Brownsville Arts Center and Apartments

ENVIRONMENTAL ASSESSMENT STATEMENT

CEQR #20HPD019K

Prepared for:
The New York City Department of Housing
Preservation and Development (HPD)

Prepared by:
Philip Habib & Associates &
Environmental Studies Corp.

REVISED
August 18, 2023

Brownsville Arts Center and Apartments

Environmental Assessment Statement

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NEW YORK CITY ENVIRONMENTAL QUALITY REVIEW (CEQR) ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FORM

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* **Brownsville Arts Center and Apartments**

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) **20HPD019K**	BSA REFERENCE NUMBER (if applicable)
ULURP REFERENCE NUMBER (if applicable) **Pending**	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY **NYC Department of Housing Preservation and Development (HPD)**			NAME OF APPLICANT **NYC Department of Housing Preservation and Development (HPD), on behalf of Brownsville Arts Developer LLC**		
NAME OF LEAD AGENCY CONTACT PERSON **Anthony Howard, Director, Environmental Planning**			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON **Aleena Farishta**		
ADDRESS **100 Gold Street**			ADDRESS **100 Gold Street**		
CITY **New York**	STATE **NY**	ZIP **10038**	CITY **New York**	STATE **NY**	ZIP **10038**
TELEPHONE **212-863-7248**	EMAIL **howarda@hpd.nyc.gov**		TELEPHONE **212-863-5327**	EMAIL **farishta@hpd.nyc.gov**	

5. *Project Description*

The Proposed Actions consist of several discretionary approvals, including: (1) a zoning map amendment to rezone an approximately 69,064-square foot (sf) midblock portion of Brooklyn Block 3499 ("Project Area") from R6/C2-3 and C4-3 to R7A with a C2-4 commercial overlay mapped along Rockaway Avenue; (2) a zoning text amendment to map a Mandatory Inclusionary Housing (MIH) Area over the proposed rezoning area; (3) Urban Development Action Area (UDAA) designation, Urban Development Action Area Project (UDAAP) approval and disposition of City-owned Lot 15 on Block 3499; and (4) Mayoral override approval to modify rear yard requirements and setback requirements along a narrow street for the proposed mixed-use development. In addition, the Project Sponsor is seeking city financing from NYC Department of Housing Preservation and Development (HPD), New York City Housing Development Corporation (HDC) and New York City Department of Cultural Affairs (DCLA). The Project Sponsor might also potentially seek additional Reso A funds in the future to facilitate the proposed affordable housing and community arts-related space.

The approximately 69,064-sf Project Area comprises all or portions of seven contiguous interior tax lots on Brooklyn Block 3499. It is located in the Brownsville neighborhood of Brooklyn Community District (CD) 16 with street frontage along the west side of Rockaway Avenue and the east side of Chester Street between East New York and Pitkin Avenues. Land use in the Project Area is predominantly vacant. There are five lots that contain multi-family walkup residential apartment buildings, and one lot that formerly contained warehouse/light industrial uses. The primary study area includes approximately 57,013 sf of vacant land, 2,500 sf of open storage space, and 9,538 sf of residential land use comprised of 15 DUs.

The Proposed Actions would facilitate the construction of a nine-story, mixed-use affordable housing and community facility development, as well as private and publicly accessible open space uses that would replace vacant and underutilized City-owned land on Lot 15 on Block 3499 (the "Proposed Project," see Figure 1). No changes are expected to occur to the remaining lots (Lots 16, p/o 25, p/o 113, and 114-116 on Block 3499) that would also be rezoned because of the Proposed Actions. The proposed mixed-use development would include 290 affordable dwelling units (DUs) and one superintendent's unit (total of 291 DUs), and approximately 25,507 gsf of community facility space. The community facility space is envisioned to be an art and media center, a performance arts school, a music school, a multipurpose theater/rehearsal/teaching space, and an administrative office for non-profit organizations at the site. The Proposed Project would also introduce a total of approximately 14,575 sf of passive open space, including two small private accessory plazas (9,393 sf) for the proposed building residents and/or tenants and one publicly accessible plaza (5,182 sf). The public plaza would be accessed from Rockaway Avenue, and the building's entrances to the residential and community facility spaces would be located on both Rockaway Avenue and Chester Street.

Project Location

BOROUGH **Brooklyn**	COMMUNITY DISTRICT(S) **16**	STREET ADDRESS **13-55 Chester St., 348-392 Rockaway Ave.**
TAX BLOCK(S) AND LOT(S) **Block 3499, Lots 15, 16, 25 (p/o), 113 (p/o), 114 -116**		ZIP CODE **11212**
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS **Located on the midblock and bounded by East New York Avenue to the north, Rockaway Avenue to the east, Pitkin Avenue to the south, and Chester Street to the west.**		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY **C4-3, R6/C2-3**		ZONING SECTIONAL MAP NUMBER **17d**

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 **ZR Section 23-90 (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: **City financing from HPD (ELLA Program), HDC, and DCLA; potential Reso A funds in the future**
☐ 384(b)(4) APPROVAL	☐ PERMITS, specify:
☒ OTHER, explain: **Mayoral zoning override of ZR Sections 23-533, 23-44(b) & 23-662(c), which correspond to rear yard and setback requirements**	

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: **Federal Low Income Housing Tax Credits**

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)	

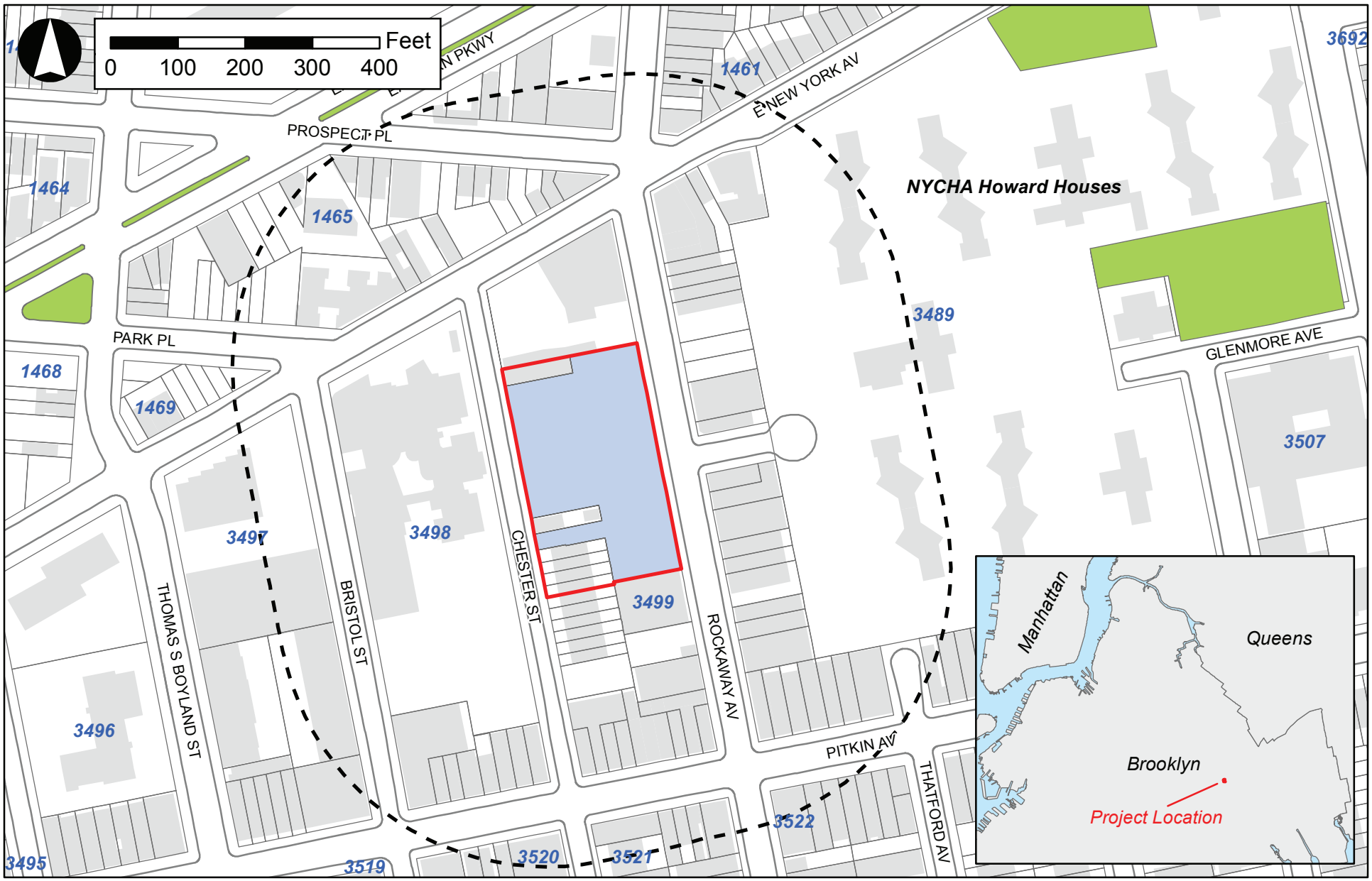
☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): **69,064 sf**	Waterbody area (sq. ft.) and type: **0 sf**
Roads, buildings, and other paved surfaces (sq. ft.): **14,551 sf**	Other, describe (sq. ft.): **54,513 sf (vacant land)**

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): **291,027 gsf**



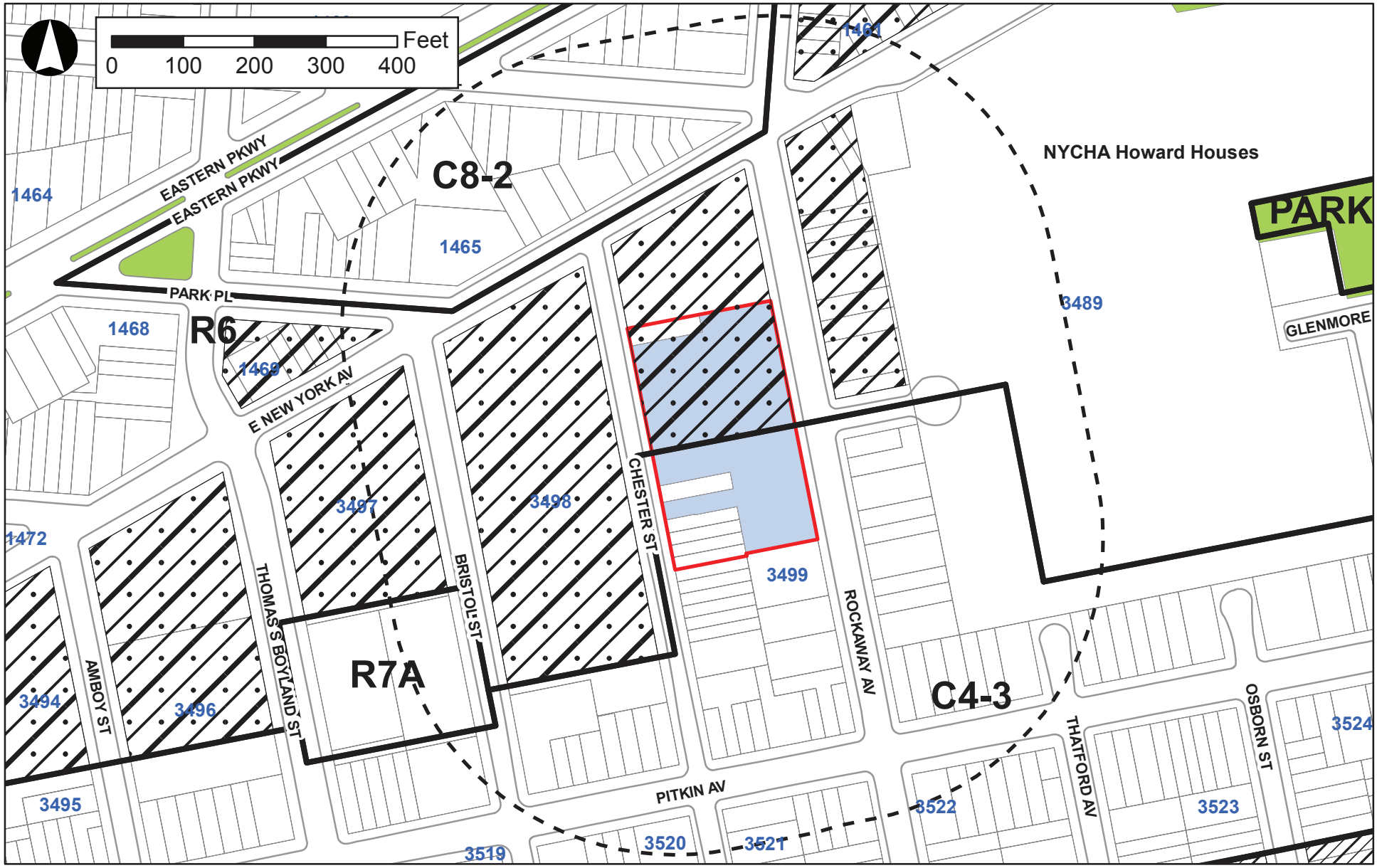
Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

Legend

Proposed Development Site | Proposed Rezoning Area | 400-Foot Radius | Open Space | 3499 Blocks | Existing Buildings

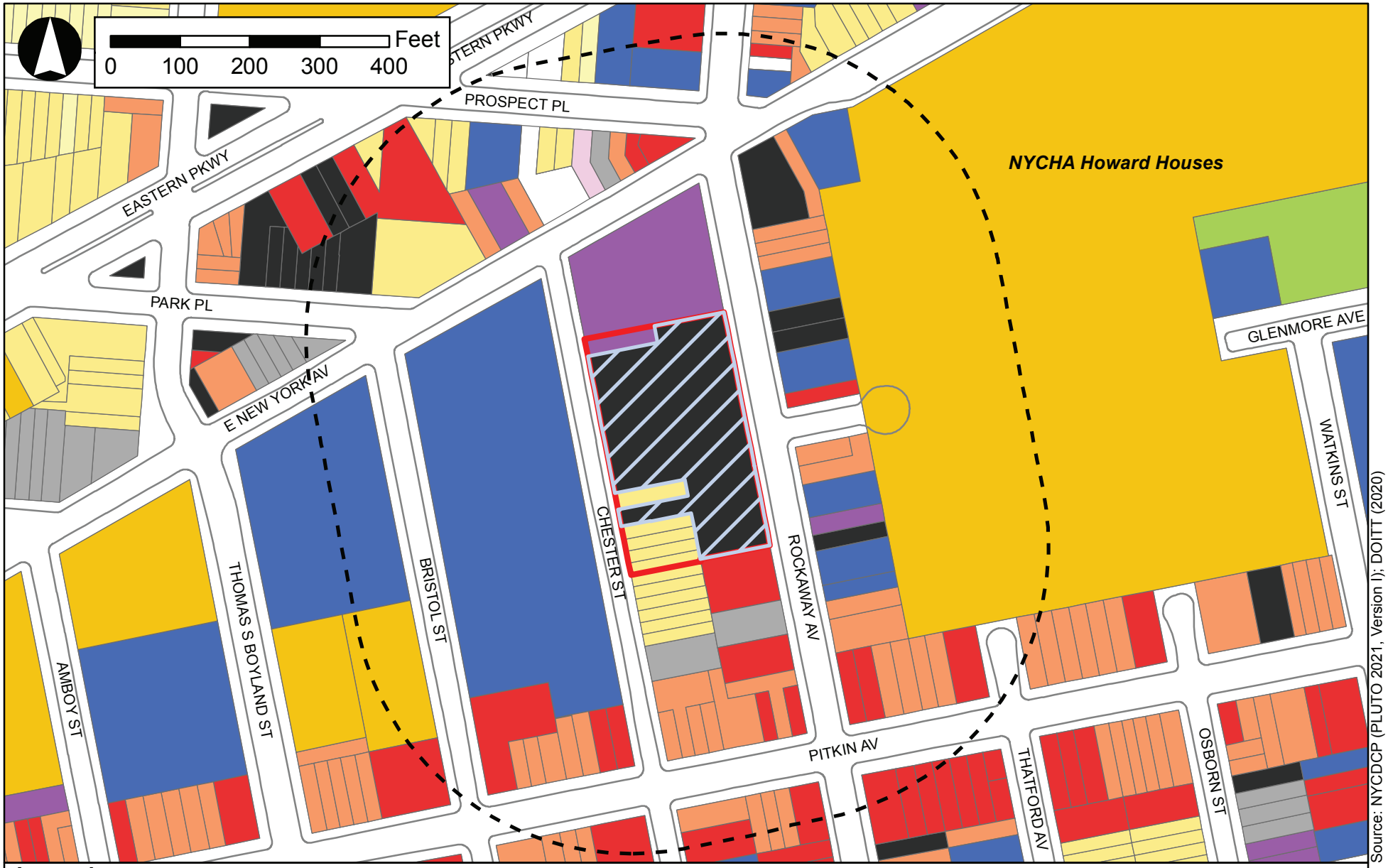
Brownsville Site A - Rockaway-Chester

Figure 1
Project Location



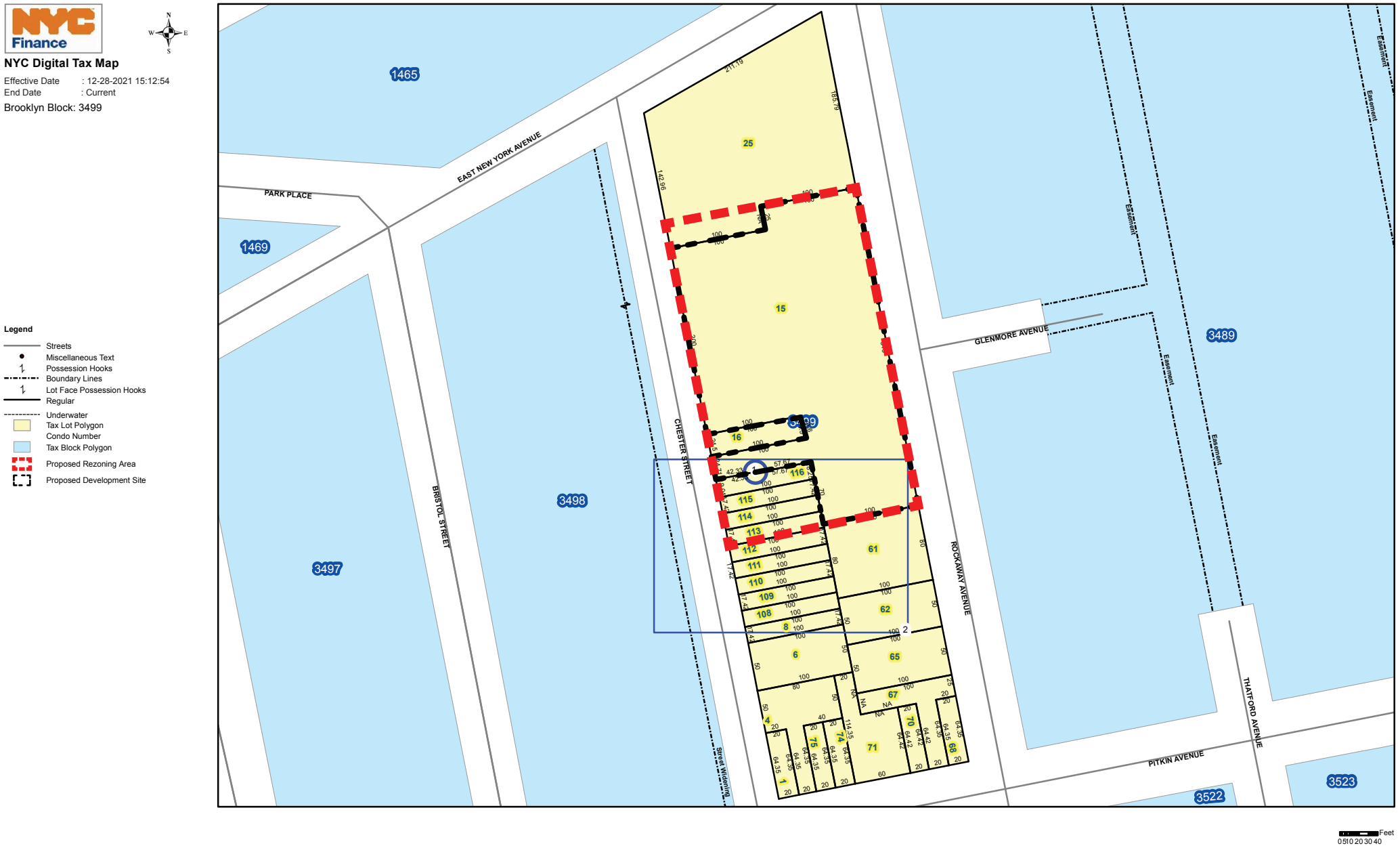
Brownsville Site A - Rockaway-Chester

Figure 2
Existing Zoning



Brownsville Site A - Rockaway-Chester

Figure 3
Land Use



Brownsville Site A - Rockaway-Chester

Figure 4
Tax Map



1. View looking north along Chester Street to proposed development site.



2. View looking northwest on Chester Street to existing building on Lot 16, which is bounded by the proposed development site to the north, west, and south.



3. View looking west from Chester Street through the proposed development site.



4. View looking south along Chester Street to the proposed development site.

Site photos taken in Spring 2021 and June 2022.

Brownsville Site A - Rockaway-Chester

Figure 5

Site Photos of the Proposed Development Site/Adjacent Sites



5. View looking east from Chester Street to Lot 25.



6. View looking northwest on Chester Street to existing 3-story multifamily residential buildings on Lots 8, 108-116.



7. View looking south on Rockaway Avenue to the proposed development site.

Site photos taken in Spring 2021 and June 2022.

