	6AM-1AM	Children, Teenagers, Adults, Seniors	10.55	9.50	90.00%	1.055	10.00%	Good/Low
20	P.S. 156	104 Suter Ave.	Benches, Basketball hoops, Running track	Open school hours	Children, Teenagers	0.26	0.23	90.00%	0.026	10.00%	Good/Low
21	P.S. 125 Playground	Rockaway Ave. and Blake Ave.	Playground, Benches	6AM-9PM	Children	0.21	0.19	90.00%	0.021	10.00%	Fair/Low
22	Van Dyke Playground	Dumont Ave. btwn. Powell St. and Mother Gaston Blvd.	Basketball hoops, Picnic tables, Handball courts, Playground	6AM-9PM	Children, Teenagers	1.40	1.12	80.00%	0.28	20.00%	Good/Low
23	Livonia Park	Livonia Ave., btwn Powell St. and Junius St.	Benches, Landscaping, Lawn	6AM-1AM	Adults, Seniors	0.92	0.18	20.00%	0.736	80.00%	Good/Moderate
24	Floyd Patterson Ballfields	Riverdale Ave., Christopher Ave., Mother Gaston Blvd., Newport St.	Baseball fields, Benches, Water fountains	6AM-9PM	Children, Teenagers, Adults	2.30	2.07	90.00%	0.23	10.00%	Good/Low
25	Nehemiah Park	Riverdale Ave., btwn. Watkins St., and Mother Gaston Blvd.	Playground, Handball courts, Basketball hoops, Benches, Sprinklers	6AM-9PM	Children, Teenagers, Adults	1.65	1.16	70.00%	0.495	30.00%	Good/Moderate
26	Newport Playground	Riverdale Ave., btwn, Osborn St., and Thatford Ave.	Playground, Restrooms, Basketball courts, Picnic tables, Field	6AM-9PM	Children, Teenagers	0.92	0.74	80.00%	0.184	20.00%	Good/Low
27	Prospect Park Plaza	Sterling Pl. and Park Pl.	Basketball Courts, Playground, Spray Shower, Seating Areas	6AM-9PM	Children, Teenagers, Adults, Seniors	0.66	0.53	80.00%	0.132	20.00%	Great/Low
28	Dr. Green Playground	Suter Ave., and Mother Gaston Blvd.	Playground, Restrooms, Handball courts, Benches, Sprinklers	6AM-9PM	Children, Teenagers	1.79	1.61	90.00%	0.179	10.00%	Good/Low
Total for Publicly Accessible Open Spaces included in the quantitative analysis						***39.77***	***31.67***	***77.50%***	***8.10***	***22.50%***	

Table D-5: Additional Open Space Resources considered in the Qualitative Analysis

Map Letter[1]	Park Name	Address	Amenities	Acres	Active		Passive	
					Acres	%	Acres	%
A	Williams Avenue Community Garden	88 Williams Ave	Community Garden	0.05	0.00	0.00%	0.05	100.00%
B	Jewel Square	Fulton St. and Williams Ave,	Plaza	0.13	0.00	0.00%	0.13	100.00%
C	Hull Street Garden	196 Hull St.	Community Garden	0.32	0.00	0.00%	0.32	100.00%
D	Phoenix Community Garden	2037 Fulton St.	Community Garden	0.45	0.00	0.00%	0.45	100.00%
E	Louis Place Pocket Park	11A Louis Pl.	Community Garden	0.04	0.00	0.00%	0.04	100.00%
F	Farmers Garden	1897-1905 Bergen St.	Community Garden	0.15	0.00	0.00%	0.15	100.00%
G	St Mark's Block Association	455 Ralph Ave.	Community Garden	0.22	0.00	0.00%	0.22	100.00%
H	Sterling Community Garden	1715 Sterling Pl.	Community Garden	0.12	0.00	0.00%	0.12	100.00%
I	Preston Community Garden	1711 Park Pl.	Community Garden	0.07	0.00	0.00%	0.07	100.00%
J	Eastern Parkway Farms	1420 Eastern Pkwy.	Community Garden	0.11	0.00	0.00%	0.11	100.00%
K	Zion Triangle	East New York Ave. and Legion St,	Plaza	0.21	0.00	0.00%	0.21	100.00%
L	Marcus Garvey Tenant's Association Garden	Strauss St. btwn. East New York Ave., and Pitkin Ave.	Community Garden	0.23	0.00	0.00%	0.23	100.00%
M	Amboy Neighborhood Garden	Blake Ave., btwn. Amboy St. and Herzl St.	Community Garden	0.36	0.00	0.00%	0.36	100.00%
N	Isabahlia Community Garden	Saratoga Ave., btwn. Blake Ave., and Sutter Ave,	Community Garden	0.03	0.00	0.00%	0.03	100.00%
O	Fantasy Garden	181 Legion St.	Community Garden	0.24	0.00	0.00%	0.24	100.00%
P	Sunkissed Garden	658 Saratoga Ave.	Community Garden	0.10	0.00	0.00%	0.1	100.00%
Q	Howard Malls	Howard Ave., btwn. Blake Ave. and Dumont Ave.	Plaza	0.19	0.00	0.00%	0.19	100.00%
R	Thomas Boyland Garden	754 Thomas Boyland St.	Community Garden	0.11	0.00	0.00%	0.11	100.00%
S	Powell Street Garden	434 Livonia Ave.	Community Garden	0.45	0.00	0.00%	0.45	100.00%
T	Osborn Plaza	Osborn St., Belmont Ave.	Plaza	0.14	0.00	0.00%	0.14	100.00%
U	Student Farm Project	Sutter Ave., Rockaway Ave.	Community Garden	0.17	0.00	0.00%	0.17	100.00%
V	Sh'ma Yisrael	2084-2090 Pacific St.	Community Garden	0.15	0.00	0.00%	0.15	100.00%
W	McLeod Community Garden	130 Liberty Ave.	Community Garden	0.11	0.00	0.00%	0.11	100.00%
X	Jes Good Rewards Children's Garden	Sutter Ave., Amboy St.	Community Garden	0.23	0.00	0.00%	0.23	100.00%
Y	Brownsville Community Farm	239 Herzl St.	Community Garden	0.02	0.00	0.00%	0.02	100.00%
			Total	4.40	0.00	0.00%	4.4	100.00%

[1] Open space resources keyed to **Figure D-3**.

As shown in **Figure D-3** and **Table D-4**, there are 28 publicly accessible open space resources located in the study area. In addition, there are 25 open space resources 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 (**see Table D-5**). These include 21 community gardens, and four public plazas.

The study area contains a total of approximately 36.52 acres of publicly accessible open space[4], of which approximately 29.39 acres (77.78 percent) comprise active open space uses and approximately 7.13 acres (22.22 percent) comprise passive open space uses (refer to **Table D-4**).

The largest open space resource in the study area is Betsy Head Park. The park (Map No. 19) is located south of Site B, and is bounded by Thomas Boyland Street to the east, Dumont Avenue to the north, Strauss Street to the west, and Livonia Avenue to the south. It totals 10.55 acres of active and passive open space uses. The land for the park was acquired in 1913 and was constructed in 1915. It was redesigned in 1936 to accompany an Olympic-sized swimming pool and play center, two Works Progress Administration (WPA)-era projects that were designated landmarks by LPC in 2008. The park was renovated again in 2020 to include an outdoor classroom, skate park, and new synthetic turf field. In addition, the park contains playgrounds, handball courts, and seating areas.

The second largest open space resource is Callahan-Kelly Playground (Map No. 1). The park is located in the northern portion of the study area and is bound by Truxton Street to the north, Fulton Street to the south, Van Sinderen Avenue to the east and bisected by Sackman Street. It totals 3.25-acres of active and passive open space uses. The open space was acquired by New York City in 1938 and in 1939 it was named as a World War I memorial site; the park's name honors two local soldiers killed in World War I. It was then acquired by NYC Parks in 1945 with portions set aside for key infrastructure including subway lines, vents, and sewers. It was renovated between 2004 and 2006. It contains a mix of active and passive recreational uses, including an athletic field, basketball courts, playgrounds, fitness equipment, and seating areas. It is open to the public 24 hours a day. Within the easternmost portion of the park is the entrance to the Broadway Junction A, C, L, J, and Z subway station and NYPD Transit Police District 33. Callahan-Kelly Playground is currently undergoing renovations to reconstruct the playground, spray shower, perimeter sidewalks and walls, basketball courts, adult fitness equipment and sitting area. In addition, the project will construct a new skate park and part entrances. The construction is expected to be completed by 2023.

Grace Playground is the third largest open space resources within the study area (Map No. 15). The park is located in the easternmost section of the study area. The park is bounded by Vermont Street to the east, Pitkin Avenue to the north, Pennsylvania Avenue to the west, and Belmont Avenue to the south. It totals 2.73 acres of passive and active open space. The land for the park was acquired in 1936, and again in 1989. It was renovated in 1994 where it was expanded to the present size. It is named after members of the clergy for Grace Baptist Church of Christ in 1997. It contains basketball courts, playgrounds, spray showers, and seating areas.

Floyd Patterson Ballfields is the fourth largest open space resource within the study area (Map No. 24). The park is located in the southernmost portion of the study area. The park is bounded by Christopher Avenue to the east, Riverdale Avenue to the north, Mother Gaston Boulevard to the east, and Newport Street to the south. The park totals 2.30 acres of mostly active open space. Originally acquired in the

[4] The 3.25-acre Callahan-Kelly Playground, which is discussed, is undergoing construction and is currently closed to the public. It is included in the table but is not included in the Existing conditions analysis.

1970s, the park was transferred to NYC Parks in 1981 and renovated in 1997 when the ballfields were constructed. Floyd Patterson Ballfields contain ballfields and a seating area.

The fifth largest open space resource is South Pacific Playground, which is located in the western portion of the study area (Map No. 10). The approximately 2.26-acre park is owned by NYC Parks and contains both active and passive recreational uses. The park was constructed in 1937 and expanded in 1941. South Pacific Playground contains a range of active and passive recreational uses including basketball courts, playgrounds, spray showers, handball courts, chess tables, and seating areas. It is in good condition and has high utilization.

There are nine open space resources with the study area that contain between 1- and 1.99-acres of open space each. They include, in order of descending acreage: Dr. Green Playground (Map No. 28), Nehemiah Park (Map No. 25), Ocean Hill Playground (Map No. 7), Van Dyke Playground (Map No. 22), Hilltop Playground (Map No. 9), Fish Playground (Map No. 3), Powell Playground (Map No. 8), Chester Playground (Map No. 18), and Howard Playground (Map No. 5).

There are thirteen additional open space resources within the study area that including less than one-acre of open space each. They include, in order of descending acreage: Carter G. Woodson Children's Playground (Map No. 2), Houston Playground (Map No. 4), Livonia Park (Map No. 23), Newport Playground (Map No. 26), Howard Pool (Map No. 6), Prospect Park Plaza (Map No. 27), P.S. 328 (Map No. 17), Weeksville Playground (Map No. 11), P.S. 156 (Map No. 20), P.S. 332 (Map No. 14), P.S. 125 Playground (Map No. 21), P.S. 178 (Map No. 13), TLC Sculpture Park (Map No. 16), and P.S. 155 (Map No. 12).

Assessment of Open Space Adequacy

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

QUANTITATIVE ASSESSMENT

As previously stated, there are 36.52 acres of publicly accessible open space, including approximately 29.39 acres (approximately 77.78 percent) of active open space and approximately 7.13 acres (approximately 22.22 percent) of passive open space. With a residential population of 72,842, the total open space ratio for residents is 0.501 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-6**). The study area's active open space ratio (0.404 acres per 1,000 residents) is less than the City's planning guideline of 2.00 acres per 1,000 residents. The area's passive open space ratio (0.098 acres per 1,000 residents) is less than the City's planning guideline of 0.50 acres per 1,000 residents.

QUALITATIVE ASSESSMENT

The study area contains a good mixture of recreational facilities, with approximately 78 percent dedicated to active uses and 22 percent dedicated to passive uses. As detailed above, under existing conditions, the total open space ratio, active open space ratio, and the passive open space ratio are all below the City's planning guidance (refer to **Table D-6**).

TABLE D-6: Existing Conditions: Adequacy of Open Space Resources

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
72,842	36.52	29.39	7.13	0.501	0.404	0.098	2.5	2	0.5

As shown in **Table D-4**, study area open spaces include a wide variety of actively programmed open spaces appropriate for the residential user groups. As noted above, the study area includes a high percentage of adults (see **Table D-3**). As indicated in the *CEQR Technical Manual*, adults tend to use court facilities for sports, as well as spaces for more individualized forms of recreation, such as rollerblading, biking, and jogging, which require bike paths, esplanades, and vehicle-free roadways. Adults also gather with families for picnicking or ad hoc active sports such as Frisbee. All of the study area's 28 open spaces include such facilities (refer to **Table D-4**). Further, some passive spaces can be used for both passive and active recreation, such as a lawns or walkways that can be used for ball playing, jogging/running, or rollerblading. In addition, as noted in **Table D-4**, a majority of open space resources located in the study area are in good condition with low utilization.

Additionally, as noted in **Table D-5**, the residential open space study area contains 20 community gardens, and four plazas. As shown in **Figure D-3**, the community gardens (Map Letters A, C-J, L-P, R, S, and U-Y) are located throughout the study area and vary in size. The largest community garden (0.45 acres) is Powell Street Garden, which is located in the southeast portion of the study area, bounded by Livonia Avenue and Junius Street. The community gardens total approximately 3.73 acres of passive open space uses and have various hours of operation and ownership. The four plazas are also located throughout the study area (Map Letters B, K, Q, and T). They total 0.67 acres of passive open space uses, including seating areas. In total, the 25 open spaces counted in the qualitative analysis total an additional 4.40 acres of passive open space uses. Although these open spaces are publicly owned, they do not provide consistent public hours or do not include seating or other amenities. As such, they are conservatively not included in the quantitative analysis above.

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

Study Area Population

There are no known No-Action developments within the half-mile open space study area. A residential background growth rate was applied to the existing residential population to account for general background growth anticipated in the study area. As indicated in **Table D-7**, the anticipated residential growth rate is expected to increase the study area population by 7,109 to a total of residents by the 2026 build year.

Open Space Resources

There are no new publicly accessible open spaces expected to be added to or removed from the study area under the No-Action condition. As discussed above, Callahan-Kelly Playground is currently under construction. The playground is expected to be fully reopen and operational by the 2026 analysis year. As such, the 3.25-acre open space resource is included in the No-Action and With-Action scenarios.

Assessment of Open Space Adequacy

In the 2026 No-Action condition, the additional population introduced to the study area would slightly increase the demand on the area's open space resources (i.e., would reduce the residential open space ratios) even with the reopening of the Callahan-Kelly Playground. As indicated in **Table D-7**, the No-Action total and active open space ratios per 1,000 residents are expected to decrease to 0.497 and 0.396, respectively, from 0.501 and 0.404, respectively, but the passive open space ratios per 1,000 residents is expected to increase to 0.101 from 0.098, under existing conditions. Similar to existing conditions, the total and passive open space ratios would remain below the City's optimal planning guidance.

TABLE D-7: Adequacy of Open Space Resources: No-Action Condition

2026 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
79,951	39.77	31.67	8.10	0.497	0.396	0.101	2.5	2	0.5

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

This section describes the open space conditions that would result from the Proposed Actions and associated RWCDS by 2026. It evaluates the potential for the Proposed Actions to result in significant adverse impacts to open space resources directly and indirectly based on a comparison of the No-Action condition (described above) to the With-Action condition.

Direct Effects

A direct effects assessment was conducted in accordance with the definitions provided in Section 210 of the *CEQR Technical Manual* Chapter 7 and the impact significance criteria specified in Section 410 of the chapter. No publicly accessible open space is currently located in the Project Area. Therefore, the Proposed Actions would not result in the physical loss of publicly accessible open space. In addition, the Proposed Actions would not cause increased noise or air pollutant emissions that would affect the usefulness of any study area open space, whether on a permanent or temporary basis. The Proposed Actions would not change the use of a publicly accessible open space so that it no longer serves the same user population, nor would it limit public access to any open spaces. Therefore, no other significant adverse direct effects on open space would occur as a result of the Proposed Actions.

Indirect Effects

Study Area Population

In the future with the Proposed Action, it is estimated 402 new residents would be introduced to the Project Area. Based on this incremental residential population growth, the study area's population would increase to a total of 80,353 residents in the 2026 With-Action condition.

Open Space Resources

Under the Proposed Actions and associated RWCDS, no new publicly accessible open space resources would be added to the study area.

Open Space Adequacy

As noted above, the open space impact analysis consists of both quantitative and qualitative assessments. The quantitative assessment considers how a proposed action(s) could change the open space ratios in the study area.

In the 2026 With-Action condition, the additional population introduced to the study area by the Proposed Actions would further increase the demand on the area's open space resources. As indicated in **Table D-8**, the With-Action total, active, and passive open space ratios per 1,000 residents are expected to decrease to 0.495, 0.394, and 0.101, respectively, from 0.497, 0.396, and 0.101, respectively, under the No-Action condition. Similar to the No-Action condition, the total, active, and passive open space ratios would remain below the City's optimal planning guidance.

TABLE D-8: Adequacy of Study Area Open Space Resources: With-Action Condition

2026 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
80,353	39.77	31.67	8.10	0.495	0.394	0.101	2.50	2.00	0.50

Potential Effects of the Proposed Actions on Publicly Accessible Open Space

QUANTITATIVE ASSESSMENT

According to the 2021 *CEQR Technical Manual*, a significant adverse open space impact may occur if a proposed action(s) would reduce the open space ratio by more than the general guidelines for the open space percentage change provided in **Table D-9**.

TABLE D-9: Detailed Assessment- Percentage Change Guidance to Determine Possible Open Space Impact

Total Open Space Ratio Range	Active Open Space Ratio Range	Passive Open Space Ratio Range	Percentage Change in Open Space Ration Signifying a Possible Adverse Open Space Impact
2.01 to 2.50 or Greater	1.61 to 2.0 or Greater	0.41 to 0.50 or Greater	5%
1.51 to 2.0	1.21 to 1.61	0.31 to 0.40	4%
1.01 to 1.50	0.81 to 1.20	0.21 to 0.30	3%
0.51 to 1.0	0.41 to 0.80	0.11 to 0.20	2%
0.50 or Less	0.01 to 0.40	0.01 to 0.10	1%

Source: *2021 CEQR Technical Manual*, Open Space Chapter; Table 7-5.

Table D-10 presents the percentage change from the No-Action condition to the With-Action condition for the study area. As noted previously, in the future with the Proposed Actions, ratios of open spaces to residents would continue to be lower than the optimal planning goals furnished by DCP. As shown in **Table D-10**, the study area's total open space ratio in the future with the Proposed Actions would decrease to 0.495 acres per 1,000 residents from 0.497 acres per 1,000 residents, which represents a reduction of approximately 0.50 percent (0.002 acres per 1,000 residents) from No-Action conditions. The active open space ratio in the study area would decrease from 0.396 acres per 1,000 residents to 0.394 acres per 1,000 residents in the With-Action condition, a 0.50 percent decrease (0.002 acres per 1,000 residents). The passive open space ratio for residents would decrease from 0.101 acres per 1,000 residents to 0.101 acres per 1,000 residents in the With-Action condition, a 0.50 percent decrease (0.0005 acres per 1,000 residents). As the percent change in total, active, and passive open space ratios for the open space study area would not exceed the one percent City's planning guidance, no significant adverse impacts would result, in accordance with *CEQR Technical Manual* guidance.

TABLE D-10: Comparison of No-Action to With-Action Open Space Ratios in the Half-Mile Study Area

Type of Open Space	CEQR Technical Manual Open Space Guideline	Open Space Ratios per 1,000			Percent Change (Future No-Action to Future With-Action)
		Existing	No-Action	With-Action	
Total	2.50	0.501	0.496	0.494	-0.50%
Active	2.00	0.404	0.396	0.394	-0.50%
Passive	0.50	0.098	0.101	0.101	-0.50%

QUALITATIVE ASSESSMENT

In the future with the Proposed Actions, the ratio of total, active, and passive open space would continue to be lower than the City's planning guidance. The incremental population that would be generated by the Proposed Actions is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific user groups. It should also be noted that the study area open spaces were all observed to be in good condition and low utilization (refer to **Table D-4**). In addition, the open spaces offer a variety of passive and active recreational amenities.

The demand for open space generated by the Proposed Actions is not expected to significantly exacerbate the No-Action deficiency, with less than a one percent decrease in the study area's total open space ratio. The population added because of the Proposed Actions is not expected to affect noticeably the utilization of the area's open spaces. As noted above, most of the study area open space resources are in good condition, and therefore, could likely handle some additional demand. With respect to the reduction in open space ratios in the study area, the residential total open space ratio would decrease by approximately 0.50 percent from the No-Action condition, the residential active open space ratio would decrease by approximately 0.50 percent from the No-Action condition, and the residential passive open space ratio would decrease by approximately 0.50 percent from the No-Action condition. As the percent change in total, active, and passive open space ratios for the open space study area would not exceed the one percent City's planning guidance for areas with open space ratio below 0.50 total acres per 1,000 residents, 0.01 to 0.40 active acres per 1,000 residents, and 0.01 to 0.10 passive acres per 1,000 residents, no significant adverse impacts would result, in accordance with *CEQR Technical Manual* guidance.

Although the open space ratios are expected to decrease in the study area, the change would be ameliorated by several factors, including the proximity of study area residents to portions of parks not included within the study area quantitative analysis. As detailed above, approximately 4.40 acres of passive open space uses are located within the study area. This is comprised of four plazas and 21 community gardens. Furthermore, the Project Area is not located within a "walk gap" area (i.e., it is in a WtPSA), NYC Parks has determined that this area is within walking distance of a park.

Moreover, the population to be generated by the Proposed Actions is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific user groups. No specific user groups would be adversely affected by the developments. Additionally, the Proposed Actions would not result in the physical loss of existing public open space resources, and would not result in any adverse air, noise, or other environmental impacts.

Therefore, as the percent change in total, active, and passive open space ratios from the No-Action condition to the With-Action condition would be below the City's planning guideline of one percent, at 0.50 percent, 0.50 percent, and 0.50 percent, respectively; and the Project Area is located within a WtPSA, the Proposed Actions would not result in an indirect significant adverse impact on open space in the study area, in accordance with *CEQR Technical Manual* impact criteria.

ATTACHMENT E

SHADOWS

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions and associated reasonable worst-case development scenario (RWCDS) to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the *City Environmental Quality Review* (CEQR) *Technical Manual*, a shadows assessment is warranted if a proposed action(s) would result in structures (or additions to existing structures) of 50 feet in height or greater, or those that would be located adjacent to, or across the street from, a sunlight sensitive resource. As discussed in **Attachment B, "Supplemental Screening,"** the Proposed Actions would facilitate the development of new buildings that would be greater than 50 feet in height, as well as the construction of a new building that would be adjacent to a sunlight sensitive resource. As such, a shadows analysis was prepared in accordance with 2021 *CEQR Technical Manual* guidance to determine the potential for the Proposed Actions to result in significant adverse shadows impacts on sunlight-sensitive resources.

II. METHODOLOGY

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

First, a preliminary screening assessment must be conducted to ascertain whether shadows resulting from 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 sunlight-sensitive resources[1]:

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

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

for food production in community gardens. The amount of sunlight typically considered the minimum that plantings and vegetation would need is six to eight hours of direct sunlight. However, certain plantings and vegetation can tolerate partial sun, with a reduced minimum requirement of four to six hours of direct sunlight. Examples of areas that can tolerate partial sun are established tree canopies, shrubs or perennials.

- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features of an architectural resource are considered in a shadows analysis. 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 community gardens, surface water bodies, wetlands, or designated resources, such as coastal fish and wildlife habitats.

The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around each of the development sites representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier, which reduces the area that could be affected by 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 over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow – 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 the proposed project. Incremental shadows are determined by establishing a baseline condition (the No-Action condition) and comparing it to the future condition resulting from the Proposed Actions (i.e., the With-Action condition), thus illustrating the shadows cast by existing or future buildings and distinguishing the additional (incremental) shadows cast by the Proposed Actions. In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern were modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21 vernal equinox (or the September 21 autumnal equinox, which is approximately the same), the June 21 summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6 or August 6 (which are approximately the same). For the cold weather months, the December 21 winter solstice is included to

demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive 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 incremental 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 ten minutes or less 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 duration available to sunlight-sensitive features of the resource to less than the time of its minimum sunlight needs (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum sunlight needs).
- *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 because of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected times.
- *For any sunlight-sensitive feature of a resource:* complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

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

III. PRELIMINARY SCREENING

First, an assessment of the five development sites, including Development Site A, B, C, Projected Development Site 1, and Potential Development Site 1, was performed in order to determine which sites required preliminary screening assessment. Pursuant to *CEQR Technical Manual* guidance, only new development or enlargements that would result in an incremental increase of 50 feet or more compared to the future without the Proposed Actions require assessment. In addition, any development site

adjacent to, or across the street from, a sunlight sensitive resource requires preliminary screening regardless of its height.

Table E-1 summarizes this initial screening. As indicated in the table, new structures of approximately 50 feet in incremental height are anticipated on three of the five development sites (including Development Site C, Projected Development Site 1, and Potential Development Site 1). The two remaining development sites would be developed with incremental heights of less than 50-feet tall; however, the Development Site A at 425 Mother Gaston Boulevard is adjacent to Carter G. Woodson Children's Park.

TABLE E-1
Development Sites Warranting Preliminary Shadow Analyses

Sites Warranting Preliminary Shadows Analysis		Sites Not Warranting Preliminary Shadows Analysis
Sites with 50-feet or Greater Height Increment	**Sites with Less than 50-feet Height Increment Adjacent to Sunlight Sensitive Resources**	**Sites with Less than 50-foot Height Increment Not Adjacent to Sunlight-Sensitive Resources**
C, Projected Development Site 1, Potential Development Site 1	A	B

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 radius for the four development sites warranting a preliminary shadow analysis was determined using each site's preliminary building massing and maximum height including bulkhead. The longest shadows that could be cast by new buildings on Development Site C, Projected Development Site 1 and Potential Development Site 1 would be approximately 452 feet in length, and the longest shadows that could be cast by the 53-feet tall (including mechanical bulkhead) building on Development Site A would be 228 feet in length.

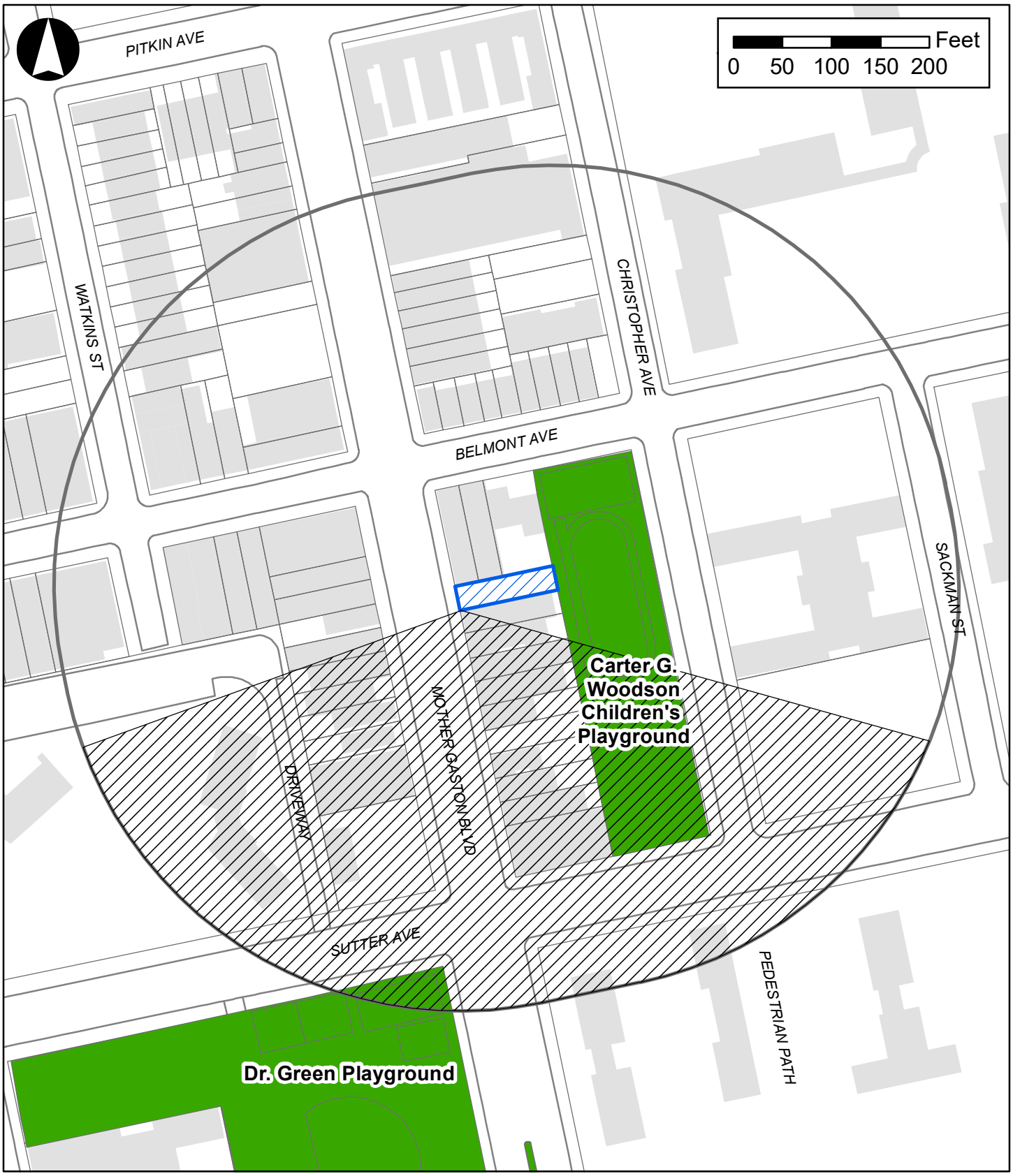
Base maps were prepared (see **Figures E-1a through E-1e**) for each of the development sites identified for analysis in **Table E-1**, the surrounding street layout, and all potentially sunlight-sensitive resources (publicly accessible open spaces, architectural resources, natural resources, and greenstreets). Within the maximum shadow radius for these development sites, there are five identified potentially sunlight-sensitive open spaces and natural resources, including a greenstreet, two playgrounds, a pool, and a community garden. Therefore, further screening was warranted in order to determine whether any resources would 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 development 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 could receive incremental shadows from the proposed developments.

Figures E-1a to E-1e illustrate 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 portions of the development sites). Three

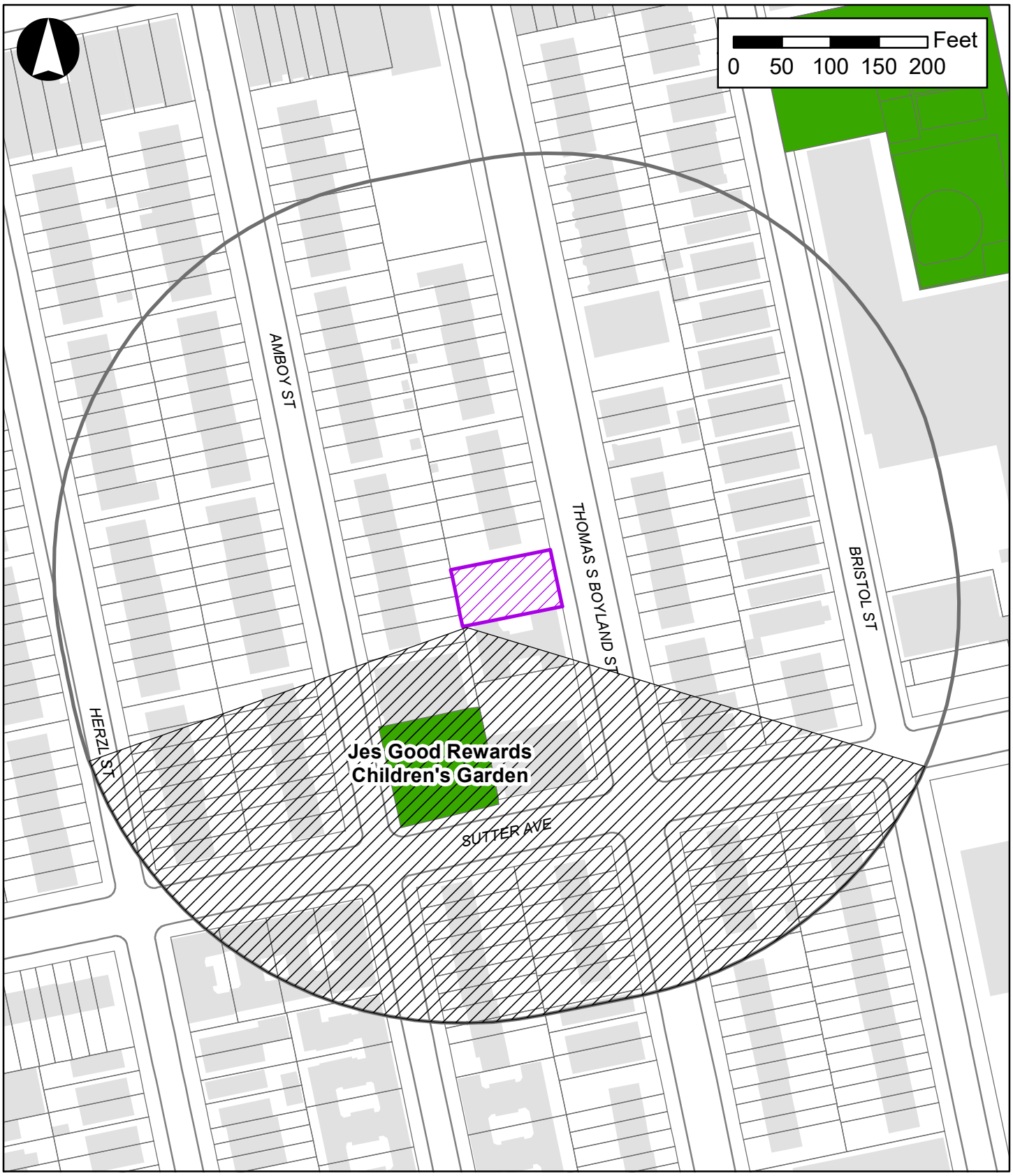
Figure E-1a
Shadows Tier 1 and 2 - Development Site A



Legend

Development Site A | Tier I - 409-Foot Radius | Tier II: Area That Cannot be Shaded

Figure E-1b
Shadows Tier 1 and 2 - Development Site B

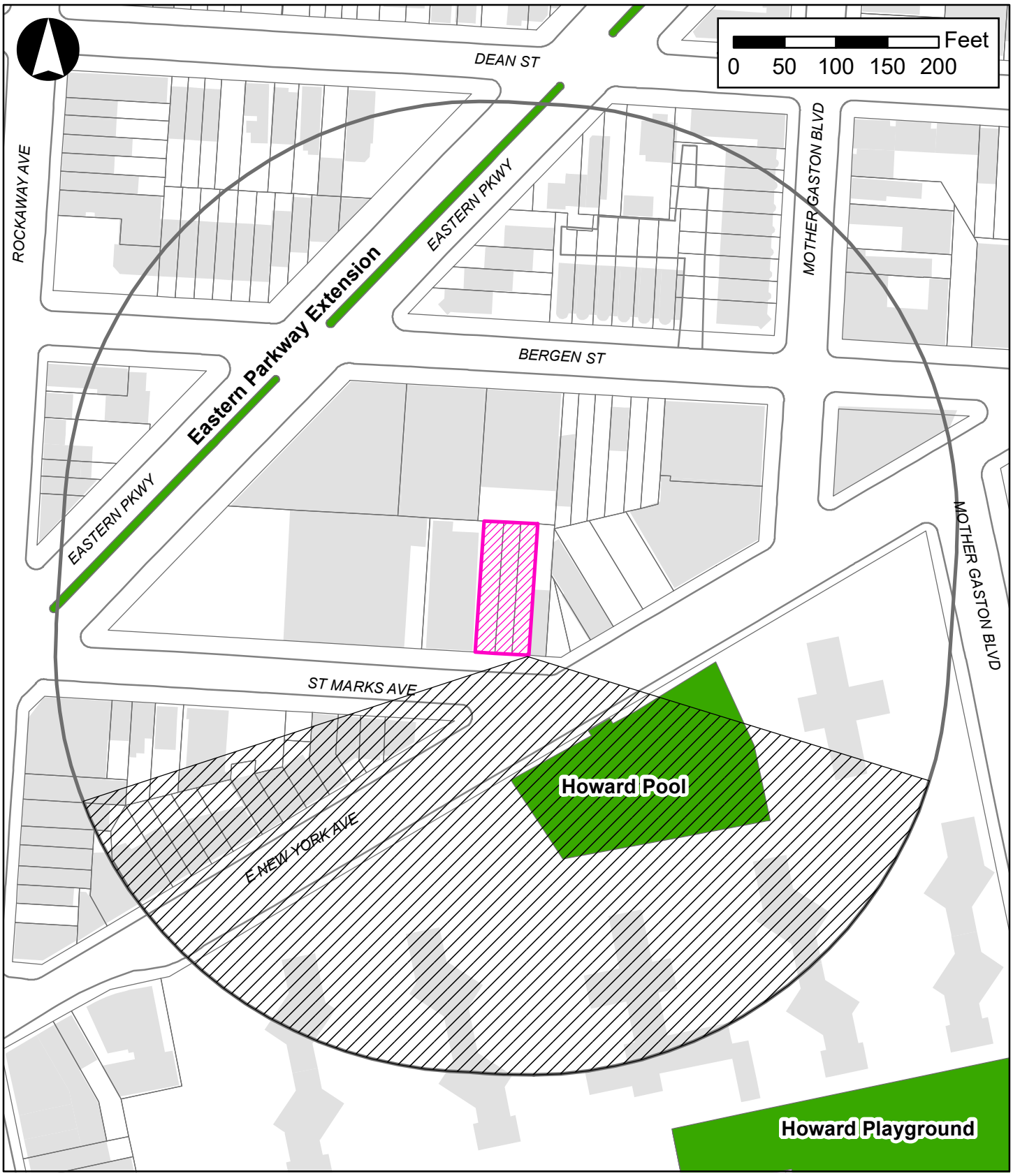


Legend

Development Site B | Tier I - 409-Foot Radius | Tier II: Area That Cannot be Shaded