Brownsville Site A - Rockaway-Chester

Figure 5
Site Photos of the Proposed Development Site/Adjacent Sites

NUMBER OF BUILDINGS: **1**
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): **291,027 gsf**
HEIGHT OF EACH BUILDING (ft.): **95'**
NUMBER OF STORIES OF EACH BUILDING: **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: **57,013 sf (City-owned Lot 15)**
The total square feet not owned or controlled by the applicant: **12,051 sf (remainder of the proposed rezoning area)**

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: sq. ft. (width x length)
VOLUME OF DISTURBANCE: **approx. 239,340** cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: **57,013** 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.)	**265,520 sf**	**0 sf**	**25,507 sf**	**0 sf**
Type (*e.g.,* retail, office, school)	**291 units**	**0 sf**	**Arts and media center, performance arts school, music school, multipurpose theater/rehearsal/teaching space**	**0 sf**

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: **800** NUMBER OF ADDITIONAL WORKERS: **89**
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 Census). The number of workers is based on standard CEQR employment ratios 1 worker per 333 SF of community facility 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: **approximately 5,182** sq. ft. **(Public plaza on Rockaway Avenue) (in addition two private spaces in an approximately 4,016 sf plaza at the northern end of the site and an approximately 5,377 sf space on the south side of the site)**

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): **2025**
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: **Up to 23 months**
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY? **N/A**
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: **Single phase**

10. *Predominant Land Use in the Vicinity of the Project* (check all that apply)
☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: **Public facilities/institutional use**

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. **See Attachment C**		
(e) Is the project a large, publicly sponsored project?	☒	☐
○ If "yes," complete a PlaNYC assessment and attach. **See Attachment C**		
(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? **See Attachment B**	☒	☐
○ 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) **See Attachment D**	☒	☐
○ **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) **See Attachment D**	☒	☐
○ **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		
(a) Would the project change or eliminate existing open space? **See Attachment E**	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees? **See Attachment E**	☒	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more? **See Attachment B**	☒	☐
(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		

	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. **Refer to Attachment B**		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning? **See Attachment F**	☒	☐
(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: **Refer to 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?	☒	☐
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒

	YES	NO
(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): **12,668**		
○ 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): **40,035,989 MBtu**		
(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		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) **See Attachments B and I**	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☒
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 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. **See Attachment B, "Supplemental Screening."**		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. **See Attachment B, "Supplemental Screening."**		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.		

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
Lisa Jourdy, Philip Habib & Associates, AICP	08/18/2023

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	August 18, 2023

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 Preservation and Development 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 that finds the proposed project:
20HD019K- Brownsville Art Center and Apartments - would not result in any significant adverse impacts.

Please refer to the negative delcaration dated August 18, 2023

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	August 18, 2023

SIGNATURE

Anthony Howard

ATTACHMENT A
PROJECT DESCRIPTION

I. INTRODUCTION

The applicant, NYC Department of Housing Preservation and Development (HPD), on behalf of Brownsville Arts Developer, LLC ("Project Sponsor"), is seeking a series of discretionary approvals (the "Proposed Actions") to facilitate the construction of a mixed-use development consisting of new affordable housing, community facility space, and open space uses (the "Proposed Project") in Brooklyn Community District (CD) 16. These discretionary approvals include:

1. A zoning map amendment to rezone an approximately 69,064-square foot (sf) midblock portion of Brooklyn Block 3499 ("Project Area") from R6/C2-3 and C4-3 to R7A with a C2-4 commercial overlay mapped along the west side of Rockway Avenue;
2. A zoning text amendment to map a Mandatory Inclusionary Housing (MIH) Area over the proposed rezoning area;
3. Urban Development Action Area (UDAA) designation, Urban Development Action Area Project (UDAAP) approval and disposition of City-owned Lot 15 on Block 3499; and
4. Mayoral zoning override approval to modify (1) required rear yard equivalents for Quality Houisng buildings as per Zoning Resolution (ZR) Section 23-533, (2) permitted obstruction in required yards or rear yard equivalents as per ZR Section 23-44(b) and (3) maximum height of buildings and setback regulations as per ZR Section 23-662(c).
5. In addition, the Project Sponsor is seeking city financing from HPD, New York City Housing Development Corporation (HDC) and New York City Department of Cultural Affairs (DCLA). The Project Sponsor might also potentially seek additional Reso A funds in the future to facilitate the Proposed Project.

The directly affected area ("Project Area") consists of all or portions of seven contigious interior tax lots (including Block 3499, Lots 15, 16, 25 (p/o), 113 (p/o), and 114-116) that occupy the midblock of Brooklyn Block 3499, which is bounded by East New York Avenue to the north, Rockaway Avenue to the east, Pitkin Avenue to the south, and Chester Street to the west (refer to **Figure 4 in the EAS Form**). The Project Area comprises approximately 69,064 sf and is zoned R6/C2-3 and C4-3. It largely consists of vacant and underutilized City-owned land, as well as five low-rise multi-family walk-up buildings and a single-story, vacant warehouse.

The Proposed Actions would facilitate the development of the Proposed Project on Lot 15 (the "Proposed Development Site"), which is the vacant and underutilized City-owned property within the Project Area. The proposed mixed-use development would include approximately 290 affordable dwelling units (DUs) and one superintendent's unit (for a net increase of 291 DUs), as well as approximately 14,575 sf of open space, including both private and publicly accessible open space (9,393 sf private and 5,182 sf public) and approximately 25,507 gross square feet (gsf) of community facility space. The proposed community facility space is currently envisioned to accommodate a range of arts and cultural spaces, including an art and

media center, a performance arts school, a music school, a multipurpose theater/rehearsal/teaching space, and an administrative office for non-profit organizations at the site.[1]

This attachment provides a summary and description of the Proposed Actions, including Project Area location, existing conditions, project purpose and need, project description, and the governmental approvals required. The attached supplemental studies examine the potential for the Proposed Project to result in impacts in any *City Environment Quality Review (CEQR)* technical areas, including separate attachments with analyses of land use, zoning, and public policy; community facilities; open space; urban design and visual resources; water and sewer infrastructure; transportation; and noise in **Attachments C through I**, respectively. All other preliminary screening assessments are summarized in **Attachment B, "Supplemental Screening."**

II. BACKGROUND AND EXISTING CONDITIONS

Project Area

The proposed rezoning area consists of Block 3499, Lots 15, 16, 25 (p/o), 113 (p/o), and 114-116 (the "Project Area") in Brooklyn CD 16; Lot 15 is City-owned and comprise the Proposed Development Site. The Project Area occupies the midblock portion of Block 3499, which is bounded by East New York Avenue to the north, Rockaway Avenue to the east, Pitkin Avenue to the south, and Chester Street to the west. In total, it encompasses approximately 69,064 sf of area and has 345 feet of frontage on both the west side of Rockaway Avenue and east side of Chester Street. As shown in **Figure A-1** and **Figure 5 in the EAS Form** ("Project Area Photos"), the Project Area includes fenced vacant land, open storage area, a handful of multi-family walkup residential buildings, and a former vacant warehouse that had since been demolished. The Proposed Actions would only facilitate the redevelopment of the Proposed Development Site on the vacant and underutilized land. A discussion of the Project Area lots is provided below.

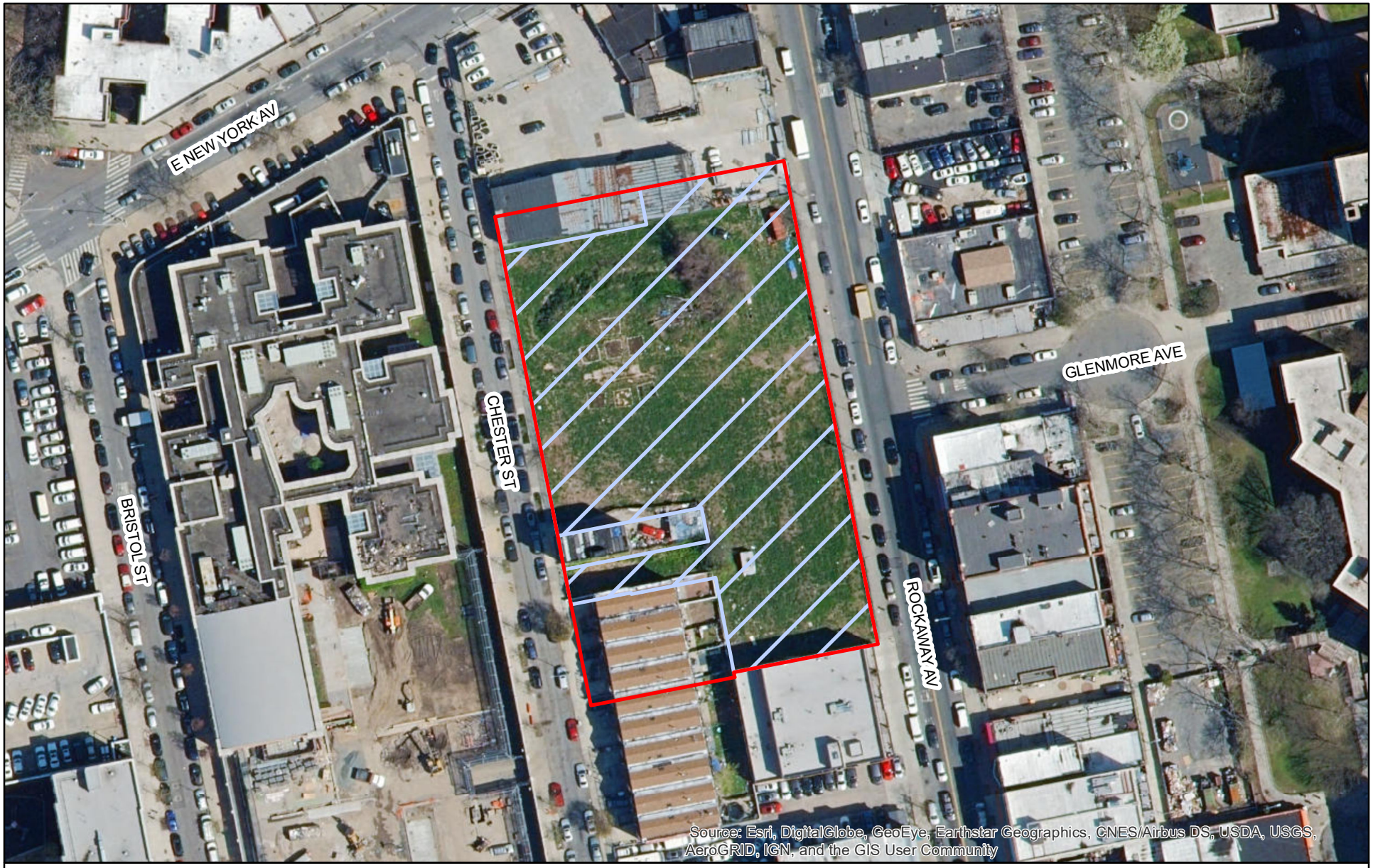
Proposed Development Site (Lot 15, City-Owned)

As described above, the Proposed Development Site is comprised of Block 3499, Lot 15. The 57,013-sf site is City-owned, vacant and comprises most of the Project Area. Currently, it is fenced in and contains ungroomed foliage. The northeast approximately 2,500-sf corner of Lot 15 is currently paved and had formerly been used for related open storage uses for the adjacent property at 326 Rockaway Avenue. The Proposed Development Site has 345 feet of frontage on the west side of Rockaway Avenue and approximately 224 feet of frontage on the east side of Chester Street. The northern portion of Lot 15 is within an R6/C2-3 zoning district, which is mapped north of the extension of Glenmore Avenue, and the southern portion of Lot 15 is within a C4-3 zoning district.

Remainder of the Project Area (Lots 16, 25 (p/o), 113 (p/o), 114-116, Non-City-Owned)

The remainder of the Project Area lots are occupied by buildings built to more than half the maximum allowable floor area ratio (FAR) under existing zoning and have frontage along the east side of Chester Street. Lot 25 comprises the northern portion of Block 3499 with frontage on Chester Street, East New York and Rockaway Avenues. Only a small portion (approximately 2,500 sf) of Lot 25 , which comprises the southwestern edge, would be rezoned as part of the Proposed Actions. Lot 25 is currently zoned R6/C2-3 with a total lot area of 32,826 sf. Until recently, Lot 25 had been occupied by two low-rise

[1] At this time, no leases have been signed for the community facility spaces. It is expected that the community facility space would be occupied by the following non-profits: BRIC, Pure Elements, The Brooklyn Music School, and Artspace.



*Aerial image is from 2021. Warehouse on Lot 25, Block 3499 has been demolished

Legend

Proposed Development Site Proposed Rezoning Area

Brownsville Arts Center and Apartments

Figure A-1
Project Area Aerial Photo

warehouse buildings, including approximately 14,836 sf, which have since been demolished. Lot 25 is slated for redevelopment and has a new building filing at the New York City Department of Buildings (DOB) for an as-of-right mixed-use residential and community facility building which will be constructed in accordance with the existing R6/C2-3 zoning. Lot 16 is currently occupied by a three-story, multifamily walkup apartment building on a 2,450 square foot site with 24.5 sf of frontage; it is located in a C4-3 zoning district. Lots 113-116, which are in separate ownership, are each less than 2,000 sf with narrow street frontages (all less than 20 feet), and each lot is occupied by a three-story multifamily building constructed in 2006. Lot 113 is only partially located within the Project Area. All four lots are located in a C4-3 zoning district.

Surrounding Area

The Project Area is located between two major roadways, East New York and Pitkin Avenues, which connect with other major Brooklyn roadways and provide convenient access to other parts of the borough. The surrounding area is characterized by a mix of housing types, including multi-family walkup buildings and mixed commercial/residential buildings; the Howard Houses New York City Housing Authority (NYCHA) development comprises much of the block immediately to the east. There are also a number of public facilities as well as some vacant land directly surrounding the Project Area. To the north, there are a variety of uses located along East New York Avenue, including public facilities, multi-family walkup, mixed commercial/residential, commercial/office, transportation/utility, and light industrial/ manufacturing. Mixed-use buildings and commercial establishments that serve the local neighborhood are concentrated south of the Project Area along Pitkin Avenue within the boundaries of the Pitkin Avenue Business Improvement District (BID). Exiting land uses immediately surrounding the Project Area are shown in **Figure 3 in the EAS Form.**

The Project Area is well served by public transportation. In addition to the A, C, and L subway lines, with stations at Rockaway Avenue/Fulton Street, Broadway Junction, and East New York/Atlantic Avenue to the north and east, there are several bus routes that traverse the surrounding area, including the B12 on East New York Avenue, B60 on Rockaway Avenue, and B14 on Pitkin Avenue. The M99 on East New York Avenue runs overnight between the East New York neighborhood in Brooklyn and Hell's Kitchen in Manhattan, operating every 20 minutes from 1AM to 6AM.

III. THE PROPOSED ACTIONS

As described above, the applicant is seeking several discretionary actions to facilitate the construction of a mixed-use development containing approximately 290 DUs (100% affordable) and one superintendent's unit, as well as community facility space. The proposed community facility space is envisioned to accommodate an art and media center, a performance arts school, a music school, a multipurpose theater/rehearsal/teaching space, and an administrative office for non-profit organizations at the site, in Brooklyn CD 16. These discretionary approvals include:

1. A zoning map amendment to rezone an approximately 69,064-sf midblock portion of Brooklyn Block 3499 ("Project Area") from R6/C2-3 and C4-3 to R7A with a C2-4 commercial overlay;
2. A zoning text amendment to map a Mandatory Inclusionary Housing (MIH) Area over the proposed rezoning area;
3. Urban Development Action Area (UDAA) designation, Urban Development Action Area Project (UDAAP) approval and disposition of City-owned Lot 15on Block 3499;

4. Mayoral override approval to modify rear yard equivalent requirements and setback requirements along a narrow street for the proposed mixed-use development.

In addition, discretionary funding may be sought to facilitate construction of the Proposed Project.

Zoning Map Amendment

The proposed zoning map amendment would rezone the 69,064-sf Project Area from R6/C2-3 and C4-3 to R7A with a C2-4 commercial overlay mapped along the west side of Rockaway Avenue (see **Figure A-2**). The C2-4 overlay would be mapped to a depth 100 feet from Rockaway Avenue. **Table A-1** provides a comparison of the allowable uses and maximum FAR under the existing and proposed zoning.

R7A is a contextual zoning district that allows for development of medium-density housing and community facilities. As shown in **Table A-1**, in MIH Areas, R7A permits a residential maximum FAR of 4.6. The maximum FAR for Affordable Independent Residences for Seniors (AIRS) is 5.01, and the maximum FAR for community facility use is 4.0 FAR. 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-1:
Comparison of Allowable Uses and Maximum FAR for the Existing and Proposed Zoning Districts in the Project Area

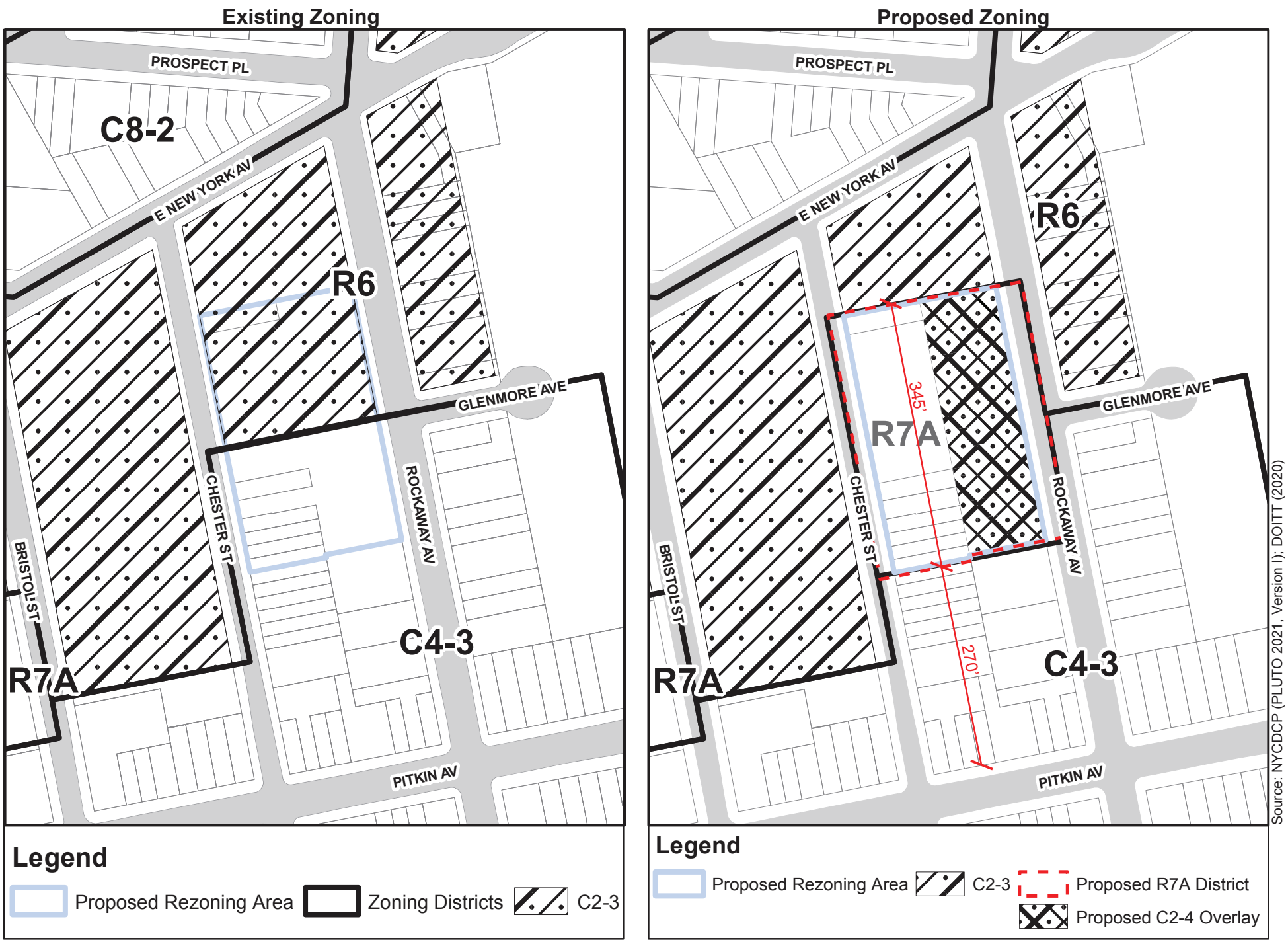
	Existing Zoning		Proposed Zoning	
Zoning District	**R6/C2-3**	**C4-3**	**R7A**	**R7A/C2-4**
Use Groups	UG 1-4, 5-9, 14	UG 1-6, 8-10, 12	UG 1-4	UG 1-9, and 14
Maximum Allowable FAR				
Residential	3.0 (under HF regulations) 3.6 (IH)	Equivalent to R6	4.0 (QH), 4.6 (IH) [1]	
Community Facility	4.8	Equivalent to R6	4.0	
Commercial	2.0	3.4	0.0	2.0
Manufacturing	0.0	0.0	0.0	

Source: *Zoning Resolution of the City of New York.*
Notes: HF=Height Factor; IH=Inclusionary Housing; QH=Quality Housing
[1] The maximum FAR for Affordable Independent Residences for Seniors (AIRS) is 5.01.

Zoning Text Amendment

The Applicant is seeking a zoning text amendment to Zoning Resolution (ZR) Section 23-90 (Appendix F) to establish the entirety of the Project 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;


Existing Zoning
PROSPECT PL
C8-2
E NEW YORK AV
R6
GLENMORE AVE
CHESTER ST
ROCKAWAY AV
BRISTOL ST
C4-3
R7A
PITKIN AV
Legend
Proposed Rezoning Area
Zoning Districts
C2-3
Proposed Zoning
PROSPECT PL
E NEW YORK AV
R6
345'
R7A
GLENMORE AVE
CHESTER ST
ROCKAWAY AV
BRISTOL ST
270'
C4-3
R7A
PITKIN AV
Legend
Proposed Rezoning Area
C2-3
Proposed R7A District
Proposed C2-4 Overlay
Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

- 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 and City Council will work together to apply a set of income level requirements for the affordable housing units created through MIH in the Project 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. The land use process will determine which MIH option(s) would be established.

Disposition of City-Owned Land & Urban Development Action Area Project (UDAAP)

The Applicant, on behalf of the Project Sponsor, is seeking disposition authority to facilitate the redevelopment of Lot 15 on Block 3499 ("Proposed Development Site"; refer to **Figure 4** in the EAS Form). The Proposed Development Site, which is owned by the City of New York, would be conveyed to the Project Sponsor in the future with the Proposed Actions. In conjunction with this disposition, the Applicant is also seeking designation of the Proposed Development Site as a UDAAP pursuant to Article 16 of the General Municipal Law, authorizing up to a 20-year tax exemption. Designation of a UDAAP must be authorized by the City Council.

Mayoral Override

The aplicant is also seeking Mayoral override approval to modify ZR Sections 23-533, 23-44(b) and 23-662(c), which relate to required rear yard equivalent requirements for Quality Housing buildings, permitted obstruction in required yards or rear yard equivalents, and maximum height of buildings and setback requirements for the proposed mixed-use development.

Public Financing

The Project Sponsor is seeking city financing from HPD through the ELLA Program, HDC, and DCLA. The Project Sponsor might also potentially seek additional Reso A funds in the future to facilitate the proposed affordable housing and community arts-related space.

IV. PROJECT PURPOSE AND NEED

The Proposed Actions would support the creation of affordable housing, community facility, and open space uses as part of a nine-story development (291,027 gsf). The proposed development would include approximately 265,520 gsf of residential space (290 DUs and one superintendent's unit) and 25,507 gsf of community facility space, as well as 14,575 sf of open space (including 9,393 sf private and 5,182 sf public).

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 expected to help alleviate the

upward pressure on housing prices and contribute to housing affordability in the neighborhood and larger City. The MIH program would promote and retain neighborhood economic diversity in the area and create a considerable amount of affordable housing near public transit.

The Proposed Development Site is currently vacant and does not support any active uses. The Proposed Actions would help to address the continuing need for affordable housing in the Brownsville neighborhood and the surrounding area and would support citywide goals (refer to **Attachment C, "Land Use, Zoning, and Public Policy"**), such as the *Housing New York* plan, by creating expanded opportunities for new development, in particular new affordable housing development. The Proposed Project would add a substantial number of affordable dwelling units to a community that anticipates population growth and has a need for such affordable housing. In addition, creating an MIH Area would promote the creation of permanently affordable housing, which would ensure that the affordable units remain a resource for the community into the future, even as neighborhood economic conditions may change.

The addition of arts-related community facility spaces would also support citywide goals, as outlined in *CreateNYC*, the City's cultural plan. The Proposed Project would advance its objectives, specifically the goal to strengthen citywide coordination of arts and cultural funding and development. The Proposed Project is mentioned in the plan.

V. DESCRIPTION OF THE PROPOSED DEVELOPMENT

As described above, the applicant is seeking a series of discretionary approvals to facilitate the construction of a nine-story, mixed-use affordable housing development with approximately 290 affordable DUs and one superintendent's unit, 25,507 gsf of community facility space, and 14,575 sf open space (including 9,393 sf private and 5,182 sf public). The Proposed Project would replace vacant and underutilized land bringing activity and a 24-hour presence to the site. As shown in **Figure A-3**, the proposed building would extend to the property lines along Chester Street and Rockaway Avenue and occupy most of the Proposed Development Site.

The Proposed Development would include nine stories above grade and rise to a maximum height of 95 feet. It would consist of approximately 291,027 gross square feet (gsf), including 265,520 gsf of residential use (290 affordable DUs and a single superintendent's unit) and 25,507 gsf of community facility space. The community facility space is envisioned to accommodate an arts and media center, a performance arts school, a music school, a multipurpose theater/rehearsal/teaching space, and an administrative office for non-profit organizations at the site. The Proposed Project would also introduce approximately 14,575 sf of outdoor passive open spaces, including two small private plazas (9,393 sf) for building residents and tenants and one publicly-accessible plaza on Rockaway Avenue (5,182 sf). The proposed building would include a single below-grade cellar level that would accommodate tenant and bicycle storage rooms, two fitness centers, a community room, the superintendent's office, and utility rooms (gas, water, cable, fire pump).

The proposed building would include entrances on both Rockaway Avenue and Chester Street frontages. It would include two residential lobbies, one accessible from Rockaway Avenue and the other from Chester Street.The arts and media center and accompanying office space, music school, and multipurpose theater/rehearsal/teaching space would have entrances on Rockaway Avenue. The public plaza would also be accessible via Rockaway Avenue, facing outward to the street. The performance arts school and accompanying office space would have entrances on both Rockaway Avenue and Chester Street.



Provided by: Aufgang Architects

Brownsville Arts Center and Apartments EAS

Figure A-3

Preliminary Ground Floor Plan for the Proposed Project

VI. ANALYSIS FRAMEWORK

Build Year

Construction is expected to take up to 23 months, with completion slated for 2025. For environmental analysis purposes, the Proposed Project has been identified as the reasonable worst-case development scenario (RWCDS) for the Proposed Action's 2025 analysis year. The non-City-owned lots (Lots 16, 25 (p/o), 113 (p/o), and 114-116) would not be developed or enlarged because of the Proposed Actions as they would not meet the potential soft site criteria. The incremental difference between the future No-Action and With-Action conditions is the basis for the impact category analysis of this EAS. **Table A-2** provides a comparison of the 2025 No-Action and With-Action conditions.

TABLE A-2: Comparison of Future No-Action and With-Action Conditions on the Development Site

Land Use		No-Action Condition	With-Action Condition	Project Increment
Residential	Gross Square Feet (GSF)	0 gsf	265,520 gsf	+265,520 *gsf*
	DUs	0 DUs	291 DUs	+291 DUs
Community Facility	Arts and Media Center	0 gsf	7,441 gsf	+7,441 gsf
	Performance Arts School	0 gsf	11,928 gsf	+11,928 gsf
	Music School	0 gsf	1,135 gsf	+1,135 gsf
	Multipurpose Theater/ Rehearsal/Teaching Space	0 gsf	4,480 gsf	+4,480 gsf
	Administrative Non-Profit Office Space	0 gsf	523 gsf	+523 gsf
	Total	*0 gsf*	*25,507 gsf*	*+25,507 gsf*
Open Space	Public	0 sf	5,182 sf	+5,182 gsf
	Private	0 sf	9,393 sf	+9,393 sf
	Total	*0 sf*	*14,575 sf*	*+14,575 sf*
Total Gross Square Feet *		***0 gsf***	***291,027 gsf***	***+291,027 gsf***

Note: Total gross square feet include residential and community facility space and does not include outdoor open space areas.

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

In the future without the Proposed Actions, it is assumed that the vacant and underutilized City-owned lot (the "Proposed Development Site") would remain unchanged. The other lots within the Project Area would also remain unchanged. With the exception of Lot 25, these non-City-owned properties are already developed and occupied, no new development is expected to occur within the proposed rezoning area in the absence of the Proposed Actions, and the existing uses would remain. Therefore, in the absence of the Proposed Actions, it is anticipated that the existing Project Area conditions would remain. Directly north of the Project Area, Lot 25 on Block 3499, which has frontage on East New York Avenue, Rockwell Avenue and Chester Street, would be redeveloped with a 14-story (155-foot tall) mixed-use residential and community facility development consisting of 215 DUs, irrespective of the Proposed Actions. The mixed-use building would be constructed pursuant to the site's existing R6/C2-3 zoning.

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

In the future with the Proposed Actions, the Proposed Project would be constructed as a result of the discretionary approvals and the non-City-owned lots within the Project Area would remain unchanged. For the non-City-owned lots, no additional or new development would be anticipated to occur because of the Proposed Actions, as they do not meet *CEQR Technical Manual* soft site criteria. Generally, lots with a small lot size (often defined as 5,000 sf or less), or that are occupied by a building built to more than half of the maximum allowable FAR under existing zoning, are not considered likely to be redeveloped. Lot 16 is occupied by a three-story, multifamily building on a 2,450 square foot site. Only a small portion (approximately 2,500 sf) of Lot 25 would be rezoned. Lots 113-116, which are in separate ownership, are each less than 2,000 sf with narrow street frontages (less than 20 feet), and each lot is occupied by a three-story multifamily building constructed in 2006. As all of the non-City-owned sites are small and separately owned, and the largest of these lots (Lot 25) would only be partially rezoned, it is not expected that these lots would be redeveloped because of the Proposed Actions.

It is expected that the Proposed Project would be fully built and occupied in the 2025 With-Action condition. As presented in **Table A-2**, compared to 2025 conditions without the Proposed Actions, the Proposed Actions would facilitate the incremental development of 265,520 gsf of residential floor area (290 DUs and 1 superintendent's unit), 25,507 gsf of community facility uses, and 14,575 sf of open space.

VII. REQUIRED APPROVALS

The applicant requires zoning text and map amendments to implement the proposed project, which are subject to both the Uniform Land Use Review Procedure (ULURP) and CEQR.

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

The applicant also requests Urban Development Action Area (UDAA) designation, Urban Development Action Area Project (UDAAP) approval, and disposition of Lot 15 on Block 3499. For these approvals to occur, the City Council must designate the formerly City-owned land as an area in need of urban renewal and pass a resolution designating the project as "UDAAP" to authorize the exemption. HPD requests the resolution and once the resolution is passed, HPD issues a Certificate of Eligibility.

The applicant also requests mayoral override approval to modify rear yard equivalent requirements and setback requirements along a narrow street for the proposed mixed-use development; this action would bypass ULURP. Discretionary funding may also be sought to facilitate the proposed affordable housing and community arts-related space. Both the mayoral override and public funding request are discretionary actions that are subject to CEQR.

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 SEQRA. In addition, the City has published a guidance manual for environmental review, the *CEQR Technical Manual*. CEQR rules guide environmental review through the following steps:

- *Establish a Lead Agency*. Under CEQR, the "lead agency" is the public entity responsible for conducting environmental review. HPD is serving as the lead agency for the Proposed Actions under CEQR.
- *Environmental Review and Determination of Significance*. The lead agency will determine whether the Proposed Actions may have a significant impact on the environment. To do so, an EAS must be prepared. This EAS will be reviewed by the lead agency, which will determine if the Proposed Actions and development would result in any significant adverse impacts on the environment.

ATTACHMENT B
SUPPLEMENTAL SCREENING

I. INTRODUCTION

This Environmental Assessment Statement ("EAS") has been prepared in accordance with the 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 detailed technical analysis be undertaken. Using this guidance, preliminary screening assessments were conducted for the Proposed Actions to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the EAS Form, including Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Community Facilities; Open Space; Shadows; Historic and Cultural Resources; Urban Design and Visual Resources; Natural Resources; Hazardous Materials; Water and Sewer Infrastructure; Transportation; Air Quality; Noise; Public Health; and Neighborhood Character supplemental screening assessments are provided in this attachment. The remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial CEQR thresholds and/or are unlikely to result in significant adverse impacts. The following technical areas screened out from any further assessment: Solid Waste and Sanitation Services; Energy; Greenhouse Gas Emissions and Climate Change; and Construction.

The supplemental screenings contained herein identified that additional analyses are required in the areas of Land Use, Zoning, and Public Policy; Community Facilities (public elementary and intermediate schools and childcare services); Open Space; Urban Design and Visual Resources; Water and Sewer Infrastructure; Transportation; and Noise. These analyses are provided in **Attachments C to I**, respectively, and are summarized in this attachment. **Table B-1** presents a summary of analysis screening information for the Proposed Actions.

As described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the construction of a nine-story, mixed-use affordable housing and community facility development, as well as private and publicly accessible open space uses that would replace vacant underutilized City-owned land on Lot 15 on Block 3499 (the "Proposed Project"). The proposed mixed-use development would include 290 affordable dwelling units (DUs) and one superintendent's unit, and approximately 25,507 gsf of community facility space. The community facility space is envisioned to be occupied by an art and media center, a performance arts school, a music school, a multipurpose theater/rehearsal/teaching space, and an administrative office for non-profit organizations at the site. The Proposed Project would also introduce approximately 14,575 sf of outdoor passive open space, including two small private plazas (9,393 sf) and one publicly accessible plaza (5,182 sf) on Rockaway Avenue. No changes to Lots 16, 25, and 113-116 on Block 3499 are expected to occur as a result of the Proposed Actions.

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 and Services			X
Open Space			X
Shadows		X	
Historic & Cultural Resources		X	
Urban Design & Visual Resources			X
Natural Resources		X	
Hazardous Materials		X	
Water and Sewer Infrastructure			X
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation - Traffic & Parking (Level 1/2 Screening) - Transit (Level 1 Screening) - Pedestrians (Level 1/2 Screening, & detailed analysis)			 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.

The Proposed Actions include zoning map and zoning text amendments, Urban Development Action Area (UDAA) designation, Urban Development Action Area Project (UDAPP) approval, and a mayoral zoning override. Therefore, a land use, zoning, and public policy assessment is provided in **Attachment C, "Land Use, Zoning, and Public Policy."** As discussed therein, no significant adverse land use, zoning, or public policy impacts are expected in the future with the Proposed Actions. The Proposed Actions would facilitate new mixed-use development in an appropriate location that is well served by public facilities and infrastructure, and that is characterized by similar uses.

Socioeconomic Conditions

Socioeconomic impacts may occur when an action directly or indirectly changes population, housing stock, or economic activities in an area. In some cases, these changes could be substantial, but not significantly adverse. In other cases, these changes may be beneficial to some groups and adverse to others. The purpose of a socioeconomic assessment is to disclose potentially adverse changes that would be created by an action and identify whether they rise to the level of significance. A socioeconomic assessment should be conducted if a proposed action may be reasonably expected to create socioeconomic changes within the area affected by the action that would not be expected to occur without the action. The *CEQR Technical Manual* states that a residential development of 200 new dwelling units or less or a commercial development of 200,000 sf or less typically does not cause significant socioeconomic impacts. As the Proposed Actions would facilitate the construction of over 200 new DUs, a preliminary assessment for indirect residential displacement is provided below.

As indicated on the EAS Form, the Proposed Actions can be screened out from any consideration of direct displacement of existing residential populations and businesses/institutions. The Proposed Development Site is entirely vacant and does not contain any existing residential units, and therefore, the Proposed Actions would not directly displace any residents. Nor are there any existing businesses or other uses occupying the site; therefore, the Proposed Actions would not directly displace any businesses. The Proposed Actions can also be screened out from any consideration of indirect business displacement or adverse effects on specific industries, according to the EAS Form. The Proposed Actions would introduce approximately 25,507 gsf of community facility space on the ground floor of a single building as compared to the No-Action condition, well below the 200,000 sf CEQR threshold warranting assessment of indirect business displacement. Additionally, the Proposed Actions would not result in any effects on any specific industries, such as introducing a new concentration of a specific industry, affecting an area where a specific industry is concentrated, or indirectly substantially reduce employment in or impair the economic viability of a specific industry. Therefore, no assessment is warranted.

The Proposed Actions would introduce a net residential increment of 291 DUs (290 affordable DUs plus a single superintendent's unit), as compared to the No-Action condition, which would exceed the CEQR threshold of 200 units. A preliminary analysis of indirect residential displacement is provided below. As discussed, the Proposed Actions would not result in any significant adverse socioeconomic impacts due to indirect residential displacement.

Indirect Residential Displacement

Preliminary Assessment

Indirect residential displacement may result from substantial new development that is markedly different from existing uses and activity in an area and that causes increased property values in the area. Increased property values can lead to increased rents in non-regulated rental units, which can make it difficult for some existing residents to afford to stay in their apartments. The indirect residential displacement assessment aims to determine whether the Proposed Project would either introduce a trend or accelerate an existing trend of changing real estate market conditions that may have the potential to displace a vulnerable residential population and, as a result, substantially change the socioeconomic character of the neighborhood. This preliminary assessment follows the step-by-step preliminary assessment guidance described in Section 332.1 of the *CEQR Technical Manual.*

Step 1: Determine if the proposed project would add new population with higher average incomes compared to the average incomes of the existing populations and any new population expected to reside in the study area in the future without the proposed project.

As shown in **Figure B-1**, the socioeconomic study area includes all census tracts with at least 50 percent of area within a half-mile radius of the rezoning area. The half-mile study area extends approximately to Fulton Street and Atlantic Avenue to the north, Van Sinderen Avenue and Mother Gaston Boulevard in the east, Sutter, Livonia, and Blake Avenues to the south, and Saratoga and Ralph Avenues to the west.

As shown in **Table B-2**, household incomes are relatively low in the study area. Based on 2015-2019 ACS Five-Year estimates, the median household income in the study area is approximately $26,141 (in 2019 dollars), as compared to median household income of approximately $60,231 in Brooklyn. New York City has an estimated median household income of approximately $63,998. Both Brooklyn and the larger City have experienced increases in median household income since 2006-2010.

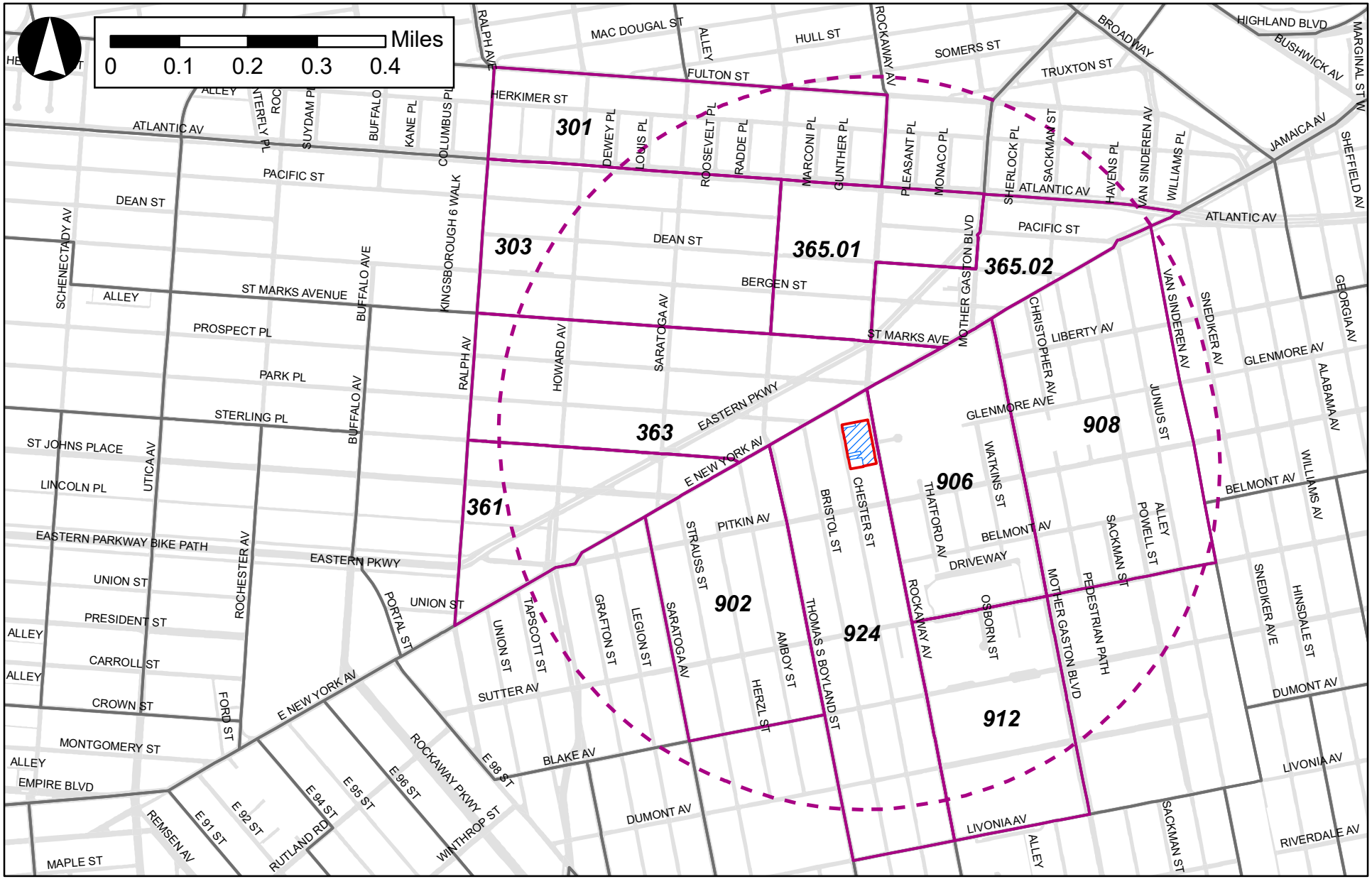
Table B-2: Household Income Characteristics: 2006-2010 and 2015-2019

	Median Household Income		Percent Change	Mean Household Income		Percent Change
	2006-2010	2015-2019		2006-2010	2015-2019	
½-Mile Study Area[1]	$28,366	$26,141	N/A*	$42,027	$43,875	N/A*
Brooklyn	$51,196	$60,231	17.6%	$73,627	$91,610	24.4%
New York City	$59,090	$63,998	8.3%	$91,537	$102,946	12.5%

Notes: All dollar values have been adjusted to 2019 dollars. The median household income represents the mid-point of all household incomes in a study area, whereas the mean or average household income is calculated by dividing aggregate income by the total number of households in a study area. The statistical reliability of the data included in this table has been vetted using DCP's Population FactFinder.
* For the study area, neither the percentage nor the directionality of change over time was statistically reliable and therefore reported. The population sample size in the ½-mile study area is not large enough to generate a reliable percentage or directional change value.
Source: US Census Bureau, 2006-2010 and 2015-19 Five-Year ACS Estimates, as reported on DCP's Population FactFinder

The average household incomes for all geographies are higher than the respective median household incomes, indicating that each study area contains a population that is earning significantly more than the median household income. The mean household income in the study area ($43,875) is considerably lower than for Brooklyn ($91,610) and New York City ($102,946). Similar to median household income, between 2006-2010 and 2015-2019, the mean household income increased in both Brooklyn and New York City.

Table B-3 illustrates the distribution of incomes in the study area as compared to the larger borough and New York City. As shown in **Table B-3**, a greater portion of households in the study area earned less than $25,000 as compared to Brooklyn and the City. More than 48 percent of study area households earn less than $25,000 annually, significantly higher than New York City (23.3 percent) and Brooklyn (24.8 percent). At the other end of the spectrum, less than 12 percent of study area households earn $100,000 or more, compared to roughly 31 percent of Brooklyn households and 33 percent of New York City households.



Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

Brownsville Arts Center and Apartments

Figure B-1
Socioeconomic Study Area

Table B-3: Income Distribution: 2015-2019

	Total Households	Households Earning Less than $25,000		Households Earning $25,000 to $49,999		Households Earning $50,000 to $99,999		Households Earning $100,000 to $199,999		Households Earning $200,000 or more	
		#	%	#	%	#	%	#	%	#	%
½-Mile Study Area	15,130	7,334	48.5	3,670	24.3	2,443	16.2	1,395	9.2	N.A.	N.A.
Brooklyn	958,567	237,982	24.8	180,339	18.8	242,825	25.3	205,858	21.5	91,563	9.6
New York City	3,167,034	739,024	23.3	570,783	18.0	805,028	25.4	694,940	21.9	357,259	11.3

Notes: * The population sample size in the ½-mile study area is not large enough to generate a reliable estimate or percentage value.
Source: US Census Bureau, 2015-19 Five-Year Estimates via NYC Population FactFinder

As shown in **Table B-4**, poverty levels in the study area were considerably higher than in the overall borough and New York City. In 2015-2019, the poverty rate in the study area was more than 38 percent, as compared to approximately 20 percent in Brooklyn and nearly 18 percent in New York City, respectively.