Figure E-1c

Shadows Tier 1 and 2 - Development Site C

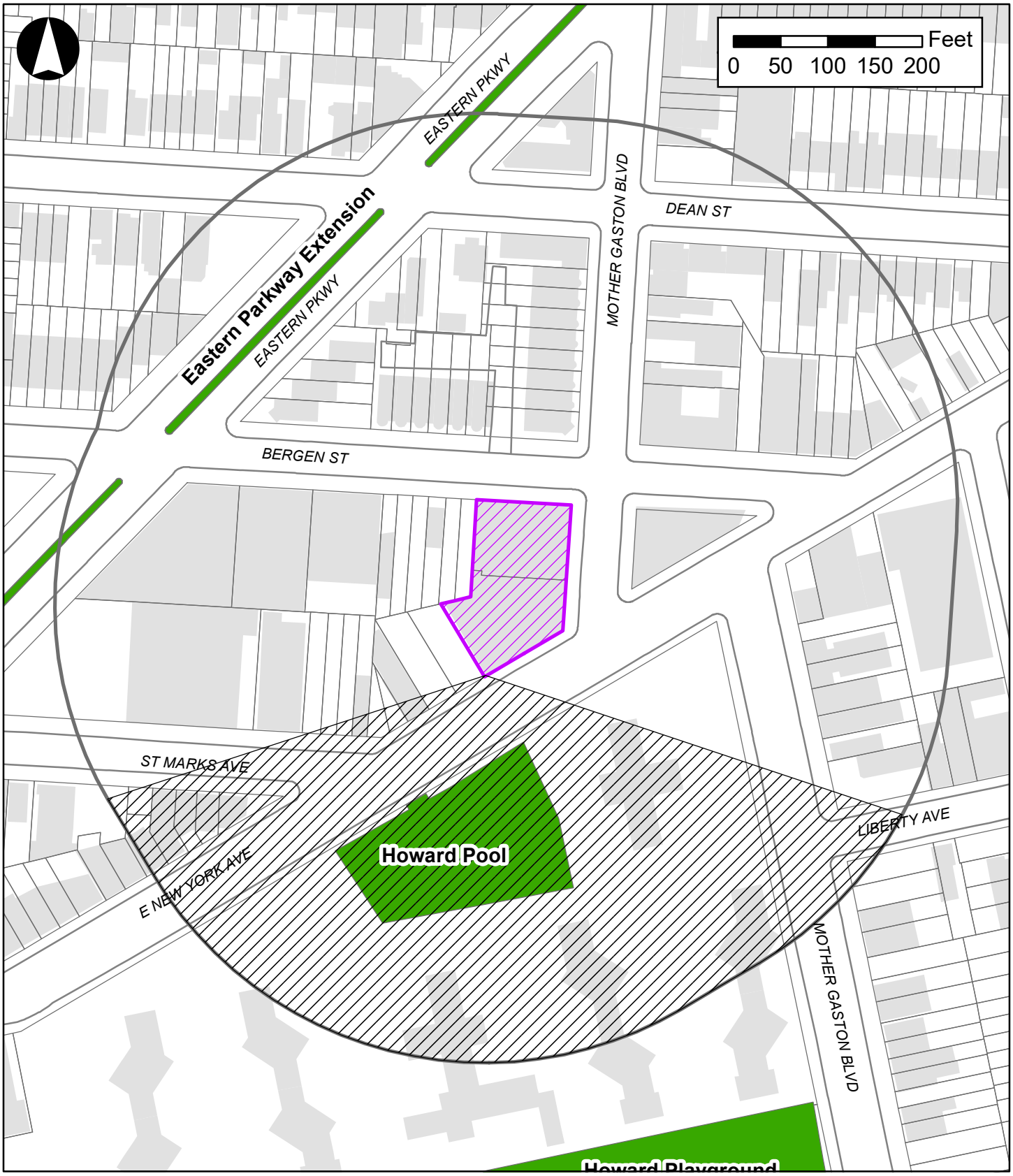


Legend

Development Site C | Tier I - 409-Foot Radius | Tier II: Area That Cannot be Shaded

Figure E-1d

Shadows Tier 1 and 2 - Projected Development Site 1

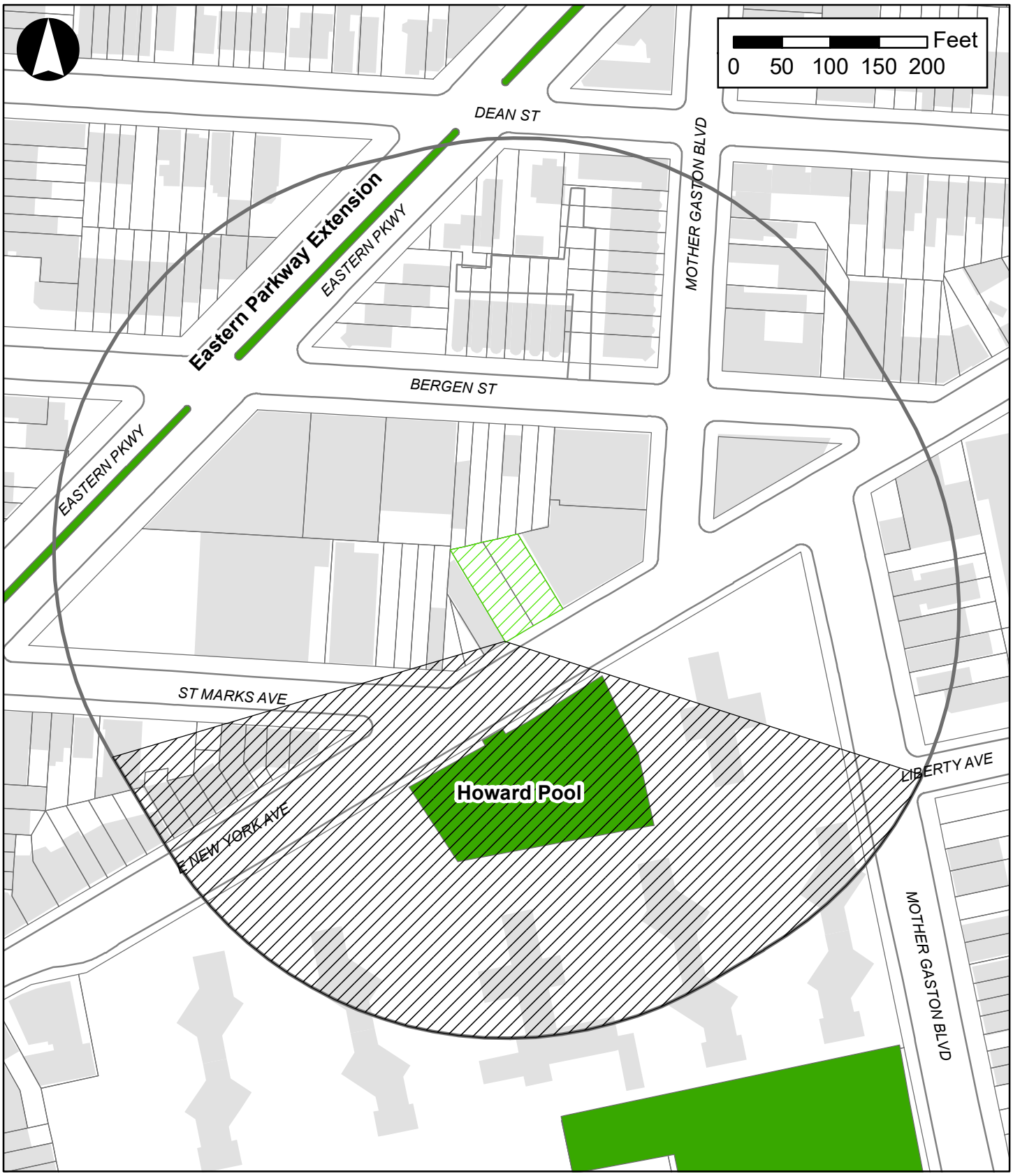


Legend

Projected Development Site 1 | Tier I: 409-Foot Radius | Tier II: Area That Cannot be Shaded

Figure E-1e

Shadows Tier 1 and 2 - Potential Development Site 1



Legend

Potential Development Site 1 | Tier I: 409-Foot Radius | Tier II: Area That Cannot be Shaded

of the five sunlight-sensitive resources were identified as sunlight-sensitive resources that warranted further assessment.

Tier 3 Screening Assessment

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

A Tier 3 assessment was performed using three-dimensional (3D) computer mapping software for Sites A and C, Projected Development Site 1 and Potential Development Site 1 to calculate and display action-generated shadows on individual representative analysis dates. The model contained 3D representations of the elements in the base map used in the preceding assessments and a 3D model of the proposed development on Sites A and C, and the projected development at Site 1 and the potential development at Site 1. 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 any sunlight sensitive resources.

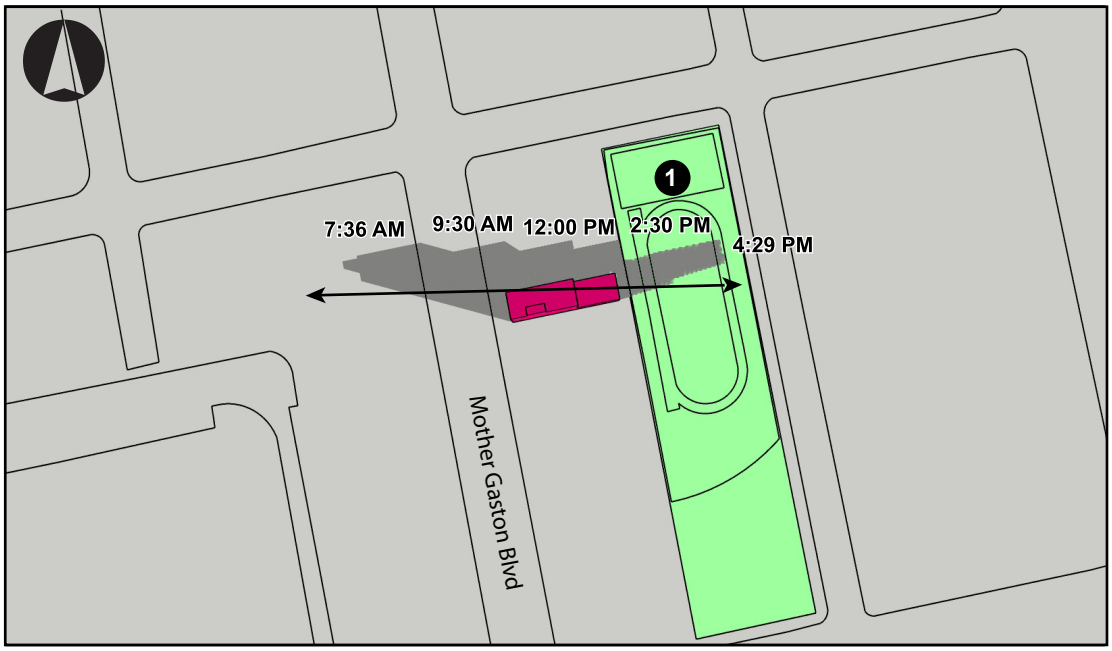
As shown in **Figures E-2a** through **Figure E-2h**, the Tier 3 results determined that Carter G. Woodson Children's Park, would receive incremental shadows from the development on all four analysis days, and, therefore, requires further analysis. New shadow generated by the Proposed Actions would be cast on the Eastern Parkway Extension on the December 21 analysis day and new shadow generated by the Proposed Actions would be cast on the Howard Pool on two analysis days. **Table E-2** presents a summary of the Tier 3 assessment. As presented in **Table E-2**, based on the Tier 3 screening assessment, the potential for new incremental shadows to be cast on the Carter G. Woodson Children's Park, Eastern Parkway Extension, and Howard Pool, could not be ruled out, and a detailed shadows analysis is warranted for these sunlight-sensitive resources.

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

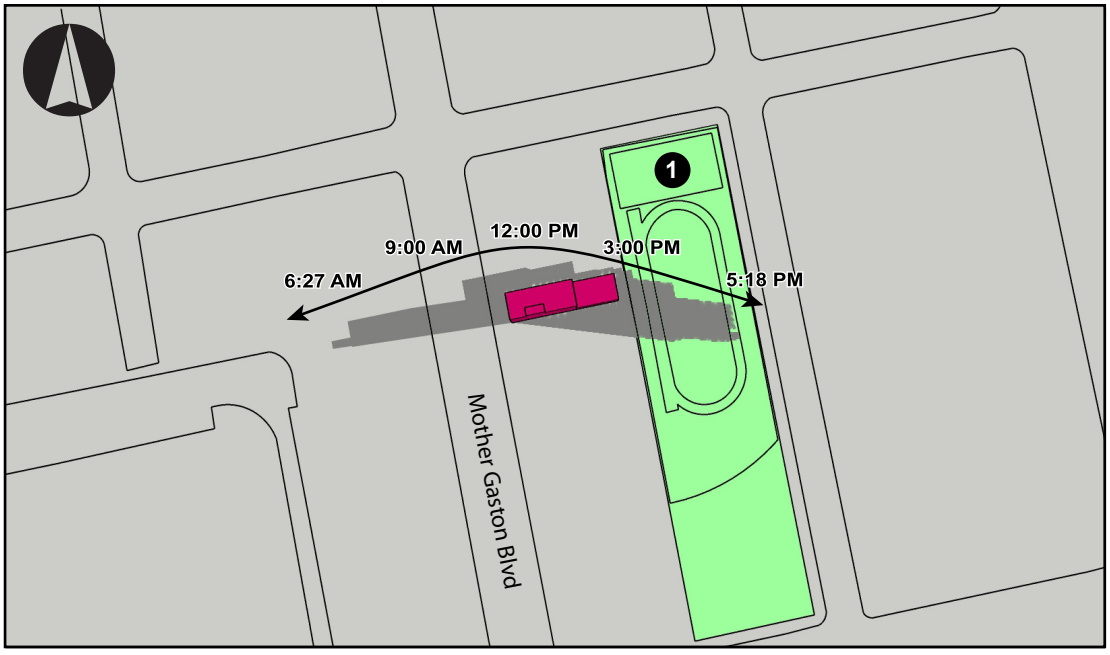
No.[1]	Name	March 21/Sept. 21 7:36AM - 4:29PM	May 6/August 6 6:27AM - 5:18PM	June 21 5:57AM - 6:01PM	December 21 8:51AM - 2:53PM	Number of Analysis Days
1	Carter G. Woodson Children's Park	**YES**	**YES**	**YES**	**YES**	**4**
2	Eastern Parkway Extension	**NO**	**NO**	**NO**	**YES**	**1**
3	Howard Pool	**NO**	**YES**	**YES**	**NO**	**2**

Notes:
[1] Numbers keyed to sunlight-sensitive resources shown in **Figures E-2a to E-2h.**