TABLE B-4: Poverty Status: 2015-2019

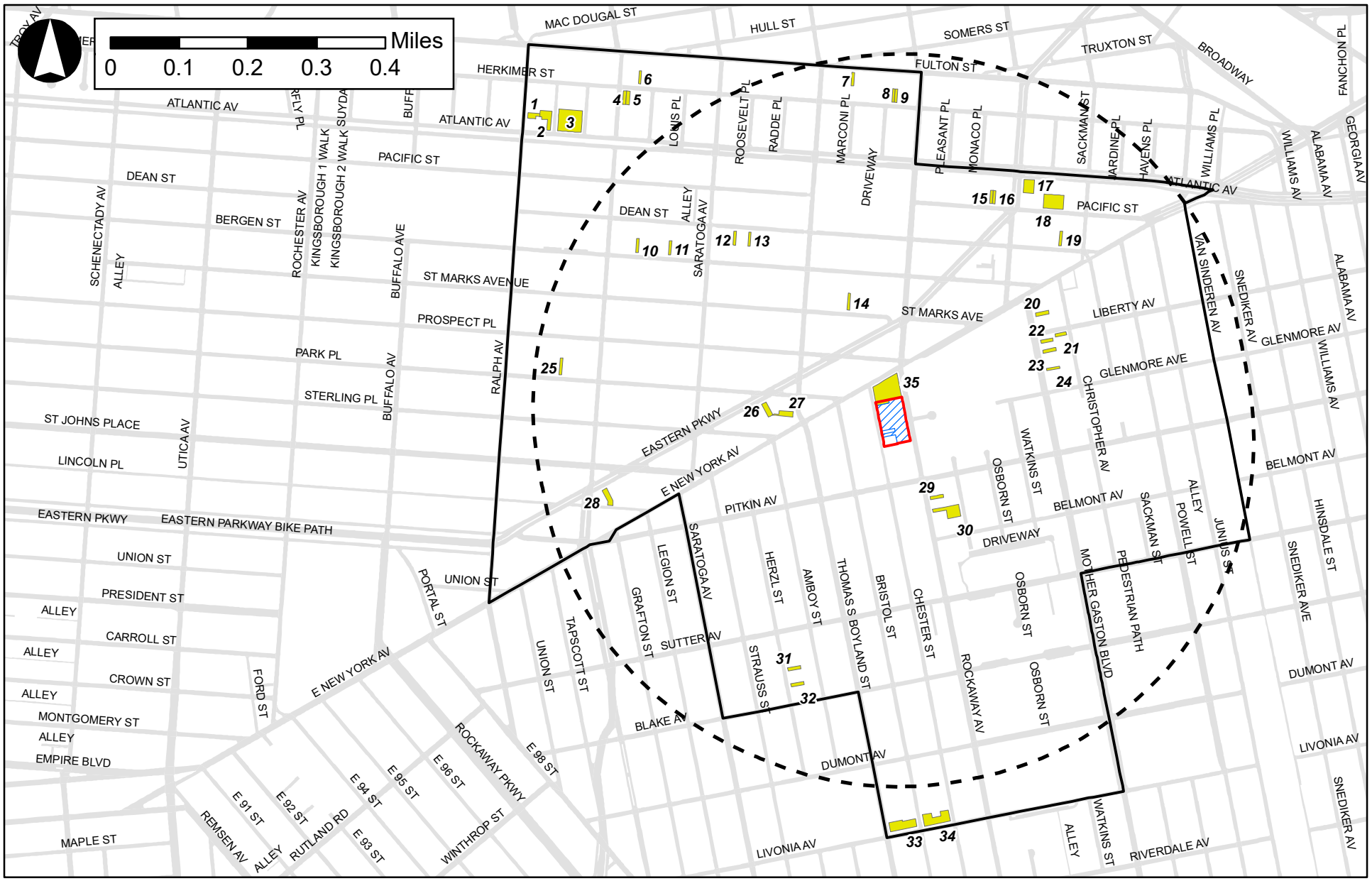
	Persons Below Poverty Level in 2015-2019	
	#	%
½-Mile Study Area[1]	15,667	38.5
Brooklyn	511,631	20.0
New York City	1,485,784	17.9

Source: US Census Bureau, 2015-19 Five-Year Estimates via NYC Population FactFinder

In the 2025 future without the Proposed Project, it is anticipated that the current land use trends and general development patterns will continue. A considerable amount of new housing would be added to the study area. **Table B-5** identifies 35 developments anticipated to occur within the socioeconomic study area by 2025, including a 100 percent affordable housing development directly to the north of the Proposed Project, which would introduce residential uses (see **Figure B-2**). The largest planned development would be located at 1911 Atlantic Avenue, which would introduce 236 affordable housing units when complete. Of the estimated total 1,091 dwelling units introduced to the study area, an estimated 698 units (or roughly 64%) will be affordable.

TABLE B-5: No-Action Residential Development within the Half-Mile Study Area

Map No.[1]	Address	Residential (DUs)	Affordable [2]
1	343 Ralph Ave	20	18
2	20 Prescott Pl	49	-
3	1911 Atlantic Ave	236	236
4	1040 Herkimer St	3	-
5	1042 Herkimer St	3	-
6	1049 Herkimer St	2	-
7	2114 Fulton St	8	-
8	1267 Herkimer St	7	-
9	1269 Herkimer St	7	-
10	1889 Bergen St	7	-
11	1915 Bergen St	3	-
12	2164 Dean St	3	-
13	2178 Dean St	3	-
14	1633 Saint Marks Ave	3	-



Legend

Proposed Rezoning Area | Proposed Development Site | No-Build Sites (refer to Table B-5) | Residential Study Area (Half-Mile Radius)

Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

Brownsville Arts Center and Apartments

Figure B-2
No-Action Residential Development

TABLE B-5: No-Action Residential Development within the Half-Mile Study Area (continued)

Map No.[1]	Address	Residential (DUs)	Affordable [2]
15	2315 Pacific St	3	-
16	2317 Pacific St	3	-
17	1864 Eastern Parkway	67	55
18	126 Sackman St	136	-
19	2427 Dean St	7	-
20	253 Mother Gaston Blvd	19	-
21	38 Christopher Ave	3	-
22	273 Mother Gaston Blvd	3	-
23	281 Mother Gaston Blvd	3	-
24	299 Mother Gaston Blvd	3	-
25	1709 Park Pl	8	-
26	1598 Eastern Parkway	19	-
27	416 Thomas S. Boyland St	8	-
28	1470 Eastern Parkway	21	-
29	435 Rockaway Ave	6	-
30	110 Thatford Ave	23	-
31	179 Herzl St	8	-
32	195 Herzl St	8	-
33	169 Livonia Ave	78	78
34	215 Livonia Ave	96	96
35	326 Rockaway Ave	215	215
	Half-Mile Total	***1,091***	***698***

Source: NYC Department of Buildings (DOB), April 2021
Notes:
[1] Refer to **Figure B-2**
[2] Accounts for an estimated number of affordable DUs, there may be more or less.

In the future with the Proposed Actions, the proposed rezoning area would be mapped as a Mandatory Inclusionary Housing (MIH) Area, which would set mandatory affordable housing requirements pursuant to the MIH program and require that a share of new housing be permanently affordable. The production of affordable housing would be a condition of any residential development in the proposed rezoning area and is expected to help preserve affordable housing in the area. There would be no expiration to the affordability requirement of housing units created through MIH, making these units a permanent reservoir of affordable housing in the area, a key policy to meet the *Housing New York* goal of fostering diverse livable communities.

The Proposed Project would be 100 percent affordable development. Depending on which MIH Option(s) would be established in the proposed rezoning area, between 25 and 30 percent of the proposed DUs would also be permanently affordable. The levels of affordability for the housing would be based on percentages of AMI defined by the US Department of Housing and Urban Development (HUD) for the region (New York, NY HUD Metro Fair Market Area [FMA]); the 2022 income limits by family size for the New York City region are presented in **Table B-6**. These levels will change over time and their future levels cannot conclusively be established at this time.

TABLE B-6: 2022 New York City Area Median Income (AMI)

Family Size	30% of AMI	40% of AMI	50% of AMI	60% of AMI	80% of AMI	100% of AMI	130% of AMI
1	$28,020	$37,360	$46,700	$56,040	$74,720	$93,400	$121,420
2	$32,040	$42,720	$53,400	$64,080	$85,440	$106,800	$138,840
3	$36,030	$48,040	$60,050	$72,060	$96,080	$120,100	$156,130
4	$40,020	$53,360	$66,700	$80,040	$106,720	$133,400	$173,420

Source: U.S. Department of Housing and Urban Development (HUD) and New York City Housing Development Corporation (HDC)
https://www1.nyc.gov/site/hpd/services-and-information/area-median-income.page

The Proposed Actions would facilitate the construction of approximately 290 affordable DUs and one superintendent's unit; none of the proposed residential units would be market-rate. All of the family housing units are expected to be targeted to households earning between 30 to 80 percent of the Area Median Income (AMI). Based on the data presented in **Table B-6**, the average income anticipated for the new population that would qualify for affordable housing is expected to be up to approximately $85,440 for a family of two and $96,080 for a family of three. Although considered affordable, this income level is significantly higher than both the existing median household income ($26,141) and the average household income ($43,875) in the ½-mile study area (see **Tables B-2** and **B-6**). Based on *CEQR Technical Manual* guidance, if the expected average incomes of the new population would exceed the average incomes of the study area populations, Step 2 of the preliminary assessment should be conducted.

Step 2: Determine if the project's increase in population is large enough relative to the size of the population expected to reside in the study area without the project to affect real estate market conditions in the study area.

Based on 2020 Census data, the study area has an estimated population of 45,576. As described above, a number of development projects are anticipated in the No-Action condition. In the absence of the Proposed Actions, 1,091 residential dwelling units would be built within the study area by 2025. Assuming an average household size of 2.75 persons per household in the Brownsville Neighborhood Tabulation (NTA) and 100 percent occupancy rates, these planned development projects would add an estimated 3,000 residents to the ½-mile study area in the No-Action condition. The estimated study area population in the No-Action condition was calculated by adding the population from the planned development projects to the 2020 Census study area population estimates. In total, in the No-Action condition, the study area population is expected to increase to 48,576 (see **Table B-7**).

The Proposed Actions would result in an incremental increase of 291 dwelling units within the study area. With an average household size of 2.75 persons per unit, the Proposed Actions would add approximately 800 residents to the study area. **Table B-7** provides a comparison of this new population and its size relative to the population of the No-Action condition.

TABLE B-7: Incremental Population by 2025 under the Proposed Actions

	2025 Population Projection in the No-Action Condition	Number of Incremental Dwelling Units	Projected Population Increase from the With-Action Condition Dwelling Units [1]	2025 Population Projection in the With-Action Condition	Percent Change from 2025 No-Action Condition
½-Mile Study Area	48,576	291	800	49,376	1.6%

Source: US Census Bureau, 2020 Census via Population FactFinder
Notes:
[1] Number of residents is based on the average household size of 2.75 for Brownsville Neighborhood Tabulation (NTA) (2020 Census)

By adding an incremental 800 residents to the study area, the Proposed Actions would increase the study area population by less than two percent, from 48,576 in the No-Action to 49,376 in the With-Action condition. Based on *CEQR Technical Manual* analysis guidance, a population increase of less than five percent in a study area typically is not large enough to affect real estate market conditions, and Step 3 of the preliminary assessment is not warranted. The new population introduced by the Proposed Actions would neither significantly alter the study area's demographics, nor alter market conditions in a manner that could lead to indirect residential displacement. Therefore, based on *CEQR Technical Manual* guidance, the Proposed Actions would not have the potential to result in significant adverse impacts due to indirect displacement and further assessment is not warranted.

Community Facilities

As recommended by the *CEQR Technical Manual*, a community facilities assessment is warranted if an action has the potential to result in either direct or indirect effects on community facilities. If a proposed action would physically alter a community facility, whether by displacement of the facility or other physical change, this "direct" effect triggers the need to assess the service delivery of the facility and the potential effect that the physical change may have on that service delivery. In addition, under CEQR, "temporary direct" effects are considered when a temporary closing of a community facility is required. Temporary closing of a community facility may occur due to construction in that location, among other reasons. New populations added to an area because of a proposed action would use existing services, which may result in potential "indirect" effects on service delivery. Depending on the size, income characteristics, and age distribution of the new population, there may be effects on public schools, libraries, or childcare centers.

Direct Effects

The Proposed Actions would not directly displace or otherwise directly affect any public schools, child care centers, libraries, health care facilities, or police and fire protection services facilities. Therefore, the Proposed Actions would not result in any significant adverse direct effects to community facilities or services, and further analysis is not warranted.

Indirect Effects

The *CEQR Technical Manual* includes thresholds that provide guidance in making an initial determination of whether a detailed analysis is necessary to determine potential impacts. **Table B-8** lists those *CEQR Technical Manual* thresholds for each community facilities analysis area. If a proposed action exceeds the threshold for a specific facility, a more detailed analysis is warranted. A preliminary screening analysis was conducted to determine if the Proposed Actions would exceed established CEQR thresholds warranting further analysis. Based on that screening, provided below, the Proposed Actions trigger a detailed analysis of publicly funded child care centers.

TABLE B-8: Preliminary Screening Analysis Criteria

Community Facility	Threshold for Detailed Analysis
Public Schools	More than 50 or more elementary/intermediate school students or 150 or more high school students
Libraries	More than five percent increase in ratio of residential units to library branches
Health Care Facilities (Outpatient)	Introduction of a sizeable new neighborhood
Child Care Centers (Publicly Funded)	More than 20 eligible children under age five based on the number of low- or low/moderate-income units
Fire Protection	Introduction of a sizeable new neighborhood
Police Protection	Introduction of a sizeable new neighborhood

Source: [1] 2021 *CEQR Technical Manual.*

Public Schools

The *CEQR Technical Manual* recommends conducting a detailed analysis of public schools if a project would generate 50 or more elementary/intermediate school students and/or 150 or more high school students. As detailed above, the Proposed Project would result in a net increment of 291 residential units in the Project Area and would therefore generate 73 school-aged students. Based on the February 2020 student generation rates for Brooklyn Community School District (CSD) 23 (which encompasses the Project Area), the incremental 291 DUs that would generate school-aged students in the future with the Proposed Actions including approximately 41 elementary school students, approximately 17 intermediate school students, and approximately 15 high school students.[1] As such, a detailed analysis of adverse effects on elementary and intermediate schools was conducted for the Proposed Actions, and is provided in **Attachment D, "Community Facilities & Services."** As discussed in **Attachment D**, the Proposed Actions would not result in significant adverse impacts on public elementary or intermediate schools.

Libraries

Potential impacts on libraries can result from an increased user population. According to the *CEQR Technical Manual*, an action that generates a five percent increase in the average number of residential units served per branch (equivalent to an 834-unit increase in Brooklyn) may cause significant adverse impacts on library services and require further analysis. The Proposed Actions are expected to add 291 DUs over the No-Action condition. Therefore, the Proposed Actions would not exceed this threshold, and a detailed analysis of indirect impacts on libraries is not warranted.

Child Care Services

According to the *CEQR Technical Manual*, if an action would add 20 or more children under age six who are eligible for child care, a detailed analysis of its impact on publicly funded child care facilities is warranted. This threshold is based on the number of low-income and low- to moderate-income units generated by a proposed action (110 units in Brooklyn). As discussed above, the Proposed Actions would facilitate the development of 291 DUs, all of which would be affordable. Therefore, the Proposed Actions would yield more than 20 children under age five who are eligible for publicly funded child care, exceeding the CEQR threshold. As such, a detailed analysis of publicly funded child care facilities was conducted for the Proposed Actions, and is provided in **Attachment D, "Community Facilities & Services**." As discussed

[1] Per the SCA's 2020 Projected Public School Ratio student generation rates, housing units in Brooklyn CSD 23 generate 0.14 elementary school students per unit, 0.06 intermediate school students per unit, and 0.05 high school students per unit.

in **Attachment D**, publicly funded child care services would continue to operate in the future with available capacity under With-Action conditions, the Proposed Actions would not result in significant adverse impacts.

Police, Fire, and Health Care Services

The *CEQR Technical Manual* recommends a detailed analysis of indirect impacts on police, fire, and health care services in cases where an action would create a sizeable new neighborhood where none existed before. As discussed above, the Proposed Actions would facilitate the development of a net increment of 291 DUs and approximately 25,507 gsf of community facility space. As the Proposed Actions would not create a sizeable new neighborhood, further analysis of police, fire, and health care services is not warranted.

Open Space

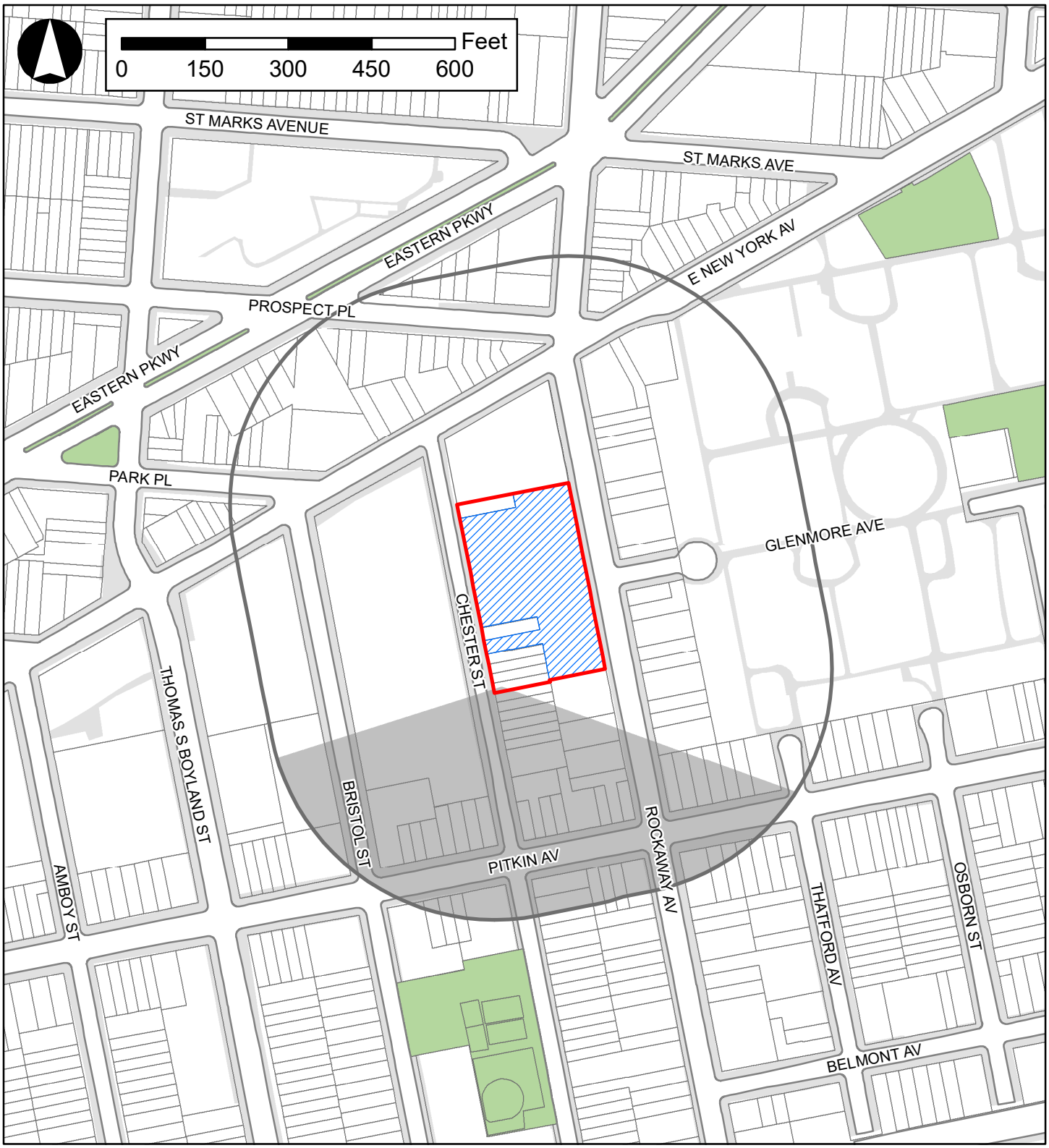
Based on the *CEQR Technical Manual*, an open space assessment is typically warranted if a project would generate more than 200 residents or 500 employees or other nonresidential users. The Proposed Actions are expected to result in an estimated 800 new residents and 69 employees as compared to the No-Action Condition. As the Proposed Actions would result in an increase in residents above the *CEQR Technical Manual* threshold for analysis, a residential open space analysis is provided in **Attachment E, "Open Space."** As discussed in detail in **Attachment E**, 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 a publicly accessible open space or sunlight-sensitive historic resource (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.

The Proposed Actions would facilitate the construction of one 95-foot tall mixed-use residential and community facility building. According to the *CEQR Technical Manual*, the longest shadow a structure would cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. Therefore, per *CEQR Technical* guidance, the maximum shadow radius (Tier 1 Assessment) would be 408.5 feet. As shown in **Figure B-3**, there are no sunlight-sensitive resources within this longest shadow study area. Chester Playground, which has frontage along the west side of Chester Street between Pitkin and Belmont Avenues, is located just south of the longest shadow study area. Therefore, a detailed assessment of shadows is not warranted, and no significant adverse shadow impacts would occur because of the Proposed Actions.

Tier I and II Shadow Assessment



Source: NYCDCP (2020); DoITT (2020)

Legend

- Proposed Rezoning Area (Primary Study Area)
- Proposed Development Site
- Open Space
- Tier I: Longest Shadow Study Area
- Tier II: Area that Cannot be Shaded

Historic and Cultural Resources

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

According to *CEQR Technical Manual* guidance, impacts on historic resources are considered on those sites affected by a proposed action(s) and in the area surrounding identified development sites. The historic resources study area is therefore defined as the area within a 400-foot radius of the proposed rezoning area. 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.