Tier 3 Screening - Development Site A



MARCH 21/SEPTEMBER 21



MAY 6/AUGUST 6

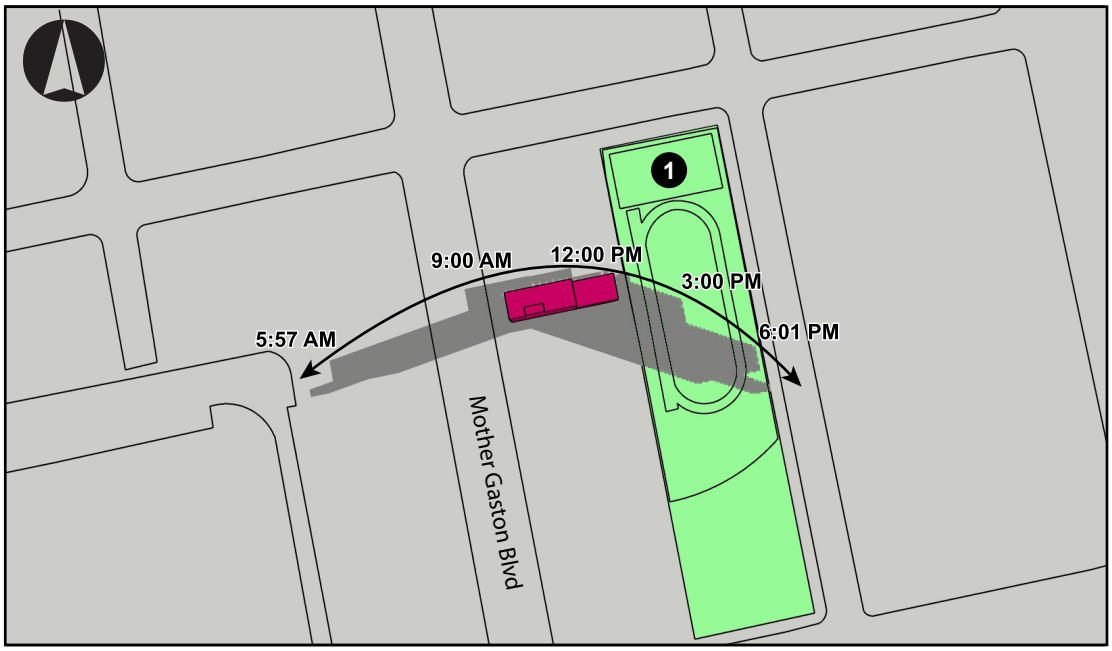
Proposed Development

Incremental Shadow

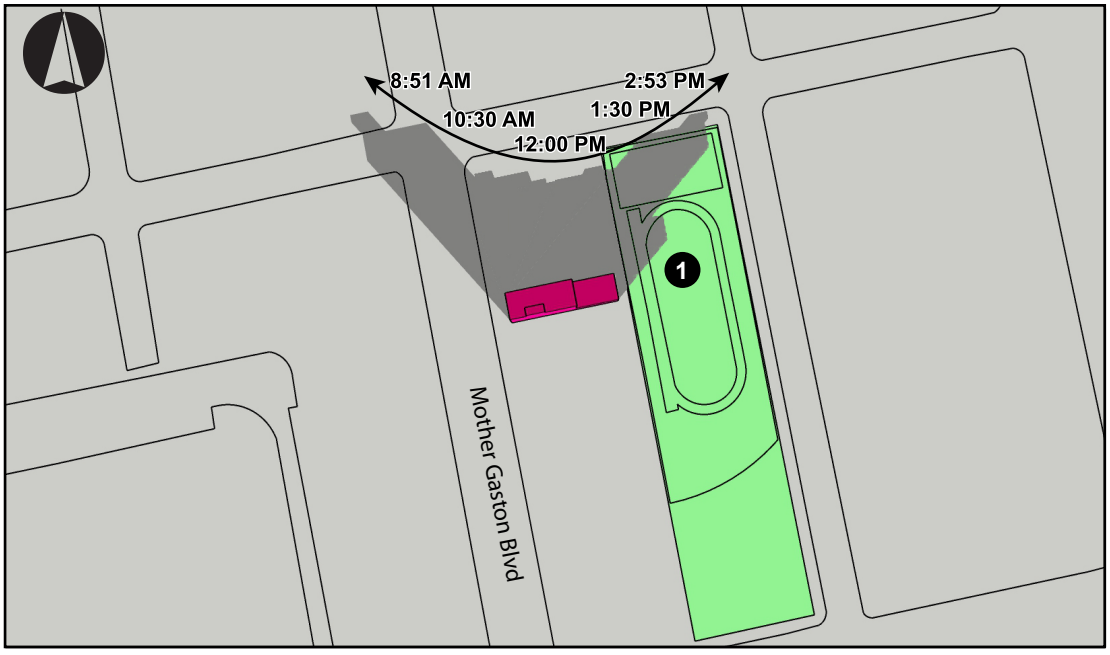
1 **Open Space**

Note: Resources keyed to Table E-2

Tier 3 Screening - Development Site A



JUNE 21



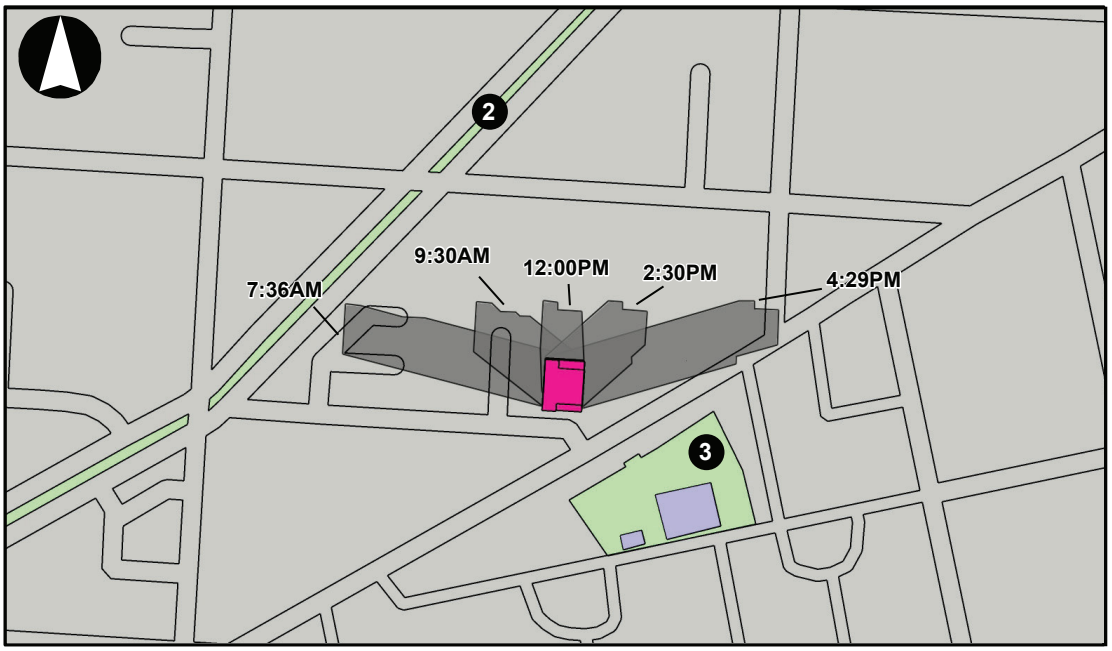
DECEMBER 21

Proposed Development

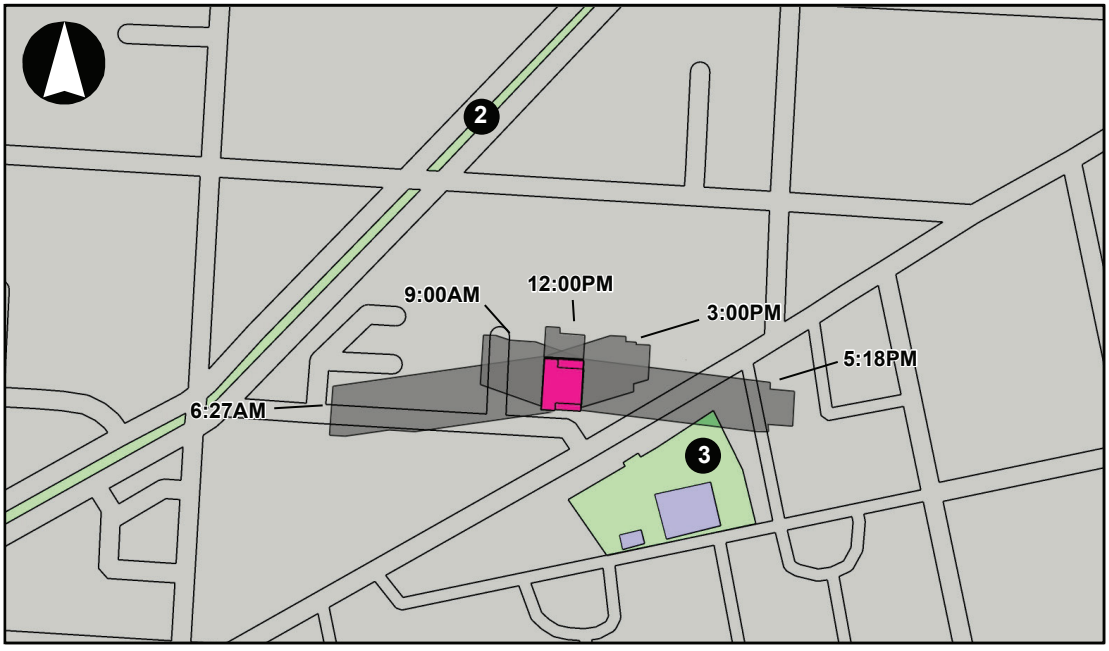
Incremental Shadow

1 **Open Space**

Note: Resources keyed to Table E-2



MARCH 21/SEPTEMBER 21



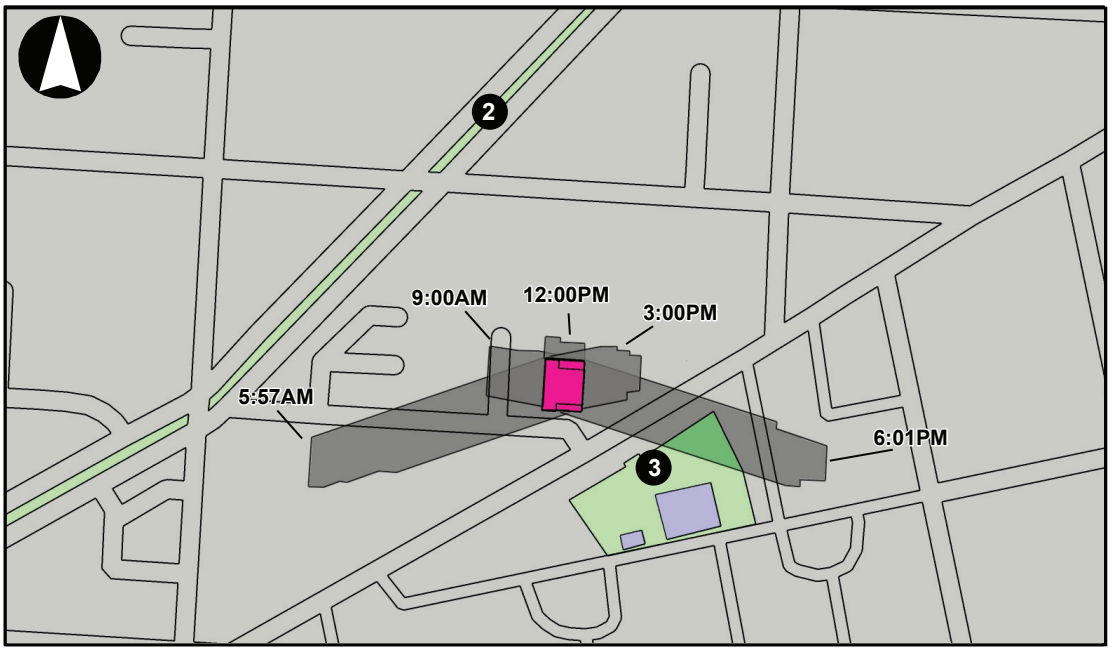
MAY 6/AUGUST 6

Proposed Development

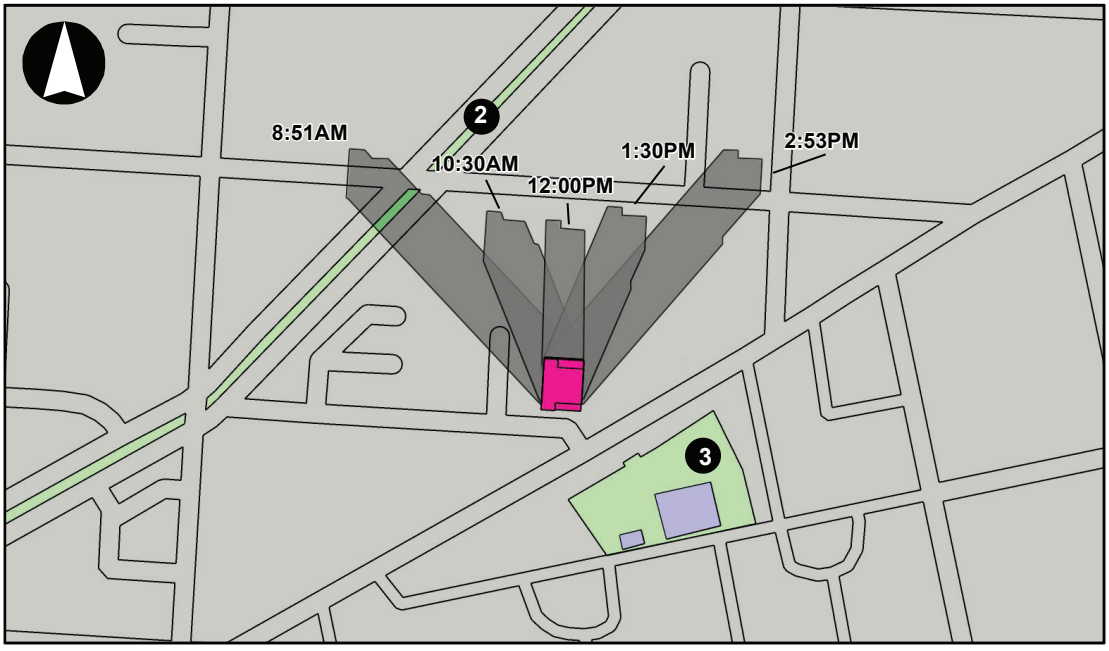
Incremental Shadow

1 **Open Space**

Note: Resources keyed to Table E-2



JUNE 21



DECEMBER 21

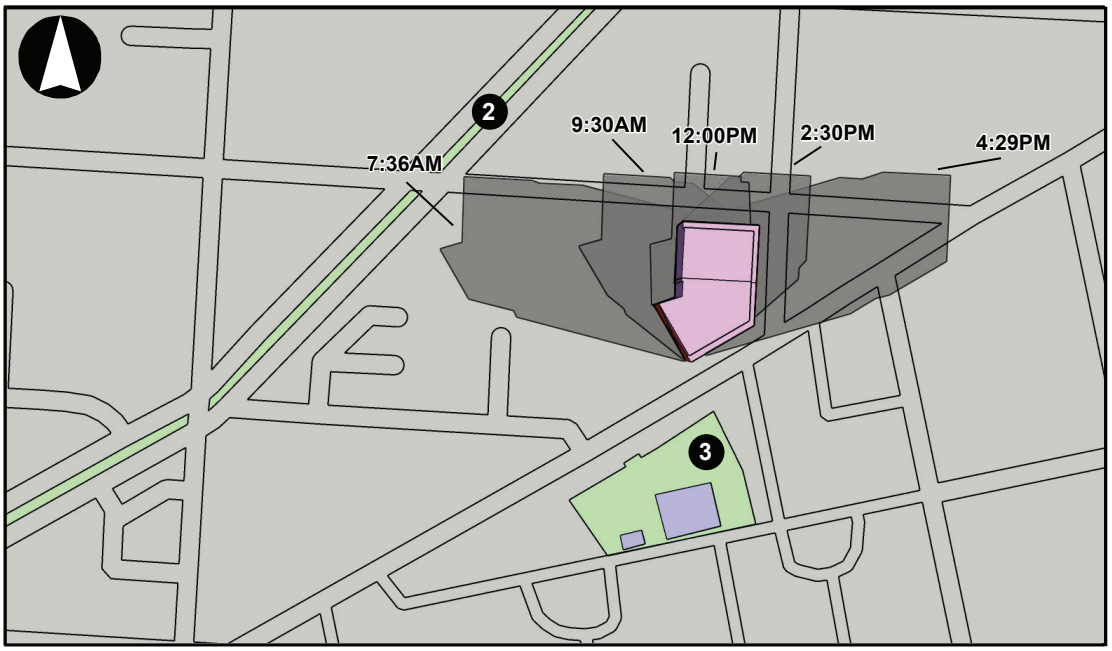
Proposed Development

Incremental Shadow

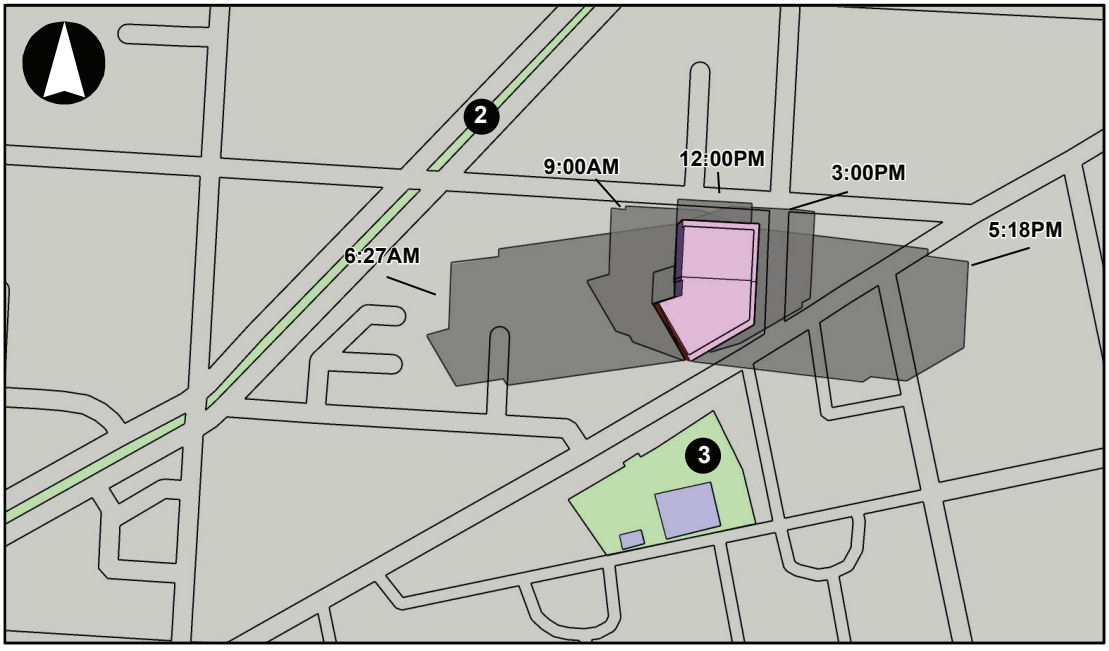
1 **Open Space**

Note: Resources keyed to Table E-2

Tier 3 Screening - Projected Development Site



MARCH 21/SEPTEMBER 21



MAY 6/AUGUST 6

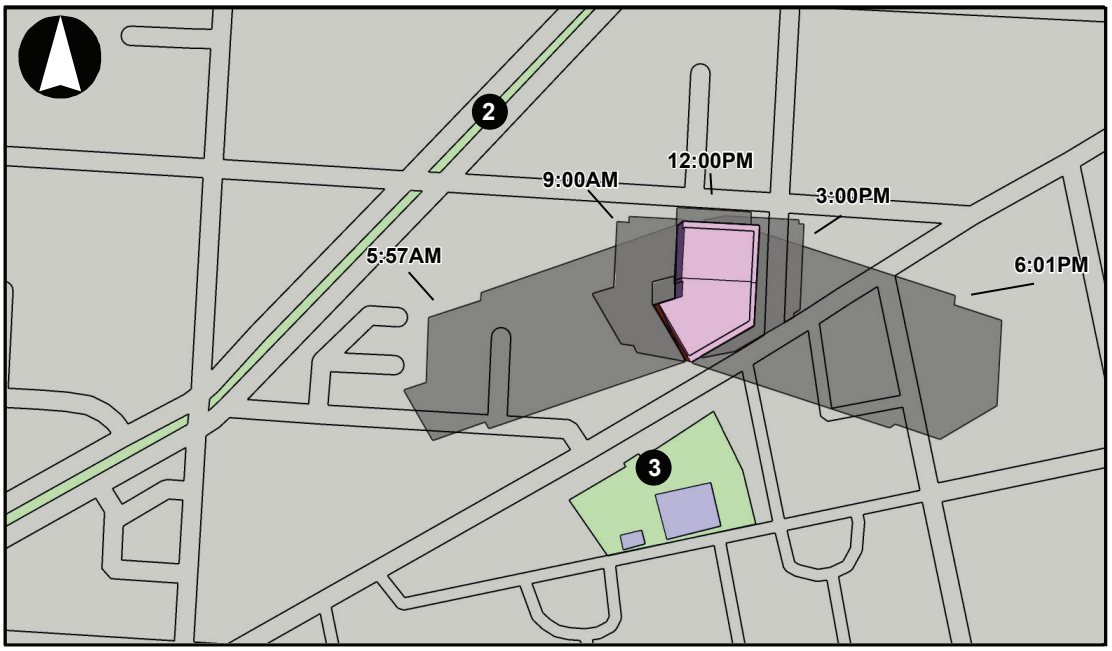
Projected Development Site

Incremental Shadow

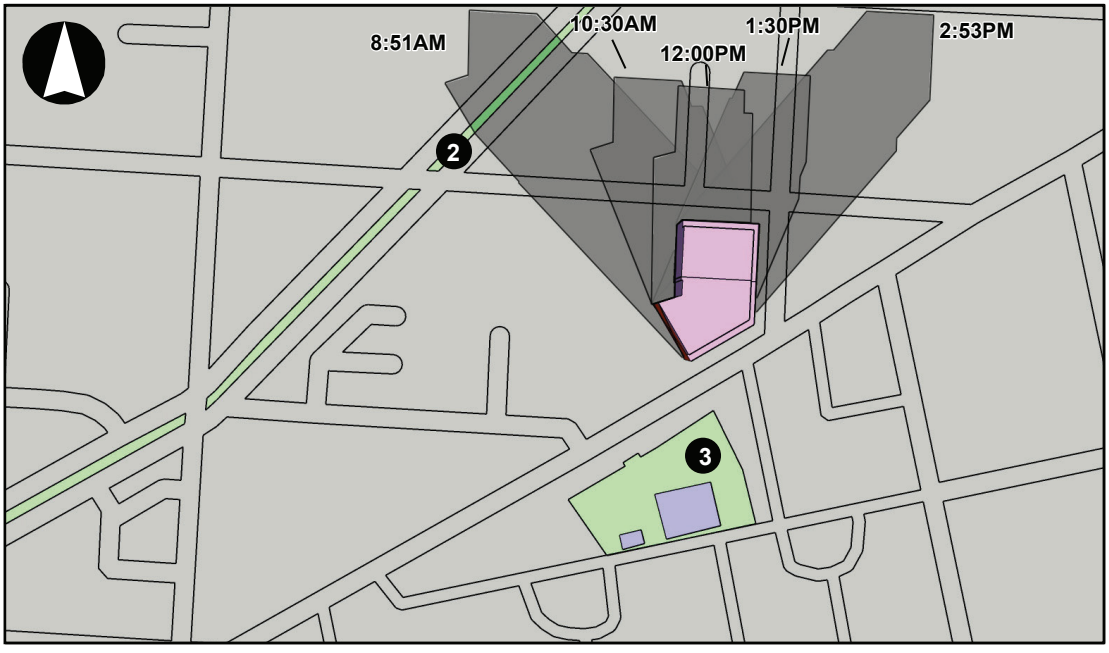
1 **Open Space**

Note: Resources keyed to Table E-2

Tier 3 Screening - Projected Development Site



JUNE 21



DECEMBER 21

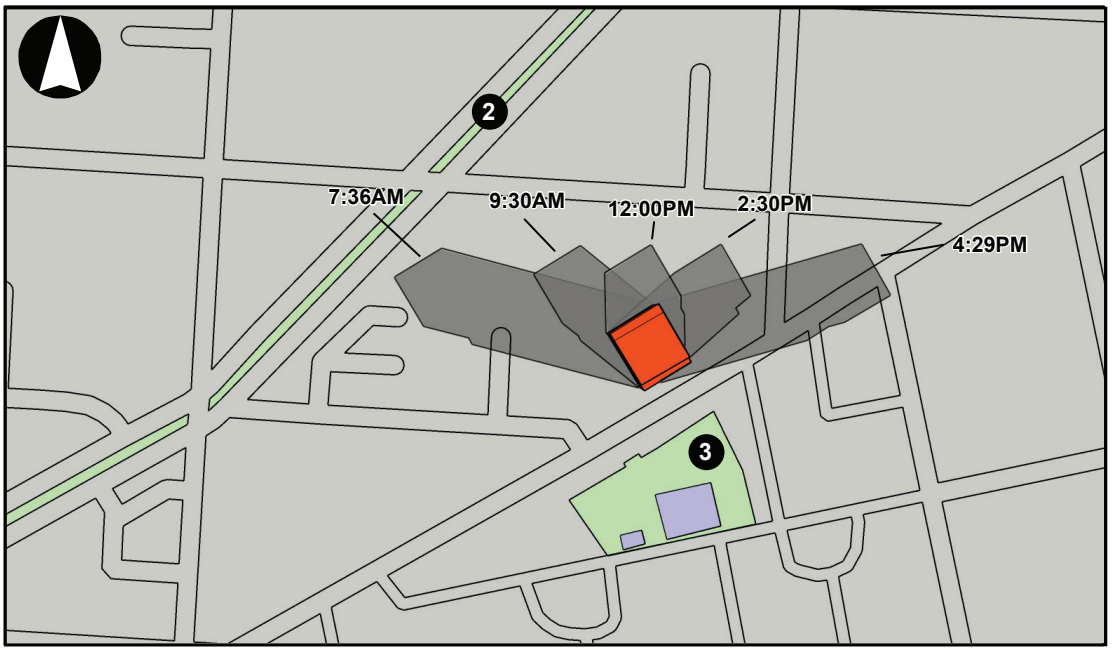
Projected Development Site

Incremental Shadow

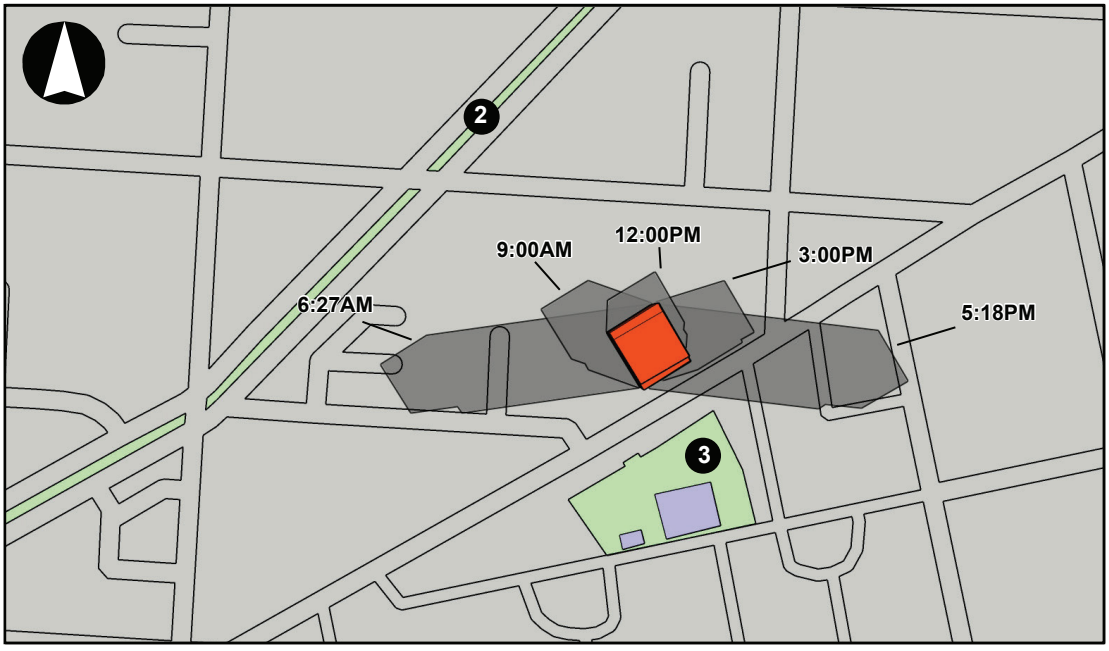
1 **Open Space**

Note: Resources keyed to Table E-2

Tier 3 Screening - Potential Development Site



MARCH 21/SEPTEMBER 21



MAY 6/AUGUST 6

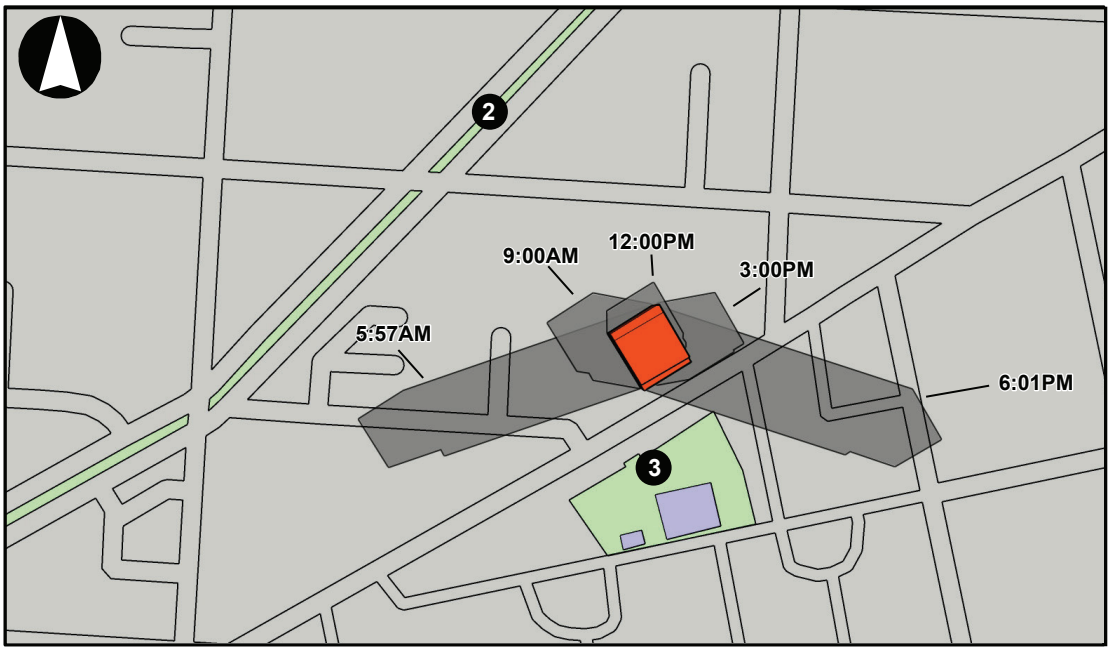
Potential Development Site

Incremental Shadow

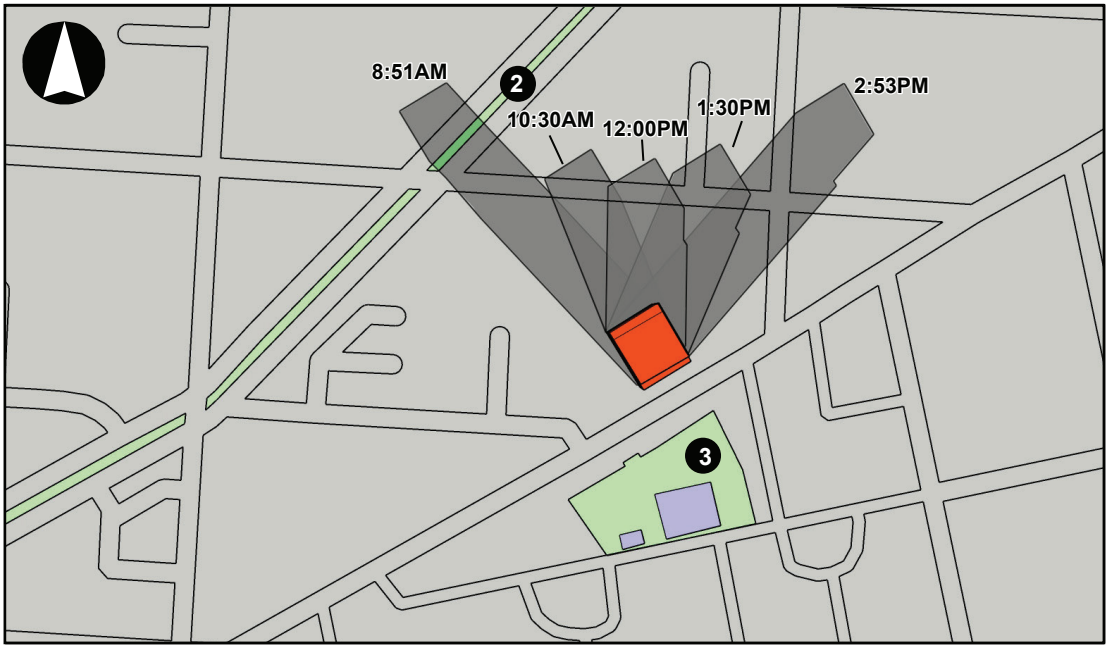
1 **Open Space**

Note: Resources keyed to Table E-2

Tier 3 Screening - Potential Development Site



JUNE 21



DECEMBER 21

Potential Development Site

Incremental Shadow

1 **Open Space**

Note: Resources keyed to Table E-2

E. DETAILED ANALYSIS OF SHADOW IMPACTS

Resources Affected by Project-Generated Shadows

Carter G. Woodson Children's Park

Carter G. Woodson Children's Park is a 0.92-acre open space extending along the west side of Christopher Avenue between Belmont and Sutter avenues. It comprises the eastern portion of Brooklyn Block 3743 and abuts Development Site A to the west. The northern portion of the park features a paved play yard and running track, and the southern portion of the park is occupied by playground equipment, seating areas, a spray shower, swings, and an additional paved play yard.

Eastern Parkway Extension

The Eastern Parkway Extension is a paved median (or mall) that includes several street trees. In its entirety, the Eastern Parkway Extension encompasses approximately two acres, and extends through portions of Brooklyn Community Districts 4 and 16. The Eastern Parkway Extension comprises the section of Eastern Parkway to the east of Ralph Avenue to Bushwick Avenue. Near the Project Area, the Eastern Parkway Extension is located to the north and west of the Site C, and Projected Development Site 1 and Potential Development Site 1 and extends between Dean Street in the north and Rockaway Avenue in the south.

Howard Pool

Howard Pool is a city-owned facility that includes two outdoor pools open to the public during the summer season. The intermediate pool measures 75 feet by 60 feet and can accommodate up to 180 bathers. The smaller wading pool measures 30 feet by 20 feet and can hold up to 24 children. Howard Pool is located on the south side of East New York Avenue near St. Marks Avenue.

Detailed Shadow Analysis

Per *CEQR Technical Manual* guidance, shadow analyses were performed for the four sunlight-sensitive resources identified above on four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of shadows over the course of the year. CEQR guidance defines the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. As discussed above, the results of the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions (see **Table E-3**).

Figures E-3a through **Figure E-5b** provided at the end of this attachment show representative incremental shadows cast on each of the three sunlight sensitive resources on the four representative analysis days.

It should be noted that, per the *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early

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

TABLE E-3
Duration of Incremental Shadows on Sunlight-Sensitive Resources (Increment Compared to No-Action)

Resource	Analysis Day	March 21/Sept. 21 7:36 AM – 4:29 PM	May 6/August 6 6:27 AM – 5:18 PM	June 21 5:57 AM – 6:01 PM	December 21 8:51 AM – 2:53 PM
Carter G. Woodson Children's Park	Shadow enter-exit time	1:45 PM – 4:29 PM	2:18 PM – 5:18 PM	2:34 PM – 6:01 PM	12:35 PM – 2:53 PM
	Incremental shadow duration	2 Hours 44 Minutes	3 Hours	3 Hours 27 Minutes	2 Hours 18 Minutes
Eastern Parkway Extension	Shadow enter-exit time				8:51 AM – 9:18 AM
	Incremental shadow duration				27 minutes
Howard Pool	Shadow enter-exit time		4:50 PM– 5:18 PM	4:51 PM– 6:01 PM	
	Incremental shadow duration		28 minutes	1 hour 10 minutes	

Notes:
[A] All times are Eastern Standard Time.
[B] Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.

Carter G. Woodson Children's Park

March 21/September 21

The analysis period for March 21/September 21 begins at 7:36 AM and continues until 4:29 PM. On this analysis day, Development Site A would create incremental shadows from 1:45 PM until 4:29 PM for a total duration of two hours and 44 minutes.

The area affected by incremental shadows contains a section of a running track, a grass field, and several trees along the western edge of the open space. As shown in **Figures E-3a through E-3c**, incremental shadows would enter a small, western portion of the park at 1:45 PM. Throughout the analysis day, incremental shadows would increase slightly, continuing in an easterly direction. The extent of the incremental shadows would affect a portion of the grass field located at the center of the open space. As the extent and duration of incremental shadows on the park would be minimal, a majority of the open space would continue to receive direct sunlight throughout the day, and no single sunlight-sensitive feature would receive direct sunlight for less than six to eight hours, which, according to the *CEQR Technical Manual,* is the general minimum requirement for the survival of vegetation during the growing season.

May 6/August 6

On May 6/August 6, the analysis period begins at 6:29 AM and lasts until 5:18 PM. On this analysis day, Development Site A would cast incremental shadows on the open space from 2:18 PM until 5:18 PM.

The area affected by incremental shadows would include portions of the running track, a grass field, and trees (refer to **Figures E-3d and E-3e**). Incremental shadows would enter a small, western portion of the

park at 2:18 PM, and would increase slightly throughout the analysis day, continuing in an easterly direction until the end of the analysis period (5:18 PM). The extent of the incremental shadows would affect a portion of the grass field located at the center of the open space. The extent and duration of incremental shadows on the playground would be minimal. A majority of the open space would continue to receive direct sunlight throughout the analysis day, and no single sunlight-sensitive feature would receive direct sunlight for less than the six to eight hours recommended by the *CEQR Technical Manual*.

June 21

The analysis period for June 21 begins at 5:57 AM and continues until 6:01 PM. Incremental shadows from Development Site A would cast incremental shadows on the open space from 2:34 PM until 6:01 PM, for a total duration of three hours and 27 minutes.

The areas affected by incremental shadows include a running track, a grass field, and several trees. As shown in **Figures E-3f and E-3g**, incremental shadows would enter a small portion of the open space at 2:34 PM, and would increase slightly throughout the analysis day, continuing in a southeasterly direction until the end of the analysis period (6:01 PM). The extent of the incremental shadows would affect a portion of the grass field located at the center of the open space. However, as the extent and duration of incremental shadows on the playground would be minimal, a majority of the open space would continue to receive direct sunlight throughout the day. Additionally, no sunlight-sensitive feature of the open space would receive less than the six to eight hours of direct sunlight recommended by *CEQR* as a result of Development Site A.

December 21

December 21 (the winter solstice) is the day with the least amount of sunlight. The sun is low in the sky, creating shadows that are at their longest. The analysis period for this day begins at 8:51 AM and ends at 2:53 PM. On this analysis day, incremental shadows from Development Site A would be cast on the open space from 12:35 PM until 2:53 PM, for a total of two hours and 18 minutes.

The areas affected by project-generated incremental shadows include a running track, a grass field, an asphalt play area, and several trees. As shown in **Figures E-3h and E-3i**, incremental shadows would enter a small portion of the open space at 12:35 PM, and would increase slightly throughout the analysis day, continuing in a northeasterly direction, reaching portions of the asphalt play area at the northern portion of the open space. Incremental shadows would be cast on one tree along the western edge of the open space. As mentioned previously, the December 21 analysis day is not considered part of the growing season, and, thus, the viability of any existing vegetation within the open space would not be threatened.

Eastern Parkway Extension

December 21

On the December 21 analysis day, incremental shadow from Projected Development Site 1 would be cast on the Eastern Parkway Extension in the early morning from 8:51 to 9:18 AM, a total of approximately 27 minutes. As shown in **Figure E-4**, incremental shadow would occur at the beginning of the analysis day and move east over the course of half an hour before exiting the sunlight-sensitive resource at 9:18 AM. As discussed above, the Eastern Parkway Extension contains several street trees along a paved median.

There are no seating areas or amenities for the public. The December 21 analysis day is not considered part of the growing season. Therefore, the viability of any existing vegetation within the sunlight-sensitive resource would not be threatened.

Howard Pool

May 6/August 6

Incremental shadow as a result of the Proposed Development at Development Site C would occur over Howard Pool site at the end of the analysis period from approximately 4:50 to 5:18 PM (approximately 28 minutes) on the May 6/August 6 analysis day. As shown in **Figure E-5a**, incremental shadow would be limited to the northeast corner of the sunlight-sensitive resource. No incremental shadows would reach the intermediate pool nor wading pool of the facility. Due to the limited duration of incremental shadow coverage, no vegetation would be threatened. The pool would continue to receive six to eight hours of direct sunlight on this analysis day.

June 21

Incremental shadow from Development Site C would be cast on the Howard Pool from approximately 4:51 to 6:01 PM on the June 21 analysis day (a total of approximately 1 hour and 10 minutes). Similar to the May 6/August 6 analysis day, no incremental shadow would be cast on the intermediate or wading pools (refer to **Figure E-5b**). Incremental shadow would be limited to the northeast corner of the site. This area is occupied by vegetation and the pool deck. The pool would continue to receive six to eight hours of direct sunlight on this analysis day.

Assessment

Development Site A would cast incremental shadows on Carter G. Woodson Children's Park on each of the four representative analysis days. Incremental shadow coverage on the open space would range from two hours and 18 minutes on December 21 to three hours and 37 minutes on June 21. Incremental shadow coverage would generally be limited to the northwest corner of the park. This section of the park includes a running track, an asphalt paved area used for active recreation, and a grass field inside the running track. The playground located within the open space would not experience any incremental shadow coverage on any of the four representative analysis days, allowing the playground's sunlight-sensitive resources to receive adequate direct sunlight throughout the day (see **Figures E-3a through E-3i**). The western part of the running track would experience incremental shadows for approximately one hour and 30 minutes on March 21/September 21 and May 6/August 6, one hour and 45 minutes on June 21, and for less than an hour on December 21. The grass field within the running track would experience incremental shadows for approximately one hour on March 21/September 21, May 6/August 6, and June 21, and less than one hour of incremental shadows on December 21. Finally, the asphalt-paved area in the northern portion of the park would experience incremental shadows for less than an hour on the December 21 analysis day. As discussed previously, no tree would receive less than six to eight hours of direct sunlight per day during the growing season. The majority of the park would continue to have direct sunlight for five or more hours.

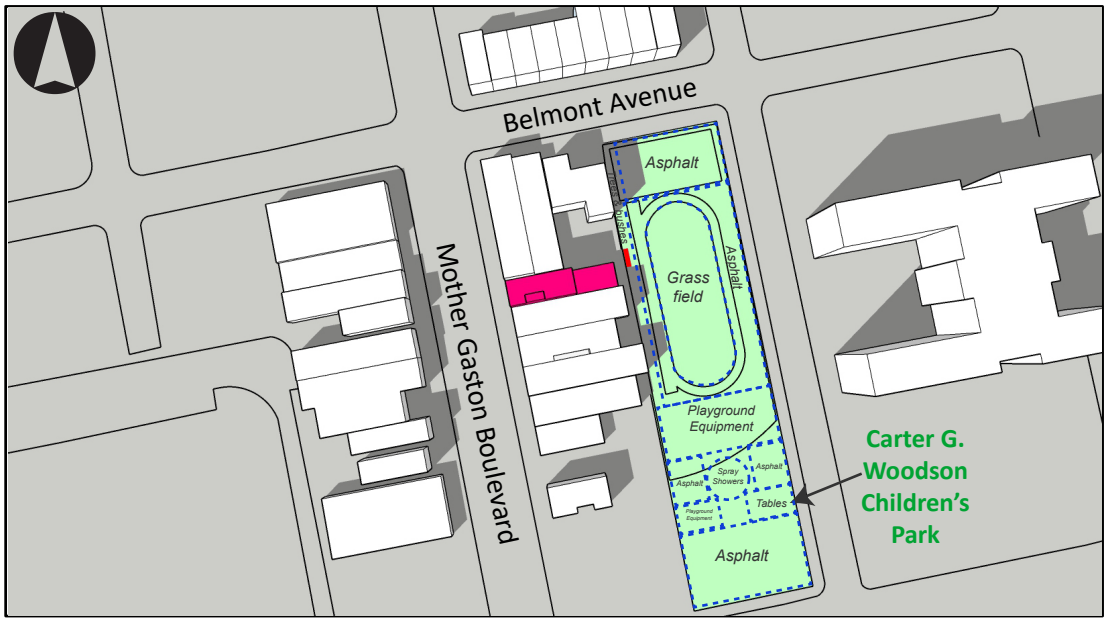
The Projected Development Site 1 would cast incremental shadow on the Eastern Parkway Extension on the December 21 analysis day for approximately 27 minutes in the morning (8:51 AM – 9:18 AM). No

incremental shadows would reach any part of this sunlight sensitive resource in the spring, summer or fall. Shadows occurring during the cold-weather months generally do not affect the growing season of vegetation. As noted above, the Eastern Parkway extension does not include any seating or other amenities. Given the limited size and duration of incremental shadow, and the fact that it would occur only in winter when shadows are longest, the project's incremental shadow would be too brief and small to affect this sunlight sensitive resource significantly (refer to **Figure E-4**).

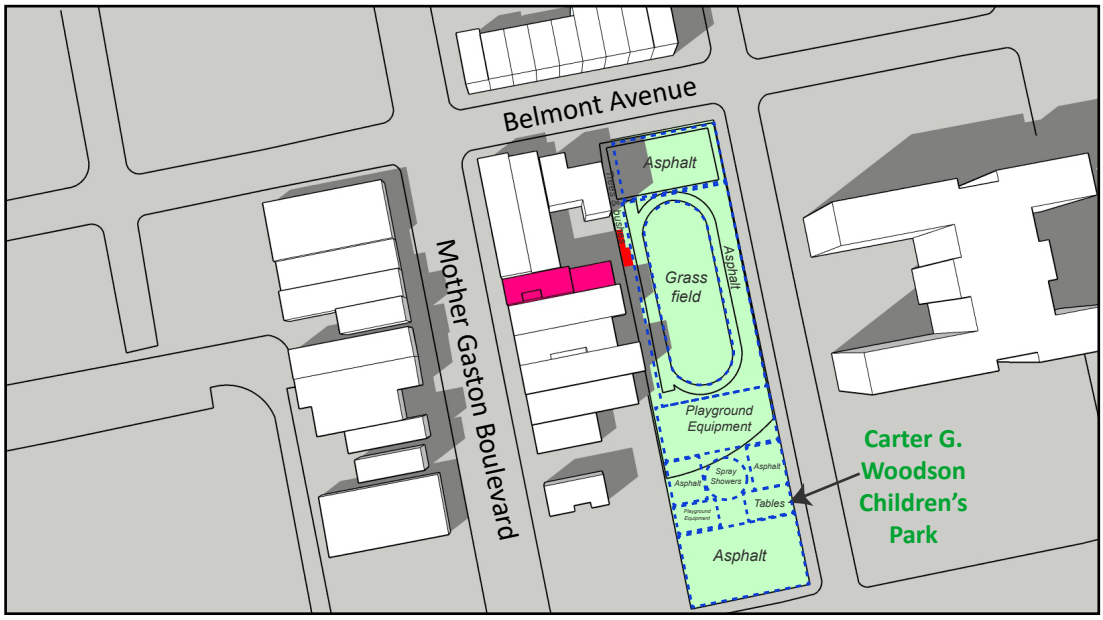
Development Site C would cast incremental shadow on the Howard Pool on two analysis days at the end of the analysis period, which would range in duration between 28 minutes and 1 hour and 10 minutes (refer to Table E-3). Although incremental shadows would occur during the summer season, incremental shadow from Development Site C would not reach the intermediate pool nor wading pool (refer to **Figures E-5a** and **E-5b**), and would be limited northeast corner of the resource, which includes part of the pool deck and vegetation. Most of Howard Pool would remain in sun. Incremental shadow would not substantially change the usability or character of Howard Pool on any analysis day. Consequently, the incremental shadows would not result in significant impact on the use of the pool. (refer to Table E-3).

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 resources found within this open space; and (2) would not significantly alter the public's use of the playground, pool, or threaten the viability of vegetation or other resources located within these open spaces and greenstreet, incremental shadows on Carter G. Woodson Children's Park, Eastern Parkway Extension, and Howard Pool, would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on March 21 / September 21



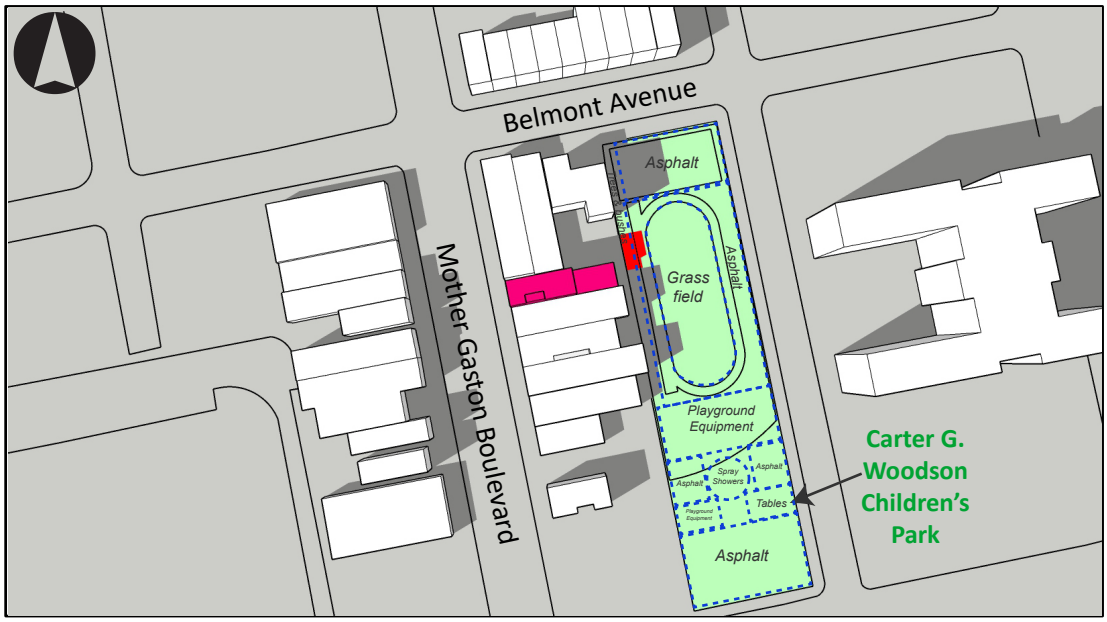
2:15 PM



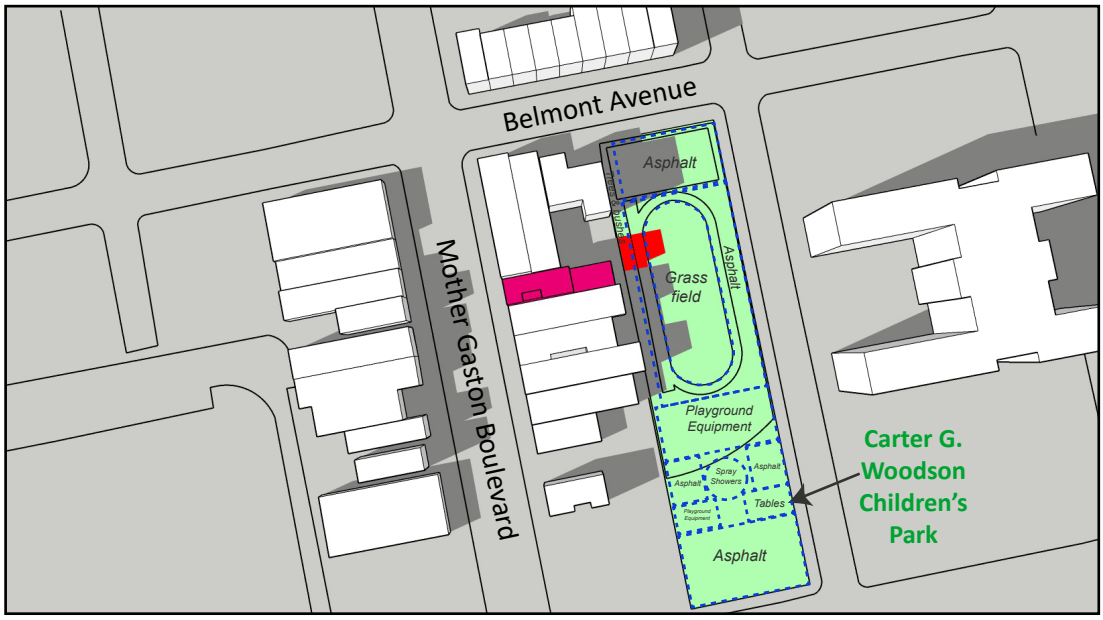
2:45 PM

Proposed Development **Open Space** **Incremental Shadow**

Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on March 21 / September 21



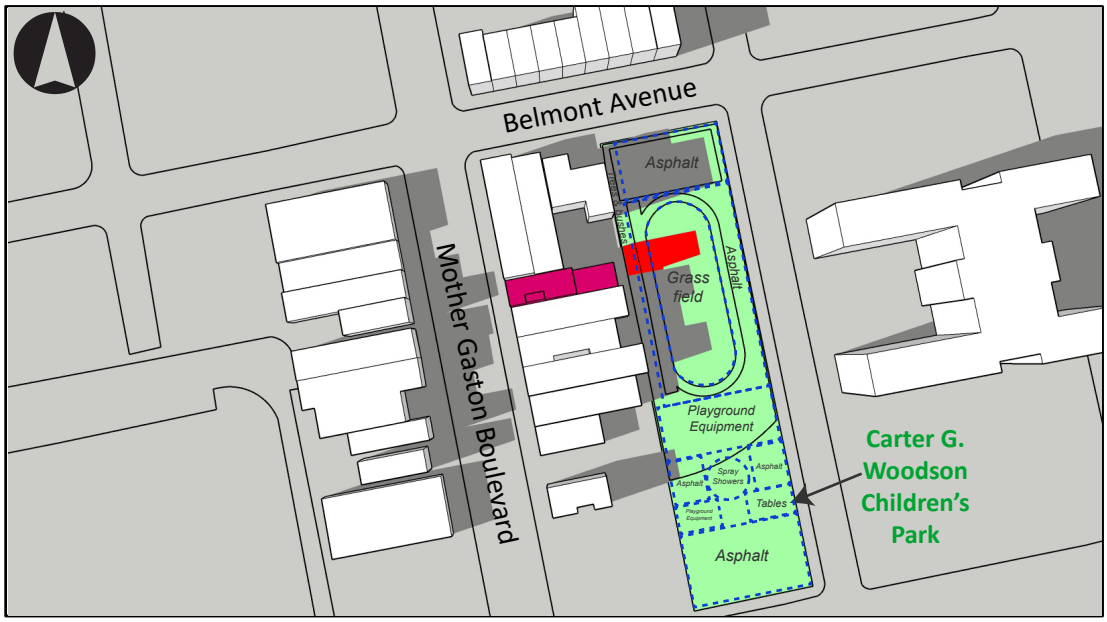
3:15 PM



3:45 PM

Proposed Development **Open Space** **Incremental Shadow**

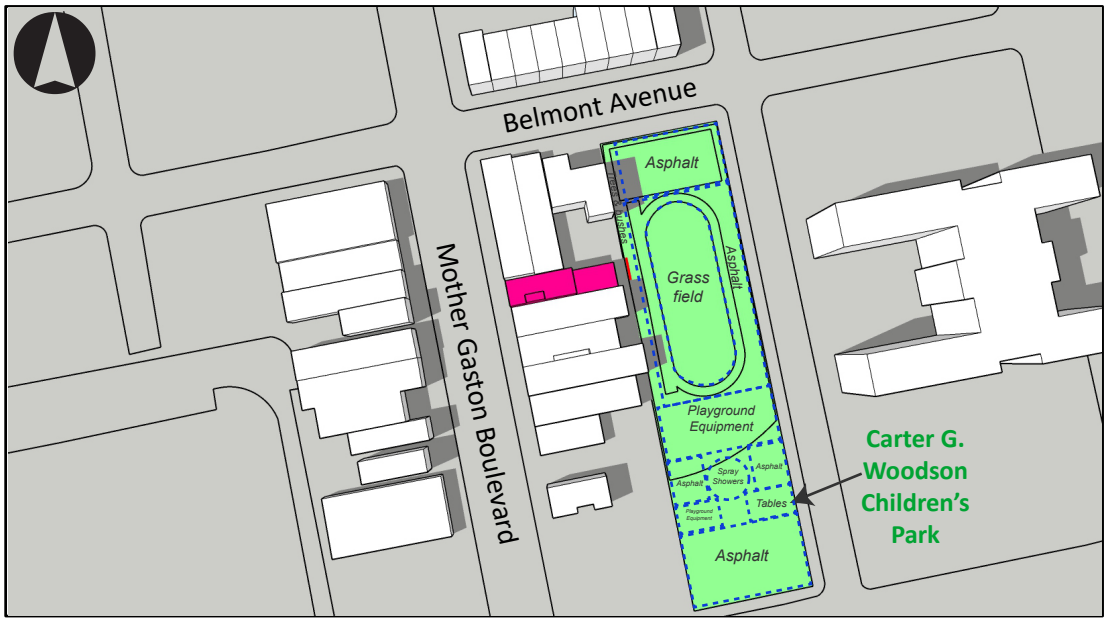
Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on March 21 / September 21



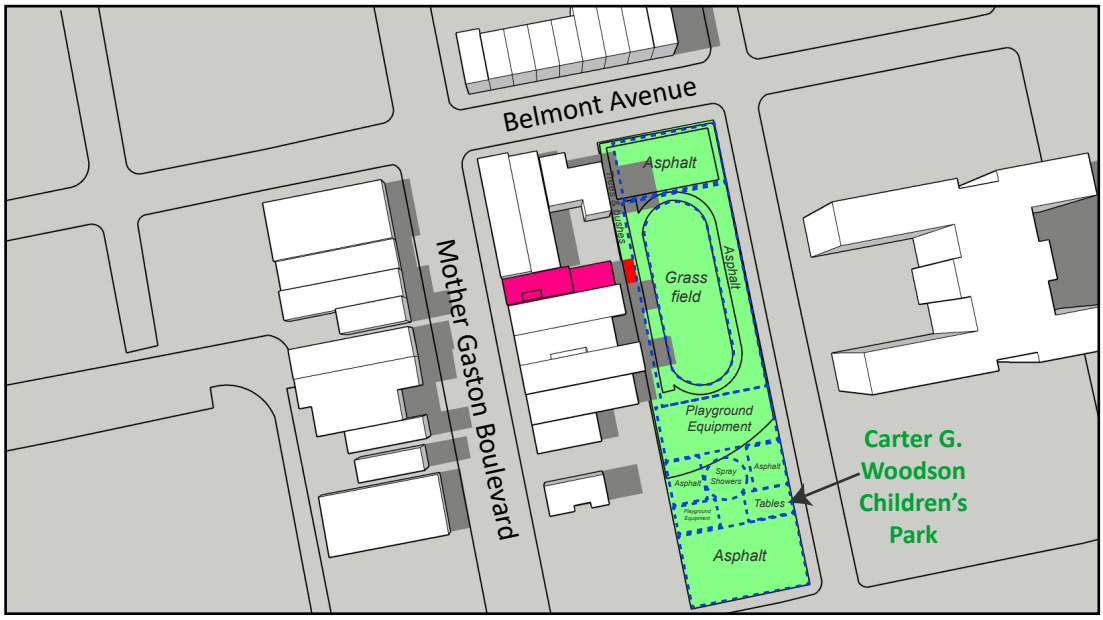
4:15 PM

Proposed Development **Open Space** **Incremental Shadow**

Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on May 6 / August 6



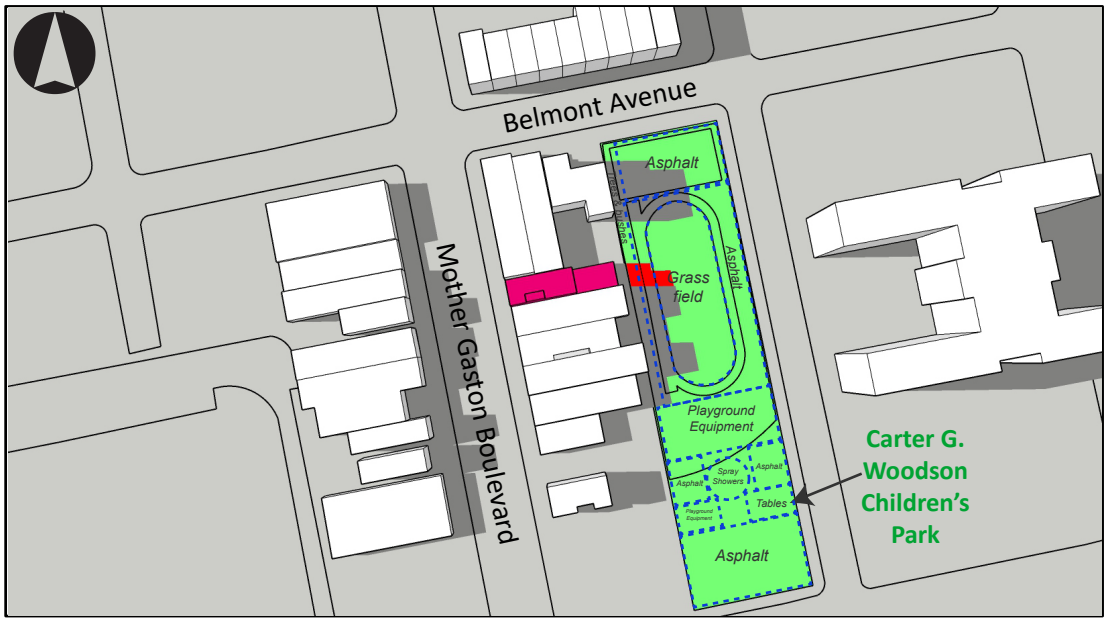
2:30 PM



3:30 PM

Proposed Development **Open Space** **Incremental Shadow**

Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on May 6 / August 6



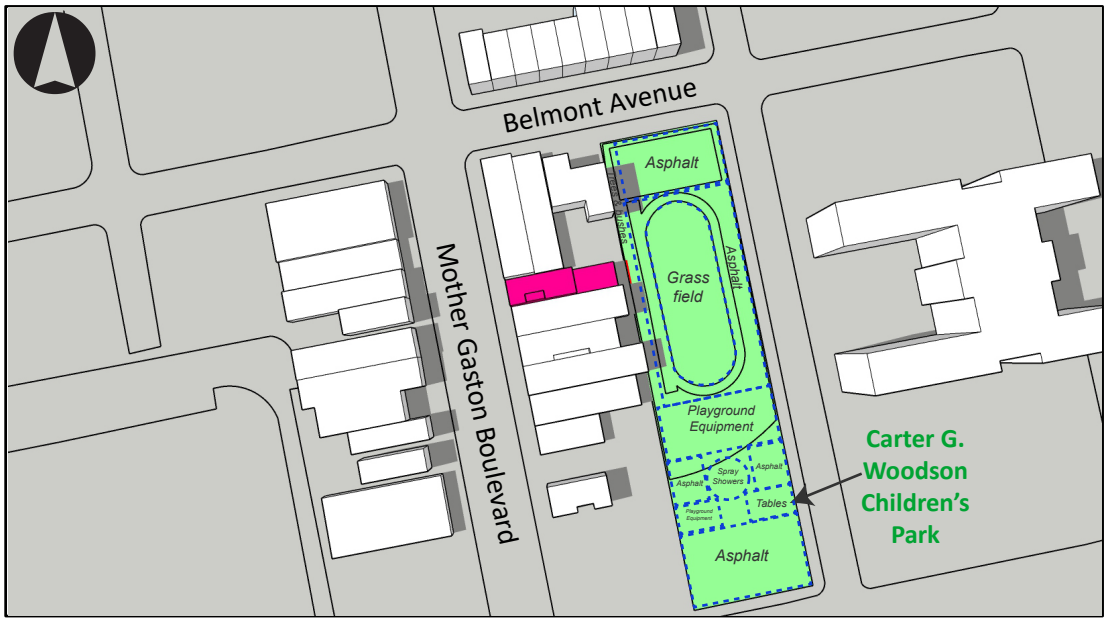
4:30 PM



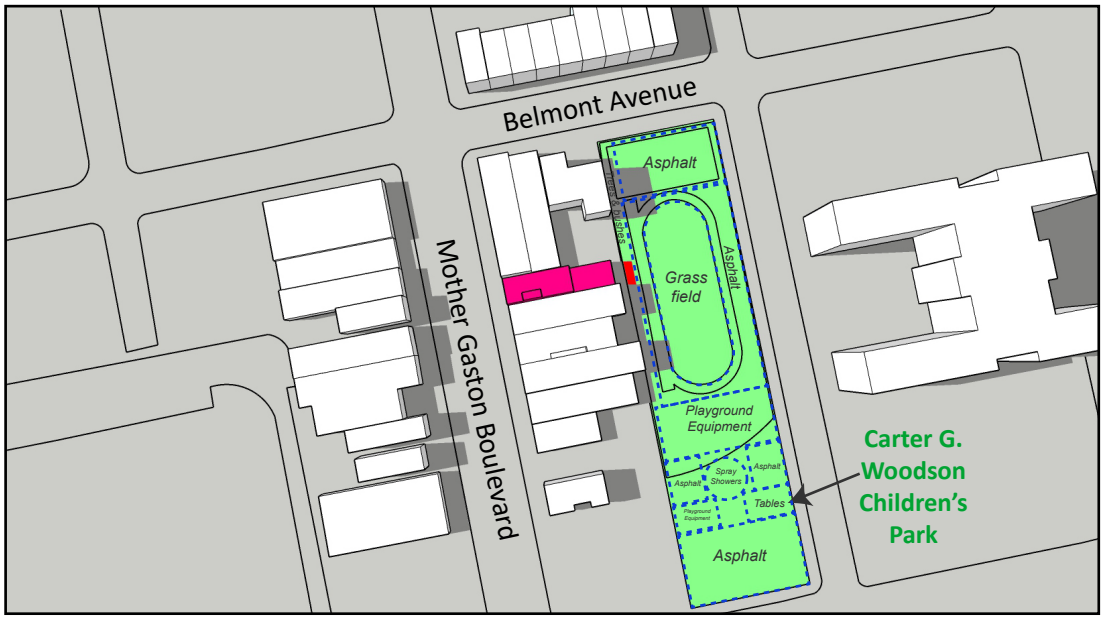
5:00 PM

Proposed Development **Open Space** **Incremental Shadow**

Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on June 21



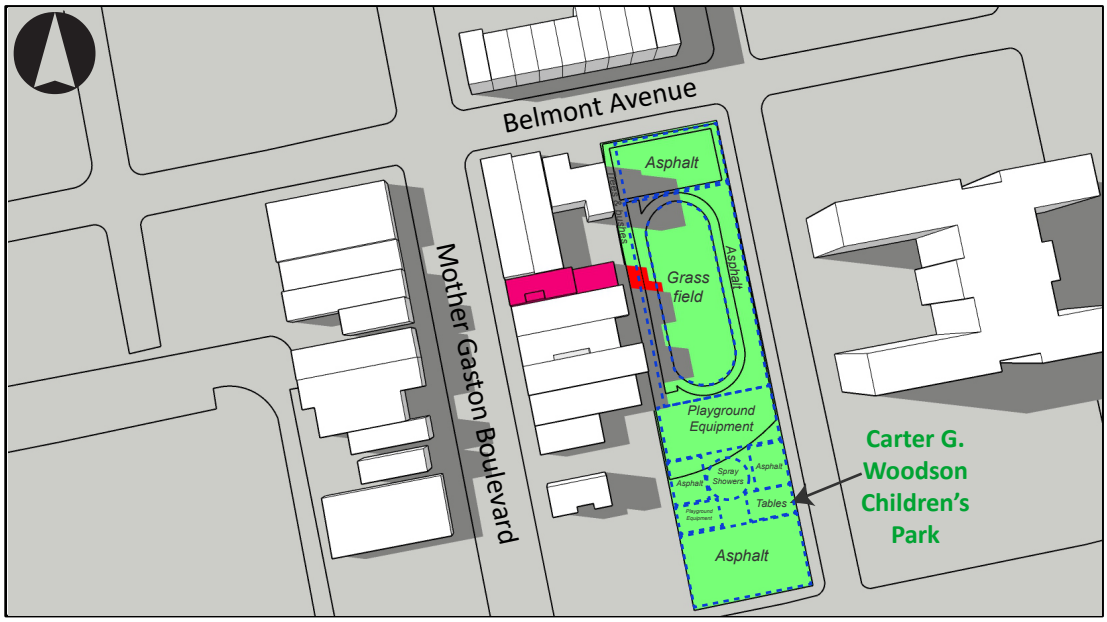
2:45 PM



3:45 PM

Proposed Development **Open Space** **Incremental Shadow**

Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on June 21



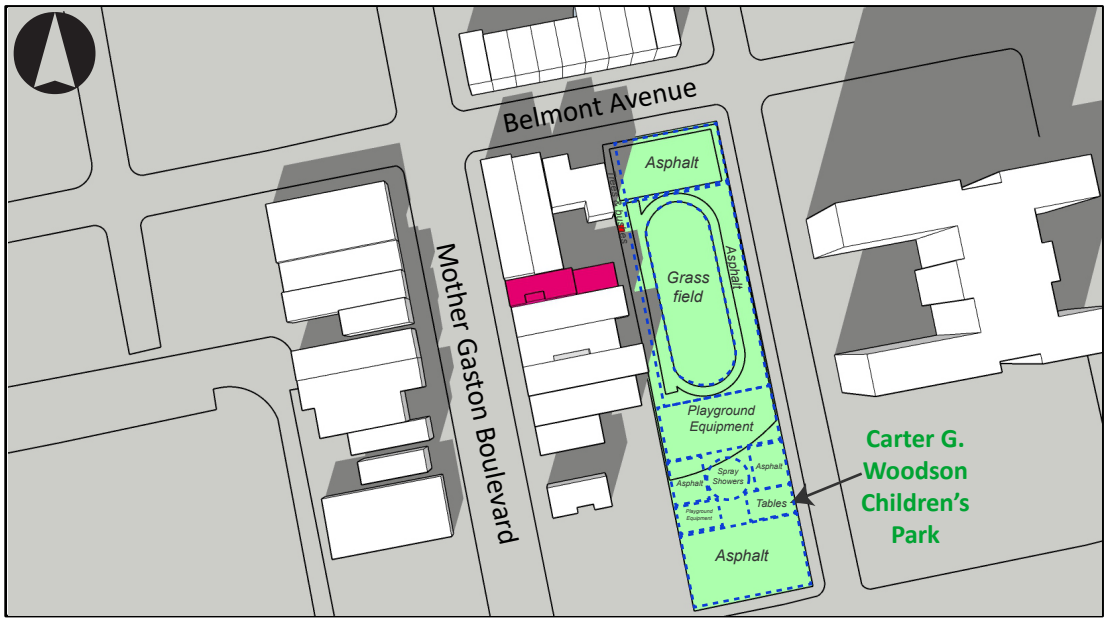
4:45 PM



5:45 PM

Proposed Development **Open Space** **Incremental Shadow**

Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on December 21



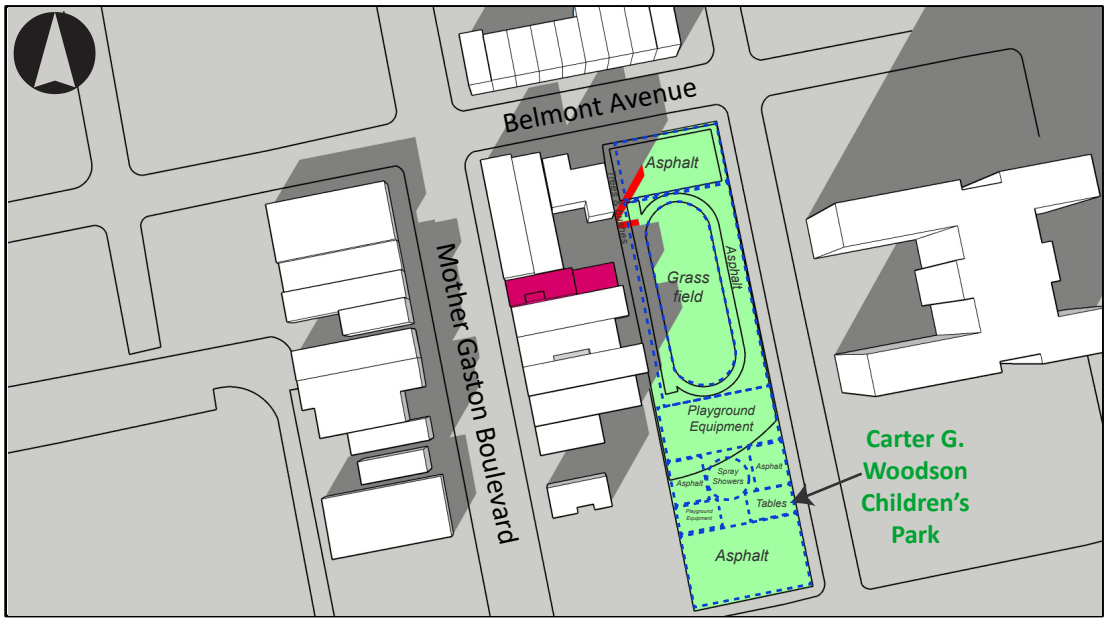
1:00 PM



1:30 PM

Proposed Development **Open Space** **Incremental Shadow**

Development Site A // Carter G. Woodson Children's Park
Incremental Shadows on December 21



2:00 PM



2:30 PM

Proposed Development **Open Space** **Incremental Shadow**

Figure E-4
Eastern Parkway Extension
Incremental Shadows on December 21



8:51 AM



9:05 AM

Development Site C
Potential Development Site
Howard Pool
Projected Development Site
Open Space
Incremental Shadow

Figure E-5a
Howard Pool
Incremental Shadows on May 6/August 6



5:00 PM



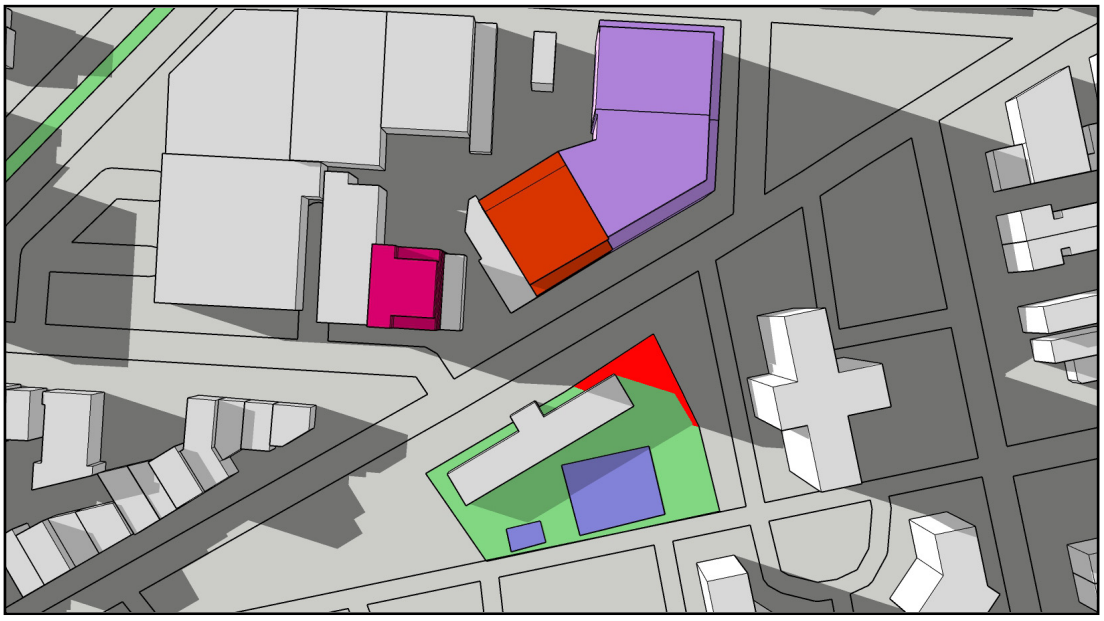
5:15 PM

Development Site C
Potential Development Site
Howard Pool
Projected Development Site
Open Space
Incremental Shadow

Figure E-5b
Howard Pool
Incremental Shadows on May 6/August 6



5:00 PM



6:00 PM

Development Site C

Potential Development Site

Howard Pool

Projected Development Site

Open Space

Incremental Shadow

ATTACHMENT F

URBAN DESIGN & VISUAL RESOURCES

I. INTRODUCTION

This attachment considers the potential effects of the Proposed Actions and reasonable worst-case development scenario (RWCDS) on urban design and visual resources. As defined in the *City Environmental Quality Review* (CEQR) *Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements such as streets, buildings, visual resources, open space, natural resources, wind, and sunlight play an important role in the pedestrian experience. In the future with the Proposed Actions, the Project Sponsor would construct three affordable housing developments on three development sites: Development Site A (Block 3743, Lot 12), Development Site B (Block 3518, Lot 63), and Development Site C (Block 1455, Lots 65, 66, 79) (collectively, the "Proposed Project") in the Brownsville neighborhood of Brooklyn Community District (CD) 16.

In accordance with *CEQR Technical Manual* guidance, the assessment focuses on the components of the Proposed Actions that may have the potential to alter the arrangement, appearance, and functionality of the built environment (the With-Action Condition). As described in **Attachment A, "Project Description,"** the Proposed Actions involve zoning changes on a portion of Brooklyn Block 1455 that would permit residential and community facility uses, as well as increase the allowable density, which would result in new development that would differ from what is currently permitted as-of-right. Under the Proposed Actions, three affordable housing developments would be constructed at the proposed development sites (Sites A, B, and C), replacing vacant and underutilized land. The Proposed Project is expected to be constructed and fully occupied by 2026. Additionally, one projected development site is also expected to be redeveloped in the future with the Proposed Actions. There would also be one potential development site that is less likely to be developed in the future with the Proposed Actions. In the absence of the Proposed Actions, it is anticipated that the development sites would remain vacant. The effect of the Proposed Actions represents the incremental effect on conditions resulting from the net change in development at the development sites between No-Action and With-Action Conditions. As compared to the No-Action condition, the With-Action condition would introduce a net increase of 146 dwelling units (DUs) and net loss of 5,077-gsf of commercial uses.

II. METHODOLOGY

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

As described in the *CEQR Technical Manual*, a preliminary urban design analysis is appropriate when there is potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning. As the Proposed Actions involve zoning changes on a portion of Brooklyn Block 1455 that would increase the allowable density and permit land uses not currently allowed under the existing M1-1

zoning, a preliminary urban design analysis is warranted. Sites A and B would be developed under the existing zoning. As such, a preliminary urban design analysis is not warranted for Sites A and B.

A preliminary analysis provides a "snapshot" of the project, comparing existing and future conditions with and without the Proposed Actions. The following analysis examines each of the elements that play an important role in the pedestrian experience, including street hierarchy and streetscape (including the arrangement and orientation of streets); building scale, form and arrangement; and natural features, open space, and topography.

Per criteria of Section 230 of the *CEQR Technical Manual,* a wind condition analysis is not warranted for the Proposed Actions. The Proposed Rezoning Area and development sites are not located in a high wind location (such as along west and northwest-facing waterfronts), and the Proposed Actions would not result in the construction of multiple tall buildings that would have the potential to alter wind conditions.

Following *CEQR Technical Manual* guidance, the analysis is based on field visits, aerial views, photographs, and other graphic images of the Proposed Rezoning Area, development sites, and surrounding areas. Zoning calculations, including floor area calculations, building heights and lot coverage information are also provided.

The following preliminary analysis also considers the effects of the Proposed Actions on the areas' visual resources, which are generally considered important public view corridors, vistas, or natural or built features. Visual resources can include waterfront views, public parks, landmark structures or districts, or natural features, such as rivers or geologic formations.

Based on *CEQR Technical Manual* guidance, the study area for urban design is the area where the Proposed Actions may influence land use patterns and the built environment where there is the potential for a pedestrian to observe, from the street, a physical alteration beyond that allowed by existing zoning. The urban design study area consists of both a primary study area (where urban design effects of the Proposed Actions are direct) and a secondary study area. For this assessment, the primary study area encompasses the Proposed Rezoning Area on Block 1455, which encompasses Development Site C, Projected Development Site 1, and Potential Development Site 1. The proposed zoning changes on Block 1455 would permit new land uses that are not currently permitted and would result in an increase in the allowable built floor area beyond that would be allowed as-of-right in absence of the Proposed Actions. Consistent with the analysis of land use, zoning, and public policy, the secondary study area for urban design resources has been defined as being within approximately 400 feet of the Proposed Rezoning Area (see **Figure F-1**).

As stated in the *CEQR Technical Manual*, for visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. While the land use study area may serve as the initial basis for analysis, in many cases where significant visual resources exist, it may be appropriate to look beyond the land use study area to encompass views outside of the area, as is often the case with waterfront sites or sites within or near historic districts. For this analysis, prominent visual resources (both within and outside of the urban design study areas) that are visible from the Proposed Rezoning Area and secondary study area were identified. The primary view sheds of these visual resources that would be affected by construction were the focus.

Aerial Map - Development Site c + Proposed Rezoning Area



Legend

- Primary Study Area
- Secondary Study Area
- Development Site C
- Projected Development Site 1
- Potential Development Site 1
- 1 → Photo Location (refer to Figures E-2a to E-4)

III. PRELIMINARY ASSESSMENT

Existing Conditions

As noted above, **Figure F-1** shows both the primary (i.e., Proposed Rezoning Area) and 400-foot secondary study area. **Figure F-1** also includes a photograph key for the approximate locations of where each of the photographs included in **Figures F-2a through F-4** had been taken.

Urban Design

Primary Study Area

The primary study area is comprised of the Proposed Rezoning Area. Within the boundaries of the Proposed Rezoning Area are the entirety, or portions of 17 lots, including the projected and potential development sites, as well as Development Site C.

Table F-1 provides a description of each lot in the primary study area. All existing buildings are low-rise, low-density uses with existing FARs that range from 0.0 to 2.3. All buildings are oriented to the street.

TABLE F-1: Existing Conditions of Lots in the Primary Study Area

Site	Block	Lot	Address	Area (sf)	Land Use	Typology	Building (gsf)	Built FAR	Frontage (sf)	Height (feet)[1]	Build Year
	1455	39[2]	2148 Bergen St.	2,132	All Others/ No Data	-	-	0	16.67’	-	-
		41	Bergen St.	1,964	Parking	-	-	0	16.67’	-	-
		42	2154 Bergen St.	2,091	Multifamily Walkup	Red Brick	2,046	0.98	16.67’		1901
		43	2156 Bergen St.	1,794	Vacant	-	-	0	16.67’	-	-
		44	Bergen St.	1,709	Vacant	-	-	0	16.67’	-	-
Projected Dev’t Site 1		46	226 Mother Gaston Blvd.	7,450	Commercial	Red brick	7,450	1.0	75	17’	1920
		50	1611 E. New York Ave.	9,254		Red brick	8,897	0.96	96	17’	2005
Potential Dev’t Site 1		56	1591 E. New York Ave.	6,449	Vacant	-	-	0	70	-	-
		58									
		60		2,319	House of Worship	Cinder, concrete	3,457	1.49	25	25’	1910
		61	1589 E. New York Ave.	1,792	Vacant	-	-	0	23.83	-	-
		62									
		64	1737 Saint Marks Ave.	2,129	Residential/Retail	Red brick, concrete	2,144	1.01	16.67	28’	1901
Site C		65	1733 St Marks Ave.	2,129	Vacant	-	-	0	16.67’	-	-
		66	1731 Saint Marks Ave.	6,558		-	-	0	51.34	-	-
		79	1735 St Marks Ave.	2,129		-	-	0	16.67’	-	-
		67	172 St Marks Ave.	6,899	Commercial and Office	Concrete	15,913	2.3	54	45’	1926

[1] Height is an approximate measurement in feet.
[2] Although DCP has Lot 39 categorized as “All Others or No Data,” the lot is currently occupied by a masonry/stone storage facility.

Building Bulk, Use, Type, and Arrangement

As shown in **Figure F-1**, Development Site C (Block 1455, Lots 65, 66, and 79) is comprised of three rectangular-shaped tax lots at 1733 St Marks Avenue. Together, the three vacant lots occupy approximately 6,558 sf and have approximately 51 feet of frontage on the north side of St Marks Avenue between East New York Avenue and Eastern Parkway. The three lots are fenced together and overgrown with vegetation (**Figure F-2a, Photo #1**).

The proposed zoning map amendment would affect the southeastern portion of Brooklyn Block 1455, and would encompass the entirety, or portions of 17 tax lots (Lots 39, 41-46, 50, 56, 58, 60-62, 64-67, 79), which includes Development Site C and the potential and projected development sites. The Proposed Rezoning Area occupies approximately 50,408-sf of lot area and extends to the middle of the street-line on each street frontage. The Proposed Rezoning Area has approximately 85 feet of frontage along St Marks Avenue, approximately 225 feet of frontage along East New York Avenue, approximately 130 feet of frontage along Mother Gaston Bouelvard, and approximately 100 feet of frontage along Bergen Street. Only a portion of lots 39, 41-44 and 67 are located within the Proposed Rezoning Area.

Lot 64 is occupied by a three-story, mixed-used commercial/residential building, while Lots 61 and 62, located adjacent and to the northeast, are vacant, fenced in, and overgrown with vegetation (**Figure F-2a, Photo #2**). Lot 60 is occupied by the Brownsville AME Zion Church while the adjacent Lots 56 and 58 are vacant and overgrown with vegetation; these two lots are currently used as parking for the church (**Figure F-2a, Photo #3**). Lots 46 and 50 are occupied by commercial/office uses; Lot 46 is occupied by a single-story Dollar General store while Lot 50 is occupied by a single-story building that was formerly a grocery store (**Figure F-2a, Photo #4**). Lots 41, 43, and 44 are currently vacant; Lot 41 is overgrown with vegetation while Lots 43 and 44 are closed with parking gates (see **Figure F-2b, Photo #5**. Lot 42 is occupied by a three-story multi-family walk-up building (see **Figure F-2b, Photo #6**). Lot 39 is occupied by a stone storage for a masonry company (see **Figure F-2b, Photo #7**). Lot 67 is occupied by a three-story, commercial building that contains 15 transient hotel units (see **Figure F-2b, Photo #8**). Projected Development Site 1 is comprised of Lots 46 and 50, while Potential Development Site 1 is comprised of Lots 56 and 58.

Block Form, Street Pattern, and Street Hierarchy

As shown in **Figure F-3**, Block 1455 is bound by East New York Avenue (80 feet wide), St Marks Avenue (70 feet wide), Eastern Parkway (110 feet wide), Bergen Street (70 feet wide), and Mother Gaston Boulevard (70 feet wide). It is slightly irregular because of East New York Avenue and Eastern Parkway traversing diagonally through the street grid directly south and north, respectively, of the Proposed Rezoning Area. East New York Avenue and Eastern Parkway are major two-way arterial roadways that run through Brooklyn; near the Proposed Rezoning Area, these streets have bike lanes. St Marks Avenue and Bergen Street are one-way, narrow streets running east and west, respectively. All streets include on-street parking.

Streetscape Elements

Streetscape elements along the street frontages of the Proposed Rezoning Area includes parking signage, parking meters, streetlamps, street trees, and fire hydrants. The sidewalks vary in width ranging from 15 to 20 feet.



1) Looking towards Development Site C from St. Marks Ave.



2) Looking towards Lots 61 and 62 (right; vacant) and Lot 64 (center building) from East New York Ave.



3) Looking towards Lot 60 (Brownsville AME Zion Church) and Lots 56 and 58 (Potential Development Site 1) from East New York Ave.



4) Looking towards Lots 46 and 50 (Projected Development Site 1) from East New York Ave.



5) Looking towards Lots 41, 43, and 44 from Bergen St.



6) Looking towards Lots 42, 43, and 44 from Bergen St.



7) Looking towards Lots 39, 40, and 41 from Bergen St.



8) Looking towards Lot 67 From East New York Ave.

Photos taken October 5, 2021



9) Looking east along East New York Ave.



10) Looking west along St. Marks Ave.



11) Looking east along Bergen St.



12) Looking south along Mother Gaston Blvd.

Photos taken October 5, 2021

Topography, Natural Features and Open Space

The topography of the primary study area is generally flat. There are no natural features or open spaces within the primary study area.

Secondary Study Area

As discussed above, the secondary study area has been defined as the area within an approximate 400-foot radius of the Proposed Rezoning Area. The 400-foot area around the Proposed Rezoning Area is generally bound by Eastern Parkway, Dean Street, Mother Gaston Boulevard, and Howard Houses.

Building Bulk, Use, Type, and Arrangement

Table C-4 in **Attachment C, "Land Use, Zoning, and Public Policy,"** summarizes the existing generalized land uses within the 400-foot secondary study area. Overall, as reflected in the table and shown in **Figure C-2c**, land uses in the secondary study area are varied.

As shown in **Figure C-2c**, the study area around Development Site C and the Proposed Rezoning Area is urban and most properties are developed with the exception of a few vacant properties located on the same block as the Proposed Rezoning Area and a few others spread around the study area. There are also four parking facilities and 11 lots with transportation/utility uses.

Residential is the most prevalent land use throughout the study area and constitutes the highest percentage of lots, (51.2 percent), lot area (37.2 percent), and building area (48.4 percent). Of the 63 residential lots in the study area, 49 are multi-family walkup buildings. Most of the residential buildings occupy narrow tax lots with frontages along Mother Gaston Boulevard and Bergen Street; there are also a few buildings with frontages on East New York Avenue and Dean Street (see **Figure F-4, Photo #1 and Photo #2**). Generally, most residential buildings range in height from two to four stories and cover the front half of their lots. There is one large lot occupied by the New York City Housing Authority (NYCHA) Howard Houses, a seven-story, multi-family elevator building located along the southern edge of the study area.

There are a number of mixed commercial/residential buildings throughout the study area, as well as transportation/utility lots. The mixed-use buildings mostly contain ground-floor retail with residential dwelling units above, while the transportation/utility lots are occupied by auto repair shops. Directly adjacent to the Proposed Rezoning Area, on the commercial and mixed commercial/residential lots, are a number of retail stores, including a Dollar Tree and Metro PCS, as well as a homeless shelter. The few industrial/manufacturing lots are occupied by storage facilities and auto parts stores.

The secondary study area includes a wide variety of building forms, including a handful of newly constructed buildings (refer to **Figure F-4, Photo #3**. As shown in **Figure F-5**, most buildings within the study area are low-rise and include four or fewer stories. There are a few taller buildings located along the periphery of the secondary study area. For example, in the eastern portion of the study area is a planned six-story residential building (at 253 Mother Gaston Boulevard, which is still under construction), and in the northeast corner is a newly constructed seven-story mixed commercial/residential building at 2175 Bergen Street (**Figure F-4, Photo #3**).



13) Looking north towards multi-family, three-story homes on Bergen St.



14) Looking towards multi-family homes along Dean St.



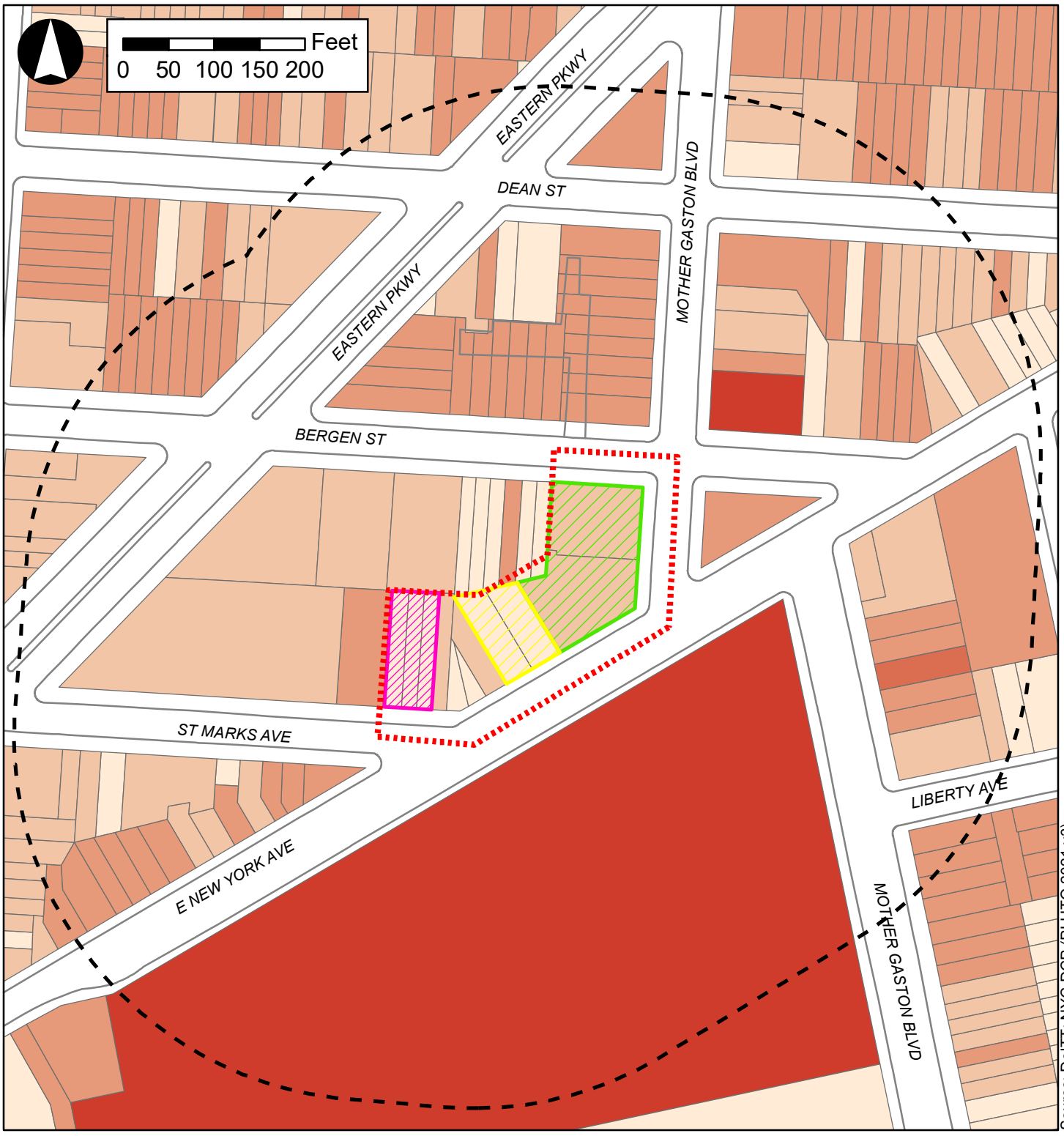
15) Looking towards new development located at 253 Mother Gaston Blvd.