In order to verify the presence of designated or eligible architectural resources in the surrounding area, a request letter was sent to the New York City Landmarks Preservation Commission (LPC). In a letter dated 04/20/2021, LPC confirmed that the Proposed Development Site[2] does not contain any architecturally or archaeologically significant resources (refer to **Appendix 1, Agency Correspondence**). As there are no other historic resources within a 400-foot radius of the proposed rezoning area, the Proposed Actions would not result in significant adverse impacts to architectural or archaeological resources and further analysis is not warranted.

Urban Design and Visual Resources

An area's urban components and visual resources together define the look and character of the neighborhood. The urban design characteristics of a neighborhood encompass the various components of buildings and streets in the area. These include building bulk, use and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For the 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, demap an active street or map a new street, or affect the street hierarchy, street wall, curb cuts, pedestrian activity or streetscape elements; or (c) would result in above-ground development in an area that includes significant visual resources.

The Proposed Actions involve the rezoning of an area from R6/C2-3 and C4-3 to R7A/C2-4, which would increase the permitted density and result in a 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

[2] Lots 15, 17, 20-24, 45-48, 50, 52-54, and 56-58 on Block 3499 have been merged into a single tax lot (Lot 15) as of December 28, 2021.

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 Proposed Development Site's location 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 an approximately 291,027 gsf mixed-use residential and community facility building, replacing vacant land, the site located in urbanized area of Brownsville. Additionally, the affected area (57,013 sf) represents a small portion of the entire watershed draining to Jamaica Bay. Lastly, DEP would require storm water management 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 semi volatile organic compounds (VOCs and SVOCs), methane, polychlorinated biphenyls (PCBs) and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). 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. As the Proposed Actions would facilitate new in-ground disturbance on Lot 15 on Block 3499[3] that would introduce affordable housing and community facility uses, the potential for hazardous materials was evaluated for the Proposed Actions.

Three documents related to remediation of hazardous materials at the project site are summarized below, including:

(1) Phase 1 Environmental Site Assessment (ESA), prepared by VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) on March 11, 2019
(2) Phase II Environmental Site Assessment (ESA) Work Plan and Health and Safety Plan (HASP), prepared by VHB on August 16, 2019
(3) Phase II Environmental Site Assessment (ESA), prepared by VHB on November 12, 2020.

Phase I Environmental Site Assessment (ESA)

On March 11, 2019, a Phase I Environmental Site Assessment (ESA) was prepared by VHB 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 Phase I ESA (**Appendix 3**) evaluated the potential for hazardous materials on the entirety of the 18 vacant parcels that comprise the Proposed Development Site (Block 3499, Lots 15). According to the Phase I report, the Proposed Development Site is predominantly vegetated and enclosed by a chain-link fence on all sides. Two gated entrances are secured with padlocks, one on Chester Street and the other on Rockaway Avenue.

Based on a review of historic resources, including aerial photographs, New York City Department of Buildings (DOB) records, and Sanborn Fire Insurance Maps, as well as a site reconnaissance, VHB was able to establish a history of the Proposed Development Site as early as 1907, when the subject properties were improved with various mixed-use commercial and residential structures. Between 1977 and 1986, each of the former buildings located at the site were demolished and the lots became vacant. They have remained this way since demolition.

The Phase I ESA identified one Recognized Environmental Condition (REC)[4] and five Business Environmental Risks (BERs). These findings are summarized below.

[3] Lots 15, 17, 20-24, 45-48, 50, 52-54, and 56-58 on Block 3499 have been merged into a single tax lot (Lot 15) as of December 28, 2021.

[4] A recognized environmental condition (REC) is defined as the presence or likely presence of any hazardous substances or petroleum produces in, on, or at a property 1) due to a release of any hazardous substances or petroleum products; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment.

Recognized Environmental Concern (REC)

- Several manufacturing uses, including furniture upholsterers, cabinet manufacturing, and stone cutting and manufacturing operations , were identified on former Lots 48, 50, 54, and 56-58 of the Proposed Development Site. Former manufacturing relating to furniture upholstering has the potential to have affected subsurface conditions on the site.

Business Environmental Risks (BERs)

- Fuel oil burner applications were identified for former buildings on former Lots 17, 46, 50, and 56. As such, there is a potential for fuel oil to have been previously used. Additionally, the site-reconnaissance identified former building foundations and slabs across the subject properties. Tanks like basement aboveground storage tanks (ASTs) and petroleum tanks may have been removed prior to demolition; however, their existence is unverified.
- The Proposed Development Site was improved with residential and commercial structure between 1907 and the mid-1980s. Evidence of several former building foundations was uncovered, which indicates that at least some of the former buildings were demolished into their basements. Accordingly, the presence of urban fill material can be expected and should be dealt with accordingly prior to any potential redevelopment.
- Several of the former structures were listed in the DOB records database as containing elevators. Therefore, there exists potential for building materials to contain polychlorinated biphenyls (PCBs). It cannot be verified whether any PCB materials were properly disposed prior to demolition.
- A visual inspection of potential painted surfaces was conducted during a site reconnaissance. Although no painted surfaces were observed, there is potential for lead-based paint (LBP) to be present in demolition debris.
- No suspect asbestos-containing materials (ACM) was observed during visual inspections. However, given the age of the former on-site buildings, the demolition debris could potentially contain roofing materials or insulation that have the potential to be considered ACM.

Phase II Environmental Site Assessment (ESA) Work Plan

On August 16, 2019, a Phase II Environmental Site Assessment (ESA) Work Plan and Health and Safety Plan (HASP) was prepared by VHB for the investigation of subsurface conditions at the Proposed Development Site. The site-specific HASP addresses potential hazards, and contaminants of concern based on past use and safety requirements associated with investigation activities, in accordance with American Society of Testing and Materials (ASTM) and Occupational Safety and Health Administration (OSHA) guidelines.

The New York City Department of Housing Preservation and Development (HPD) requested a Phase II ESA plan be prepared and submitted in tandem with the Phase I ESA for review and approval. The HASP document describes emergency response procedures for actual and potential hazards associated with the following site investigation procedures:

- Geophysical Survey
- Soil Samples and Analysis, including UST Investigation if present,
- Groundwater Investigation and Sample Analysis
- Soil Vapor Investigation and Sample Analysis
- Investigation Derived Waste

The Phase II Work Plan proposes to install 11 soil borings, three temporary groundwater monitoring wells and four soil vapor probes at the Proposed Development Site. Two soil samples will be collected from each boring. Soil and groundwater samples will be analyzed for VOCs via US EPA Method 8260, semi-VOCs via US EPA Method 8270, pesticides via US EPA Method 8081, polychlorinated biphenyls via EPA Method 8082, and Target Analyte List metals via US EPA Methods 6010 and 7471 (filtered and unfiltered for groundwater samples). Four soil vapor samples will also be collected and analyzed for VOCs via EPA Method To-15.

The HASP addresses safety protocol related to hazard assessment, personal protective equipment, air monitoring and action levels, site control, decontamination procedures, confined space, and contingency/emergency response plans.

DEP has reviewed both the Phase I ESA and Phase II ESA Work Plan and HASP prepared by VHB (see **Appendix 1, Agency Correspondence**) and made the following recommendations:

- Two soil samples should be collected from each test boring, and the samples should be focused on sections exhibiting evidence of contamination based on field screening. One surface soil sample should be collected from the upper two feet of soil (typically the 0-2 feet below ground surface [bgs] interval) and one subsurface soil sample collected between 2 feet bgs and the maximum proposed excavation depth (based on visual/olfactory evidence of impacts and/or elevated soil screening readings obtained using acceptable field instruments). If no evidence or elevated reading are noted during borehole advancement, the subsurface soil sample should be collected from a two-foot interval below the proposed maximum excavation depth and/or the groundwater interface (whichever is encountered first).
- The proposed soil, groundwater and soil vapor sampling locations should be individually labelled on Figure 3, Proposed Sample Locations Map (e.g., SB-1, GW-1, SV-1, etc.)

With the incorporation of the recommendations, DEP found the Phase II ESA Work Plan and HASP, as well as the Phase I ESA acceptable.

Phase II Environmental Site Assessment (ESA)

On November 12, 2020, a Phase II Environmental Site Assessment (ESA) was performed in accordance with the approved HASP (**Appendix 3**). The following site conditions were identified as a result of the subsurface investigation.

Soils

- There were no volatile organic compounds (VOCs) detected with the exception of xylenes in one soil sample, which can be considered an isolated occurrence.
- Semi-volatile organic compounds (SVOCs) were detected in the majority of the soil borings, primarily in shallow and mid-range soil samples. These samples exceeded New York State Environmental Conservation (NYSDEC) Part 375 Track One Unrestricted Use Soil Cleanup Objectives (UUSCOs) but did not exceed NYSDEC Part 375 Track Two Restricted-Use Restricted-Residential Soil Cleanup Objectives (RRSCOs).
- Metals were detected in several soil borings above Track Two RRSCOs, including arsenic and lead and barium and lead. Additional metals were detected that exceeded Track One UUSCOs but below Track Two RRSCOs, including copper, lead, mercury, barium, and zinc.

- There were no pesticides detected above Track Two RRSCOs. However, several samples were identified with concentrations of pesticides that exceed Track One UUSCOs.
- There were no concentrations of polychlorinated biphenyls (PCBs) that exceeded NYSDEC Part 375 Track Two RRSCOs. However, total PCB concentrations were detected that exceed the Track One UUSCO.

The presence of certain VOCs, SVOCs, metals, pesticides, and PCBs in surficial and mid-range soil samples can likely be attributed to the presence of contaminated historic/urban fill that was observed throughout the majority of the Site. The Phase II ESA recommends that excavated soil from the project site be considered impaired or impacted. Soils containing UUSCO and RRSCO exceedances within the redevelopment areas should be properly characterized and transported to appropriate disposal facilities.

Groundwater

- There were no pesticides or PCBs detected above NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs).
- One VOC and one SVOC were detected that exceeded the AWQSGV threshold. PCE was not detected in any of the on-site groundwater samples.
- Elevated total concentrations of metals present could be attributed to high turbidity; the presence of manganese and sodium detected in the sample is typical of New York City. Thallium was also detected. Based upon the known historic use of the site, it is likely attributable to an off-site source since presence of thallium is typical of ore processing and manufacturing uses.

Soil Vapor

VOCs were detected at the screening depths within the project area. Given the presence of petroleum- and refrigerant-related VOCs in the soil vapor beneath the Site, as well as the presence of chlorinated VOCs, the Phase II ESA recommends that soil vapor beneath the Site be considered as impaired or slightly impacted. The VOCs found in soil vapor at the site are typical throughout New York City due to the extensive and dense development history.

Given these conditions, no further action would be required with respect to soil vapor. Furthermore, it is expected that the future development will include a building slab that will function as a barrier to protect future occupants from the impacted soil vapor. As a conservative measure, a soil vapor barrier could be incorporated into the proposed development.

NYS Brownfield Cleanup Program (BCP)

The Proposed Project has been accepted into the New York State Brownfield Cleanup Program (BCP). New York State's Brownfield Cleanup Program (BCP) encourages voluntary private-sector cleanups of contaminated properties, known as "brownfields," to promote their redevelopment into uses that include housing, recreation, business, and other uses. A brownfield site is a real property where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance adopted by NYSDEC that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations. The BCP is intended to remove some of the barriers to, and provide tax incentives for, the redevelopment of urban brownfields. At the completion of

a BCP project and upon a determination that the remedial action objectives for the BCP site have been achieved, a Certificate of Completion (COC) will be issued.

The NYSDEC approved the Citizen Participation Plan (CPP) for the project, which outlines the citizen participation activities that will be undertaken to address significant public interests/concerns about the project (refer to Appendix 1). With the approval of the CPP, the Brownfield Cleanup Agreement (BCA) for the Proposed Development Site is activated. The BCA provides for the investigation and cleanup of the site. With the execution of a BCA, the applicant has made a commitment to undertake certain remedial activities under NYSDEC's oversight. All environmental investigation and cleanup activity must be performed in accordance with the Work Plan or design document approved by NYSDEC. The selection of the remedy is based on the characterization of nature and extent of contamination on the site and qualitative exposure assessment. The final Decision Document describes the selected remedy or site remediation activities that are to be implemented. NYSDEC issues a Certification of Completion (COC) at the completion of a BCP and upon a determination that the remedial action objectives for the BCP site as defined in the Decision Document have been achieved. Once all cleanup and remedial activities have been completed, no significant adverse impacts related to hazardous materials would result. Prior to closing the project, the project will need full approval and the Notice to Proceed (NTP) will be provided to HPD.

Assessment

The project sponsor will commit to preparing a remediation plan for the Proposed Development Site, including a construction-related health and safety plan (CHASP), to the satisfaction of HPD and NYSDEC. The project sponsor will commit to undertake certain remedial activities under NYSDEC's oversight in accordance with the BCP. To address the remediation of known or potential environmental conditions that may be encountered during proposed construction and development activities at the Proposed Development Site, all construction work involving subsurface disturbance would be performed under a site-specific remediation plan and CHASP.

With the implementation of the measures and recommendations outlined above, no significant adverse impacts related to hazardous materials would be expected to occur as a result of the Proposed Actions and resultant Project. These measures will be a condition of the Land Disposition Agreement (LDA) or other legally binding document to be executed between HPD and the project sponsor (Brownsville Arts Developer LLC) to ensure that the project sponsor incorporates all remedial action measures to the satisfaction of HPD and NYSDEC. Following construction, there would be no potential for significant adverse impacts.

Water and Sewer Infrastructure

For assessment purposes, the City's "infrastructure" comprises the physical systems supporting its population, including: water supply, wastewater treatment, and stormwater management. Other infrastructure components are addressed separately per CEQR guidance. Given the size of New York City's water supply system and the City's commitment to maintaining adequate water supply and pressure, few actions have the potential to cause significant impacts on this system. Therefore, only exceptionally large developments or actions having exceptionally large water demands (e.g., more than one million gallons per day) would warrant a detailed water supply assessment. For wastewater and stormwater conveyance and treatment, the *CEQR Technical Manual* indicates that a preliminary sewer analysis is warranted if a project site comprises one or more acres in the Jamaica Bay watershed or certain drainage areas (including

the Flushing Bay and Creek) where the amount of impervious surface would increase, or if a project is located in a combined sewer area and would result in the incremental development of at least 400 residential units or 150,000 sf or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens or at least 1,000 residential units or 250,000 sf or more of commercial space in Manhattan.

Although the Proposed Development would not exceed the incremental development threshold of 400 residential units or 150,000 sf or more of commercial space in a combined sewer area of the Brooklyn, the Proposed Development Site comprises approximately 1.31 acres (57,013 sf) in the Jamaica Bay watershed in the Fresh Creek drainage area. Given the Proposed Development Site is currently vacant and occupied by unmaintained vegetative foliage and the Proposed Actions would increase the amount of impervious area surface with the site's redevelopment, a preliminary analysis infrastructure is warranted. As presented in **Attachment G, "Water and Sewer Infrastructure,"** the Proposed Project are not expected to result in a significant adverse impact on wastewater and stormwater conveyance and treatment. A total of 86,147 gallons per day (gpd) of sanitary sewage would be generated by the Proposed Project in the With-Action condition. This increase in sewage generation is less than 0.08 percent of the average daily flow at the Coney Island Water Pollution Control Plant (WPCP) and would not result in an exceedance of the plant's permitted capacity. The project sponsor would be required to file a site connection proposal for approval from DEP for the proposed mixed-use affordable housing and community facility building to tie into the City's sewer system. In order to obtain a sewer connection permit from DEP, the project sponsor would be required to demonstrate that the existing system could manage the increased flows due to the Proposed Project. Any analysis and improvements, if required, would be undertaken prior to construction of the Proposed Project and would be coordinated with DEP for review and approval. As the adequacy of the existing sewer system would be evaluated by DEP, as part of the site connection process, the Proposed Actions would not result in a significant adverse impact to the City's sanitary sewage conveyance and treatment system.

Depending on the rainfall volume and duration, the total With-Action volume to the combined sewer system could be between 0.01 and 0.14 million gallons (mg). Compared to existing conditions, this would represent an increase in combined sewer flows of 0.01 to 0.12 mg, depending on rainfall intensities. With the incorporation of selected stormwater source control best management practices (BMPs) that would be required as part of the site connection approval process, subject to the review and approval of DEP, the peak stormwater runoff rates would be reduced. As required by DEP and DOB, all storm water would be retained on site or detained on site before releasing into the City's combined sewer lines. In addition, as noted above, as part of the site connection proposal process, sewer improvements and/or an amended drainage plan may be required, if determined warranted by DEP. Overall, the proposed project is not expected to result in significant adverse impacts on the City's sewage conveyance and treatment systems.

Transportation

The *CEQR Technical Manual* identifies minimum development densities that have the potential to result in significant adverse impacts to transportation and therefore require a detailed transportation analysis. As shown in Table 16-1 of the *CEQR Technical Manual*, actions which may result in fewer than 50 peak hour vehicle trips are generally unlikely to cause significant adverse impacts. For projects in Zone 2 (which includes areas within a 0.25-mile of a subway station in Brooklyn), the development thresholds requiring trip generation analysis are 200 DUs and 25,000 gsf of community facility space.

As the net increment for the Proposed Actions would result in the introduction of 291 DUs and approximately 25,507 gsf of community facility space, an assessment of the Proposed Actions' effect on

the City's transportation system is required and has been provided in **Attachment H, "Transportation."** Per CEQR guidance, a screening assessment was completed to determine if the Proposed Actions and Proposed Project warrant detailed analyses of traffic, parking, transit, or pedestrians. The screening assessment consisted of a Level 1 Project Trip Generation and a Level 2 Project-Generated Trip Assignment, presented in **Attachment H**.

As detailed in **Attachment H**, the Proposed Actions do not warrant detailed analyses of traffic or transit. No intersections near the Project Area would exceed the 50-vehicle CEQR threshold for a detailed traffic analysis. It is also not expected that any subway or bus lines near the Project Area would experience an increase of more than 200 peak hour rail or 50 peak hour bus transit riders, the CEQR thresholds for a detailed transit analysis. The Proposed Actions would exceed the 200 or more incremental pedestrian trips at two pedestrian elements (one sidewalk and one corner area) near the proposed rezoning area during the Saturday peak hour. Conditions at the northwest corner of Pitkin Avenue and Rockaway Avenue and on the west sidewalk along Rockaway Avenue between East New York Avenue and Pitkin Avenue were analyzed during the Saturday midday peak hours. As presented in **Attachment F**, incremental pedestrian trips generated by the RWCDS would not result in any significant adverse pedestrian impacts based on *CEQR Technical Manual* criteria. Therefore, no significant adverse impacts to traffic, transit, or pedestrians would be expected in the future with the Proposed Actions.

Air Quality

According to *CEQR Technical Manual* guidance, air quality analyses are conducted to assess the effect of an action on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the 2021 *CEQR Technical Manual*, an air quality assessment should be conducted for actions that can result in either significant adverse mobile source or stationary source air quality impacts.

Per *CEQR Technical Manual* Section 210, the threshold for detailed CO impact analysis is 170 vehicles per hour per intersection for the directly affected area, and the threshold for $PM_{2.5}$ impact analysis is 12 to 23 heavy duty diesel vehicles (HDDV) or its equivalent vehicular emission based on the type of road. According to NYS DOT Highway Functional Classification (https://www.dot.ny.gov/gisapps/functional-class-maps), Rockaway Avenue is classified as a principal arterial with a threshold of 23 HDDV trip-ends. Chester Street is a paved road with average daily traffic of fewer than 5,000 vehicles with a threshold of HDDV of 12 HDDV trip-ends. Per the EAS Form and as shown in **Attachment H, "Transportation"** the Proposed Actions and Proposed Project 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.[5] **Table H-4** in **Attachment H** indicates that the maximum incremental vehicle trips generated by the Proposed Actions would be 91 during the weekday PM peak period, which would be under the threshold for detailed CO impact analysis. Given that the Proposed Development Site has frontage on both Chester Street and Rockaway Avenue, vehicle trips would be distributed between the two streets, with most vehicle trips on Rockaway Avenue, and therefore, would not exceed the threshold for detailed $PM_{2.5}$ impact analysis for either a principal arterial (Rockaway Avenue) with a threshold of 23 HDDV trip-ends, or a paved road with average daily traffic fewer than 5,000 vehicles (Chester Street) with

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

a threshold of HDDV of 12 HDDV trip-ends. Therefore, further analysis of air quality mobile sources from action-generated vehicle trips has been screened out in accordance with *CEQR Technical Manual.*

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, which can affect surrounding uses. Impacts from boiler emissions associated with a development are a function of fuel type, stack height, minimum distance of the stack on the source building to the closest building of similar or greater height, building use, and the square footage size of the source building. In addition, stationary source impacts can occur when new uses are added near existing or planned emissions stacks, or when new structures are added near such stacks and those structures change the dispersion of emissions from the stacks so that they affect surrounding uses.

The Proposed Project would rise up to nine-stories tall (approximately 95 feet) and include approximately 290,687 gsf. The Proposed Project, as it is currently designed, would not utilize fossil fuel-powered boiler(s) for the HVAC systems. Rather, the Proposed Project has been designed to utilize electricity for both heat and hot water. Therefore, no on-site emissions would result, and no further analysis of the Proposed Project's HVAC systems is warranted. Therefore, no significant adverse stationary source air quality impacts from the Proposed Project's HVAC systems are expected in the future with the Proposed Actions.