16) Looking towards new development located at 2175 Bergen St.

Photos Taken October 5, 2021

Building Heights - Development Site C and Proposed Rezoning Area



Legend

- Development Site C
- Proposed Rezoning Area
- Secondary Study Area
- Projected Development Site 1
- Potential Development Site 1

Number of Floors

- 0
- 1 - 2
- 3 - 4
- 5 - 6
- 7 - 10
- Greater than 11

Most buildings are oriented to the street, and largely built at the street line, or include shallow-fenced front yards. As shown in **Figure F-5**, most buildings also have high lot coverage and occupy the entire property, with the exception of residential buildings. Various built FARs are scattered throughout the study area, and range in between 0 and 5.85. As shown in **Figure F-6**, most existing development in the secondary study area has an FAR of 2.0 or less.

Block Form, Street Pattern, and Street Hierarchy

As shown in **Figure F-1**, the area street network consists of arterials and smaller cross streets, with heavier traffic volumes on East New York Avenue (80 feet wide) and Eastern Parkway (110 feet wide). It is slightly irregular because of these roadways, which traverse diagonally though the street grid. These roads support a wide variety of land use types, including multi-family elevator and walkup buildings, transportation/utility and industrial/manufacturing uses, and mixed residential/commercial and commercial only spaces. They are two-way arterial roadways that run through Brooklyn and have bike lanes; East New York Avenue is a designated local truck route.

The other roads in the study area include Mother Gaston Boulevard, Liberty Avenue, Christopher Avenue, Dean Street, Bergen Street, St Marks Avenue, and Rockaway Avenue. As described previously, Mother Gaston Boulevard (85 feet wide) is a two-way, north-south roadway with bike lanes; Liberty Avenue (60 feet wide) is another two-way, east-west roadway with bike lanes. Bergen Street (70 feet wide), Dean Street (70 feet wide), and St Marks Avenue (70 feet wide) are one-way, narrow roadways: Bergen Street runs westbound while Dean Street and Saint Marks Avenue run eastbound. All streets include on-street parking.

Streetscape Elements

Concrete sidewalks flank all streets in the secondary study areas and are generally in good condition. There is some scattered debris and trash. All sidewalks in the secondary study areas accommodate street lighting, street signs, fire hydrants, mailboxes, and street trees. Most pedestrian activity is concentrated along Eastern Parkway and East New York Avenue.

Topography, Natural Features and Open Space

The secondary study area is also urbanized. The topography of the secondary study area is generally flat. There are no natural features within the secondary study area. There are several publicly accessible open spaces within the secondary study area. Within 400 feet of the Proposed Rezoning Area is Howard Pool and Eastern Parkway Extension.

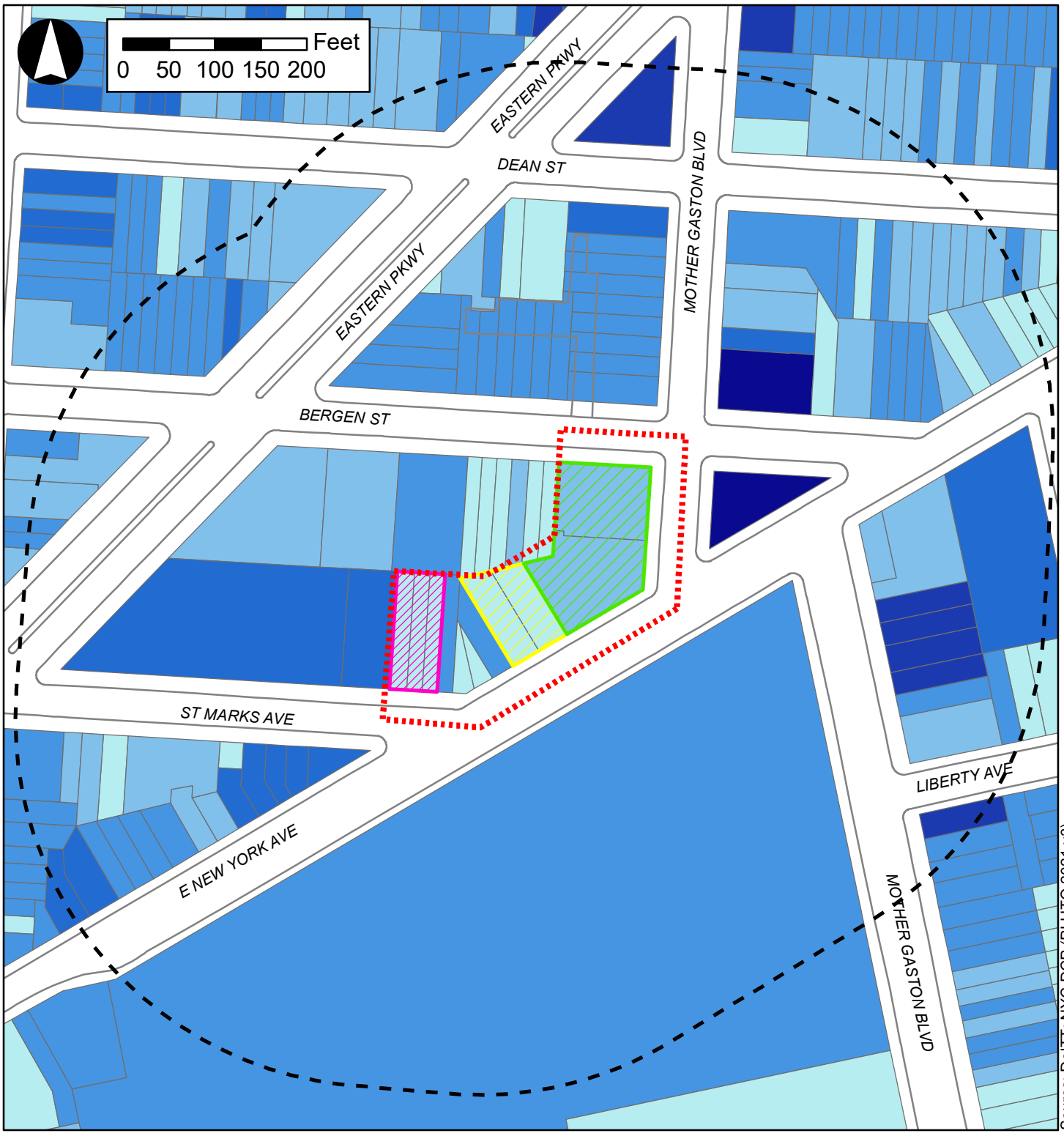
Visual Resources

Primary Study Area

There are no significant natural or built features, including views of the waterfront, public parks, designated landmark structures or districts, or otherwise distinctive buildings or groups of buildings in the primary study area.

Figure F-6

Built FAR - Development Site C and Proposed Rezoning Area



Legend

- Development Site C
- Proposed Rezoning Area
- Secondary Study Area
- Projected Development Site 1
- Potential Development Site 1

Built FAR

- 0.0
- 0.01 - 1.0
- 1.01 - 2.0
- 2.01 - 3.0
- 3.01 - 5.0
- Greater than 5.01

Secondary Study Area

There are no significant natural or built features, including views of the waterfront, public parks, designated landmark structures or districts, or otherwise distinctive buildings or groups of buildings in the secondary study area.

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

In the absence of the Proposed Actions, no changes would occur to the primary study area and existing conditions would remain. The Development Site C would continue to be City-owned and would remain vacant and underutilized land. In addition, and as described in **Attachment C, "Land Use, Zoning, and Public Policy,"** existing land use patterns are anticipated to continue in the surrounding area. There are no known zoning changes anticipated in either the primary or secondary study area.

There are no projects currently under construction within 400 feet of the Proposed Rezoning Area.

There are no visual resources within the primary or secondary study area and no new visual resources are anticipated to be introduced within either study area in absence of the Proposed Actions.

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

This section describes the effects of the Proposed Actions on the urban design and visual resources conditions in the primary and secondary study areas by 2026 and evaluates the potential for significant adverse impacts on urban design and visual resources.

In the 2026 future with the Proposed Actions, the requested zoning changes, Urban Development Action Area Project (UDAAP), and public financing would be approved, and the Proposed Project at Sites A, B, and C would be completed and occupied. As discussed in **Attachment A, "Project Description**," the proposed zoning changes and other associated actions would create additional zoning capacity in a transit accessible area and facilitate the redevelopment of vacant City-owned land to support new housing creation and increase the number of affordable housing units available in New York City, as well as expand opportunities for community amenities.

The Proposed Actions would facilitate construction of three new affordable housing developments, including 61 DUs and 2,500 gsf of restaurant space on Sites A, B and C replacing vacant land. In addition to the Proposed Project, the proposed zoning changes are expected to facilitate the development of a single projected development site and possibly a potential development site. For the purposes of the urban design analysis, the developments facilitated within the Proposed Rezoning area would include Development Site C, Projected Development Site 1, and Potential Development Site 1.

The proposed building at Development C would include one entrance on St Marks Avenue. Entrances to the buildings at Projected Development Site 1 and Potential Development Site 1 are expected to be along East New York Avenue.

Urban Design

Primary Study Area

Development facilitated by the Proposed Actions would be built on existing blocks, and would not entail any changes to topography, street patterns and hierarchy, block shapes, or natural features in the primary study area. The Proposed Actions would alter the urban design of the primary study area by replacing vacant and underutilized land with new housing and mixed-use developments. The proposed building at Development Site C, Projected Development Site 1, and Potential Development Site 1 would have a massing and scale that are not permitted under the current zoning. Under the proposed zoning changes, the allowable residential density in the primary study area would increase from not permitted to 4.6 FAR.

The proposed development at Development Site C would result in a noticeable change in the pedestrian perspective in comparison to No-Action conditions and would introduce new height and scale to the block, as the site is currently vacant. With building height of 91 feet, and building square footage of approximately 32,258 gsf, the height and bulk of the With-Action building would be taller and larger than the surrounding buildings on the block (Block 1455). On Block 1455, where Development Site C, Projected Development Site 1, and Potential Development 1 are located, all buildings do not exceed three stories and most have FARs less than 2.0.

The With-Action buildings at the three development sites are expected to complement the surrounding area's varied built context of older and newer structures that vary in use, height, form, and materials. Under the RWCDS, Projected Development Site 1 and Potential Development Site 1 would maximize the allowable height and rise to 95 feet tall; therefore, the three With-Action buildings would be aligned in height and bulk. In accordance with the proposed contextual zoning, the three development sites would be built close to the street line forming strong street wall presences (see Development Site C **Figure F-7**).

The Proposed Actions would also enhance the streetscape experience of the development sites, increasing foot traffic in the immediate vicinity of the primary study areas, further activating the streetscape and improving pedestrian experience. Compared to the Future without the Proposed Actions, in the Future with the Proposed Actions, the visual appearance of the pedestrian experience of the three development sites would change, as new buildings would replace vacant and underutilized lots. However, this change would not meet the 2021 *CEQR Technical Manual* threshold for a significant adverse urban design impact in that it would not alter the arrangement, appearance, or functionality of the Project Area such that the alteration would negatively affect a pedestrian's experience of the areas.

Secondary Study Area

The Proposed Actions are site-specific and would not result in any changes in the urban design in the secondary study area. New development facilitated by the Proposed Actions would be limited to two projected development sites (Site C and Projected Development Site 1) and one potential development site within the primary study area. The Proposed Actions would not alter any street patterns, street hierarchies, block forms, building uses, arrangements and bulk regulations in the secondary study area. The Proposed Actions would facilitate the construction of new residential and mixed-use residential and commercial developments that would include affordable and market-rate housing and would be in keeping with the mixed-use character and varied density, form, and urban context of the secondary study area, replacing currently vacant and underutilized land.



2 STREET VIEW LOOKING EAST FROM ST MARKS AVE



1 STREET VIEW LOOKING NW FROM E NEW YORK AVE

The With-Action buildings would be prominent and distinctive additions to the surrounding area's built environment. With a maximum allowable building height of 95 feet, the With-Action buildings would be taller and have greater scale and density than most existing developments in the secondary study area. With a building height for Development Site C of 91 feet, the upper floors of the building would be visible from surrounding streets. With-Action buildings at Projected Development Site 1 and Potential Development Site 1 are expected to have building heights of 95 feet, the maximum allowable building height. The proposed R7A zoning district that would affect Development Site C and the Proposed Rezoning Area is a contextual district governed by Quality Housing bulk regulations, which would encourage high lot coverage buildings set at or near the street line with height limits.

The With-Action developments would introduce strong streetwalls that would be consistent with surrounding development. Given that the With-Action buildings would be taller than most surrounding development in the study area, they would be more noticeable from surrounding streets. While the With-Action buildings would represent a departure from the urban design character of the secondary study area in terms of height and bulk, they would be consistent with the varied building typologies of the secondary study area and complement the area's mixed land uses, including active ground floors uses, and building placement and orientation along the property lines.

The Proposed Actions are intended to facilitate development that would be appropriate for transit accessible areas along major thoroughfares. The With-Action buildings would be located near and sometimes directly on wide, busy corridors that allow for more traffic and building scale increases. Therefore, the scale of future development would be appropriate for the scale of the streets near the Proposed Rezoning Area. The With-Action developments would promote and reaffirm a live-work neighborhood by balancing the preservation of neighborhood scale and allotting a moderate increase in density with the opportunity to increase affordable housing.

The Proposed Actions would also introduce street lighting, street trees, and other landscaping to the area, and improve the visual appearance of the primary study area. The Proposed Actions would enhance streetscapes of the primary study area, while also increasing pedestrian activity in the secondary study areas.

As such, the Proposed Actions are not expected to result in any significant adverse impacts to urban design in the study area surrounding the area to be rezoned, nor would they result in significant adverse impacts to the experience of the pedestrian.

Visual Resources

As discussed above, neither the primary nor secondary study area contain any visual resources and this would not change in the future with or without the Proposed Actions. As such, the Proposed Actions would not change or alter the context of any natural or built visual resources. Moreover, there are no views of any natural or built features, such as waterfront views, rivers, geological formations, or historic structures in the primary or secondary study areas.

As the new developments would occur on existing block that contains no visual resources, the Proposed Actions would not block, obstruct, or encroach on any significant public views. The new buildings at Development Site C, Projected Development Site 1 and Potential Development Site 1 are expected to

define view corridors in the study area, filling in a gap by replacing several vacant lots with new predominantly residential developments that would be constructed near the street lines.

Therefore, the Proposed Actions would not result in significant adverse impacts on the visual resources in the study area.

In summary, the Proposed Actions would not change urban design features such that the context of natural or built features are adversely altered and would not partially or fully block any significant public views to a visual resource. Therefore, the Proposed Actions would not result in significant adverse impacts to study area visual resources.

IV. CONCLUSION

The Proposed Actions would not have a significant adverse impact on urban design and visual resources. The proposed zoning changes would introduce new land uses and result in development at a greater density than currently permitted as-of-right on a portion of Block 1455, which would represent a notable change in the urban design character of the primary study area. Under the RWCDS, the zoning changes would facilitate the construction of new residential and mixed-use residential and commercial buildings on two projected development sites (Site C and Projected Development Site 1), and possibly on Potential Development Site 1 with frontages near arterial roadways. The With-Action buildings would replace vacant and underutilized land and are expected to have active ground floor uses. Consistent with the proposed R7A/C2-4 contextual zoning district, the With-Action developments would be constructed near the street lines creating strong streetwalls consistent with surrounding development.

The Proposed Actions would not result in any significant adverse impacts on the existing street network or grid, nor would they affect any view corridors. The With-Action developments on Development Site C and Projected Development Site 1 would be larger and taller than existing buildings and planned development in the No-Action condition in the study area, but are expected to complement the existing varied context, which includes a diverse mix of building typologies and uses. The With-Action buildings would also be consistent with surrounding neighborhood context in terms of use and lot placement, forming consistent streetwalls with buildings lining the subject blocks.

Although the Proposed Actions would result in buildings larger in height and bulk (scale) than those found in the immediate surrounding neighborhood, from a pedestrian's perspective, the buildings would not obstruct important view corridors. The With-Action developments would be prominent; however, located near busy corridors with more traffic and building scale increases, the scale of future development would be appropriate for the scale of the streets adjacent to the Proposed Rezoning Area and secondary study area.

The Proposed Actions would not result in any development that would obstruct or eliminate any public views or affect any existing view corridors or views of visual resources in the study areas. As such, the Proposed Actions would not result in any significant adverse impacts to visual resources.

The Proposed Actions are site-specific, and would not alter building uses, bulks, or arrangements in the surrounding area, or result in any changes to streets, blocks, topography, open spaces, or natural features in the secondary study area under With-Action conditions.

ATTACHMENT G

AIR QUALITY

I. INTRODUCTION

The Project Sponsor, the FAC Brownsville Apartments LP (FAC), is seeking discretionary actions to facilitate the development of new affordable housing (the "Proposed Project") on three sites (Development Sites A, B, and C) in the Brownsville neighborhood of Brooklyn Community District (CD) 16. Development Site A, located at 425 Mother Gaston Boulevard (Block 3743, Lot 12), would be redeveloped with a four-story, approximately 9,650 gross square foot (gsf), mixed-use residential and commercial building. Development Site B, located at 546 Thomas S. Boyland Street (Block 3518, Lot 63), would be redeveloped with a six-story, approximately 23,662-gsf, multiunit residential building. Development Site C, located at 1733 Saint Marks Avenue (Block 1455, Lots 65, 66, 79), would be redeveloped with a nine-story, approximately 32,285 gsf, multiunit residential building.

As the Proposed Actions involve zoning changes that affect a larger area than Development Site C on Block 1455, a reasonable worst-case development scenario (RWCDS) has been established for the analysis year of 2026. Under the RWCDS, in addition to the Proposed Project, the Proposed Actions would facilitate the development of one projected development site ("Projected Development Site 1"), which would be on Lots 46 and 50 on block 1455, and a potential development site ("Potential Development Site 1") on Lots 56 and 58 on Block 1455. Although the Potential Development Site 1 is unlikely to be developed by 2026, it was conservatively included in the analysis. The locations of Development Site C, as well as the projected and potential development sites are shown in **Figure G-1**.

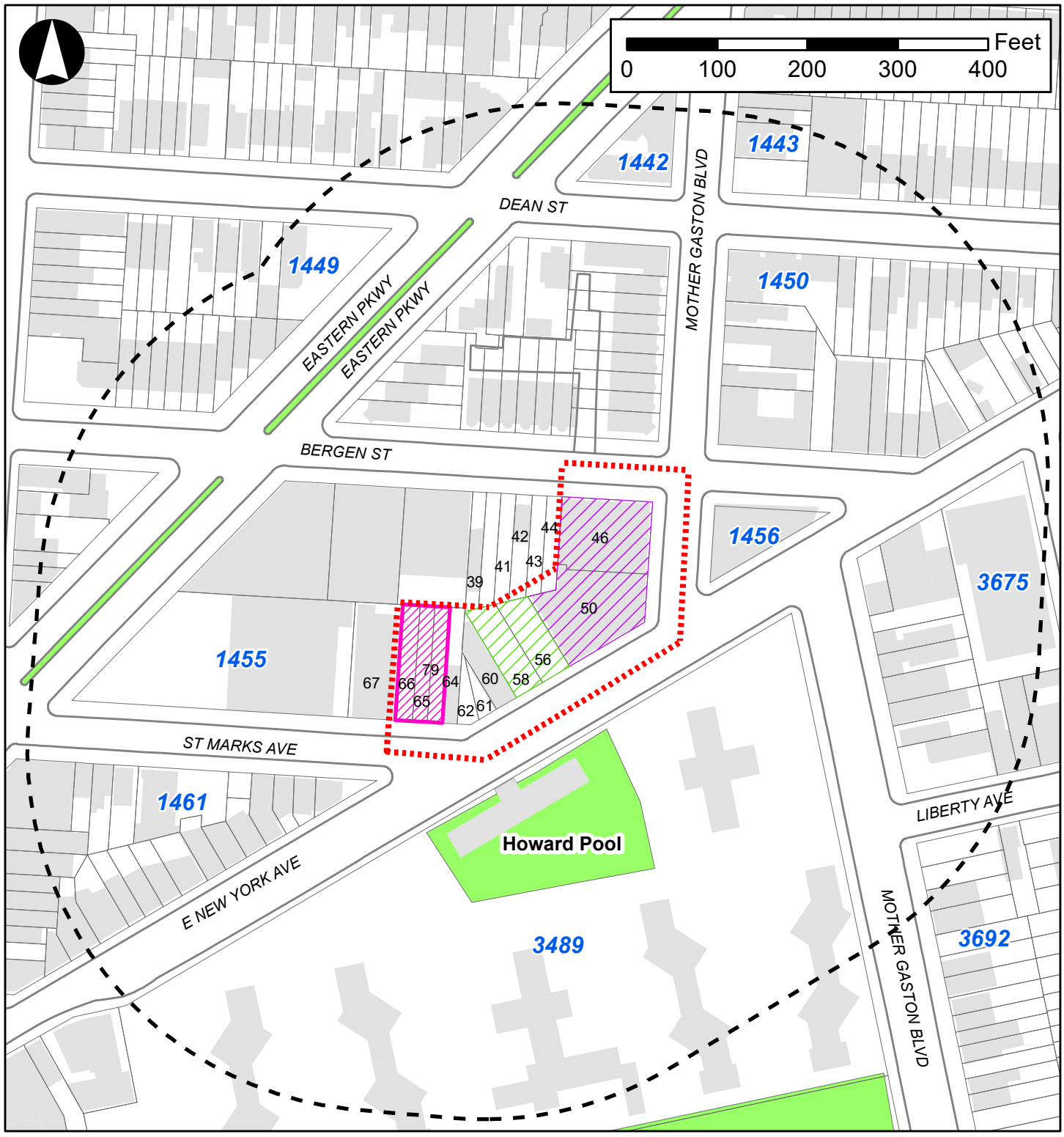
As three of the development sites are near each other (i.e., within 400 feet of each other), emissions from heating, ventilation, and air conditioning (HVAC) systems of each of the RWCDS buildings could potentially adversely affect the other RWCDS buildings, as follows:

- Development Site C (91 feet tall) could impact Potential Site 1 (95 feet tall)
- Potential Site 1 (95 feet tall) could impact Projected Site 1 (95 feet tall)
- Projected Site 1 could impact Potential Site 1 (95 feet tall)

The other two development sites – Sites A and B -- are located outside of the 400-foot radius and would not adversely affect each other, nor Site C, Projected Site 1 and Potential Site 1. However, potential emissions from Sites A and B could potentially affect existing uses. As such, pursuant to *New York City Environmental Quality Review (CEQR) Technical Manual* guidance, project-on-project analyses are warranted for Development Site C, Potential Development Site 1, and Projected Development Site 1. In addition, Development Sites A, B, C, Potential Development Site 1, and Projected Development Site 1 warrants project-on-existing analyses for HVAC emissions.

In addition, as several industrial facilities are located within 400 feet of Development Site C, Projected Development Site 1 and Potential Development 1, an industrial source analysis would need to be conducted to determine whether the potential impacts of the air toxic emissions released from these facilities could significantly affect these developments.

The air quality project-on-project HVAC analysis, project-on-existing, and air toxics analysis were conducted following the procedures and methodologies prescribed in the *2021 CEQR Technical Manual*.



Legend

- Proposed Rezoning Area
- 400-Foot Radius
- Development Site C
- Projected Development Site 1
- Potential Development Site 1
- 1455 Block
- 66 Lots
- Building Footprints
- Open Space

A major or large emission source analysis is not required as no such sources are identified within 1,000 feet of the development sites. In addition, because the Proposed Actions would not result in an increase in vehicle trips higher than the *CEQR Technical Manual* screening threshold of 170 trips at any intersection in the study area, no mobile source carbon monoxide (CO) analysis is warranted. Project-generated volumes would not exceed the particulate matter (PM) emission screening thresholds discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. Therefore, a quantitative assessment of emissions from action-generated traffic was not warranted.

II. STATIONARY SOURCE HVAC ANALYSIS

Preliminary HVAC Screening Analysis

Project-on-Project Analysis

Based on *CEQR Technical Manual* guidance, a preliminary screening analysis is recommended as a first step to predict whether the potential impacts of a project would be significant. A preliminary screening analysis was conducted to predict whether the potential impacts of the RWCDS's HVAC emissions would be significant, and detailed analysis would be required. The *CEQR* screening procedure is applicable for single buildings that are more than 30 feet apart from the nearest building of similar or greater height. As such, this procedure is not applicable for the developments that are adjacent to one another (Potential and Projected Development Sites) or located less than 30 feet apart (Site C and Potential Development Site 1). Site C, Potential Development Site 1, and Projected Development Site 1 require a detailed project-on-project analysis. For Sites A, B, and C, which are located more than 400-feet from each other, neither screening nor detailed analyses are warranted for project-on-project analysis.

Project-on-Existing Analysis

Project-on-existing screening analyses were conducted for Development Sites A, B, and C, and Potential and Projected developments to determine whether their respective HVAC emissions could adversely affect nearby existing buildings.

The total square footage of each site was used, and the nomograph on Figure 17-2 of the 2021 *CEQR Air Quality Appendix* entitled, "Boiler Screen Residential Development – Natural Gas," was applied. The nomograph is applicable for all stack heights. If the actual distance between a building with an HVAC stack and an affected building is greater than the threshold distance for that building size, then that building passes the screening analysis, and no significant impact is predicted. However, if the actual distance is less than the threshold distance for a building, then there is a potential for a significant impact, and a detailed analysis would be required.

The following existing buildings were included (see **Table G-1**):

- Development Site A (42 feet tall) on a 4-story building on Block 3743/Lot 16, a 5-story building on Block 3744/Lot 9, an 18-story building on Block 3727/Lot 1, and a 22-story building on Block 3526/Lot 21.
- Development Site B (62.67 feet tall) on a 7-story building on Block 3518/Lot 70.
- Development Site C (91 feet tall) on a 113-foot-tall building and a 117-foot-tall building on Block 3489/Lot 1.
- Potential Development Site 1 (95 feet tall) on a 113-foot-tall building and a 117-foot-tall building on Block 3489/Lot 1.

- Projected Development Site 1 (95 feet tall) on a 113-foot-tall building and a 117-foot-tall building on Block 3489/Lot 1.

TABLE G-1: Results of the HVAC Screening Project-on Existing Analysis

Development Site	GSF	Building Height (feet)	Potentially Impacted Existing Building (Block/Lot)	Distance to Building (feet)	Estimated Threshold Distance (feet)	CEQR Nomograph Results (Pass/Fail)
Development Site A (Block 3743, Lot 12)	9,650	42.8	4-story Building on 3743/16	36	25	**Pass**
			5-story Building on 3744/9	159		**Pass**
			18-story Building on 3721/1	219		**Pass**
			22-story Building on 3526/1	183		**Pass**
Development Site B (Block 3518, Lot 63)	23,662	62.67	7-story Building on 3518/70[1]	60	52	**Pass**
Development Site C (Block 1455, Lot 65/66/79)	32,285	90.7	114-feet Building on 3489/1	269	48	**Pass**
			117-feet Building on 3489/1	267		**Pass**
Potential Development Site 1 (Block 1455, Lot 56/58)	31,149	95	114-feet Building on 3489/1	189	47	**Pass**
			117-feet Building on 3489/1	277		**Pass**
Projected Development Site 1 (Block 1455, Lot 46/50)	97,380	95	114-feet Building on 3489/1	109	78	**Pass**
			117-feet Building on 3489/1	312		**Pass**

[1] The building on Block 3518 Lot 70 is currently under construction and will be a 7-story building upon completion by the analysis year.

Table G-1 provides the results of the screening analysis. As shown in **Table G-1**, the actual distances between Development Sites A, B, C, Potential and Projected Development Sites 1 and the taller nearby existing buildings are greater than the threshold distances determined by Figure 17-2, indicating that all these sites passed the screening analysis, and no further analysis on project-on-existing is required.

Detailed Project-on Project HVAC Analysis

As described previously, detailed project-on-project HVAC analysis is warranted for the following:

1. Development Site C (91 feet tall) on Potential Development Site 1 (95 feet tall);
2. Potential Development Site 1 (95 feet tall) on Projected Development Site 1 (95 feet tall); and
3. Projected Development Site 1 (95 feet tall) on Potential Development Site 1 (95 feet tall)

Relevant Air Pollutants

The U.S. Environmental Protection Agency (EPA) has identified several pollutants, which are known as criteria pollutants, as being of concern nationwide. As it is expected that the RWCDS developments' HVAC systems would use natural gas, the two critical criteria pollutants associated with natural gas combustion – nitrogen dioxide (NO_2) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) – would be the primary concern.

Applicable Air Quality Standards and Significant Impact Criteria

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA. The NAAQS are concentrations set for each of the criteria pollutants to

protect public health and the nation's welfare, and New York has adopted the NAAQS as of the State ambient air quality standards.

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

This analysis addressed compliance of the potential impacts with the 24-hour/annual $PM_{2.5}$ *CEQR* significant incremental impact criteria as well as with $PM_{2.5}$ NAAQS and 1-hr/annual NO_2 NAAQS. 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-2**.

TABLE G-2: Applicable National Ambient Air Quality Standards and CEQR Significant Impact Criteria

Pollutant	Averaging Period	NAAQS (ug/m³)	CEQR Significant Impact Criteria (ug/m³)
NO_2	1-Hour	188 µg/m³	--
	Annual	100 µg/m³	--
$PM_{2.5}$	24-Hour	35 µg/m³	8.6
	Annual	12 µg/m³	0.3

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter
Source: *U.S. 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 (NYSDEC) (http://www.dec.ny.gov/chemical/8542.html.*

$PM_{2.5}$ CEQR Significant Impact Criteria

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

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

The latest 3-year (2017-2019) average of the 98th percentile 24-hour $PM_{2.5}$ background concentration from the nearest monitoring station to the development sites at Brooklyn JHS 126 monitoring station from the New York State Department of Environmental Conservation (NYSDEC) 2019 monitoring Report is 17.8 ug/m³ (2017= 17.2 ug/m³, 2018=17.9 ug/m³, and 2019=18.4 ug/m³).[1] Half the difference between the 24-hour $PM_{2.5}$ NAAQS of 35 ug/m³ and the background value of 17.8 ug/m³ is 8.6 ug/m³. As such, a significant impact threshold of 8.6 ug/m³ was used for determining whether a potential 24-hour $PM_{2.5}$ impact for the development is 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 ug/m³ at any receptor location for stationary sources.*

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

[1] NEW YORK STATE AMBIENT AIR QUALITY REPORT FOR 2019 (ny.gov)

NO_2 NAAQS

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

The 1-hour NO_2 NAAQS of 0.100 ppm (188 µg/m^3) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100 percent) conversion of NOx to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80 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 which accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations.

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

The annual NO_2 standard is 0.053 parts per million (ppm or 100 µg/m^3). To estimate conservatively 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.

Dispersion Analysis

A dispersion modeling analysis was conducted to estimate the potential impacts from the HVAC emissions of each of the RWCDS buildings using the latest version 12112 of EPA's AERMOD dispersion model. Per *CEQR* 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 RWCDS buildings (i.e., with and without downwash) utilizing the AERMOD Building Profile Input Program (BPIP) algorithm, and both results are reported.

As the RWCDS buildings are expected to use natural gas, emission rates of NOx and $PM_{2.5}$ were calculated using EPA AP-42 emission factors for firing natural gas in small boilers. The $PM_{2.5}$ emission factors were accounted for both filterable and condensable particulates. Emission rates for were estimated as follows:

- Short-term NO_2 and $PM_{2.5}$ emission rates were estimated by accounting for seasonal variation in heat and hot water demand. Based on the DCP guidance, a seasonal emission factor was set as 1.0 for the winter season and 0.5 for the remaining three seasons of the year.
- A total energy consumption factor of 60.3 thousand Btu per square foot was obtained from Table US1, applicable for housing in New York City (*CEQR* Air Quality Appendix, Table US1, Total Energy Consumption, Expenditures and Intensities, 2005, Part I: Housing Unit Characteristics and Energy Use Indicators). Using 60.3 thousand Btu per square foot and the natural gas heating value of 1,020 Btu/ft^3, this value was converted to a fuel usage factor of 59.1 cubic feet per square foot per year and applied for all sites.

Table G-3 provides the estimated $PM_{2.5}$ and NO_2 short-term (e.g., 24-hour and 1-hour) and annual emission rates for Development Site C, and the Potential and Projected Developments. The diameter of each stack and the exit velocity were estimated based on values obtained from DEP "CA Permit" database for the corresponding boiler sizes (i.e., rated heat input or million BTUs per hour). Boiler size was estimated based on assumption that all fuel would be consumed during the 100-day (or 2,400 hours)

heating season. A stack exit temperature of 300°F (423°K), which is appropriate for boilers, was assumed for all boilers.

Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2015 through 2019 provided by the NYSDEC. Surface data were obtained from La Guardia International Airport and upper-air data from Brookhaven station, New York. Five years of meteorological data were combined into a single multiyear file to conduct $PM_{2.5}$ and NO_2 analyses for their respective averaging periods.

TABLE G-3: Estimated Pollutant Short-term and Annual Emission Rates

Development Site	Block/Lot(s)	Stack Height (feet) (1)	Total GSF	Estimated Emission Rates			
				$PM_{2.5}$		NO_2	
				24-hr. (g/sec)	Annual (g/sec)	1-hr. (g/sec)	Annual (g/sec)
Development Site C	1455/65, 66, 79	94	32,285	7.62E-04	2.09E-04	1.00E-02	2.75E-03
Potential Development Site 1	1455/56, 58	98	31,149	7.35E-04	2.01E-04	9.67E-03	2.65E-03
Projected Development Site 1	1455/46, 50	98	97,380	2.30E-03	6.29E-04	3.02E-02	8.28E-03

Note:
1. Stack is assumed to be 3 feet above the building roof

Pollutant Background Concentrations

Three-year average background concentrations for all pollutants were obtained from Queens College 2 or Brooklyn JHS-126 monitoring stations for the 2017-2019 period, as follows:

- The 3-year average of the 98thpercentile of the annual distribution of the daily maximum 1-hour NO_2 concentration was 55.1 ppb (104 ug/m^3);
- The highest annual NO_2 concentration over the 3 years was 14.62 ppb (27.6 ug/m^3); and
- The 3-year average (2017-2019) annual $PM_{2.5}$ background concentration is 7.6 ug/m^3 (JHS-126).

Stack and Receptor Locations for the HVAC Analysis

It was assumed that emissions from each site would be released through a single stack located 3 feet above the roof. Stacks were initially located at the minimum distance from the impacted building. If exceedances of the *CEQR* significant impact criteria or NAAQS were predicted, the stack would be gradually set back further from the impacted building until no exceedances of the *CEQR* thresholds or NAAQS were predicted.

Receptors were placed around all faces of impacted Potential and Projected Developments in 10-foot increments on all floor levels horizontally and vertically, starting 10 feet above the ground and extending up to the level of the upper windows up to 90-foot (assumed to be 5 feet below roof level).

For Development Site C (91 feet tall), which could impact the taller Potential Development Site 1 (95 feet tall), and Potential and Projected Development sites (95 feet tall), as they impact each other, windows receptors on impacted buildings will be lower than stack heights (and plume centerline) and lower impacts are expected.

$PM_{2.5}$ Results

Development Site C on Potential Development Site 1

With stack located at the minimum distance from Potential Development Site 1, the maximum estimated 24-hour/annual $PM_{2.5}$ impacts and concentrations would be less than the *CEQR* significant impact criteria and NAAQS with or without downwash. As such, no stack setback beyond the 10-foot allowable distance would be required. The results with downwash would be slightly lower than without downwash (refer to **Tables G-4 through G-7**).

TABLE G-4: 24-hour $PM_{2.5}$ Analysis Results (with Downwash)

RWCDS Development Site	Receptor Site	24-hr. Impact (ug/m^3)	Background Concentration (ug/m^3)	Total Concentration (ug/m^3)	*CEQR* Significant Impact Criteria (ug/m^3)	NAAQS (ug/m^3)
Development Site C	Potential Development Site 1	0.16	17.8	18.0	8.6	35
Potential Development Site 1	Projected Development Site 1	0.29		18.1		
Projected Development Site 1	Potential Development Site 1	1.86		19.7		

TABLE G-5: 24-hour $PM_{2.5}$ Analysis Results (without Downwash)

RWCDS Development Site	Receptor Site	24-hr. Impact (ug/m^3)	Background Concentration (ug/m^3)	Total Concentration (ug/m^3)	*CEQR* Significant Impact Criteria (ug/m^3)	NAAQS (ug/m^3)
Development Site C	Potential Development Site 1	0.6	17.8	18.4	8.6	35
Potential Development Site 1	Projected Development Site 1	0.13		17.9		
Projected Development Site 1	Potential Development Site 1	0.44		18.2		

TABLE G-6: Annual $PM_{2.5}$ Analysis Results (with Downwash)

RWCDS Development Site	Receptor Site	Annual Impact (ug/m^3)	Background Concentration (ug/m^3)	Total Concentration (ug/m^3)	*CEQR* Significant Impact Criteria (ug/m^3)	NAAQS (ug/m^3)
Development Site C	Potential Development Site 1	0.01	7.6	7.6	0.3	12
Potential Development Site 1	Projected Development Site 1	0.009		7.6		
Projected Development Site 1	Potential Development Site 1	0.04		7.6		

TABLE G-7: Annual $PM_{2.5}$ Analysis Results (without Downwash)

RWCDS Development Site	Receptor Site	Annual Impact (ug/m^3)	Background Conc. (ug/m^3)	Total Conc. (ug/m^3)	*CEQR* Significant Impact Criteria (ug/m^3)	NAAQS (ug/m^3)
Development Site C	Potential Development Site 1	0.01	7.6	7.6	0.3	12
Potential Development Site 1	Projected Development Site 1	0.003		7.6		
Projected Development Site 1	Potential Development Site 1	0.02		7.6		

Potential Development Site 1 on Projected Development Site 1

With stack located at the minimum distance from Projected Development Site 1, the maximum estimated 24-hour/annual $PM_{2.5}$ impacts and concentrations would be less than the *CEQR* significant impact criteria and NAAQS with or without downwash. Therefore, no stack setback beyond the 10-foot allowable distance would be required. Results with downwash would be slightly higher than without downwash (refer to **Tables G-4 through G-7**).

Projected Development Site 1 on Potential Development Site 1

With stack located at the minimum distance from Potential Development Site 1, the maximum estimated 24-hour/annual $PM_{2.5}$ impacts and concentrations would be less than the *CEQR* significant impact criteria and NAAQS with or without downwash. Therefore, no stack setback beyond the 10-foot allowable distance would be required. Results with downwash would be higher than without downwash (refer to **Tables G-4 through F-7**).

NO_2 Results

A Tier 1 analysis was sufficient to demonstrate compliance with the 1-hour NO_2 NAAQS with the HVAC stack located at the minimum allowable distance from the impacted building (as in the $PM_{2.5}$ analysis). The estimated 1-hour/annual impacts and total concentrations would be less than the 1-hour/annual NO_2 NAAQS (**Tables G-8 to G-12**). Therefore, no stack setback beyond the 10-foot allowable distance would be required, as in the case of $PM_{2.5}$ analysis. Results with and without downwash vary but all would be within the NAAQS (**Tables G-8 through G-12**).

TABLE G-8: 1-hour NO_2 Analysis Results (With Downwash)

RWCDS Development Site	Receptor Site	1-hr. NO_2 Impact ($\mu g/m^3$)	Background Concentrations ($\mu g/m^3$)	Total 1-hour Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)
Development Site C	Potential Development Site 1	3.5	104	107.5	188
Potential Development Site 1	Projected Development Site 1	6.6		110.6	
Projected Development Site 1	Potential Development Site 1	51.4		155.4	

TABLE G-9: 1-hour NO_2 Analysis Results (Without Downwash)

RWCDS Development Site	Receptor Site	1-hr. NO_2 Impact ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total 1-hour Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)
Development Site C	Potential Development Site 1	14.2	104	118.2	188
Potential Development Site 1	Projected Development Site 1	5.3		109.3	
Projected Development Site 1	Potential Development Site 1	18.9		122.9	

TABLE G-10: Annual NO_2 Analysis Results (With Downwash)

RWCDS Development Site	Receptor Site	Annual NO_2 Impact ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Annual Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)
Development Site C	Potential Development Site 1	0.1	27.6	27.7	100
Potential Development Site 1	Projected Development Site 1	0.3		27.9	
Projected Development Site 1	Potential Development Site 1	0.3		27.9	

TABLE G-11: 1-hour NO_2 Analysis Results (Without Downwash)

RWCDS Development Site	Receptor Site	Annual NO_2 Impact ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Annual Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)
Development Site C	Potential Development Site 1	0.1	27.6	27.7	100
Potential Development Site 1	Projected Development Site 1	0.1		27.7	
Projected Development Site 1	Potential Development Site 1	0.2		27.8	

Regulatory Agreement (Development Site C)

To ensure that the City-owned Development Site C (1733 Saint Marks Avenue) would be in full compliance with CEQR significant impact criteria and respective NAAQS for both $PM_{2.5}$ and NO_2 NAAQS, a Regulatory Agreement or other legally binding agreement between the Project Sponsor and HPD would stipulate the necessary heating, ventilating, and air conditioning (HVAC) system requirements for the site. The Regulatory Agreement or other legally binding agreement will require that any future residential development on Development Site C (Block 1455, Lots 65, 66, and 79) must use natural gas as the type of

fuel for its HVAC system and ensure that the building's HVAC stack would be located at a height of 94 feet above grade, to avoid any potential significant adverse stationary source air quality impacts. If the application for the approval of construction documents for these lots are past the applicable date noted under Article 506 of Local Law 154, the buildings(s) must abide by the restrictions of Local Law 154 and will use electric power for the HVAC system(s).

E-Designations

Based on the results of the detailed stationary source HVAC analysis, an (E) designation (E-736) will need to be placed on Projected Development Site 1 (Block 1455, Lots 46 and 50) and on Potential Development Site 1 (Block 1455, Lots 56 and 58), which will restrict the location of each building's associated HVAC stack, as well as limit the HVAC system's fuel to natural gas. For new developments, enlargements of existing buildings, or changes in use, the NYC Department of Buildings (DOB) will not issue a building permit until the environmental requirements of the (E) designation are satisfied. The Office of Environmental Remediation (OER) administers the (E) Designation Environmental Review Program.

To ensure that there would be no significant air quality impacts from the proposed actions, the following restrictions would be placed on Projected Development Site 1 and Potential Development Site 1:

Potential Development Site 1 (Block 1455, Lots 56, 58)

> **Any new commercial or residential development on Block 1455, Lots 56 and 58 must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and ensure that the HVAC stack is located at a height of 98 feet above grade, to avoid any potential significant adverse air quality impacts. If the application for the approval of construction documents for these lots are past the applicable date noted under Article 506 of Local Law 154, the buildings(s) must abide by the restrictions of Local Law 154 and will use electric power for the HVAC system(s).**

Projected Development Site 1 (Block 1455, Lots 46 and 50)

> **Any new commercial or residential development on Block 1455, Lots 46 and 50 must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and ensure that the HVAC stack is located at a height of 98 feet above grade, to avoid any potential significant adverse air quality impacts. If the application for the approval of construction documents for these lots are past the applicable date noted under Article 506 of Local Law 154, the buildings(s) must abide by the restrictions of Local Law 154 and will use electric power for the HVAC system(s).**

Results of the Detailed HVAC Analysis

The results of the stationary source HVAC project-on-project analysis indicated that no exceedances of applicable air quality standards or *CEQR* significant impact thresholds are predicted with the placement of an (E) designation or an equivalent institutional control. The (E) designation or equivalent institutional control would specify fuel and HVAC stack location restrictions, which would be placed as part of the zoning proposal, to ensure the developments would not result in any significant air quality impacts from fossil fuel-fired HVAC systems emissions.

III. INDUSTRIAL SOURCE ANALYSIS

In accordance with Section 220 (Stationary Sources) of the *CEQR Technical Manual*, "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 impacts, and therefore require stationary source analyses. In order to identify any potential sources of emissions, land use maps were reviewed and a field survey was conducted to identify manufacturing/industrial processing or transportation/utility operations within a 400-foot study area for Development Sites A, and B and the Proposed Rezoning Area (Development Site C, Projected Development Site 1 and Potential Development Site 1). The 400-foot study area surrounding the sites supports a wide range of land uses, including mixed-use residential and commercial, institutional, commercial, residential, parking, and vacant land as well as light industrial uses (see **Figure G-2a and G-2b**). As shown in **Table G-12** below, the existing light industrial uses within 400 feet of the sites include self-storage facilities, auto parts retailers, construction contractors, showrooms, and warehouse/storage supply facilities. Based on a review of DEP's Clean Air Tracking System (CATS) Light Industrial Permit records, there are two industrial air permits for manufacturing or processing facilities within 400 feet of the Proposed Rezoning Area (Development Site C, Projected Development Site 1, and Potential Development Site 1).

Based on the table outlined above, there are two permitted industrial facilities, including an automotive-related use and a manufacturing establishment, located within 400 feet of the Proposed Rezoning Area (Development Site C, Projected Development Site 1, and Potential Development Site 1). A 3-D view of the two industrial sources considered in the analysis relative to the three development sites is provided in **Figure G-3**. As such, an industrial analysis was conducted to determine whether the potential impacts of the toxic emissions released from these facilities could significantly affect the proposed development on Site C, the Projected Development on Site 1, or Potential Development Site 1. Potential air quality impacts were estimated following the procedures and methodologies prescribed in the *CEQR Technical Manual*.

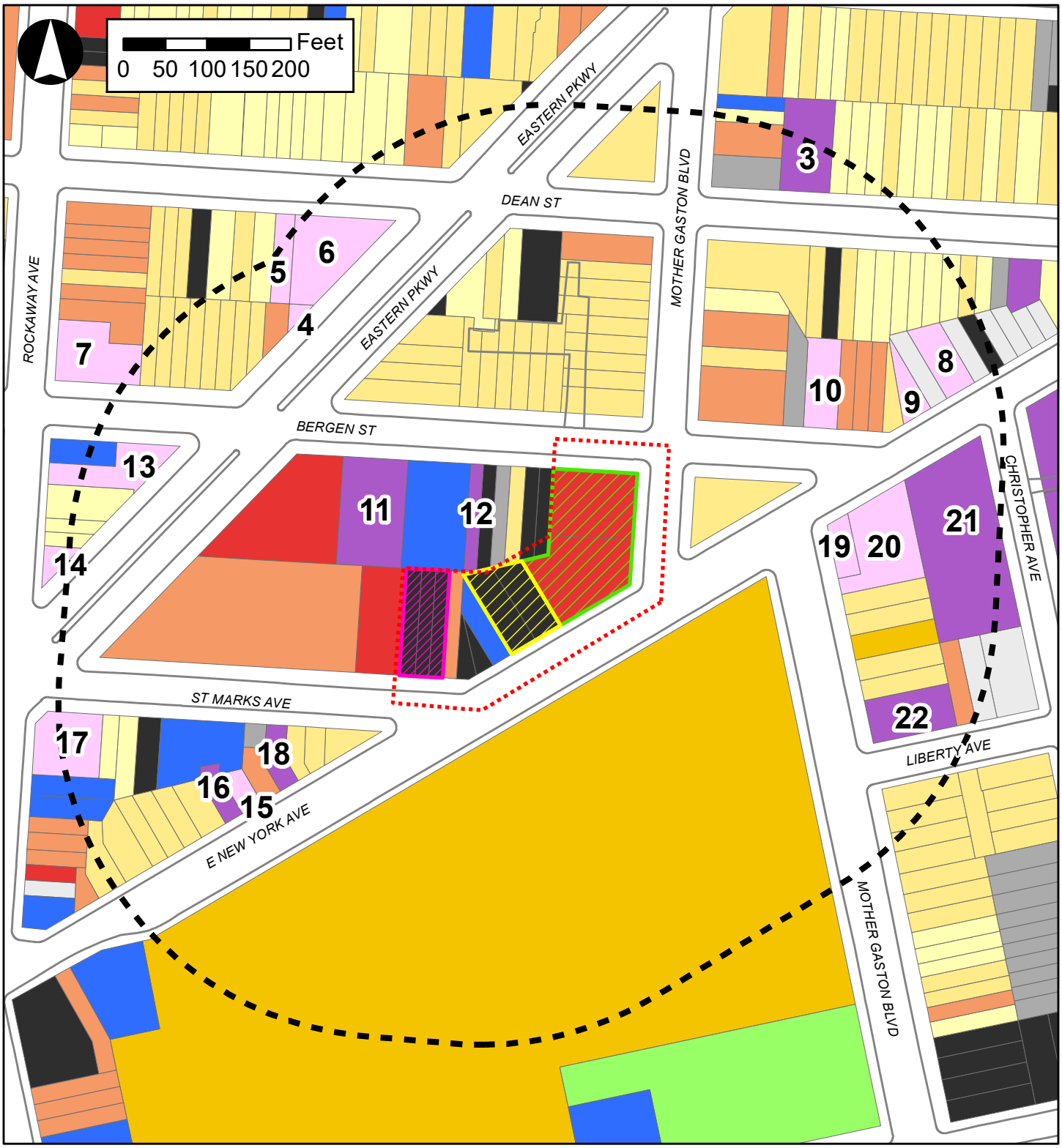


Legend

- Development Site A
- 400-Foot Radius

Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential
- Commercial/Office Buildings
- 1 Industrial/Manufacturing (Keyed to Table G-12)
- 2 Transportation/Utility (Keyed to Table G-12)
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data



Legend

- 400-Foot Radius
- Development Site C
- Proposed_Rezoning_Area
- Potential Development Site 1
- Projected Development Site 1

Land Use

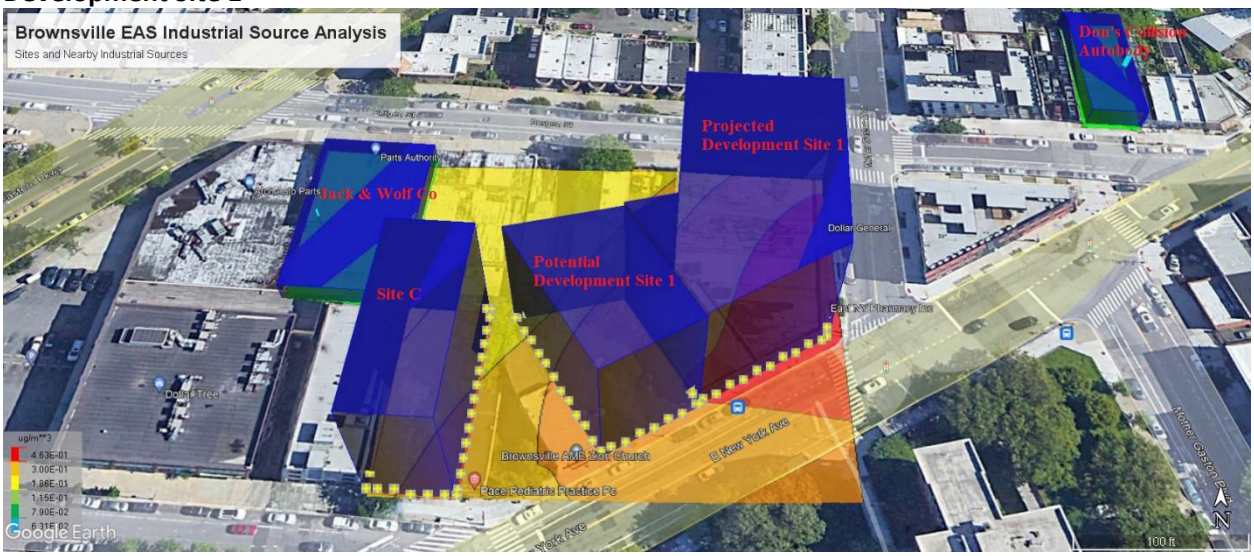
- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential
- Commercial/Office Buildings
- Industrial/Manufacturing (Keyed to Table G-12)
- Transportation/Utility (Keyed to Table G-12)
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

TABLE G-12: Description of Existing Light Industrial Uses and Transportation/Utility Operations within 400-feet of Development Sites A and B and the Proposed Rezoning Area

Map ID[1]	Block	Lot	Land Use	Address	Existing Use	Business Name	CATS Permit #	Notes
400-foot Radius of Development Site A								
1	3525	2	Industrial/Manufacturing	147 Watkins St.	Contractor Warehouse	Aurora Plumbing & Heating	N/A	No permits
2	3526	327	Transportation/Utility	345 Sutter Ave.	Vacant Gas Station/Auto Body Shop	76 Gas Station	#GA002988	Permit to operate a gas station
400-foot Radius of Development Site B								
There are no manufacturing/industrial processing or transportation utility operations within the study area of Development Site B.								
400-foot Radius of Rezoning Area (Development Site C, Projected Development Site 1, Potential Development Site 1)								
3	1443	55	Industrial/Manufacturing	2397 Dean St.	Alcohol Wholesale Warehouse	Ace's Beer	N/A	No permits
4	1449	30	Transportation/Utility	1787 Eastern Parkway	Automobile Tire Retailer/Repair	Tire Shop	N/A	No permits
5	1449	18	Transportation/Utility	2344 Dean St.	Auto Parts Retailer	Safe & Sound Installation Center	N/A	No permits
6	1449	19	Transportation/Utility	1801 Eastern Parkway	Auto Parts Retailer		N/A	No permits
7	1449	1	Transportation/Utility	245 Rockaway Ave.	Vacant Auto Repair Shop	-	N/A	No permits
8	1450	42	Transportation/Utility	1649 E. New York Ave.	Auto Repair Shop	Discount Auto Repair Inc.	N/A	No permits
9	1450	45	Transportation/Utility	1645 E. New York Ave.	Auto Repair Shop	Flawless Motors Inc.	N/A	No permits
10	1450	51	Transportation/Utility	2187 Bergen St.	Auto Repair Shop	Don's Collison Body Shop	#PA068798	**Industrial permit - detailed analysis required**
11	1455	31	Industrial/Manufacturing	2130 Bergen St.	Auto Repair Shop/ Auto Part Retailer	Parts Authority	#PA00399N	**Industrial permit - detailed analysis required**
12	1455	39	Industrial/Manufacturing	2148 Bergen St.	Contractor Warehouse/Storage	JCM Stone Corp.	N/A	No permits
13	1455	6	Transportation/Utility	1757 Eastern Parkway	Auto Repair Shop	770 Auto Service Center Inc.	N/A	No permits
14	1455	1	Transportation/Utility	1739/1745 Eastern Parkway	Auto Repair Shop	Willy's Auto Radiators	N/A	No permits
15	1461	28	Transportation/Utility	1567 E. New York Ave.	Auto Repair Shop	Shop Auto Repair	N/A	No permits
16	1461	29	Industrial/Manufacturing	1563 E. New York Ave.	Auto Repair Shop	JV Autobody	N/A	No permits
17	1461	11	Transportation/Utility	301 Rockaway Ave.	Auto Repair Shop	K&W Chung Auto Collision Specialist	N/A	No permits
18	1461	26	Industrial/Manufacturing	1573 E. New York Ave.	Vacant Building	-	N/A	No permits
19	3675	10	Transportation/Utility	1634 E. New York Ave.	Auto Repair Shop	-	N/A	No permits
20	3675	11	Transportation/Utility	1642 E. New York Ave.	Auto Repair Shop	Morillo Muffler Auto Repair	N/A	No permits
21	3675	14	Industrial/Manufacturing	1648 E. New York Ave.	Self-Storage Facility	Safeguard Self Storage	N/A	No permits
22	3675	1	Industrial/Manufacturing	261 Mother Gaston Blvd.	Auto Repair Shop	Rotech 261	N/A	No permits

Source: NYC DEP Clean Air Tracking System (CATS), NYC DCP ZoLa, May 2023 field visits
Note: Application numbers starting with 'C' are associated with boilers, 'P' with industrial uses, and 'G' with Gas stations.
[1] Map number keyed to **Figures G-2a and G-2b**.

Figure G-3: Industrial Sources near Development Site C, Projected Development Site 1, and Potential Development Site 1



Emissions

The first step in this analysis is to determine the types and amounts of emissions generated by the identified nearby industrial or processing facilities, which include Don's Collision Body Shop, located at 2187 Bergen Street (Permit PA068798) and Jack & Wolf Co, located at 2130 Bergen Street (Permit PA00399N). The facility under PA068798 is involved in car painting operations via a spray booth, and the facility under PA00399N is involved in mixing and blending ceramics. Facility types, addresses, block and lot numbers, permit numbers, and emitted pollutants for these two facilities are provided in **Table G-13**.

TABLE G-13: Existing Industrial/Processing Facilities Permit Information within 400-feet of Development Site C, Projected Development Site 1, and Potential Development Site 1

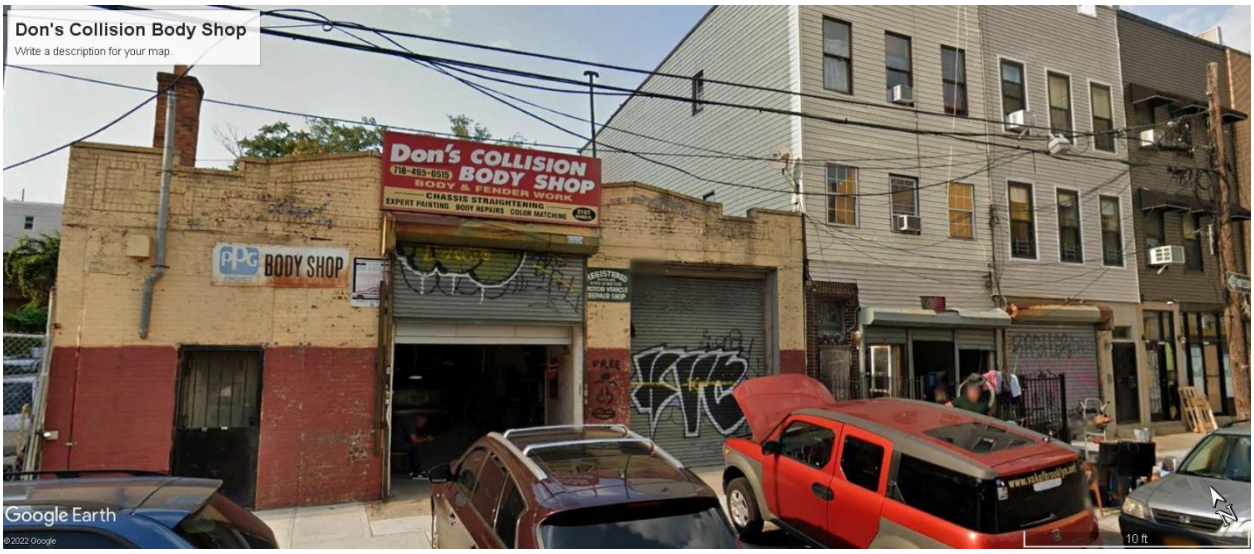
Facility Name	Address	Permit No.	Facility Operation	Pollutant Name	CAS No.*	Pollutant Emission Rates	
						lb./hr.	lb./year
Don's Collision Body Shop	2187 Bergen St. (Block 1450, Lot 51)	PA068798	Spray Booth Operations	Solids	NY079-00-0	0.04	24.5
				Solvents	NY998-00-0	0.39	233
Jack & Wolf Co	2130 Bergen St. (Block 1455, Lot 31)	PA00399N	Mixing &Blending Ceramics	Ceramic Dust	NY075-00-0	0.001	0.16

Notes: *CAS number is a unique numerical identifier of chemical substances.

The permit for Don's Collision Center lists two pollutants – solids (CAS NY079-00-0) and solvents (CAS NY998-00-0). The solids under CAS NY079-00-0 are particulate matter (listed in DAR-1 as NY075-00-0) and the solvents under CAS NY998-00-0 is a group of total volatile organic compounds (VOCs) – a family of compounds with different toxicities (not an individual compound). These compounds have no established DAR-1 guideline values in the current 2021 edition of DAR-1. Therefore, individual chemicals with known guideline values need to be considered instead of total VOCs.

The spray booth is equipped with a fiberglass filter that can achieve almost 99% of efficiency in particles removal from spray booth exhaust. A view of this facility is shown in **Figure G-4**.

Figure G-4: View of Don's Collision Center Spray Booth at 2187 Bergen Street Considered in the Analysis



The Jack & Wolf Co, under Permit PA00399N, is involved in mixing and blending ceramics in blending machines connected to baghouse collectors and emitting one pollutant – ceramic dust. The facility is equipped with a high-efficiency filter capable of removing up to 99% of the dust. For conservative purposes, it was assumed that ceramic dust consists of 100% $PM_{2.5}$ particles.

Toxic Pollutant Assessment Methodology

While no federal standards have been promulgated for toxic air pollutants, the NYSDEC has issued guidance DAR-1 that establishes acceptable ambient levels for these pollutants. As shown, the short-term (and annual) impacts of the toxic pollutants should be evaluated on a 1-hour (and annual) basis and compared to the 1-hour (and annual) guideline values of the DAR-1 database. The DAR-1 guideline values are short-term ambient guideline concentrations (SGCs) and the ambient annual-average-based guideline concentrations (AGCs) are the maximum allowable concentrations below which there should be no health-related adverse effects. If no exceedances of the SGCs or AGCs are found, no adverse health effects would occur. If the concentration of any pollutant exceeds its applicable guideline value (either SGC or AGC), a more detailed analysis would be required.

The current (February 2021) edition of the DAR-1 no longer includes guideline values (SGC and AGC) for $PM_{2.5}$ and PM_{10} – the NAAQS for these pollutants is used instead. The NAAQS for $PM_{2.5}$ is 35 ug/m^3 for 24-hours and 12 ug/m^3 for an annual period, and 150 ug/m^3 for 24-hour PM_{10}. As noted in DAR-1, federal standards for $PM_{2.5}$/PM_{10} are not SGC or AGC and are only included in the DAR-1 to facilitate screening or regulatory analysis. Because the NAAQS, as well as the *CEQR* significant incremental impact criteria established for $PM_{2.5,}$ are based on 24-hour or annual averaging periods, analyses of $PM_{2.5}$ require the use of the AERMOD dispersion model that contains a special procedure for this analysis.

Approach for Spray Booth Analysis

In accordance with DEP guidance related to the analysis of spray booth emissions, the following methodologies and assumptions were applied to this analysis:

1. If a permit contains only data for a total group of volatile organic compounds (VOCs) – not individual solvents, paint composition could be obtained from Table 3 of the report entitled, "Air Toxic Analysis of Auto Repair Spray Paint Booth Near Solow Centers" (i.e., the "Solow Report).
2. It should be conservatively assumed that 100% of the paint ingredients, regardless of volatility, including particulates, would be evaporated and released into the atmosphere.
3. Solids (or total particulate matter) listed in the permit should be considered as fractions of both $PM_{2.5}$ and PM_{10} particles, and the percentages of $PM_{2.5}$ and PM_{10} in the total mass of particulate matter should be estimated using the cumulative particle size distribution for surface coating operations via spray booths.
4. Exhaust stacks should be located according to roof plan drawings. If drawings are not available and a field survey could not determine stack locations, stacks should be placed at minimum distances from the impacted building.

Solvent Emission Rates

As described above, the composition of the paint with solvent percentages in the paint obtained from Table 3 of Solow's Report is shown in **Table G-14**. Emission rates for solvents were calculated by multiplying hourly and annual paint usage rates listed in the permit in pounds per hour (0.39 lbs./hr.) and pounds per year (233 lbs/year), by the weight percentage of each solvent in the paint provided in **Table G-14**. Estimated hourly and annual emission rates of solvents are provided in **Table G-15**.

TABLE G-14: Composition of the Paint Used in the Spray Booth Analysis (As shown in Table 3 of Solow Report)

Chemical Name	CAS No.	Maximum % by wt.
Acetone	67-64-1	43
Aromatic Petroleum Distillate [(1)]	64742-94-5	10
Butene	106-97-8	11
Ethanol	64-17-5	3
EER [(2)]	763-69-9	9
Ethylbenzene	100-41-4	5
Methyl Ethyl Ketone [(3)]	78-93-3	8
N-Butyl Acetate	123-86-4	5
Propane	74-98-6	11
Stoddard Solvents	8052-41-3	10
Toluene	108-88-3	10
Xylene	1330-20-7	10

Notes: [(1)] APD = Aromatic Petroleum Distillate; [(2)] EER = Ethyl 3-Ethoxypropionate; and [(3)] MEK = Methyl Ethyl Ketone

TABLE G-15: Estimated Hourly and Annual Emission Rates for Solvents from Spray Booth Operations under PA068798

Pollutant	Hourly Emission Rate		Annual Emission Rate	
	lb./hr.	g/sec	lb./year	g/sec
Acetone	0.1677	0.0211	100.2	0.0014
APD [(1)]	0.0390	0.0049	23.3	0.0003
Butene	0.0429	0.0054	25.6	0.0004
Ethanol	0.0117	0.0015	7.0	0.0001
EER [(2)]	0.0351	0.0044	21.0	0.0003
Ethylbenzene	0.0195	0.0025	11.7	0.0002
MEK [(3)]	0.0312	0.0039	18.6	0.0003
N-Butyl Acetate	0.0624	0.0079	37.3	0.0005
Stoddard Solvents	0.0390	0.0049	23.3	0.0003
Toluene	0.0390	0.0049	23.3	0.0003
Xylene	0.0390	0.0049	23.3	0.0003

Notes: [(1)] APD = Aromatic Petroleum Distillate; [(2)] EER = Ethyl 3-Ethoxypropionate; and [(3)] MEK = Methyl Ethyl Ketone

Solvents Screening Analysis

For estimating the potential impacts of toxic pollutants from industrial sources, the *CEQR Technical Manual* recommends a screening procedure as the first step in the analysis. This procedure uses pre-tabulated pollutant concentration values based on a generic emission rate of 1 gram per second from Table 17-3, "Industrial Source Screen," of the *CEQR Technical Manual* for the applicable averaging periods. This approach, which can be used to estimate maximum short-term and annual average concentration values at various distances (from 30 to 400 feet) from an emission source, was used to assess the potential impacts of the solvent emissions for Don's Collision Body Shop under PA068798 (Block 1450, Lot 1).

Of all three sites, the Projected Development Site 1 is the closest site to the industrial source with a minimum distance estimated to be approximately 205 feet. Conservatively, a shorter distance of 180 feet was used. At this distance, based on a 1 gram per second emission rate, the maximum 1-hour and annual concentrations using Table 17-3 were estimated to be 3,507 ug/m^3 and 181 ug/m^3, respectively.

All values obtained from Table 17-3 of the *CEQR Technical Manual* for an emission rate of 1 gram per second were then multiplied by the actual emission rates of each solvent to estimate actual solvent concentration. These values were then compared to the DAR-1 short-term (SGC) and annual (AGC) guideline concentrations (**Tables G-16 and G-17**).

TABLE G-16: Estimated 1-hour Solvent Concentrations under PA068798 for Don's Collision Center

Chemical Name	CAS No.	Max Estimated 1-hour Concentration (µg/m³)	SGC (µg/m³)	Exceed (Yes/No)
Acetone	67-64-1	74.1	180,000	No
APD	64742-94-5	17.2	N/A	No
Butene	106-98-9	19.0	N/A	No
Ethanol	64-17-5	5.2	N/A	No
EER [(2)]	763-69-9	15.5	140	No
Ethyl Benzene	100-41-4	8.6	N/A	No
Methyl Ethyl Ketone	78-93-3	13.8	13,000	No
n-Butyl Acetate	123-86-4	27.6	71,300	No
Stoddard Solvents	8052-41-3	17.2	N/A	No
Toluene	108-88-3	17.2	37,000	No
Xylene	1330-20-7	17.2	22,000	No

TABLE G-17: Estimated Annual Solvent Concentrations under PA068798 for Don's Collision Center

Chemical Name	CAS No.	Max Estimated Annual Concentration (µg/m³)	AGC (µg/m³)	Exceed (Yes/No)
Acetone	67-64-1	0.2608	30,000	No
APD	64742-94-5	0.0607	100	No
Butene	106-98-9	0.0667	1,400	No
Ethanol	64-17-5	0.0182	45,000	No
EER	763-69-9	0.0546	64	No
Ethyl Benzene	100-41-4	0.0303	1,000	No
Methyl Ethyl Ketone	78-93-3	0.0485	5,000	No
n-Butyl Acetate	123-86-4	0.0971	565	No
Stoddard Solvents	8052-41-3	0.0607	900	No
Toluene	108-88-3	0.0607	5,000	No
Xylene	1330-20-7	0.0607	100	No

Notes:

- The maximum 1-hour and annual concentrations were estimated based on actual emission rate (Table 3) and pre-tabulated concentration of 1 gram per second concentration obtained from *CEQR* Table 17-3 of 3,507 ug/m³ and 181 ug/m³, respectively.
- APD, butene, ethanol, ethylbenzene, and Stoddard solvents have no SGC values.

Results of Screening Solvent Analysis

Results of the screening solvent analysis are that the estimated short-term and annual concentrations of individual solvents from the spray booth are all less than SGC and AGC values, indicating that all solvents passed the screening analysis, and no further analysis is required.

Dispersion Analysis of Particulate Emissions

A dispersion analysis was conducted to estimate the potential impacts of the $PM_{2.5}/PM_{10}$ emissions from the spray booth under PA068798 for Don's Collision Center and $PM_{2.5}$ emissions from mixing and blending machines under PA00399N for Jack & Wolf Co. using the same version and dispersion options of EPA's

AERMOD dispersion model and meteorological data provided by the NYSDEC. Analyses were conducted with and without the effects of the downwash, and both results are reported.

Results of the dispersion analysis were compared to the *CEQR* $PM_{2.5}$ significant impact criteria and respective NAAQS and NAAQS for 24-hour PM_{10}.

Particulate Emission Rates

As mentioned above, DEP currently requires that particulate matter released from spray booth operations be considered as $PM_{2.5}/PM_{10}$ emissions based on the $PM_{2.5}/PM_{10}$ fraction content in the total mass of particulate matter. EPA data on cumulative particle size distribution for surface coating operations via spray booths shows that 28.6% of the total mass of particulate matter are $PM_{2.5}$ particles and 46.7% of the total mass of particulate matter are PM_{10} particles (EPA-42, Appendix B1, Page B.1-12, Particle Size Distribution Data and Sized Emission Factors for selected Sources, Table 4.2.2.8 Automobile and Light-Duty Truck Surface Coating Operations, Automobile Spray Booths). Therefore, factors of 0.286 and 0.467 were applied to the solid content listed in the permit to estimate $PM_{2.5}$ and PM_{10} emission rates under PA068798 (**Table G-18**).

Estimated hourly and annual $PM_{2.5}$ emission rates from mixing and blending machines under PA00399N are provided in **Table G-19**.

TABLE G-18: Estimated $PM_{2.5}/PM_{10}$ Emission Rates from Spray Booth Operations under PA068798

Facility	PM_{10}/ $PM_{2.5}$	Permitted Emission Rate		Percent of $PM_{10}/PM_{2.5}$ in total Solids	Estimated Emission Rates			
					Hourly		Annual	
		lb./hr.	lb./ye		lb./hr.	g/sec	lb./year	g/sec
Don's Collision Autobody	$PM_{2.5}$	0.04	24.5	28.6%	0.011	0.0014	7.01	0.0001
	PM_{10}			46.7%	0.019	0.0024	11.4	0.0002

TABLE G-19: Estimated $PM_{2.5}$ Hourly and Annual Emission Rates under PA00399N

Facility	Pollutant	CAS No.	Hourly Emission Rate		Annual Emission Rate	
			lb./hr.	g/sec	lb./year	g/sec
Jack & Wolf Co	Ceramic Dust	NY075-00-0	0.001	0.0001	0.16	2.0E-06

Ceramic dust was assumed to be 100% $PM_{2.5}$

The stack exhaust temperature and flow rate for Don's Collision Autobody were obtained from the facility's permit while stack height, diameter, and location were approximated based on the spray booth drawing and Google map observations. Stack parameters for the Jack & Wolf facility were obtained from the facility's permit and the stack location was approximated based on the facility's drawing. **Table G-20** provides stack parameters used in the dispersion analysis.

TABLE G-20: Stack Parameters Used in Dispersion Analysis

Facility	Emission Rate			Stack Height (Feet)	Stack Diameter (inches)	Stack Temp (deg F)	Flow Rate	
	24-hr. $PM_{2.5}$ (g/sec)	24-hr. PM_{10} (g/sec)	Annual $PM_{2.5}$				ft^3/min	m^3/sec
Don's Collision Auto	0.0014	0.0024	0.0001	29	39	70	3,200	1.507
Jack & Wolf Co	0.0001	-	2.0E-06	20	8	70	1,500	0.707

Dispersion Analysis

As shown in **Figure G-3**, the industrial facility (Don's Collision Auto) under PA068798 is closer to Projected Development Site 1 and Potential Development Site 1, while the facility under PA00399N (Jack & Wolf Co.) is closer to Development Site C. Receptors were located around the perimeters of each development site, starting from the ground level (6 feet) and extending up to the upper window (receptors) levels (i.e., 5 feet below roof level), horizontally and vertically, in 10-foot increments. More than 1,200 receptors were considered to assure that the maximum impacts are estimated. To estimate cumulative $PM_{2.5}$ impact, both emission sources were included in one set of modeling runs.