There are also no major or large combustion sources located within 1,000 foot radius of the Proposed Development Site. Based on a review of DEP's light industrial permit records, there are only two permits (CA048391 and PB028602) for facilities located within 400 feet of the Proposed Development. DEP Permit CA048391 is for a boiler at 1562 East New York Avenue (Block 3489, Lot 1) that serves the New York City Housing Authority (NYHA) Howard Houses, which is not an industrial source. Permit PB028602 is for an engine generator at 17 Bristol Street (Block 3498, Lot 8) that expired in 2005. Based on this information, no industrial source analysis would be warranted for the Proposed Project. Moreover, based on surrounding area land uses, there are no industrial processing/manufacturing facilities within 400 feet of the Proposed Development Site (see **Figure B-4**). The four industrial processing/manufacturing land use identified in **Figure B-4**, include: a former vacant warehouse at 13 Chester Street (Block 3499, Lot 25), which has been demolished; a former warehouse for Colonial Electric at 336-340 Rockaway Avenue (Block 3499, Lot 25), which has been demolished; a warehouse at 391 Rockaway Avenue (Block 3489, Lot 168); and an autobody shop at 1495 East New York Avenue (Block 1465, Lot 46). The autobody shop at 1495 East New York Avenue specializes in autobody and tire repairs and based on a site visit in June 2023 does appear to paint on-site. However, the facility does not have a DEP air permit for a spray booth. **Attachment I, "Air Quality"** includes an air dispersion analysis of the existing auto repair facility at 1495 East New York Avenue. The detailed industrial source air dispersion analysis provided therein determined that there would be no potential for significant adverse air quality impacts. Therefore, no significant adverse industrial source or large emission source air quality impacts are anticipated, and no significant adverse stationary air quality impacts are expected in the future with the Proposed Action.

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

Study Area Building Floors



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

Legend

- Proposed Rezoning Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Proposed Development Site
- 0 Building Floors

Land Use

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

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 J, "Noise,"** noise from the increased traffic volumes generated by the Proposed Actions and Proposed Project would not cause significant adverse noise impacts, as the relative increases in noise levels would fall below the applicable *2021 CEQR Technical Manual* significant adverse impact threshold (3.0 dBA).

The Proposed Actions would result in residential and community facility 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 J, "Noise."** As discussed in detail Attachment I, the noise analysis determined that no special noise attenuation measures beyond standard construction practices would be required for residential or community facility uses at the Proposed Development Site in order to achieve the required residential or community facility interior noise level of 45 dBA or lower. Therefore, the Proposed Actions would not result in any significant adverse noise impacts.

Public Health

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

According to the *2021 CEQR Technical Manual*, a public health assessment may be warranted if a project results in (a) increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; (b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect groundwater to be used as a source of drinking water; (c) solid waste management practices that could attract vermin and result in an increase in pest populations; (d) potential significant adverse impacts to sensitive receptors from noise and odors; (e) vapor infiltration from contaminants within a building or underlying soil that may result in significant adverse hazardous materials or air quality impacts; (f) exceedances of accepted federal, state, or local standards; or (g) other actions that might not exceed the preceding thresholds but might, nonetheless, result in significant health concerns.

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

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 E**), urban design and visual resources (**Attachment F**), transportation (**Attachment H**) and noise (**Attachment J**), 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 the Proposed Development Site. The proposed residential and community facility uses would add affordable housing and arts and cultural-related amenities to the neighborhood and are expected to further enhance the mixed-use character of the area. The Proposed Project would also create a publicly accessible plaza for passive recreational use. 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 zoning changes that would affect the mid-block portion of a single block (Block 3499) with frontages along Rockaway Avenue and Chester Street between East New York and Pitkin Avenues in the Brownsville neighborhood of Brooklyn Community District (CD) 16. The Proposed Actions would facilitate the development of new affordable housing and community facility uses on Lot 15 of Block 3499 (the "Proposed Project"). The proposed mixed-use residential and community facility development would include 290 affordable dwelling units (DUs) and one superintendent's unit, and approximately 25,507 gsf of community facility space. The community facility space is envisioned to be occupied by an arts and media center, a performance arts school, a music school, a multipurpose theater/rehearsal/teaching space, and an administrative office for non-profit organizations at the site. The Proposed Project is expected to be complete and fully operational by 2025. Absent the Proposed Actions, the Proposed Project would not occur, and the proposed development site would remain vacant, as under existing conditions.

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, as well as a mayoral override approval to modify rear yard and setback requirements, an analysis of land use and zoning is 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 2025. Therefore, for the purposes of determining potential impacts, this analysis assesses current conditions and forecasts those conditions to 2025. Future No-Action conditions account for planned land use and development projects, initiatives, and proposals that are anticipated to be completed by 2025.

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"), which comprises proposed rezoning area (Lots 15, 16, 25 (p/o), 113 (p/o) and 114-116 of Block 3499); and (2) a secondary study area that encompasses an area that has the potential to experience indirect impacts as a result of the Proposed Actions. As shown in **Figure C-1**, the secondary study area extends an approximate 400-foot radius from the boundary of the primary study area. The secondary study area is roughly bounded to the north by Eastern Parkway, to the east by Thatford Avenue, to the south by Pitkin Avenue, and to the west by Thomas S. Boyland Street.

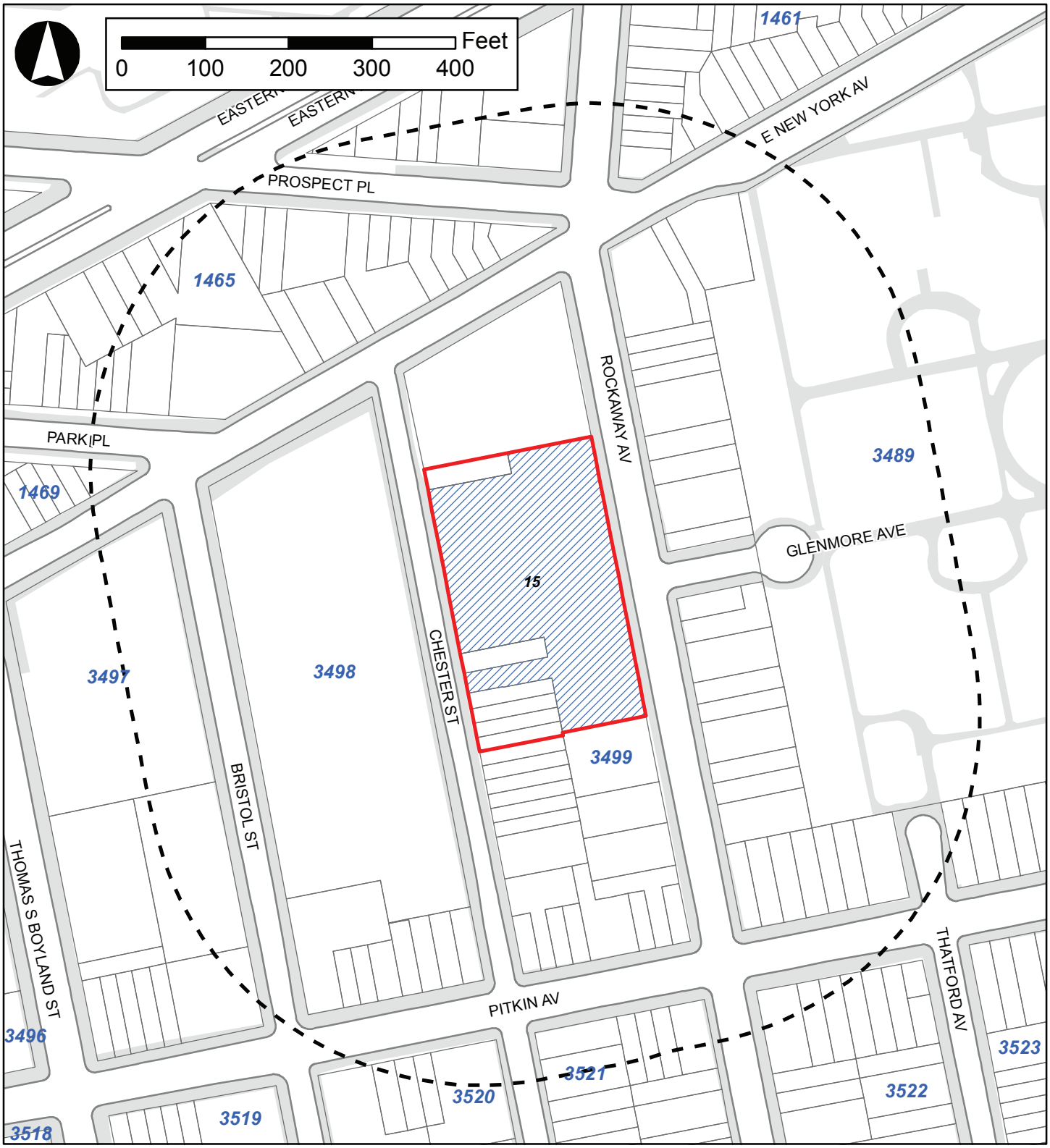
III. DETAILED ANALYSIS

Existing Conditions

Land Use

Primary Study Area (Directly Affected Area)

The primary study area comprises an approximately 69,064-sf portion of the midblock of Brooklyn Block 3499, which is bounded by East New York Avenue to the north, Rockaway Avenue to the east, Pitkin



Legend

- Proposed Rezoning Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Proposed Development Site
- 3499 Blocks
- 15 Lots

Avenue to the south, and Chester Street to the west. It comprises the expansive, irregularly shaped City-owned, Lot 15 (the "Proposed Development Site"), as well as six privately owned lots (Lots 16, p/o 25, p/o 113, and 114-116) facing Chester Street. The primary study area has approximately 345 feet of frontage on both the west side of Rockaway Avenue and the east side of Chester Street. Both Rockaway Avenue and Chester Street are defined as narrow streets with widths of 70 and 50 feet, respectively. Rockaway Avenue is a two-way, north-south road, whereas Chester Street is a one-way northbound road.

As shown in **Figure C-2**, land use in the primary study area is predominantly vacant. There are five lots that contain multi-family walkup residential apartment buildings, and one lot that contains a single-story warehouse. The primary study area includes 54,526 sf of vacant land use, 9,538 sf of residential land use comprised of 15 DUs, and formerly accommodated an approximately 2,500 gsf of warehouse that has been demolished.

The approximately 57,013-sf Proposed Development Site has approximately 345 feet of frontage on Rockaway Avenue and approximately 225 feet of frontage on Chester Street. It is currently vacant with ungroomed foliage and enclosed by fencing, with a single curb cut on Rockaway Avenue. The remaining six lots (Lots 16, 114-16, p/o 25, p/o 113) included in the primary study area are not City-owned and are each under separate private ownership. With the exception of Lot 25, these lots are rectangular-shaped lots with frontage on Chester Street and are improved with existing low-rise three-story multiunit walkup residential buildings at 49 to 55 Chester Street (Lots 16, 113-16). Lot 113 is only partially included within the proposed rezoning area. Lot 25 comprises 32,826 sf of lot area with frontage on Chester Street, East New York and Rockaway Avenues. Only the southwestern 2,500 sf portion of Lot 25 is included within the proposed rezoning area. Until recently, this portion of Lot 25 had been occupied by a single-story warehouse at 13 Chester Street, which has been demolished.

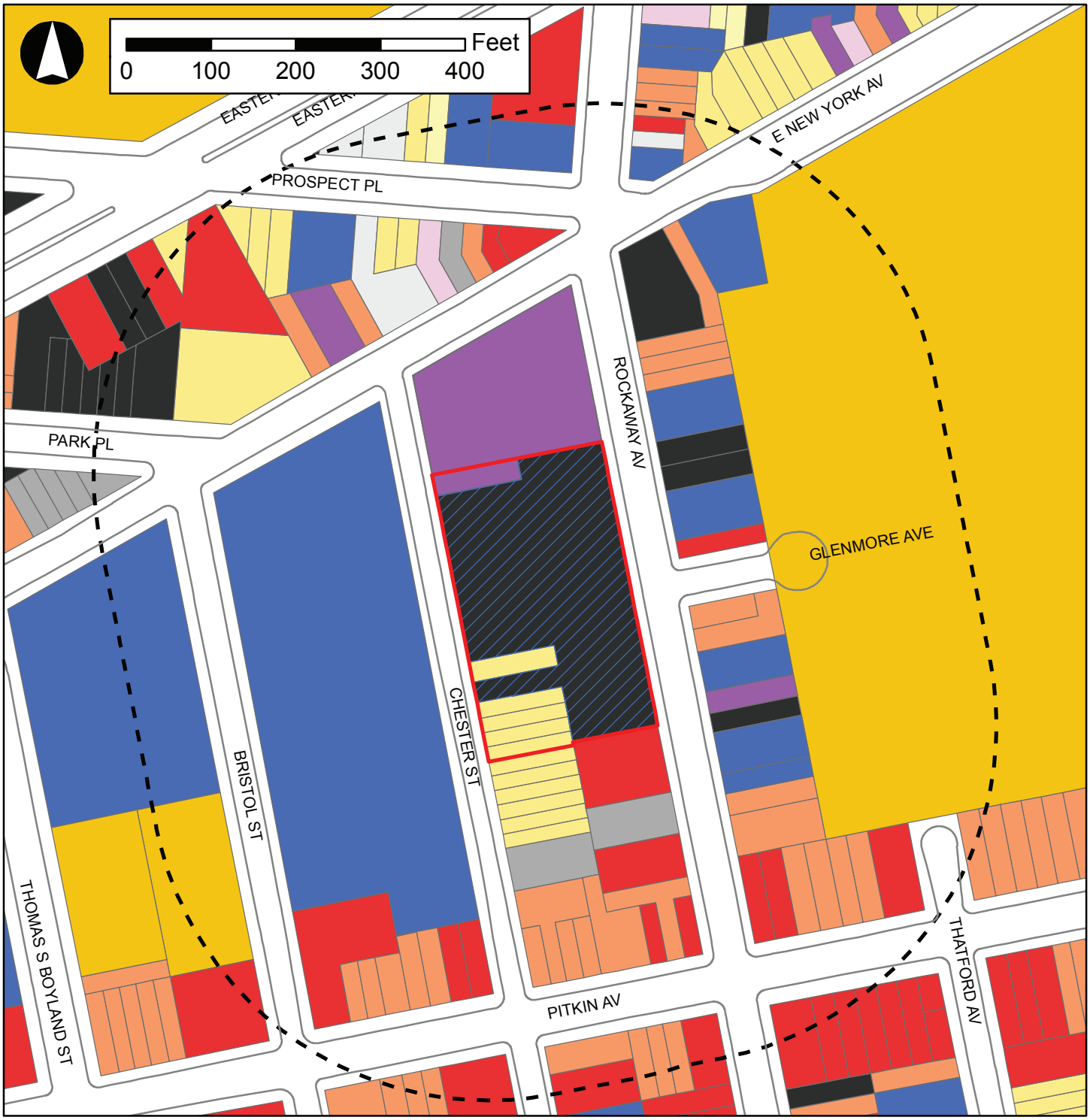
Secondary Study Area

As show in **Figure C-2**, land uses within the secondary study area are varied, with a mix of uses including multi-family housing, mixed commercial and residential buildings, commercial, light industrial/ manufacturing, and public facilities/institutional uses. In addition, although most of the lots within the secondary study area are improved with existing buildings or support active uses, there are several vacant properties located along the east and west sides of Rockaway Avenue and along Park Place, as well as four lots with open parking lots.

Residential uses are distributed throughout the study area. They generally consist of low-rise multiunit walkup residential apartment buildings that occupy narrow rectangular-shaped lots with frontage along Chester Street, East New York Avenue, and Prospect Place. Larger multiunit elevator apartment buildings, including a portion of the NYC Housing Authority's Howard Houses, are located along the eastern and western periphery of the secondary study area.

A few industrial/manufacturing uses are scattered throughout the study area and occupy lots with low-rise buildings that occupy the entire property. Mixed-use commercial and residential uses are generally clustered along Pitkin and Rockaway Avenues, with a few scattered along East New York Avenue. Similarly, office and other commercial uses are generally clustered in the southern portion of the study area, with a few lots scattered along East New York Avenue. Public facilities and institutional uses are distributed throughout the study area and include religious institutions and government services/facilities. There is one expansive lot at 17 Bristol Street that is occupied by the 120-bed Crossroads Juvenile Center, and the 73rd Police Precinct is located at 1470 East New York Avenue.

Study Area Land Uses



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

Legend

- Proposed Rezoning Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Proposed Development Site

Land Use

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

Table C-1 provides a description of existing land use within the secondary study area. As shown in **Table C-1**, mixed commercial/residential is the most prevalent land use throughout the study area and constitutes the highest percentage of tax lots (nearly 30 percent). Public facilities comprise the largest percentage of lot area, accounting for nearly 34 percent of total lot area within the secondary study area, and the highest percentage of building area (roughly 28 percent); this is in large part due to the Crossroads Juvenile Center. Vacant land comprises the second largest percentage of lot area (nearly 23 percent). Residential/commercial uses account for roughly a quarter of the built area within the study area, and commercial/office buildings account for nearly 19 percent of the building area.

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

Land Use Categories	Number of Lots	Percentage of Total Lots	Lot Area (sf)	Percentage of Total Lot Area	Building Area (sf)	Percentage of Total Building Area
One & Two Family Buildings	0	0.0%	0	0.0%	0	0.0%
Multi-Family Walkup Buildings	17	15.3%	42,376	8.9%	93,891	14.3%
Multi-Family Elevator Buildings	1	0.9%	20,000	4.2%	87,429	13.3%
Mixed Commercial/Residential Buildings	32	28.8%	79,248	16.6%	151,980	23.1%
Commercial/Office Buildings	16	14.4%	65,419	13.7%	124,204	18.9%
Industrial/Manufacturing	5	4.5%	14,501	3.0%	12,515	1.9%
Transportation/Utility	1	0.9%	2,407	0.5%	1,150	0.2%
Public Facilities & Institutions	10	9.0%	161,955	33.9%	185,487	28.2%
Open Space	0	0.0%	0	0.0%	0	0.0%
Parking Facilities	4	3.6%	13,235	2.8%	0	0.0%
Vacant Land	25	22.5%	78,166	16.4%	0	0.0%
Total	***111***	***100.0%***	***477,307***	***100.0%***	***656,656***	***100.0%***
Total Residential	18	16.2%	62,376	13.1%	181,320	27.6%

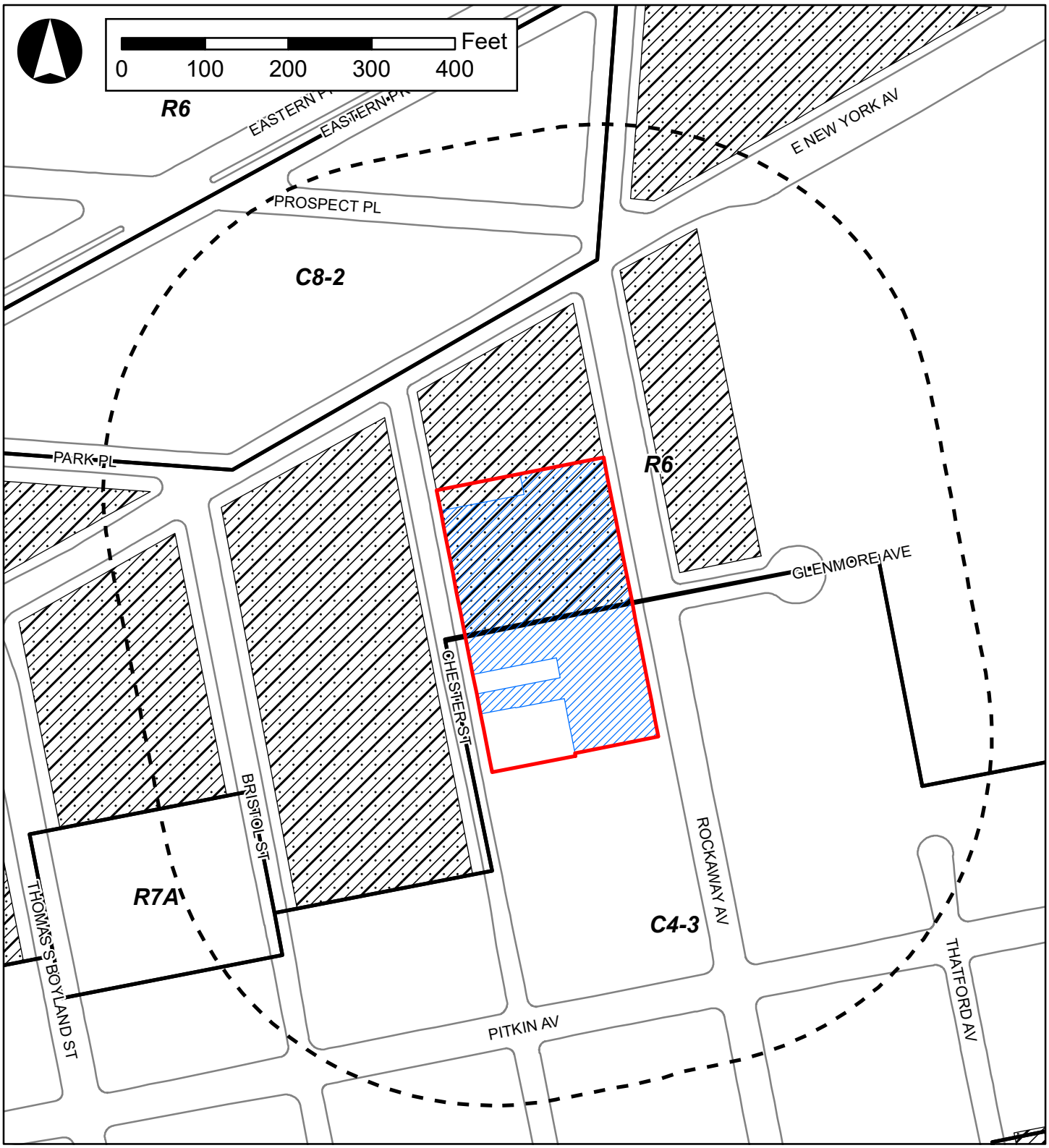
Source: NYC Department of City Planning (PLUTO 2021v1)

Zoning

Primary Study Area

As shown in **Figure C-3**, the northern portion of the primary study area is currently zoned R6 with a C2-3 commercial overlay, while the southern portion of the primary study area is zoned C4-3. 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.

C2-3 commercial overlay districts are mapped along streets that serve local retail needs. Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors; C2 districts permit a slightly wider range of commercial uses than C1 overlays, such as funeral homes and repair services. When mapped in



Source: NYCDCP (2020); DoITT (2020)

Legend

- Proposed Rezoning Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Proposed Development Site
- Zoning District Boundaries
- C2-3 Commercial Overlay

R6 districts, the maximum commercial FAR is 2.0. One parking space for every 400 square feet of floor area is required in C2-3 districts.

C4-3 zoning districts are mapped in regional commercial centers that are located outside of central business districts. In these areas, specialty and department stores, theaters and other commercial and office uses serve a larger region and generate more traffic than neighborhood shopping areas. They are non-contextual general commercial districts. The maximum FAR for commercial uses is 3.40 and one parking space per 400 square feet is required. Its residential equivalent is a R6 zoning district.