Results

Results of the cumulative $PM_{2.5}$/PM_{10} analyses with and without downwash are provided in **Tables G-21 to G-24**. The estimated cumulative $PM_{2.5}$ concentrations are compared with *CEQR* significant impact criteria and NAAQS and PM_{10} concentration is compared to the NAAQS.

TABLE G-21: Estimated 24-hour $PM_{2.5}$/PM_{10} Concentration with Downwash

Pollutant	Max 24-hr. Impact	Background Conc.	Max Total Conc.	*CEQR* Significant Impact Criteria	NAAQS
	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³
$PM_{2.5}$	0.47	17.8	18.3	8.6	35
PM_{10}	0.9	28	28.9	-	150

TABLE G-22: Estimated 24-hour $PM_{2.5}$/PM_{10} Concentration without Downwash

Pollutant	Max 24-hr. Impact	Background Conc.	Max Total Conc.	*CEQR* Significant Impact Criteria	NAAQS
	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³
$PM_{2.5}$	0.56	17.8	18.4	8.6	35
PM_{10}	1.1	28	29.1	-	150

PM_{10} background concentration from Queens College monitor for 2019 is 28 ug/m³.

TABLE G-23: Estimated Annual $PM_{2.5}$ Concentration With Downwash

Pollutant	Max Annual Impact	Background Conc.	Max Total Conc.	CEQR Significant Impact Criteria	NAAQS
	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³
$PM_{2.5}$	0.005	7.6	7.6	0.3	12

TABLE G-24: Estimated Annual $PM_{2.5}$ Concentration Without Downwash

Pollutant	Max Annual Impact	Background Conc.	Max Total Conc.	CEQR Significant Impact Criteria	NAAQS
	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³
$PM_{2.5}$	0.005	7.6	7.6	0.3	12

Annual $PM_{2.5}$ background concentration for 2017-2019 period is 7.6 ug/m³.

The result of the dispersion analysis is that no exceedances of either the 24-hour/annual *CEQR* significant impact criteria or NAAQS for $PM_{2.5}$, the 24-hour PM_{10} NAAQS are predicted from the particulate emissions of Don's Collision Autobody spray booth operations and mixing & blending equipment of Jack & Wolf Co.

In a letter dated October 2023 (see **Appendix I**), DEP has reviewed the air quality assessment and concluded that there is no potential for significant adverse impacts from air quality.

IV. CONCLUSIONS

The detailed stationary source HVAC analysis determined that there would be no potential for significant adverse stationary source air quality impacts from HVAC system emissions with a Regulatory Agreement or other legally binding agreement between the Project Sponsor and HPD on Development Site C (Block 1455, Lots 65, 66, and 79). The Regulatory Agreement or other legally binding agreement would stipulate the necessary heating, ventilating, and air conditioning (HVAC) system requirements for Development Site C. Additionally, Projected Development Site 1 (Block 1455, Lots 46 and 50) and Potential Development Site 1 (Block 1455, Lots 56 and 58) would be mapped with an (E) designation. The (E) designation would also specify fuel and HVAC stack location restrictions for Projected Development Site 1 and Potential Development Site 1, which would be placed as part of the zoning proposal, to ensure these developments would not result in any significant air quality impacts from fossil fuel-fired HVAC systems emissions. In addition, the analysis of emissions from nearby industrial sources determined that no significant adverse impacts would result from air toxics related to industrial sources.

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,"** the Project Sponsor is requesting the disposition of City-owned property through Urban Development Action Area Project (UDAAP) designation and project approval, a zoning map and a zoning text amendment, and approval of public financing (the "Proposed Actions") to facilitate the construction of three new affordable housing developments, one of which would also include ground floor local retail space, in the Brownsville neighborhood of Brooklyn Community District (CD) 16. The Proposed Actions would facilitate the redevelopment of five vacant lots across three different areas with a total of three residential buildings containing a total of 61 affordable dwelling units (DUs), and Site A would also contain approximately 2,500 gross square feet (gsf) of ground-level local retail space (collectively known as the "Proposed Project"). All five tax lots are owned by the New York City Department of Housing Preservation and Development (HPD) and would be disposed of to the Project Sponsor as a result of the Proposed Actions. In addition, the development of the three residential developments would be facilitated by HPD financing and potentially funding from New York State Home and Community Renewal (HCR).

Under the reasonable worst-case development scenario (RWCDS), the proposed zoning changes would also facilitate the development of one projected development site ("Projected Development Site 1" comprising Lots 46 and 50 on Block 1455) and a potential development site ("Potential Development Site 1" comprising Block 1455, Lots 56 and 58), which is less likely to be developed by the analysis year of 2026. The incremental (net) change that would result from the Proposed Actions and associated RWCDS would be the net addition of approximately 146 DUs and a net loss of approximately 5,077 gsf of commercial space. The developments are expected to be constructed, occupied, and fully operational by 2026.

The noise analysis for the Proposed Actions was carried out in compliance with *CEQR Technical Manual* guidelines and consists of two parts:

- (1) A screening analysis to determine whether traffic generated by the Proposed Actions would have the potential to result in significant adverse noise impacts on existing sensitive receptors;

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

II. NOISE FUNDAMENTALS

Noise is considered unwanted sound. Sound is a fluctuation in air pressure. Sound pressure levels are measured in units called "decibels" (dB). The particular character of the sound that we hear (a whistle compared with a French horn, for example) is determined by the speed, or "frequency," at which the air pressure fluctuates or "oscillates." Frequency defines the oscillation of sound pressure in terms of cycles

per second (cps). One cycle per second is known as 1 Hertz (Hz). People can hear sound over a limited range of frequencies, between 20 Hz and 20,000 Hz. Furthermore, the human ear does not perceive all frequencies equally well. High frequencies (e.g., a whistle) are more easily discernible and therefore more intrusive than many of the lower frequencies (e.g., the lower notes on the French horn).

A-Weighted Sound Level (dBA)

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

TABLE 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

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

Community Response to Changes in Noise Levels

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

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 Federal Highway Administration, 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 have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level" L_{eq} can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$) conveys the same sound-energy as the actual time-varying sound.

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

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

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

Applicable Noise Codes and Impact Criteria

CEQR Technical Manual Noise Standards

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

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

Notes:

(i) In addition, any new activity shall comply with the Impact Thresholds detailed in Section 410 of Chapter 19, "Noise," of the *CEQR Technical Manual*;

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

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

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

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

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

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

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

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

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

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

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

HUD Development Guidelines

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

TABLE H-5: HUD Exterior Noise Standards

	Acceptable	Normally Unacceptable	Unacceptable
Noise Level With Proposed Actions	Ldn ≤ 65	65 < Ldn ≤ 75	75 < Ldn

Source: HUD

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

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

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

III. NOISE PREDICTION METHODOLOGY

Proportional Modeling

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

equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of 18 cars. Future noise levels are calculated using the following equation:

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

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

Analyses for the Proposed Actions were conducted for three typical periods: the weekday AM peak hour (8 AM to 9 AM), the midday peak hour (12 PM to 1 PM), and the weekday PM peak hour (5 PM to 6 PM). These times are the hours when the maximum traffic generation is expected and, therefore, the hours when future conditions with the Proposed Actions are most likely to result in maximum noise impacts for the receptor locations. 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 proximity of several public schools near the development sites, in order to determine whether ambient noise levels were higher during this period than during the other standard weekday peak periods.

Noise data for Sites A and B, including vehicular traffic volumes, were collected on February 6 and 8, 2018. The No-Action and With-Action noise levels for Sites A and B were projected using data from the 2018 collection. Noise data for Site C, Projected Development Site 1, and Potential Development Site 1 was collected on January 25 and February 8, 2022.

For the purpose of this analysis, during each noise recording, vehicles were counted and classified. To calculate the No-Action PCE values, an annual background growth rate of 0.25 percent for 2022-2026 was applied to the existing PCE noise values based on counted vehicles[1]. In order to obtain the future With-Action noise PCE values to calculate the With-Action noise levels, a trip generation forecast was created for the proposed incremental dwelling units (+146 total DUs) and decrease commercial space (-5,077 gsf) generated by the 2026 With-Action development for the three City-owned development sites and Projected Development Site 1, which is based on existing modal split data for the census tracts within which the development sites are located.[2] The total incremental vehicles generated by the projected developments per hour were estimated at 11 for the AM peak hour and zero for the midday, school PM, and PM peak hours.

[1] Calculation according to Table 16-4 in the *CEQR Technical Manual.*
[2] Based on: 2015-2019 ACS T128, Means of Transportation Journey to Work, Brooklyn Census Tracts 365.02, 898, 902, 906, 908, 910, 912, and 924; *East New York Rezoning FEIS*, 2016.

IV. EXISTING CONDITIONS

Selection of Noise Monitoring/Receptor Locations

To collect existing baseline volumes at each of the development sites, existing noise levels were measured at six locations. Receptor 1 was located on the east side of Mother Gaston Boulevard along the western frontage of Site B (425 Mother Gaston Boulevard) to measure noise resulting from traffic along Mother Gaston Boulevard. Receptor 2 was located on the west side of Thomas S. Boyland Street along the eastern frontage of Site A (546 Thomas S. Boyland Street) to measure noise resulting from traffic along Thomas S. Boyland Street. Receptor 3 was located on the southern side of Bergen Street along the northern frontage of Projected Development Site 1 to measure noise resulting from traffic along Bergen Street. Receptor 4 was located on the western side of Mother Gaston Boulevard along the eastern frontage of Projected Development Site 1 to measure noise resulting from Mother Gaston Boulevard. Receptor 5 was located along the northern side of East New York Avenue along the southeastern frontage of Projected Development Site 1 and Potential Development Site 1 to measure noise resulting from East New York Avenue. Receptor 6 was located along the northern side of St Marks Avenue along the southern frontage of Site C (1733 St. Marks Avenue), to measure noise resulting from St. Marks Avenue. As discussed above, Receptor Locations 1 and 2 were placed in February 2018, and Receptor Locations 3, 4, 5, and 6, were placed in January 2022. For reference, the noise monitoring receptor locations are identified in **Figures H-1a** and **H-1b** and explained further below:

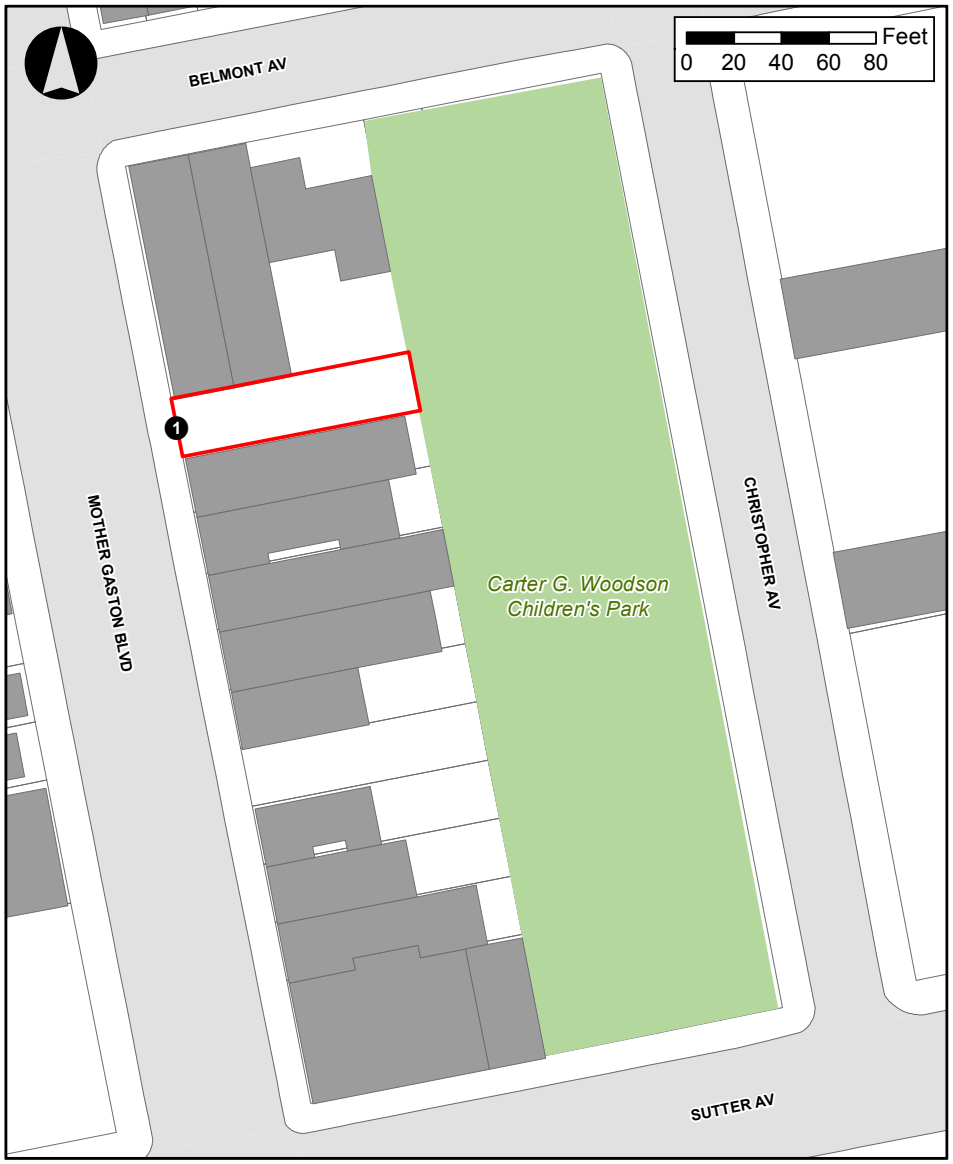
- ***Receptor Location 1*** – Future eastern frontage of Site A (Mother Gaston Boulevard); approximate midpoint of lot frontage.
- ***Receptor Location 2*** – Future western frontage of Site B (Thomas S. Boyland Street); approximate midpoint of lot frontage.
- ***Receptor Location 3*** – Future northern frontage of Projected Development Site 1 (Bergen Street); approximate midpoint of Lot 46 frontage.
- ***Receptor Location 4*** – Future eastern frontage of Projected Development Site 1 (Mother Gaston Boulevard); approximate midpoint of Lots 46 and 50.
- ***Receptor Location 5*** – Approximate midpoint of East New York Avenue along the future southeastern frontages of Projected Development Site 1/Potential Development Site 1.
- ***Receptor Location 6*** – Future southern frontage of Site C (St. Marks Avenue); approximate midpoint of site.

Noise Monitoring

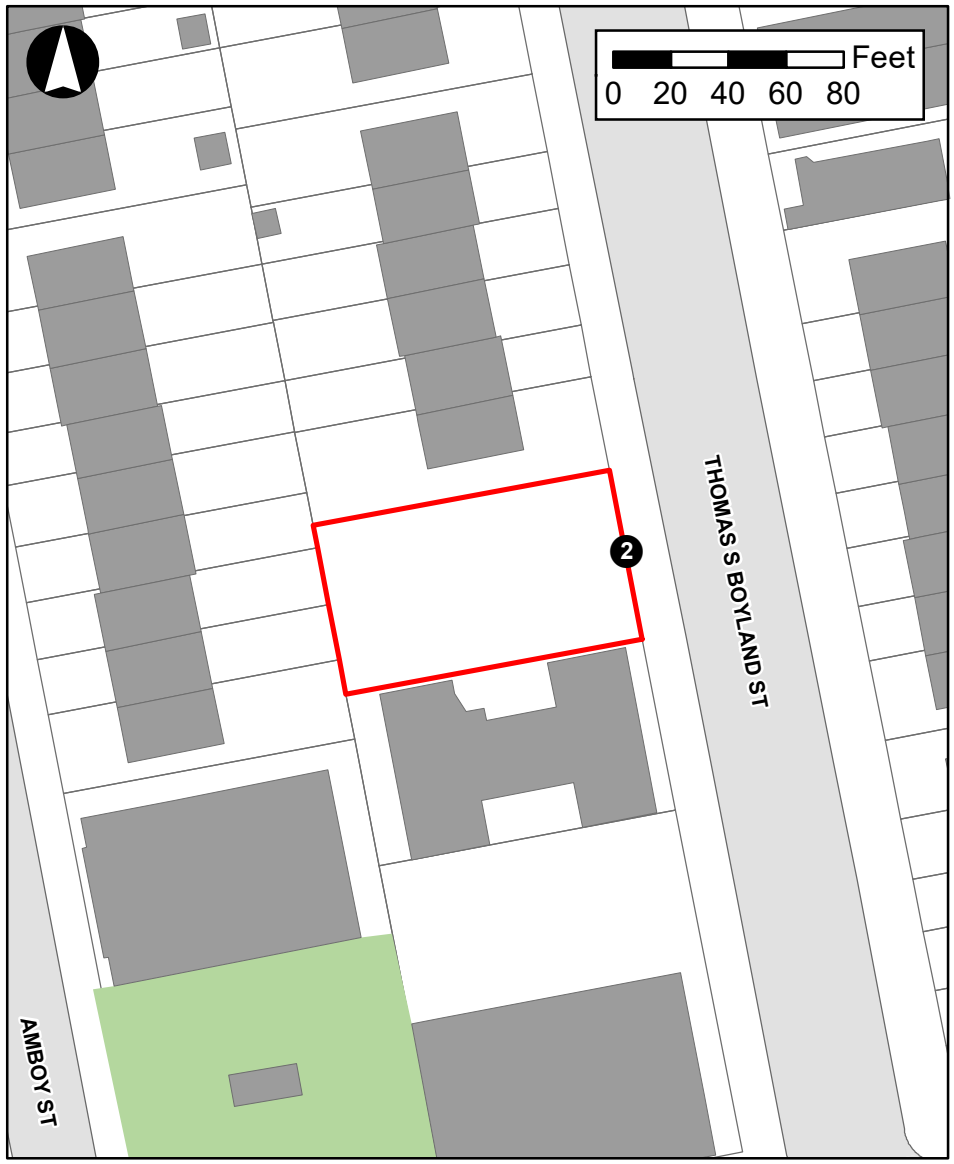
At each receptor location, as the main source of noise was local traffic, pursuant to CEQR guidelines, 20-minute measurements were performed to establish existing noise levels for three analysis time periods, the weekday AM peak hour (8 AM to 9 AM), the midday (MD) peak hour (12 PM to 1 PM), and the weekday PM peak hour (5 PM to 6 PM). Additional noise measurements were performed at each receptor location during the school dismissal/bus departure (School PM) peak period (2:30 PM to 3:30 PM), due to the proximity of schools to Sites A and B. Noise monitoring was conducted during the School PM weekday peak period in order to determine whether ambient noise levels were higher during this period than during the other standard weekday peak periods. As discussed above, noise monitoring at Receptor 1 was performed on Thursday, February 8, 2018. On February 8, 2018, the weather was clear with temperatures in the high-20s to low-30s and an average wind speed of six mph. Noise monitoring at Receptor 2 was

Figure H-1a
Noise Monitoring Locations

425 Mother Gaston Boulevard: Receptor 1



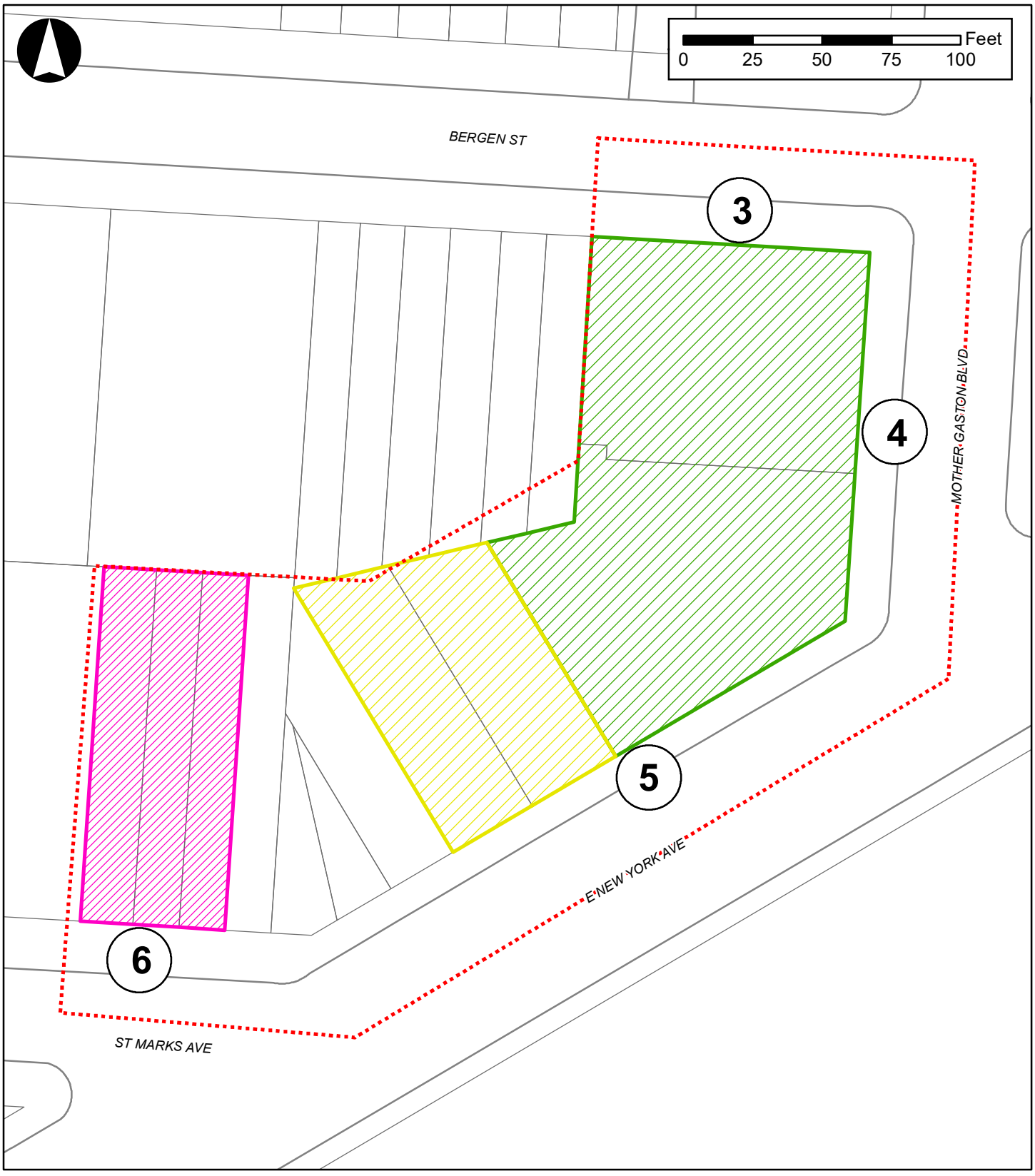
546 Thomas Boyland Street: Receptor 2



Legend

- Development Sites
- 1 Noise Monitoring Locations (Keyed to Table H-6)
- Existing Building Footprints
- Open Space

Noise Receptor Locations - Proposed Rezoning Area



Legend

- Development Site C
- Proposed Rezoning Area
- Projected Development Site 1
- Potential Development Site 1
- 3 — Monitor Location (Keyed to Table H-6)

performed on Tuesday, February 6, 2018. On February 6, 2018, the weather was mostly cloudy with temperatures in the high-20s to mid-30s and an average wind speed of five miles per hour (mph). Noise monitoring at Receptors 3, 4, 5, and 6 was performed on Tuesday, January 25, and Tuesday, February 8, 2022. On January 25, 2022, the weather was mostly cloudy with temperatures in the high-30s to low-40s and an average wind speed of ten mph. On February 8, 2022, the weather was mostly cloudy with temperatures in the high-30s to low-4os with an average wind speed of eight mph.

Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by the American National Standards Institute) sound level meter. This assembly was mounted at a height of six 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 levels being measured at each of the receptor locations. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at each receptor location were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. Traffic and aircraft flyover noise was captured; noise from other sources (e.g., emergency sirens etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at Monitoring Locations

The noise monitoring results are shown in **Table H-6**. Vehicle traffic was the dominant source of all noise receptor locations. Overhead flights were moderate sources of noise at each of the receptors, but they were not continuous.

Noise levels were relatively moderate near the six monitor locations near the five development sites. Specifically, as shown in **Table H-6**, the highest overall L_{10} value (75.1 dBA) was measured in the School PM peak period at Receptor 1. Pursuant to *CEQR Technical Manual* guidance, this L_{10} value places Receptor 1 in the "Marginally Unacceptable (II)" CEQR Noise Exposure category, as the noise levels exceeded 70.0 dBA under existing conditions. The highest L_{10} for Receptor 2 was measured in the PM peak period (67.1 dBA), placing Receptor 2 in the "Marginally Acceptable" CEQR Nosie Exposure category under existing conditions. The highest L_{10} for Receptor 3 was measured in the AM peak period (68.7 dBA), placing Receptor 3 in the "Marginally Acceptable" CEQR Nosie Exposure category under existing conditions. The highest L_{10} for Receptor 4 was measured in the AM peak period (72.4 dBA), placing Receptor 4 in the "Marginally Unacceptable (I)" CEQR Nosie Exposure category under existing conditions. The highest L_{10} for Receptor 5 was measured in the PM peak period (71.7 dBA), placing Receptor 5 in the "Marginally Unacceptable (I)" CEQR Nosie Exposure category under existing conditions. The highest L_{10} for Receptor 6 was measured in the School PM peak period (67.6 dBA), placing Receptor 6 in the "Marginally Acceptable" CEQR Nosie Exposure category under existing conditions.

TABLE H-6: Existing Noise Levels (dBA) at the Development Sites

Receptor Location [1]	Noise Receptor Location	Time[2]	L_{max}	L_{min}	L_{eq}	L_1	L_{10}[3]	L_{50}	L_{90}	*CEQR* Noise Exposure Category
1	East side of Mother Gaston Boulevard between Belmont Avenue and Sutter Avenue	AM	89.4	52.2	66.3	75.5	68.8	62.1	57.1	Marginally Unacceptable (II)
		MD	84.4	55.3	65.2	74.7	67.2	62.5	59.3	
		SC PM	94.0	55.0	72.0	83.8	**75.1**	62.8	58.8	
		PM	100.4	56.1	69.5	75.2	67.5	62.8	59.8	
2	West side of Thomas S. Boyland Street between Pitkin Avenue and Sutter Avenue	AM	75.0	42.4	60.3	69.5	64.9	53.8	44.9	Marginally Acceptable
		MD	94.5	44.4	62.4	72.2	64.3	55.5	47.4	
		SC PM	79.4	44.3	60.3	70.8	63.6	55.0	47.3	
		PM	86.8	46.5	64.2	75.9	**67.1**	57.6	50.2	
3	South side of Bergen Street near Mother Gaston Boulevard	AM	94.3	52.1	67.6	76.5	**68.7**	65.4	54.0	Marginally Acceptable
		MD	89.5	50.2	66.8	77.7	67.9	60.9	52.2	
		SC PM	86.2	49.3	65.0	73.7	66.8	64.3	51.7	
		PM	81.0	50.3	61.2	71.4	63.8	57.4	51.9	
4	West side of Mother Gaston Boulevard between Bergen Street and East New York Avenue	AM	96.6	51.7	71.9	84.3	**72.4**	64.0	58.8	Marginally Unacceptable (I)
		MD	89.8	48.4	64.0	74.4	65.7	59.5	54.9	
		SC PM	86.3	50.6	66.6	79.1	68.7	61.4	56.2	
		PM	91.9	52.6	66.1	74.6	69.7	61.9	57.4	
5	North side of East New York Avenue	AM	88.8	49.9	66.8	76.4	69.7	63.2	55.2	Marginally Unacceptable (I)
		MD	81.3	49.0	64.7	73.4	68.7	61.2	53.3	
		SC PM	83.6	51.1	66.7	75.1	70.4	63.8	55.9	
		PM	86.2	50.3	68.6	77.9	**71.7**	66.1	58.2	
6	North side of St. Marks Avenue	AM	82.2	49.2	63.2	72.2	66.8	60.1	53.6	Marginally Acceptable
		MD	98.2	50.4	67.8	69.8	63.1	58.4	54.2	
		SC PM	95.4	50.5	67.5	81.7	**67.6**	59.3	54.8	
		PM	81.5	48.9	60.8	70.8	63.2	58.1	53.1	

Notes: [1] Refer to **Figures H-1a and H-1b** for receptor locations.
[2] AM = weekday AM peak hour; MD = weekday midday peak hour; SC PM = weekday school peak hour; PM = weekday PM peak hour.
[3] Highest L_{10} at each receptor is shown in **bold**.

Existing L_{dn} Noise Levels

As part of the Proposed Actions, the Proposed Project (projected developments at Sites A, B, and C) may receive Federal funding. L_{dn} noise levels were therefore calculated for the corresponding receptor locations, as described above in the "HUD Development Guidelines" section. Using this methodology, the L_{dn} for receptor locations 1, 2, 3, 4, 5, and 6 were estimated to be 72.1 dBA, 64.1 dBA, 65.7 dBA, 69.4 dBA, 68.7 dBA, and 64.6 dBA, respectively. According to HUD criteria, the calculated Existing L_{dn} noise levels at receptor locations 1, 3, 4, and 5 would fall in the "normally unacceptable" category, and receptor locations 2 and 6 would fall in the "acceptable" category.

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

In the future without the Proposed Actions (the No-Action scenario), it is expected that there would be no new development on any of the development sites. Development Sites A, B and C would remain vacant.

As there are no additional anticipated developments expected to generate a significant number of vehicle trips by 2026 within a 400-foot radius of each of the development sites, consistent with *CEQR Technical Manual* guidance, estimates of peak hour noise levels for the No-Action condition were developed by applying background growth rates. For Receptor Locations 1 and 2, the annual background growth rate was calculated for 0.5 percent from 2018 to 2023 and 0.25 from 2023 to 2026 to the existing traffic levels. For Receptor Locations 3 through 6, the annual background growth rate was calculated for 0.5 percent from 2022 to 2026 to the existing traffic levels.

In the future without the Proposed Actions, noise levels at the development sites are anticipated to be similar to existing conditions, apart from slight increases (0.15 dBA and 0.09 dBA) associated with minor increases in traffic along adjacent roadways due to general background growth. As indicated in **Table H-7**, noise levels at all receptor locations would remain in their respective CEQR Noise Exposure categories.

TABLE H-7: 2026 No-Action Noise Levels (dBA) at the Development Sites

Receptor	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	1233.0	1276.8	66.3	66.4	0.15	68.9	**Marginally Unacceptable (II)**
	MD	1125.0	1165.0	65.2	65.4	0.15	67.4	
	SC PM	1284.0	1329.6	72.0	72.1	0.15	**75.2**	
	PM	1005.0	1040.7	69.5	69.6	0.14	67.6	
2	AM	615.0	636.9	60.3	60.4	0.15	65.0	**Marginally Acceptable**
	MD	984.0	1019.0	62.4	62.5	0.15	64.4	
	SC PM	1032.0	1068.7	60.3	60.4	0.15	63.8	
	PM	1062.0	1099.7	64.2	64.3	0.14	**67.2**	
3	AM	384.0	391.7	67.6	67.7	0.09	**68.8**	**Marginally Acceptable**
	MD	468.0	477.4	66.8	66.9	0.09	68.0	
	SC PM	432.0	440.7	65.0	65.1	0.09	66.9	
	PM	201.0	205.1	61.2	61.3	0.09	63.9	
4	AM	636.0	648.8	71.9	72.0	0.09	**72.5**	**Marginally Unacceptable (I)**
	MD	411.0	419.3	64.0	64.1	0.09	65.8	
	SC PM	570.0	581.5	66.6	66.7	0.09	68.8	
	PM	1116.0	1138.5	66.1	66.1	0.09	69.8	
5	AM	1407.0	1435.4	66.8	66.8	0.09	69.7	**Marginally Unacceptable (I)**
	MD	1284.0	1309.9	64.7	64.8	0.09	68.7	
	SC PM	1296.0	1322.1	66.7	66.8	0.09	70.5	
	PM	1932.0	1970.9	68.6	68.7	0.09	**71.8**	
6	AM	570.0	581.5	63.2	63.2	0.09	66.9	**Marginally Acceptable**
	MD	198.0	202.0	67.8	67.9	0.09	63.1	
	SC PM	432.0	440.7	67.5	67.6	0.09	**67.6**	
	PM	417.0	425.4	60.8	60.9	0.09	63.3	

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**.

No-Action L_{dn} Noise Levels

As described above in the "HUD Development Guidelines" section, the No-Action L_{dn} for Receptor Locations 1, 2, 3, 4, 5, and 6 were estimated according to the methodology described above to be 72.2 dBA, 64.2 dBA, 65.8 dBA, 69.5 dBA, 68.8 dBA, and 64.6 dBA, respectively. According to HUD criteria, the calculated No-Action L_{dn} noise levels at receptor locations 1, 3, 4, and 5 would remain in the "normally unacceptable" category, and receptor locations 2 and 6 would remain in the "acceptable" category, as under existing conditions.

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

Following *CEQR Technical Manual* guidance, noise levels in the future with the Proposed Actions were calculated for the weekday AM, MD, School PM, and PM peak periods in the 2026 analysis year. These calculations account for the additional traffic that would be added because of the Proposed Actions. As shown in **Table H-8**, the analysis indicates that noise levels at all receptor locations would remain in their respective CEQR Noise Exposure categories.

TABLE H-8: 2026 With-Action Noise Levels (dBA) at the Development Sites

Receptor	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	1276.8	1287.8	66.4	66.5	0.06	69.0	**Marginally Unacceptable (II)**
	MD	1165.0	1165.0	65.4	65.4	0.02	67.4	
	SC PM	1329.6	1329.6	72.1	72.1	0.03	**75.2**	
	PM	1040.7	1040.7	69.6	69.7	0.03	67.6	
2	AM	636.9	647.9	60.4	60.5	0.11	65.2	**Marginally Acceptable**
	MD	1019.0	1019.0	62.5	62.5	0.00	64.4	
	SC PM	1068.7	1068.7	60.4	60.4	0.00	63.8	
	PM	1099.7	1099.7	64.3	64.3	0.00	**67.2**	
3[3]	AM	391.7	402.7	67.7	67.9	0.17	**69.0**	**Marginally Acceptable**
	MD	477.4	477.4	66.9	66.8	-0.07	67.9	
	SC PM	440.7	440.7	65.1	64.9	-0.12	66.7	
	PM	205.1	205.1	61.3	61.1	-0.26	63.7	
4[3]	AM	648.8	659.8	72.0	72.1	0.11	**72.6**	**Marginally Unacceptable (I)**
	MD	419.3	419.3	64.1	64.0	-0.08	65.7	
	SC PM	581.5	581.5	66.7	66.6	-0.09	68.7	
	PM	1138.5	1138.5	66.1	66.1	-0.05	69.8	
5	AM	1435.4	1446.4	66.8	66.9	0.06	69.8	**Marginally Unacceptable (I)**
	MD	1309.9	1309.9	64.8	64.8	0.01	68.7	
	SC PM	1322.1	1322.1	66.8	66.8	0.02	70.5	
	PM	1970.9	1970.9	68.7	68.7	0.01	**71.8**	
6	AM	581.5	592.5	63.2	63.4	0.15	67.0	**Marginally Acceptable**
	MD	202.0	202.0	67.9	68.0	0.09	63.2	
	SC PM	440.7	440.7	67.6	67.7	0.06	**67.7**	
	PM	425.4	425.4	60.9	61.0	0.09	63.3	

Notes: All PCE and noise values are shown for a weekday.

[1] With-Action L_{eq} – No-Action L_{eq}.

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

[3] Given the decrease in commercial gsf for Projected Development Site 1 under the With-Action condition compared to the No-Action condition (a decrease in approximately 7,577-gsf), the number of trips are expected to decrease.

In the future with the Proposed Actions, noise levels at the development sites would be similar to No-Action conditions, apart from increases (up to 0.17 dBA) associated with increased traffic along adjacent roadways. Comparing the future With-Action noise levels with No-Action noise levels, noise levels at Receptor 1 would experience an increase of up to 0.06 dBA; noise levels at Receptor 2 would experience and increase of up to 0.11 dBA; noise levels at Receptor 3 would experience an increase of up to 0.17 dBA; noise levels at Receptor 4 would experience an increase of up to 0.11 dBA; noise levels at Receptor 5 would experience an increase of up to 0.06 dBA; and noise levels at Receptor 6 would experience an increase of up to 0.15 dBA. According to the *CEQR Technical Manual*, increases of these magnitudes would not be perceptible. As these increases are less than the CEQR impact criteria threshold (3.0 dBA), the overall changes to noise levels at each of the development sites as a result of the Proposed Actions would not result in any significant adverse noise impacts.

With-Action L_{dn} Noise Levels

As described above in the "HUD Development Guidelines" section, the With-Action L_{dn} for Receptor Locations 1, 2, 3, 4, 5, and 6 were estimated according to the methodology described above to be 72.2 dBA, 64.2 dBA, 65.9 dBA, 69.6 dBA, 68.8 dBA, and 64.6 dBA, respectively. According to HUD criteria, the calculated With-Action L_{dn} noise levels at receptor locations 1, 3, 4, and 5 would remain in the "normally unacceptable" category, and receptor locations 2 and 6 would remain in the "acceptable" category, as under existing and No-Action conditions.