Secondary Study Area

Zoning classifications within the secondary study area are also shown in **Figure C-3** and described in **Table C-2** and consist of residential and commercial zoning districts. A C8-2 zoning district is mapped at the northern portion of the study area, north of East New York Avenue. A small R7A contextual zoning district is mapped in the southwestern portion of the study area, west of Bristol Street. R6 and C4-3 zoning districts are mapped over the majority of the secondary study area: the R6 district is located in the northern and central portion of the study area, while the C4-3 district is located in the southern portion. C2-3 commercial overlays are mapped along the north and south sides of East New York Avenue in the R6 zoning district.

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 Primary and Secondary Study Areas

The study areas are located within or nearby areas subject to four citywide policies considered under CEQR: Business Improvement Districts (BIDs), *OneNYC 2050: Building a Strong and Fair City*, *Housing Our Neighbors: A Blueprint for Housing and Homelessness*, and *CreateNYC*. The Brownsville neighborhood also has a comprehensive plan. Of note, the proposed rezoning area is located within the boundaries of the Marcus Garvey Urban Renewal Area, which expired in September 2018. In addition, much of the secondary study area is located within the boundaries of the Brownsville II plan, which was adopted in 1984, last revised in 2022 and expires in 2040.

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).

TABLE C-2: Existing Zoning Districts Mapped within the Secondary Study Area

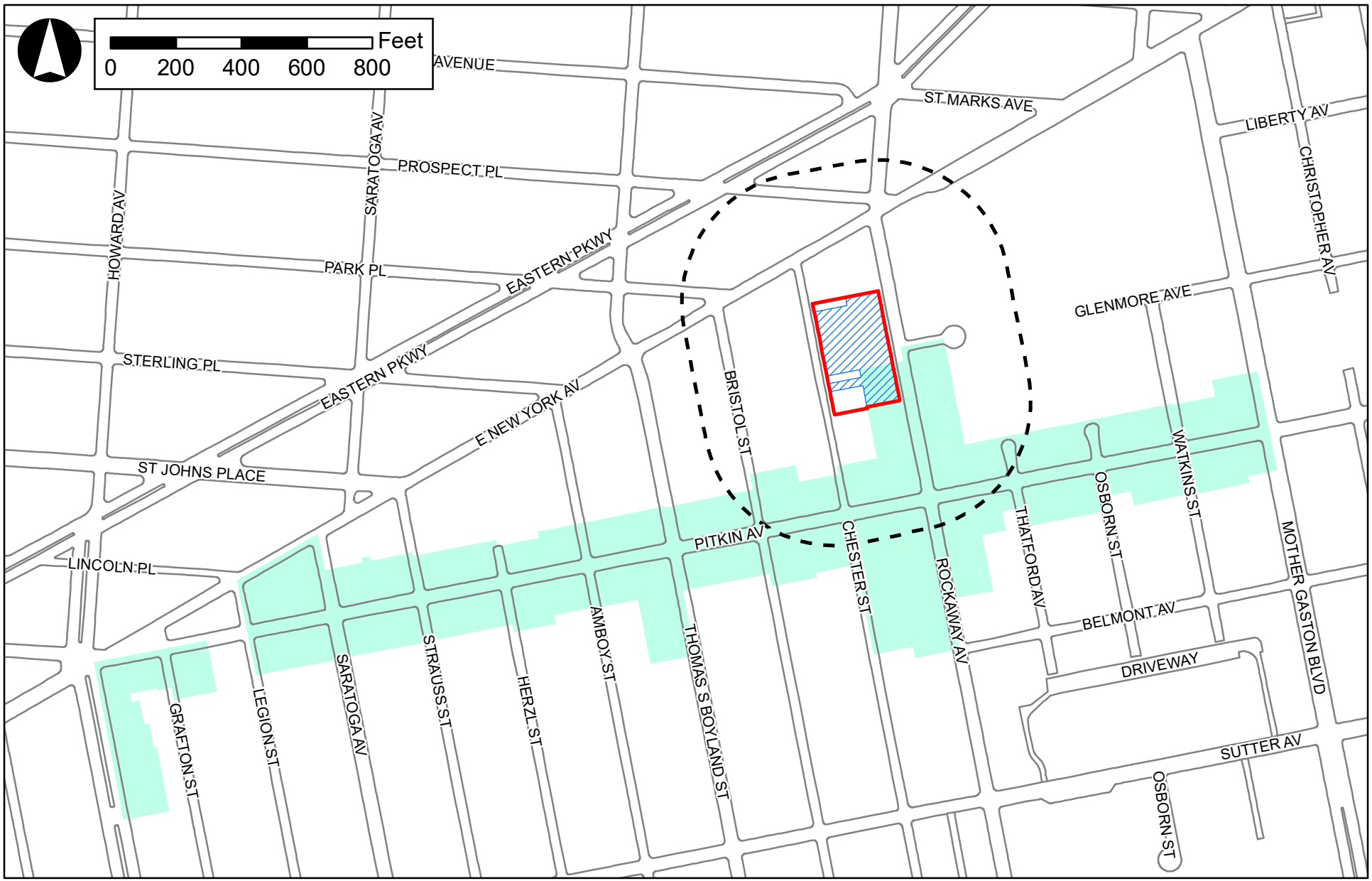
Name	Definition/General Use	Maximum FAR
Residential Districts		
R6	R6 districts are widely mapped in built-up, medium-density areas with a diverse mix of building types and heights. Developers can choose between two sets of bulk regulations: standard height factor or Quality Housing. Standard height 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	The contextual Quality Housing regulations, which are mandatory in R7A districts, typically produce high lot coverage, seven- to nine- story apartment buildings, blending with existing buildings in many established neighborhoods. Allow Use Groups 1 to 4. Maximum building height of 95 feet and maximum base height of 75 feet.	R: 4.0, 4.6 (IH); CF: 4.0; C/M: 0.0
Commercial Districts		
C4-3	C4 districts are mapped in regional commercial centers located outside central business districts. In these areas, specialty and department stores, theaters and other commercial and office uses serve a larger region and generate more traffic than neighborhood shopping areas. Allow Use Groups 5, 6, 8, 9, 10, 12. Its residential district equivalent is an R6 zoning district.	R:0.78-2.43; CF: 4.8; C: 3.4
C8-2	C8 districts, bridging commercial and manufacturing uses, provide for automotive and other heavy commercial services that often require large amounts of land. Typical uses are automobile showrooms and repair shops, warehouses, gas stations and car washes—although all commercial uses (except large, open amusements) as well as certain community facilities are permitted. Housing is not permitted.	R:0.0; CF: 4.8; C: 2.0
C2-3 (overlay)	C2 commercial overlays are mapped within residential districts along streets that serve local retail needs, as well as meet broader shopping and service needs. In mixed-use buildings, commercial uses are limited to one or two floors and must always be located below the residential uses. C2 commercial overlay districts permit a slightly wider range of uses than C1 districts.	R: same as underlying residential district; C: 1.0 within R1-R5 districts & 2.0 within R6-R10 districts; M: 0.0

Source: Zoning Resolution of the City of New York
Notes: R=Residential; C=Commercial; CF=Community Facility; M=Manufacturing; IH=Inclusionary Housing; QH=Quality Housing

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**, portions of both the primary and secondary study areas are located within the Pitkin Avenue BID. 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.



Legend

Proposed Rezoning Area (Primary Study Area) | 400-Foot Radius (Secondary Study Area) | Proposed Development Site | Pitkin Avenue BID

Brownsville Arts Center and Apartments

Figure C-4
Pitkin Avenue BID

OneNYC 2050: Building a Strong and Fair City

In April 2019, the de Blasio administration released *OneNYC 2050: Building a Strong and Fair City* (OneNYC 2050), a strategic plan for inclusive growth and climate action in New York City. Building upon its predecessor, *One New York: The Plan for a Strong and Just City* (OneNYC), OneNYC 2050 brings new attention to the fundamental link between climate action and inclusive growth with a focus on creating good-paying jobs, ensuring equitable access to natural resources, guaranteeing the right to quality healthcare and education, and promoting justice by recognizing and repairing the damage caused by historic oppression.

OneNYC 2050 includes progress since 2015, saluting the success of OneNYC's growth, sustainability, resiliency, and equity initiatives. However, the plan emphasizes that there is still much to be done to address critical challenges like climate change, increasing unaffordability, and failing infrastructure. The plan's eight goals lay the foundation for transformational change:

- **A Vibrant Democracy**, where every New Yorker is welcomed into the City's civic and democratic life.
- **An Inclusive Economy**, where economic growth creates opportunities for New Yorkers and safeguards the American Dream.
- **Thriving Neighborhoods**, where all communities have safe, affordable housing and are well served by parks, cultural resources, and other shared spaces.
- **Healthy Lives**, where health inequities based on race and ethnicity are eliminated, and all residents have equal access to health care, clean air, and healthy food.
- **Equity and Excellence in Education**, where diverse and fair schools provide a quality education for every student, and New York serves as a model for education children of all backgrounds.
- **A Livable Climate**, where we no longer rely on fossil fuels and have mitigated the risks posed by climate change.
- **Efficient Mobility**, where affordable, reliable, safe, and sustainable transportation options mean no New Yorker needs to rely on a car.
- **Modern Infrastructure**, where reliable physical and digital infrastructure allows New Yorkers to flourish.

OneNYC 2050 articulates a global perspective on the long-term needs of the City and how we must grow responsibly and sustainably while supporting the well-being of all New Yorkers. The plan is referred to as New York City's Green New Deal, and progress reports will be released yearly.

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.

CreateNYC

In July 2017, *CreateNYC* was released as New York City's first-ever comprehensive cultural plan. Following months of public engagement with nearly 200,000 New Yorkers across all five boroughs, the plan provides a long-term framework for promoting greater equity, access, diversity, and expanding opportunities for all residents to participate in the City's vibrant cultural life. The plan considers social and economic challenges, as presented by community members, to outline eight inter-related issue areas and propose action.

Two years later, the NYC Department of Cultural Affairs (DCLA) released the new *CreateNYC Action Plan*. The goal of the Action Plan is to streamline the cultural plan to better communicate both progresses to date and strategies going forward. The Action Plan reorganizes *CreateNYC*'s 90+ recommendations into five broad objectives with 22 supporting strategies.

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.

The Brownsville II URP

The Brownsville II URP includes a mix of residential, commercial, public and institutional, public open space, and industrial uses for lots in the plan area. The goals of the URP are:

a. Redevelop the area in a comprehensive manner, removing blight and maximizing appropriate land use.
b. Remove or rehabilitate substandard and insanitary structures.
c. Remove impediments to land assemblage and orderly development.
d. Strengthen the tax base of the City by encouraging development and employment opportunities in the area.
e. Provide new housing of high quality and/or rehabilitated housing of upgraded quality.

f. Provide appropriate community facilities, parts and recreational uses, retail shopping, public parking, and private parking.
g. Provide a stable environment within the Area which will not be a blighted influence on surrounding neighborhoods.

It is the intent of this URP that, to the extent deemed feasible by HPD, (i) the Area should be developed in a manner compatible with or beneficial to the surrounding community, (ii) the project should harmonize in scale, configuration, and materials to the prevailing neighborhood pattern, and (iii) in areas with exceptionally strong or uniform street character, the new construction should reinforce the existing urban pattern.

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

Land Use and Zoning

Primary Study Area

As presented in **Attachment A, "Project Description,"** in the 2025 future without the Proposed Actions, it is anticipated that no zoning changes would occur within the directly affected area, and the existing uses would remain the same. The primary study would continue to be zoned R6 with C2-3 commercial overlay and C4-3.

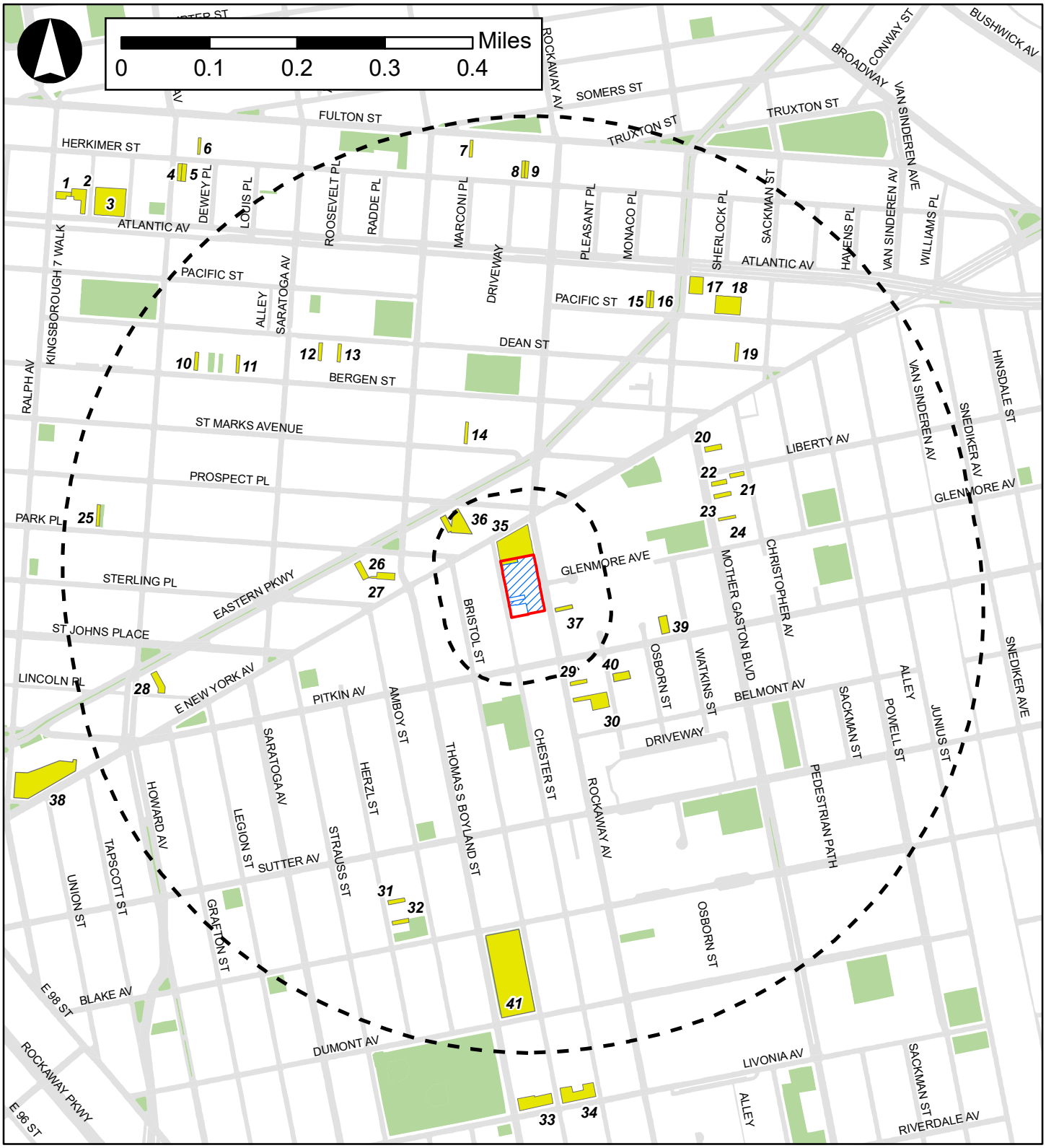
Secondary Study Area

Existing land use patterns are anticipated to continue in the surrounding area. There are no known zoning changes proposed, and three new developments anticipated to be completed by the 2025 analysis year in the secondary study area. Directly north of the Proposed Development Site, Lot 25 on Block 3499, which is partially within the proposed rezoning area and comprises the northern portion of the subject block, would be redeveloped with a 14-story (155-foot tall) mixed-use residential and community facility building at 326 Rockaway Avenue (Map No. 35). The planned development would comply with the site's existing R6/C2-3 zoning and would include 215 affordable housing units and approximately 5,000 gsf of community facility space according to filed plans with the New York City Department of Buildings (DOB). 1668 Eastern Parkway, which is located to the north of the proposed rezoning area, will be a six-story, 72-room hotel (Map No. 36). 393 Rockaway Avenue will be a six-story, 30-room hotel, located across the street from the Proposed Development Site (Map No. 37).

For the purposes of other technical analyses that assess conditions in a larger study area, developments anticipated within an approximately ½-mile of the proposed rezoning area are summarized in **Table C-3** and shown graphically in **Figure C-5**. As presented in **Table C-3**, in the future without the proposed actions, it is anticipated that 1,091 residential DUs, including approximately 698 affordable units, 20,178 sf of community facility space, and 199,347 sf of commercial uses would be developed within a ½-mile of the proposed rezoning area at 41 sites.

Public Policy

In the absence of the proposed actions, no changes to public policies are anticipated in the primary or secondary study areas.



Legend

- Proposed Rezoning Area (Primary Study Area)
- Proposed Development Site
- 400-Foot Radius (Secondary Study Area)
- Half-Mile Radius
- Open Space
- 1 No-Build Sites

TABLE C-3: No-Action Developments within ½-Mile of the Primary Study Area

Map No.	Block	Lot	Address	Residential		Retail (GSF)	Community Facility (GSF)
				Total DUs	Affordable		
1	1556	1	343 Ralph Ave	20	18	0	0
2	1556	25	20 Prescott Pl	49	0	0	0
3	1557	38	1911 Atlantic Ave	236	236	14,990	7,946
4	1559	16	1040 Herkimer St	3	0	0	0
5	1559	17	1042 Herkimer St	3	0	0	0
6	1549	72	1049 Herkimer St	2	0	0	0
7	1551	9	2114 Fulton St	8	0	0	0
8	1551	67	1267 Herkimer St	7	0	0	0
9	1551	66	1269 Herkimer St	7	0	0	0
10	1446	67	1889 Bergen St	7	0	0	0
11	1446	56	1915 Bergen St	3	0	0	0
12	1447	14	2164 Dean St	3	0	0	0
13	1447	20	2178 Dean St	3	0	0	0
14	1454	66	1633 Saint Marks Ave	3	0	0	0
15	1435	52	2315 Pacific St	3	0	0	0
16	1435	51	2317 Pacific St	3	0	0	0
17	1436	6	1864 Eastern Parkway	67	55	0	6,585
18	1436	32	126 Sackman St	136	0	0	0
19	1443	44	2427 Dean St	7	0	0	0
20	3675	5	253 Mother Gaston Blvd	19	0	0	0
21	3692	19	38 Christopher Ave	3	0	0	0
22	3692	15	273 Mother Gaston Blvd	3	0	0	0
23	3692	12	281 Mother Gaston Blvd	3	0	0	0
24	3692	6	299 Mother Gaston Blvd	3	0	0	0
25	1462	58	1709 Park Pl	8	0	0	0
26	1468	52	1598 Eastern Parkway	19	0	0	0
27	1468	63	416 Thomas S. Boyland St	8	0	0	0
28	1474	7	1470 Eastern Parkway	21	0	0	0
29	3522	12	435 Rockaway Ave	6	0	2,250	0
30	3522	27	110 Thatford Ave	23	0	9,797	0
31	3539	12	179 Herzl St	8	0	0	0
32	3539	5	195 Herzl St	8	0	0	0
33	3573	70	169 Livonia Ave	78	78	5,161	0
34	3574	60	215 Livonia Ave	96	96	6,770	0
35	3499	25	326 Rockaway Ave	215	215	0	5,000
36	1465	20	1668 Eastern Parkway	0	0	29,279	0
37	3489	167	393 Rockaway Ave	0	0	8,452	0
37	1477	1	1203 East New York Ave	0	0	88,673	0
38	3489	254	1755 Pitkin Ave	0	0	17,000	0
39	3523	7	99 Thatford Ave	0	0	16,075	0
40	3558	1	272 Bristol St	0	0	0	647
			Total	***1,091***	***698***	***199,347***	***20,178***

Source: NYCDOB, June 2021

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

This section describes the land use, zoning, and public policy conditions that would result from the Proposed Actions and subsequent Proposed Project by 2025 and evaluates the potential for the Proposed Actions to result in significant adverse impacts.

Under the With-Action condition, the Proposed Actions, which include zoning map and text amendments, an Urban Development Action Area (UDAA) designation, Urban Development Action Area Project (UDAAP) approval, disposition of City-owned lots, mayoral override approval, as well as public financing

would be approved. As described in **Attachment A, "Project Description,**" the Proposed Actions would facilitate the incremental development of 290 affordable DUs and one superintendent's unit, as well as approximately 25,507 gsf of community facility space. The community facility space is envisioned to include an arts and media center, a performance arts school, a music school, a multipurpose theater/rehearsal/teaching space, and administrative office for non-profit organizations at the site.

Land Use

Per CEQR methodology, although changes in land use could lead to impacts in other technical areas, significant adverse land use impacts are extraordinarily rare in the absence of an impact in another technical area. Also, according to the *CEQR Technical Manual*, many land use changes may be significant, but not adverse.

Primary Study Area

The Proposed Actions would result in changes to land use within the primary study area by increasing the allowable density. The Proposed Development Site would be redeveloped close to its maximum allowable FAR. The Proposed Actions would facilitate new mixed-use residential and community facility development on an underutilized site. The proposed residential and community facility uses would be consistent with the existing mixed-use character and support existing uses already present in the surrounding area, including existing multiunit walkup apartment buildings, mixed-use residential and commercial buildings, commercial/office buildings, and public facilities in the immediate vicinity of the rezoning area. The proposed ground floor community facilities would activate streetscape adjacent to the development site along Rockaway Avenue and Chester Street.

The proposed zoning changes would help further enliven Rockaway Avenue by transforming the existing underutilized vacant land into a residential and community facility building, introducing new residents as well as arts producers and consumers. The proposed R7A district would continue to allow residential and community facility uses at a slightly higher density, and the proposed C2-4 overlay mapped along Rockaway Avenue would continue to permit commercial uses up to 2.0 FAR.

The Proposed Actions would not generate land uses that would be incompatible with surrounding uses, nor would they directly displace land uses in such a way as to adversely affect surrounding land uses. The introduction of housing and community facility uses in a transit accessible area would further contribute to the mission and purpose of integrating housing with transportation and jobs, thus encouraging live-work communities and transit-oriented development. Therefore, the Proposed Actions would support land use trends, and no significant adverse land use impacts are expected.