VII. OTHER NOISE CONCERNS

Mechanical Equipment

All of the future buildings' mechanical systems (i.e., heating, ventilation, and air conditioning systems) will be designed to meet all applicable noise regulations and requirements and would be designed to produce noise levels that would not result in any significant increase in ambient noise levels. In addition, the building mechanical systems would be designed with enclosures where necessary to meet all applicable noise regulations (i.e., Subchapter 5 §24-227 of the New York City Noise Control Code and the NYC DOB Building Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in any significant increases in ambient noise levels.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptors would either generate or reroute aircraft or introduce a new receptor that is within a 65 dBA DNL contour. Since the Proposed Actions would not generate or reroute aircraft, and as the Project Area is not within a 65 dBA DNL contour, no initial aircraft noise impact screening analysis is warranted.

VIII. CEQR ATTENUATION REQUIREMENTS

CEQR

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

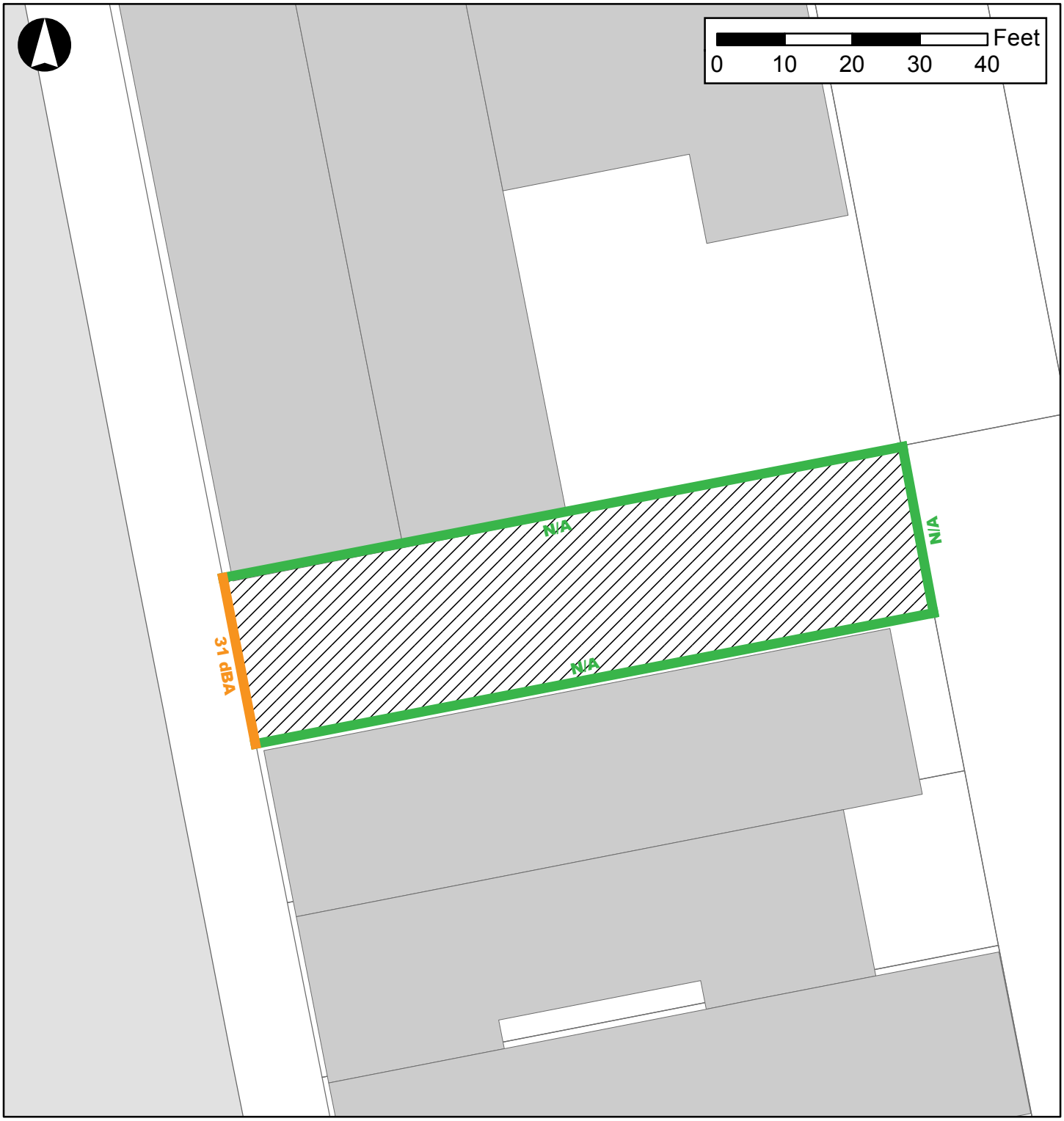
All facades that would experience an L_{10} of 70.0 dBA or greater must provide an alternate means of ventilation (AMV) permitting a closed window condition during warm weather. This can be achieved by installing double-glazed windows on a heavy frame for masonry structures or windows consisting of laminated glass, along with AMV such as central air conditioning, through-wall sleeve-fitted air conditioners, packaged terminal air conditioning (PTAC) units, trickle vents integrated into window frames, or other approved means. Where the required window/wall attenuation is above 40 dBA, special design features may be necessary that go beyond the normal double-glazed window and air conditioning. These may include specially designed windows (e.g., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.) and additional building insulation.

As detailed above and presented in **Table H-8**, the maximum predicted L_{10} noise levels are expected to be 75.2 dBA along the western frontage of Site A, 72.6 dBA along the eastern frontage of Projected Development Site 1, and 71.8 dBA along the southern frontage of Projected Development Site 1 and Potential Development Site 1. The maximum predicted L_{10} noise levels for Sites B and C are expected to be 67.2 dBA and 67.7 dBA, respectively. As such, the facades at Sites B and C would not require additional attenuation measures beyond standard construction practices. However, as shown in **Figure H-2a** and **Figure H-2b**, to ensure acceptable interior noise levels for Site A, Projected Development Site 1, and Potential Development Site's frontages, a minimum of 28 dBA of attenuation is needed along the Projected Development Site 1's eastern frontage (Mother Gaston Boulevard) and Projected Development Site 1's and Potential Development Site 1's southern frontage (East New York Avenue), and a minimum of 31 dBA of attenuation is needed along Site A's western frontage (Mother Gaston Boulevard). The noise attenuation specifications for Site A would be mandated through Regulatory Agreements between HPD and the Project Sponsor, whereas an (E) designation (E-736) for noise will be placed on Projected Development Site 1 and Potential Development Site 1.

TABLE H-9: Attenuation Requirements (dBA) for Future Developments at Site A, Projected Development Site 1, and Potential Development Site 1 Pursuant to CEQR

Proposed Development Site	Facade [1]	Corresponding Receptor	Location	Max. L_{10} (dBA)	Required Attenuation Pursuant to CEQR
Site A	Western	1	Facing Mother Gaston Boulevard	75.2	31
Projected Development Site 1	Eastern	4	Facing Mother Gaston Boulevard	72.6	28
	Southern	5	Facing East New York Avenue	71.8	28
Potential Development Site 1	Southern	5	Facing East New York Avenue	71.8	28

Notes: [1] Refer to **Figures H-2a and H-2b**.
[2] Attenuation values are shown for residential uses; commercial office uses would be 5 dBA less.



Legend

Existing Building Footprints

Projected Development Site B

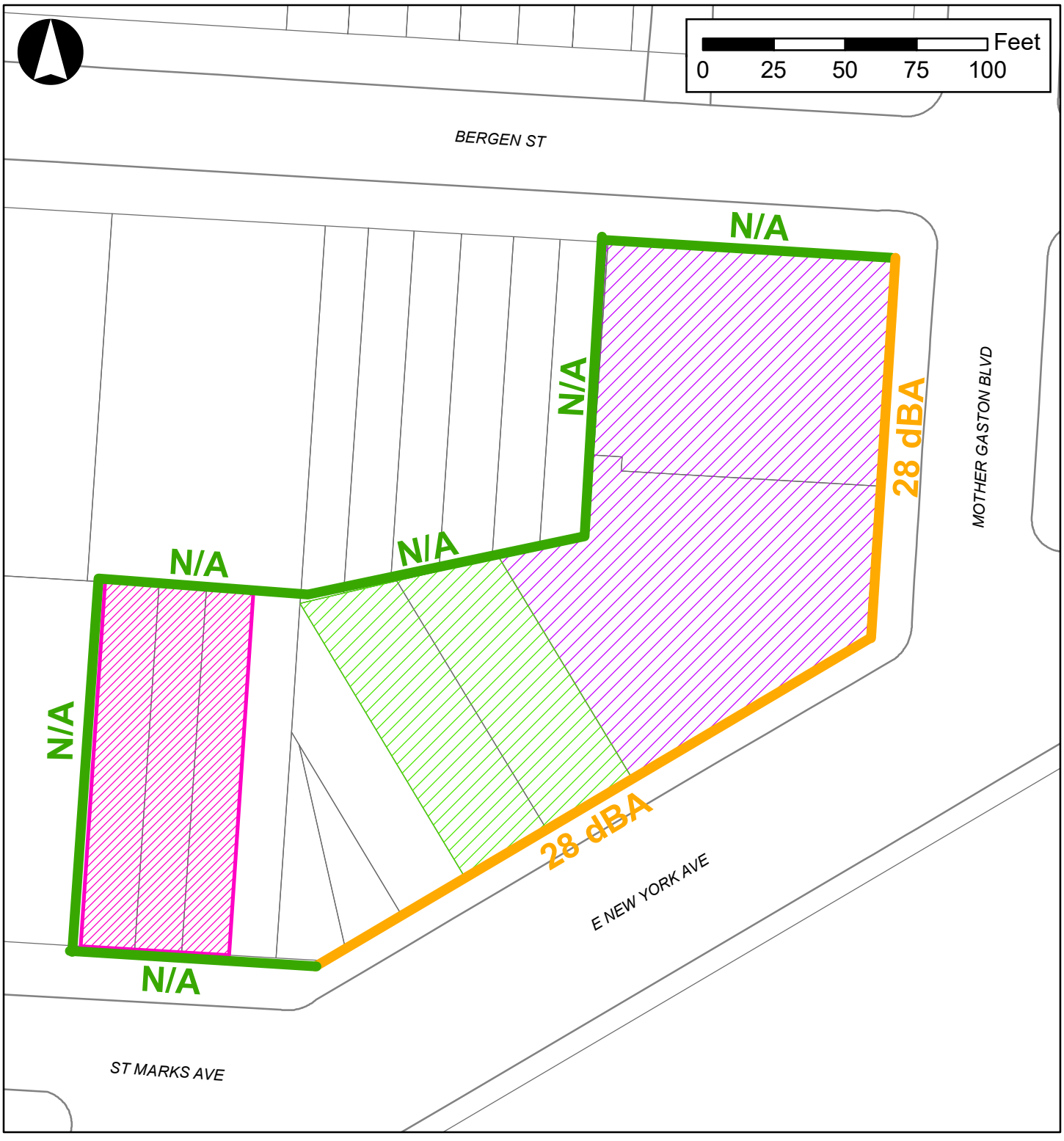
CEQR Window/Wall Attenuation Requirements
(Refer to Table H-9)

N/A

31 dBA

*Attenuation requirements for commercial uses would be 5 dBA less.

Noise Attenuation Requirements



Legend

- Development Site C
- Projected Development Site 1
- Potential Development Site 1

CEQR Window/Wall Attenuation Requirements
(Refer to Table H-9)

N/A 28 dBA

*Attenuation requirements for commercial uses would be 5 dBA less.

Regulatory Agreement (Site A)

The Regulatory Agreements would stipulate the following attenuation measures to ensure an acceptable interior noise environment for future residential uses on Site A (Block 3743, Lot 12; 425 Mother Gaston Boulevard). Site A must provide a closed window condition with a minimum of 31 dBA of attenuation on the site's western facade to maintain an interior noise level of 45 dBA or lower for residential uses. For all other facades at Site A, no additional noise attenuation measure above standard construction practices will be required to achieve interior noise levels of 45 dBA or lower for residential uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. The minimum required composite building facade attenuation for future commercial office uses would be 5 dBA lower than that of residential and community facility uses.

(E) Designation

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

The (E) designation will require that any future residential or community facility uses at Projected Development Site 1 must provide a closed window condition with a minimum of 28 dBA of attenuation on the site's northern (Bergen Street), eastern (Mother Gaston Boulevard), and southern (East New York Avenue) facades to maintain an interior noise level of 45 dBA or lower. For all other facades at Projected Development Site 1, no additional noise attenuation measure above standard construction practices will be required.

As such, the text of the (E) designation (E-736) for Projected Development Site 1 would be as follows:

> **Block 1455, Lots 46 and 50 (Projected Development Site 1): In order to ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the facades facing Bergen Street, Mother Gaston Boulevard, and East New York Avenue in order to ensure an interior noise level not greater than 45 dBA for residential and community facility uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation include but is not limited to central air conditioning.**

In addition, the (E) designation will require that any future residential or community facility uses at Potential Development Site 1 must provide a closed window condition with a minimum of 28 dBA of attenuation on the site's southern (East New York Avenue) facade to maintain an interior noise level of 45 dBA or lower. For all other facades at Potential Development Site 1, no additional noise attenuation measure above standard construction practices will be required.

As such, the text of the (E) designation (E-736) for Potential Development Site 1 would be as follows:

> **Block 1455, Lots 56 and 58 (Potential Development Site 1): In order to ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the facades facing East New York Avenue in order to ensure an interior noise level not greater than 45 dBA for residential and community facility uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation include but is not limited to central air conditioning.**

Per the Regulatory Agreement and (E) designation requirements, in order to receive a Certificate of Occupancy from the DOB, Site A, Projected Development Site 1, and Potential Development Site 1, respectively, must comply with the required composite window/wall attenuation values described above in order to maintain proper interior noise levels. With the implementation of the attenuation levels outlined above, the Proposed Actions would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation requirements.

HUD

As described above in the "HUD Development Guidelines" Section, the With-Action L_{dn} noise levels for the receptor locations 1, 2, 3, 4, 5, and 6 were estimated using the methodology described above to be 72.2 dBA, 64.2 dBA, 65.9 dBA, 69.6 dBA, 68.8 dBA, and 64.6 dBA, respectively. According to HUD criteria, the calculated With-Action L_{dn} noise levels at receptor locations 1, 3, 4, and 5 would fall in the "normally unacceptable" category, and receptor locations 2 and 6 would fall in the "acceptable" category. To satisfy HUD development guidelines, any future residential uses within Site A (Block 3743, Lot 12) would require a minimum of 30 dBA of building attenuation on any frontages facing Mother Gaston Boulevard to the east; any future residential uses within Projected Development Site 1 (Block 1455, Lots 46 and 50) would require a minimum of 25 dBA of building attenuation on any frontages facing Bergen Street to the north, Mother Gaston Boulevard to the east, and East New York Avenue to the south; and any future residential uses within Potential Development Site 1 (Block 1455, Lots 56 and 58) would require a minimum of 25 dBA of building attenuation on any frontages facing East New York Avenue to the south.[3] As L_{dn} noise levels at Development Sites B (Receptor Location 2) and C (Receptor Location 6) would fall in the "acceptable" category under HUD Development Guidelines, no additional noise attenuation measures above standard construction practices will be required to achieve interior noise levels of 45 L_{dn} or lower for residential uses.

For Site A , Projected Development Site 1 and Potential Development Site 1, the requirements for window-wall building attenuation, as well as the requirement for an alternate means of ventilation, will be satisfied by the CEQR requirements outlined in the Regulatory Agreement and (E) designation described above, as

[3] It should be noted that any noise attenuation requirements pursuant to HUD Development Guidelines at Projected Development Site 1 and Potential Development Site 1 would only be warranted for the project's residential uses in the event that Federal funding is utilized in connection with that development. Absent any Federal funding, Projected Development Site 1 and Potential Development Site 1 would be subject to the attenuation requirements outlined in the (E) Designation (E-736) only. However, as discussed above, any HUD requirements at Projected Development Site 1 and Potential Development Site 1 will be satisfied by the CEQR requirements memorialized through the (E) designation as the CEQR requirements are more conservative and would provide up to 3 dBA of additional building attenuation than required under HUD.

the CEQR requirements are more conservative and would provide a minimum of approximately 1-to-3 dBA of additional building attenuation than required under the HUD Development Guidelines. With the implementation of the attenuation levels outlined in the Regulatory Agreement and (E) designation described above, the Proposed Actions would provide sufficient attenuation to achieve the HUD interior noise level guidelines for residential uses. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation requirements for residential uses.

CONCLUSIONS

The five development sites (City-owned Sites A, B, and C, and privately-owned Projected Development Site 1 and Potential Development Site 1) do not include any institutional controls (e.g., (E) designation or Restrictive Declaration) related to noise, and therefore, have been evaluated to determine the level of building attenuation necessary to ensure that the With-Action developments' interior noise levels satisfy applicable interior noise criteria.

In the future with the Proposed Actions, the predicted peak period L_{10} values at the six receptor locations would range from a minimum of 63.1 dBA to a maximum of 75.2 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 all analyzed receptor locations. Therefore, no significant adverse mobile source noise impacts due to action-generated vehicular traffic would occur.

To ensure acceptable interior noise levels for any future development at Site A, the noise attenuation specifications would be required through Regulatory Agreements between the New York City Department of Housing Preservation and Development (HPD) and the Project Sponsor. The Regulatory Agreements would stipulate that the required noise attenuation ratings would be 31 dBA for the western facade on Site A (Block 3743, Lot 12; Mother Gaston Boulevard frontage) to achieve interior noise levels of 45 dBA or lower for the proposed residential uses. For all other facades, no additional noise attenuation above standard construction practices would be required to achieve interior noise levels of 45 dBA at Site A. The minimum required composite window/wall attenuation for future commercial office uses on any of the development sites would be 5 dBA lower than that of residential uses. In addition, in order to maintain a closed-window condition, an alternate means of ventilation must also be provided for each of the development sites. A signed and stamped letter from the project architect dated July 2023 (**Appendix III**) was submitted to HPD ensuring proper noise attenuation as ascribed above. The design for Site A will provide a closed window condition with a minimum of 31 dBA or lower for all residential windows at the building's western (Mother Gaston Boulevard) façade.

To ensure acceptable interior noise levels for any future development at Projected Development Site 1 and Potential Development Site 1, the noise attenuation specifications would be required through (e) designation. The (e) designation will require that any future residential or community facility uses at Projected Development Site 1 (Block 1455, Lots 46 and 50; Mother Gaston Boulevard and East New York frontages) provide a minimum of 28 dBA of attenuation on the site's northern (Bergen Street), eastern (Mother Gaston Boulevard), and southern (East New York Avenue) facades to maintain an interior noise level of 45 dBA or lower. For all other facades, no additional noise attenuation above standard construction practices would be required to achieve interior noise levels of 45 dBA. The (e) designation will require that any future residential or community facility uses at Potential Development Site 1 (Block 1455, Lots 56 and 58; East New York frontages) provide a minimum of 28 dBA of attenuation on the site's southern (East New York Avenue) facades to maintain an interior noise level of 45 dBA or lower. The minimum required composite window/wall attenuation for future commercial office uses on any of the

development sites would be 5 dBA lower than that of residential uses. In addition, in order to maintain a closed-window condition, an alternate means of ventilation must also be provided for each of the development sites.

With the implementation of the attenuation requirements at Site A, Projected Development Site 1, and Potential Development Site 1 pursuant to the Regulatory Agreements between HPD and the Project Sponsor and (e) designations, the Proposed Actions would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation requirements.

APPENDIX I

CITY AGENCY CORRESPONDENCE

Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: FAC BROWNSVILLE
Date Received: 1/14/2022

Properties with no Architectural or Archaeological significance:

1) 226 MOTHER GASTON BLVD, BBL: 3014550046
2) 1611 EAST NEW YORK AVENUE, BBL: 3014550050
3) EAST NEW YORK AVENUE, BBL: 3014550056
4) EAST NEW YORK AVENUE, BBL: 3014550058
5) 1733 ST MARKS AVENUE, BBL: 3014550065
6) ST MARKS AVENUE, BBL: 3014550066
7) 1735 ST MARKS AVENUE, BBL: 3014550079
8) 546 THOMAS S BOYLAND ST, BBL: 3035180063
9) 425 MOTHER GASTON BLVD, BBL: 3037430012

Comments:

S/NR ELIGIBLE P.S. CHRISTOPHER SCHOOL, 364 SACKMAN STREET WITHIN RADIUS OF 425 MOTHER GASTON BOULEVARD;

S/NR LISTED ST. TIMOTHY HOLY CHURCH (FORMER CHEVRA TORAH ANSHEI RADISHKOWITZ, 139 AMBOY STREET WITHIN RADIUS OF 546 THOMAS S. BOYLAND STREET

NO INTEREST WITHIN RADIUS OF 1733 ST MARKS AVENUE.

Gina Santucci 1/24/2022

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 36078_FSO_DNP_01242022.docx

Environmental Protection

Rohit T. Aggarwala, Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Boulevard
Flushing, NY 11373
T: (718) 595-4398
alicata@dep.nyc.gov

October 16, 2023

Alexander Schaefer
NYC Department of Housing Preservation and Development
100 Gold Street
New York, NY 10038

Re: Brownsville FAC
Blocks 3742, 3518, and 1455, Brooklyn, NY
CEQR #22HPD065K

Dear Alexander:

The New York City Department of Environmental Protection, Bureau of Environmental Planning and Analysis (DEP) has reviewed the Air Quality section of the Environmental Assessment Statement (EAS) dated 2022 for this project. The New York Deparatment of Housing Preservation and Development (HPD) seeks approval for discretionary actions to facilitate development of new affordable housing ('Proposed Project') on sites at 425 Mother Gaston Boulevard ('Development Site A'), 546 Thomas S. Boyland Street ('Development Site B'), and 1733 Saint Marks Ave ('Development Site C'). Construction of the Proposed Project is anticipated to last 18 months and the project analysis year is 2026. Per HPD request, we have reviewed the above-mentioned materials. Below please find our signoff and two minor comments:

Air Quality:

Based on the air quality analysis performed, for the proposed project, DEP has concluded that there is no potential for significant adverse impacts from air quality.

The project would not generate traffic exceeding the mobile source screening thresholds for carbon monoxide (CO) or particulate matter (PM). Therefore, the project would not result in significant impacts from mobile sources.

As it pertains to stationary sources, based on the modeling analysis performed, the proposed project would not result in any adverse air quality impacts from industrial sources on sensitive receptors. To ensure that the proposed HVAC system at Development Site C would not cause any significant adverse impacts, the Applicant has proposed the following legally binding regulatory agreement between the Applicant and HPD at Development Site C:

1. To ensure that the City-owned Development Site C (1733 Saint Marks Avenue) would be in full compliance with CEQR significant impact criteria and respective NAAQS for both PM2.5 and NO2 NAAQS, a Regulatory Agreement or other legally binding agreement between the Applicant and HPD would stipulate the necessary heating, ventilating, and air conditioning (HVAC) system requirements for the site. The Regulatory Agreement or other legally binding agreement would require that any future residential development on Development Site C (Block 1455, Lots 65, 66, and 79) would either use natural gas as the type of fuel and ensure that the HVAC stack(s) would be located at a height of at least 94 feet above grade; or use electric power for the HVAC system(s) to avoid any potential significant adverse stationary source air quality impacts. If the application for the approval of construction documents for these lots are past the applicable date noted under Article 506 of Local Law 154, the building(s) must abide by the restrictions of Local Law 154 and would use electric power for the HVAC system(s).

To ensure that there would be no significant adverse air quality impacts from the propose actions, the Applicant has proposed the following E-designations to be memorialized and enforced by the NYC Department of Buildings at the following buildings on Block 1455:

2. Potential Development Site 1 (Block 1455, Lots 56, 58):
   Any new commercial or residential development on Block 1455, Lots 56 and 58 would either use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and ensure that the HVAC stack(s) would be located at a height of at least 98 feet above grade; or use electric power for the HVAC system(s) to avoid any potential significant adverse air quality impacts. If the application for the approval of construction documents for these lots are past the applicable date noted under Article 506 of Local Law 154, the buildings(s) must abide by the restrictions of Local Law 154 and would use electric power for the HVAC system(s).

3. Projected Development Site 1 (Block 1455, Lots 46 and 50):
   Any new commercial or residential development on Block 1455, Lots 46 and 50 would either use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and ensure that the HVAC stack(s) would be located at a height of at least 98 feet above grade; or use electric power for the HVAC system(s) to avoid any potential significant adverse air quality impacts. If the application for the approval of construction documents for these lots are past the applicable date noted under Article 506 of Local Law 154, the buildings(s) must abide by the restrictions of Local Law 154 and would use electric power for the HVAC system(s).

As it pertains to industrial sources, the proposed project would not result in any adverse air quality impacts from industrial sources on sensitive receptors. Based on the modeling analysis performed for Don's Collision Autobody and the dispersion analysis performed for Don's Collision Autobody and Jack and Wolf Co., the non-criteria pollutant emissions from these emissions sources do not exceed the SGC/AGC values and the cumulative $PM_{2.5}$ concentrations would not exceed the de minimis criteria or NAAQS. Therefore, there is no potential for significant adverse air quality impacts on the proposed project from existing manufacturing and industrial sources within 400 feet of the project site.

Lastly, as it pertains to large or major sources, there are no existing sources of emissions within 1,000 feet of the proposed project. Therefore, there is no potential for significant adverse air quality impacts from large or major sources from the surrounding area on the proposed project.

Comments:

1. We note that including Jack and Wolf Co. is conservative given that the field survey found them to no longer occupy the site.

2. Under Industrial Source Analysis, please add : “and a field survey was conducted” to “land use maps were reviewed”.

If you have any questions, please feel free to forward them to wswanson@dep.nyc.gov.

Sincerely,



Chung Chan
Director
Air Quality and Noise Review and Planning

Environmental Protection

Rohit T. Aggarwala
Commissioner

Angela Licata
Deputy Commissioner
Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

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

March 4, 2024

Anthony Howard
Director, Environmental Planning
New York City Department of Housing Preservation and Development
100 Gold Street
New York, NY 10038

Re: Brownsville NCP
1733 and 1735 Saint Marks Avenue (Development Site C)
Block 1455, Lots 65, 66, and 79
CEQR # 22HPD065K

Dear Mr. Howard:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the revised November 2023 Remedial Action Plan (RAP) prepared by Tyll Engineering and Consulting PC and the revised January 2024 Construction Health and Safety Plan (CHASP) prepared by CA RICH Consultants on behalf of Fifth Avenue Committee, Inc. (applicant) for the above referenced project. It is our understanding that the applicant is requesting approval of several discretionary actions from the New York City Department of Housing Preservation and Development (HPD) to facilitate development of new affordable housing (Proposed Project) on three sites (Development Sites A, B, and C) in the Brownsville neighborhood of Brooklyn Community District 16. Development Site A (Block 3743, Lot 12) is a 2,500 square feet (sf) vacant city-owned lot located at 425 Mother Gaston Boulevard; it would be redeveloped with a four-story, 9,650 gross square feet (gsf) mixed residential/commercial building containing six affordable dwelling units (DUs) and 2,500 sf of ground-floor restaurant space. Development Site B (Block 3518, Lot 63) is a 6,000-sf vacant city-owned lot located at 546 Thomas S. Boyland Street; it would be redeveloped with a six-story, 23,661-gsf residential building containing 21 affordable DUs. Development Site C (Block 1455, Lots 65, 66, and 79) is a 6,558-sf vacant city-owned property located at 1733 Saint Marks Avenue; it would be redeveloped with a nine-story, 32,285-gsf residential building containing 34 affordable DUs. The five tax lots are owned by HPD and are located within a 0.07-square mile area. To facilitate the Proposed Project, the applicant is seeking: (i) a zoning map amendment to rezone a portion of Block 1455 comprising the entirety or portions of 17 lots (Lots 46, 50, 56, 60, 61, 62, 64, 65, 66, 79 and portions of Lots 39, 41-44, 58, and 67 (Proposed Rezoning Area) from M1-1 to R7A; (ii) a zoning text amendment to map a Mandatory Inclusionary Housing area encompassing the Proposed Rezoning Area; (iii) disposition of City-owned property and Urban Development Action Area Project designation and approval, including Lot 12 on Block 3743; Lot 63 on Block 3518; and Lots 65, 66, and 79 on Block 1455; and (iv) public financing via HPD, and other sources (Proposed Actions). In the future with the Proposed

Actions, the proposed zoning map amendment, disposition of City-owned property, and provision of public financing would be approved, allowing the applicant to construct the Proposed Project at Development Sites A, B, and C. In addition, the proposed zoning changes are expected to facilitate the redevelopment of another projected development site (Projected Development Site 1; Block 1455, Lots 46 and 50). In total, the Proposed Actions would facilitate the development of up to approximately 146 DUs, including 83 affordable DUs, and 11,270 gsf of commercial space at Development Sites A, B, and C, and Projected Development Site 1. A single potential development site (Potential Development Site 1; Block 1455, Lots 56 and 58) has also been identified. It should be noted that this review is for Development Site C.

Development Site C: Block 1455, Lots 65, 66, and 79

The revised November 2023 RAP proposes the transportation and off-site disposal of soil in accordance with local, State and Federal regulations; excavation and removal of any underground storage tanks according to applicable regulations; stockpiles will be kept covered at all times with appropriately anchored tarps; dust control; air monitoring; liquids discharged into the New York City sewer system will be addressed through approval by the New York City Department of Environmental Protection; installation of a vapor barrier consisting of 46-mil GCP Applied Technologies PREPRUFE 300R Plus and 32-mil GCP Applied Technologies PREPRUFE 160R Plus beneath the building slab and along subgrade foundation; and the garden and landscaped areas will consist of a 2-feet clean fill/soil at the surface that will need to be approved by DEP prior to importation. The January 2024 CHASP addresses worker and community health and safety during redevelopment.

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

RAP

- HPD should instruct the applicant that the proposed vapor barrier system should be used unless an amendment is approved by DEP.

DEP finds the revised November 2023 RAP and January 2024 CHASP for the proposed project acceptable, as long as the aforementioned information is incorporated into the RAP. HPD should instruct the applicant that at the completion of the project, a Professional Engineer (P.E.) certified Remedial Closure Report should be submitted for DEP review and approval for the proposed project. The P.E. certified Remedial Closure Report should indicate that all remedial requirements have been properly implemented (i.e., transportation/disposal manifests for removal and disposal of soil in accordance with applicable local, state, and federal laws and regulations; installation of vapor barrier system; two feet of DEP approved certified clean fill/topsoil capping requirement in any landscaped/grass covered areas not capped with concrete/asphalt, etc.).

Future correspondence and submittals related to this project should include the following CEQR # **22HPD065K**. 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
M. Wimbish
M. Noralez-Brown – HPD
A. Schaefer – HPD

APPENDIX II

JAMAICA BAY WATERSHED FORM

Print Form

Jamaica Bay Watershed Protection Plan
Project Tracking Form

The Jamaica Bay Watershed Protection Plan, developed pursuant to Local Law 71 of 2005, mandates that the New York City Department of Environmental Protection (DEP) work with the Mayor's Office of Environmental Coordination (MOEC) to review and track proposed development projects in the Jamaica Bay Watershed (http://www.nyc.gov/html/oec/downloads/pdf/ceqr/Jamaica_Bay_Watershed_Map.jpg) that are subject to CEQR in order to monitor growth and trends. If a project is located in the Jamaica Bay Watershed, (the applicant should complete this form and submit it to DEP and MOEC. This form must be updated with any project modifications and resubmitted to DEP and MOEC.

The information below will be used for tracking purposes only. It is not intended to indicate whether further CEQR analysis is needed to substitute for the guidance offered in the relevant chapters of the CEQR Technical Manual.

A. GENERAL PROJECT INFORMATION

1. CEQR Number: 22HPD065K 1a. Modification ☐
2. Project Name: Brownsville FAC EAS
3. Project Description:

The Project Sponsor is seeking a zoning map amendment, zoning text amendment, and disposition of City property through UDAAP designation and project approval to develop three new buildings on five tax lots in the Brownsville neighborhood of Brooklyn Community District (CD) 16.

4. Project Sponsor: FAC Brownsville Apartments LP
5. Required approvals: zoning map amendment; zoning text amendment; UDAAP; public financing
6. Project schedule (build year and construction schedule): 18 months construction; 2026 build year

B. PROJECT LOCATION:

1. Street address: 425 Mother Gaston Blvd, 546 Thomas S. Boyland St, 1733 St Marks Ave
2. Tax block(s): Blocks 3743, 3518, and 1455 Tax Lot(s): Lots 12 (3743), 63 (3518), 65, 66, 79 (1455)
3. Identify existing land use and zoning on the project site: R6/C1-3, R6, M1-1; vacant land
4. Identify proposed land use and zoning on the project site: R6/C1-3, R6; residential and commercial
5. Identify land use of adjacent sites (include any open space): Residential, commercial, industrial
6. Describe existing density on the project site and the proposed density:

Existing Condition	Proposed Condition
0.0 FAR; vacant lots	Btwn 2.94 and 4.19 FAR; residential and mixed residential/commercial

7. Is project within 100 or 500 year floodplain (specify)? ☐ **100 Year** ☐ **500 Year** ☒ **No**

C. GROUND AND GROUNDWATER

1. Total area of in-ground disturbance, if any (in square feet): Approx. 31,762 sf (three sites)
2. Will soil be removed (if so, what is the volume in cubic yards)? Yes - TBD
3. Subsurface soil classification:
   (per the New York City Soil and Water Conservation Board): Urban Land
4. If project would change site grade, provide land contours (**attach** map showing existing in 1' contours and proposed in 1' contours).
5. Will groundwater be used (list volumes/rates)? ☐ **Yes** ☒ **No**

   Volumes: Rates:
6. Will project involve dewatering (list volumes/rates)? ☐ **Yes** ☒ **No**

   Volumes: Rates:
7. Describe site elevation above seasonal high groundwater:

   N/A

D. HABITAT

1. Will vegetation be removed, particularly native vegetation? ☐ **Yes** ☒ **No**

   If YES,
   - **Attach** a detailed list (species, size and location on site) of vegetation to be removed (including trees >2" caliper, shrubs, understory planting and groundcover).
   - **List** species to remain on site.
   - **Provide** a detailed list (species and sizes) of proposed landscape restoration plan (including any wetland restoration plans).
2. Is the site used or inhabited by any rare, threatened or endangered species? ☐ **Yes** ☒ **No**
3. Will the project affect habitat characteristics? ☐ **Yes** ☒ **No**

   If YES, describe existing wildlife use and habitat classification using "Ecological Communities of New York State." at http://www.dec.ny.gov/animals/29392.html.
4. Will pesticides, rodenticides or herbicides be used during construction? ☐ **Yes** ☒ **No**

   If YES, estimate quantity, area and duration of application.
5. Will additional lighting be installed? ☒ **Yes** ☐ **No**

   If YES and near existing open space or natural areas, what measures would be taken to reduce light penetration into these areas?

   The site is not located near any natural areas or open space

E. SURFACE COVERAGE AND CHARACTERISTICS

(describe the following for both the existing and proposed condition):

	Existing Condition	Proposed Condition
1. ***Surface area:***		
Roof:	0 sf (vacant)	Approx. 15,058 sf
Pavement/walkway:	N/A	0 sf (vacant lots to be built in their entirety)
Grass/softscape:	Approx. 15,058 sf (vacant lots)	0 sf (vacant sites to be developed)
Other (describe):	N/A	N/A
2. ***Wetland*** (regulated or non-regulated) area and classification:	N/A (no wetlands)	N/A (no wetlands)
3. ***Water surface area:***	N/A (no water surface area)	N/A (no water surface area)

4. ***Stormwater management*** (describe):

Existing – how is the site drained?

Stormwater drains overland and into sewers in adjacent streets

Proposed – describe, including any infrastructure improvements necessary off-site:

Stormwater BMP would be required as part of the DEP site connection approval process in order to comply with the NYCDEP required stormwater release rate in effect at the time of project construction. No off-site infrastructure improvements are needed

APPENDIX III

ARCHITECT'S NOISE ATTENUATION LETTER

Think! Architecture + Design

1 MetroTech Center North
6th Floor
Brooklyn, NY 11201

646.688.5898
info@think-arc.com

THINK

July 20, 2023

Amhara Hernandez, Borough Planner, Brooklyn Planning
NEW YORK CITY DEPARTMENT OF HOUSING PRESERVATION AND DEVELOPMENT
100 Gold Street, Room 9X
New York, NY 10038

Re: 425 Mother Gaston Boulevard, Brooklyn
Site A, Block 3743, Lot 12
Window Specification, Sound Attenuation Measures

Dear Ms. Hernandez:
The design for the above referenced project will provide a closed window condition with a minimum of 31 dBA or lower at all residential windows at the building's western façade. As such, an alternate means of ventilation will be provided through the use of trickle vents or other acceptable means meeting code requirements.

Yours truly,
Think! Architecture and Design PLLC



Martin Kapell AIA
Principal