Secondary Study Area

The Proposed Actions are not expected to alter development trends or patterns in the secondary study area. The secondary study area would not undergo any changes because of the Proposed Actions. The Proposed Actions would have no direct effect on land use nor zoning in the secondary study area. As noted above, land uses in the secondary study area are varied with a dense mix of residential, commercial, public facilities, industrial/manufacturing, parking, and some vacant uses. The Proposed Actions would facilitate the construction of a mixed-use affordable housing and community facility development as well as private and publicly accessible open space uses that would replace vacant underutilized City-owned land. The

proposed development would be compatible existing conditions and trends in the secondary study area and is expected to enliven and bring activity to the site, as well as enhance the character of this area of Brownsville, which is an established residential area well served by transit.

Therefore, the Proposed Actions would not introduce any new land uses that would be incompatible with their surroundings, and the Proposed Actions would not represent a significant adverse impact on land use in the secondary study area in accordance with the criteria set forth in the *CEQR Technical Manual.*

Zoning

In the future with the Proposed Actions, the existing zoning in the primary study area would change along Rockaway Avenue and Chester Street between East New York and Pitkin Avenues. The existing R6/C2-3 and C4-3 districts would be rezoned to a R7A with a C2-4 commercial overlay mapped on the eastern portion of the midblock to a depth of 100 feet along Rockaway Avenue (see **Figure A-2** in **Attachment A, "Project Description"**). R7A districts are medium-density contextual zoning districts that typically produce high lot coverage, seven-to nine-story apartment buildings that blend with existing buildings in established neighborhoods.

The Proposed Actions would map R7A and R7A/C2-4 zoning districts to improve vacant land and allow a mix of uses reflective of the adjacent mixed residential/commercial setting in Brownsville. The proposed R7A zoning district would allow residential and community facility uses (Use Groups 1-4) at a greater density than permitted under the existing R6/C2-3 and C4-3 zoning. Commercial uses (Use Groups 5-9, and 14) would no longer be allowed along Chester Street, which has a residential identity, and the maximum allowable commercial FAR would be reduced to 2.0 along Rockaway Avenue.

TABLE C-4: Comparison of Allowable Uses and Maximum FAR for the Existing and Proposed Zoning

	Existing Zoning		**Proposed Zoning**	
Zoning District	**R6/C2-3**	**C4-3**	**R7A**	**R7A/C2-4**
Use Groups	UG 1-4, 5-9, 14	UG 1-6, 8-10, 12	UG 1-4	UG 1-9, and 14
Maximum Allowable FAR				
Residential	3.0 (under HF regulations) 3.6 (IH)	Equivalent to R6	4.0 (QH), 4.6 (IH)	
Community Facility	4.8	Equivalent to R6	4.0	
Commercial	2.0	3.4	0.0	2.0
Manufacturing	0.0	0.0	0.0	

Source: *Zoning Resolution of the City of New York.*
Notes: HF=Height Factor; IH=Inclusionary Housing; QH=Quality Housing

The proposed zoning changes and mayoral zoning override are being sought to achieve the goals of maximizing the development of affordable housing and a variety of community facility uses at the development site. The zoning override, specifically, is needed to provide a superior site plan that maximizes the amount of affordable housing at the site. Approval of these actions would increase the allowable density and 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 proposed rezoning area along Rockaway Avenue is well-suited for additional development, given its proximity to public transit and as the street is a major north-south arterial.

The proposed R7A zoning district with a C2-4 commercial overlay would have a maximum FAR of 4.6 for residential uses with MIH and 4.0 for community facility uses. The proposed zoning change would also establish a medium-density contextual residential district that would have minimum and maximum base height requirements as well as a maximum building height. 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 to a depth of 15 feet (on a narrow street). Off-street accessory parking would be required for 15 percent of MIH units within the Transit Zone.

The proposed zoning map change would permit new development consistent with land uses and zoning in the surrounding area, including an existing medium density contextual residential district (R7A) mapped to the west of Chester Street, C2-3 commercial overlays mapped along East New York Avenue, and a C4-3 commercial district mapped south of the proposed rezoning area. The proposed zoning change would allow for the development of vacant and underutilized land for new affordable housing and community facilities in an area that is well served by transit. The proposed R7A district and C2-4 commercial overlay would be consistent with the City's policy to support additional development in transit accessible area.

The proposed zoning text amendment would establish an MIH area coterminous with the rezoning area through ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Community District 16. The proposed text amendment would require the applicant to develop in accordance with the MIH program and would mandate the provision of affordable housing. Future qualifying development of all sites within the rezoning area would also be required to adhere to the requirements of the MIH program. Pursuant to the MIH program, a percentage of the new dwelling units in the Proposed Project must be permanently affordable units, resulting in an affordable housing set-aside for either 25 percent of the residential floor area at an average of 60 percent of the Average Median Income (AMI) (Option 1) or 30 percent of the residential floor area at an average of 80 percent of AMI (Option 2). The applicant is seeking to develop the project site with 100 percent affordable housing units and the proposed housing would be affordable to households earning between 30 to 80 percent of the AMI. The proposed affordable housing set-asides would ensure that the development within the rezoning area would help to address the need for housing to serve a broad change of the City's diverse incomes.

Secondary Study Area

The proposed zoning actions would only apply in the primary study area and would not affect lots beyond this area. The proposed zoning map and text amendments would be in keeping with the City's land use, zoning, and public policy objective to encourage denser development in areas served by public transit and facilitate the development of affordable housing. The proposed R7A (MIH) district would facilitate the development of affordable housing and community facility uses. The proposed C2-4 overlay along Rockaway Avenue would permit commercial development consistent with the mixed-use character of the street corridor. The proposed zoning changes would be consistent with existing zoning within the Brownsville neighborhood and secondary study area, including the existing C2-3 commercial overlays mapped along the south side of East New York Avenue to the north and along the east and west sides of Rockaway Avenue. The Proposed Actions would not result in any significant impacts to zoning patterns in the area, nor have a significant impact on the extent of conformity within the current surrounding area.

Public Policy

As detailed below, the Proposed Actions would not result in any significant adverse public policy impacts to the primary or secondary study areas.

Pitkin Avenue BID

The Pitkin Avenue BID supports the following core programs: sanitation, marketing and place making, 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 291 dwelling units, attracting new residents, and approximately 25,507 gsf of community facility space, which would introduce new cultural institutions and workers, within 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.

OneNYC 2050

The proposed zoning actions would be consistent with *OneNYC 2050* and the sustainability goals outlined in the plan. Notably, the Proposed Actions would support the plan's goal to create "Thriving Neighborhoods," where all communities have safe, affordable housing and are well served by parks, cultural resources, and other shared spaces. The Proposed Actions are expected to facilitate the development of the Proposed Project, a nine-story mixed-use building with 290 affordable DUs, one superintendent's unit, and 25,507 gsf of community facility space, which would be occupied by a range of arts and cultural uses. Additionally, approximately 5,182 sf of publicly accessible passive open space would be created along Rockaway Avenue. This combination of space advances outlined strategies in *OneNYC 2050* to ensure that all New Yorkers have access to safe, secure, and affordable housing, as well as neighborhood open spaces and cultural resources. Therefore, the Proposed Actions would be supportive of the applicable goals and objectives of *OneNYC 2050*, and further analysis is not warranted.

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 291 DUs. The Proposed Actions would establish a MIH area encompassing the area to be rezoned, which would require residential development in the With-Action condition to include permanently affordable housing units. The affordable dwelling units under the With-Action condition would provide the area with new affordable housing units and 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.

CreateNYC

The Proposed Actions would provide approximately 25,507 gsf of community facility space, which is envisioned to accommodate a range of cultural and arts spaces including an arts and media center, a performance arts school, a music school, a multipurpose theater/rehearsal/teaching space, and administrative office space for the various programs at the site. These community facilities would expand opportunities for cultural activity in the Brownsville neighborhood. In providing more community facility

space with arts uses, the proposed development would help further the objectives of *CreateNYC*, including strengthening citywide coordination of arts and cultural funding and development. Moreover, the Proposed Project is mentioned as part of Objective 4, Strategy C, "Promote the inclusion of cultural facilities in City-led developments," outlined in the 2019 Action Plan. Therefore, the Proposed Actions would advance the goals or objectives of *CreateNYC*.

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 ensure City investments are paired with access to jobs and educational resources for residents, as well as 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 a range of new arts and cultural related spaces, as well as new publicly accessible passive open space. The proposed development, selected through HPD's 2018 Brownsville Request for Proposals (RFP) process, would be a mixed-use residential and community facility building between five to nine-stories tall that would include 291 units of affordable housing and 25,507 gsf of community facility space, as well as 5,182 sf of public plaza area.

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

IV. 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 2025 future with the Proposed Actions in the primary and secondary study areas. The Proposed Actions would result in changes to land use on the Proposed Development Site. 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 increase the allowable density in 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 Rockaway Avenue, which is a major north-south corridor in the surrounding area that is suited for denser development near public transit.

The proposed mixed-use R7A and 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
COMMUNITY FACILITIES

I. INTRODUCTION

This attachment examines the potential effects of the Proposed Actions and resultant Proposed Project on community facilities and services in and around the Project Area. The 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* defines community facilities and services as public or publicly funded facilities, including schools, health care, child care, libraries, and fire and police protection services. CEQR methodology focuses on direct impacts on community facilities and services, and on indirect effects caused by increased demand for community facilities and services generated by increases in population.

The Proposed Actions would facilitate the development of new affordable housing and community facility uses on Lot 15 of Brooklyn Block 3499 (the "Proposed Project"). The proposed mixed-use development would include 290 affordable dwelling units (DUs) and a single superintendent's unit, as well as approximately 25,507 gross square feet (gsf) of community facility space, which is envisioned to accommodate a range of cultural and arts-related spaces at the site (the "Proposed Project"). The Proposed Project is expected to be complete and operational by 2025. Absent the Proposed Actions, the Proposed Project would not be constructed, and the Proposed Development Site would remain vacant as under existing conditions.

As discussed in **Attachment B, "Supplemental Screening,"** the Proposed Project would exceed the *CEQR Technical Manual* thresholds for public elementary and intermediate schools and child care services. Therefore, detailed analyses of indirect public elementary and intermediate schools, as well as publicly funded child care services are provided below. The projected population expected to be introduced due to the Proposed Project would not exceed the *CEQR Technical Manual* thresholds requiring detailed analysis of other community facilities, including high schools, libraries, health care facilities, and fire and police protection services. The following analysis of community facilities and services has been conducted in accordance with *CEQR Technical Manual* guidance, utilizing the latest data and guidance from agencies such as the New York City Department of Education (DOE), the New York City School Construction Authority (SCA), and the New York City Department of City Planning (DCP).

II. INDIRECT EFFECTS ON PUBLIC ELEMENTARY AND INTERMEDIATE SCHOOLS

Methodology

According to *CEQR Technical Manual* guidance, a schools analysis focuses on potential impacts on public schools operated by the DOE. Therefore, private and parochial schools are not included in the analysis of schools presented in this attachment.

Based on the CEQR multipliers, the Proposed Actions and associated Proposed Project would result in the incremental development of 291 DUs, which would generate approximately 41 elementary school

students and 17 intermediate school students, and therefore, exceed the threshold of 50 elementary and intermediate school students warranting a detailed analysis.

Pursuant to *CEQR Technical Manual* guidance, this analysis assesses the potential effects of the Proposed Project on elementary and intermediate schools located within the study area, defined as Sub-district 1 of Community School District (CSD) 23 (see **Figure D-1**). Children residing in the Project Area would most likely attend elementary and intermediate schools in this study area.

A school's analysis presents the most recent capacity, enrollment, and utilization rates for elementary, intermediate, and high schools in the respective study areas. Future conditions for the No-Action Condition are forecast based on enrollment projections and planned or known development projects.[1] The future utilization rate for school facilities is calculated by adding the estimated enrollment from anticipated residential developments in the school's study area to DOE's projected enrollment and comparing that number with projected school capacity. In addition, any new school projects identified in the DOE 2020-2024 Five-Year Capital Plan (and/or subsequent amendments) are included if construction has begun. According to the *CEQR Technical Manual*, some school projects may be included in the analysis if they are in the DOE Five-Year Capital Plan, but are not yet under construction, if the lead agency, in consultation with the SCA, concurs that it is appropriate.

To determine With-Action school utilization rates, the net elementary and intermediate school population generated by the Proposed Actions was added to CSD 23, Sub-district 1. The effect of the new students on the capacity of schools within the study area was then evaluated. According to the *CEQR Technical Manual*, a significant adverse impact may occur if a proposed action would result in (i) a utilization rate of the elementary and/or intermediate schools that is equal to or greater than 100 percent in the future With-Action Condition; and (ii) 100 or more new students generated from the proposed development past the 100 percent utilization rate.

Existing Conditions

Elementary Schools

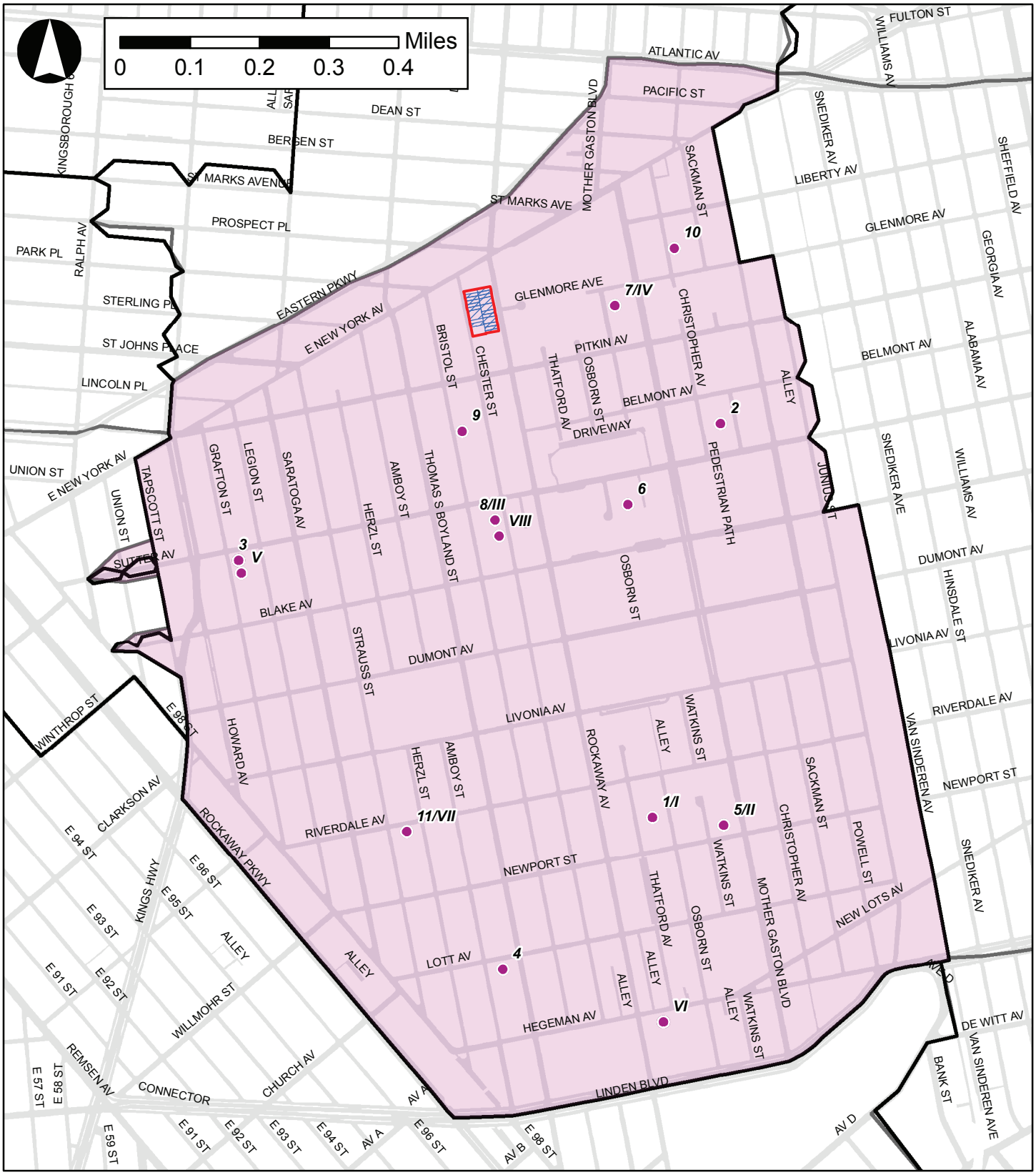
As described above, elementary schools in New York City are located in geographically defined school districts. As shown in **Figure D-1**, the Project Area is located within the boundaries of CSD 23, Sub-district 1. Analyzed schools located in CSD 23, Sub-district 1 serving elementary students can generally be defined by one of two categories: elementary or K-8 schools. Public elementary schools (P.S.) serve pre-kindergarten or kindergarten through 5th grades and K-8 schools serve pre-kindergarten or kindergarten through 8th grades. For analysis purposes, the elementary and the P.S. component of K-8 schools have been combined.

As shown in **Figure D-1** and **Table D-1**, there are 11 public schools located within Sub-district 1 of CSD 23, which serve elementary students, including three K-8 schools serving both elementary and intermediate levels.

Table D-1 provides the existing capacity, enrollment, and utilization figures for elementary schools within Sub-district 1 of CSD 23 during the 2021-2022 academic year. As shown in **Table D-1**, the 11 schools within

[1] School Construction Authority, "Projected New Housing Starts for the FY 2020-2024 Capital Plan."

Public School Study Area- CSD 23, Sub-district 1



Legend

- Proposed Rezoning Area
- Proposed Development Site
- Community School Districts
- Community School Subdistricts
- Study Area
- Public Schools (refer to Table D-1)

CSD 23, Sub-district 1 that serve elementary levels had a target capacity of 4,648 seats, enrollment of 2,925 students, utilization of approximately 63 percent and 1,723 seats available.

TABLE D-1: 2021-2022 Public Elementary and Intermediate School Enrollment, Capacity, and Utilization in CSD 23, Sub-district 1

Map No. [1]	Name	Address	Org. Level	Enrollment	Target Capacity	Available Seats	Utilization (%)
Elementary Schools							
1	**P.S. 041 Francis White**	411 Thatford Avenue	PS/IS	142	358	216	39.7%
2	**P.S. 150 Christopher**	364 Sackman Street	PS	157	276	119	56.9%
3	**P.S. 156 Waverly**	104 Sutter Avenue	PS	466	584	118	79.8%
4	**P.S. 165 Ida Posner**	76 Lott Avenue	PS	218	608	390	35.9%
5	**P.S. 184 Newport**	273 Newport Street	PS/IS	303	388	85	78.1%
6	**The Gregory Jocko Jackson School of Sports, Art, and Technology**	213 Osborn Street	PS	240	358	118	67.0%
7	**P.S. 298 Dr. Betty Shabazz**	85 Watkins Street	PS	310	304	-6	102.0%
8	**P.S./I.S. 323**	210 Chester Street	PS/IS	334	356	22	93.8%
9	**P.S. 327 Dr. Rose B. English**	111 Bristol Street	PS	216	668	452	32.3%
10	**Christopher Avenue Community School**	51 Christopher Avenue	PS	248	366	118	67.8%
11	**Riverdale Avenue Community School**	76 Riverdale Avenue	PS	291	382	91	76.2%
Total Elementary Schools in Sub-district 1 of CSD 23				**2,925**	**4,648**	**1,723**	**62.9%**
Intermediate Schools							
I	**P.S. 041 Francis White**	411 Thatford Avenue	PS/IS	102	257	155	39.7%
II	**P.S. 184 Newport**	273 Newport Street	PS/IS	137	175	38	78.3%
III	**P.S./I.S. 323**	210 Chester Street	PS/IS	188	200	12	94.0%
IV	**Brownsville Collaborative Middle School**	85 Watkins Street	IS	264	263	-1	100.4%
V	**I.S. 392**	104 Sutter Avenue	IS	327	412	85	79.4%
VI	**Kappa V (Knowledge and Power Preparatory Academy)**	985 Rockaway Avenue	IS	99	434	335	22.8%
VII	**Riverdale Avenue Middle School**	76 Riverdale Avenue	IS	128	260	132	49.2%
VIII	**Mott Hall Bridges Academy**	210 Chester Street	IS	184	449	265	41.0%
Total Intermediate Schools in Sub-district 1 of CSD 23				**1,429**	**2,450**	**1,021**	**58.3%**

Notes: [1] Map numbers correspond to **Figure D-1**.
Source: DOE, Enrollment-Capacity-Utilization Report, 2021-2022 School Year.

Intermediate Schools

Analyzed schools located in CSD 23, Sub-district 1 serving intermediate students can generally be defined by one of three categories: intermediate, secondary, and K-8 schools. Intermediate schools (IS) serve 6th through 8th grades; secondary schools serve 6th through 12th grades; and K-8 schools serve pre-kindergarten or kindergarten through 8th grades. For analysis purposes, the intermediate and IS components of K-8 schools and secondary schools have been combined.

Table D-1 shows the existing capacity, enrollment, and utilization figures for intermediate schools within CSD 23, Sub-district 1. As shown in **Table D-1**, in the 2021-2022 academic year there were eight public schools within the study area that served intermediate students, including three schools serving both elementary and intermediate levels.

As shown in **Table D-1**, CSD 23, Sub-district 1 had a target capacity of 2,450 intermediate school seats in the 2021-2022 academic year and an enrollment of 1,429 students, for a total utilization of approximately 58.3 percent and 1,021 available seats.

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

In the 2025 future without the Proposed Actions, future utilization of public elementary and intermediate schools serving the study area would be affected by changes in enrollment mainly due to: (1) aging of the existing student body and new arrivals born in the area or moving to it; and (2) changes in capacity, or number of available seats, in the schools as a result of planned construction of new schools or building additions.

Capacity Changes

As outlined in the *CEQR Technical Manual*, No-Action school capacity changes considered in a community facilities analysis include information on proposed and adopted "Significant Changes in School Utilization" and the DOE's Five-Year Capital Plan. As discussed in the DOE's Five-Year Capital Plan, no elementary school or intermediate school capacity changes are anticipated within CSD 23, Sub-district 1 by 2025 in the future without the Proposed Actions. Therefore, there would be no additional elementary or intermediate school seats added to the study area by 2025.

Enrollment Changes

Estimates of future enrollment are derived from the latest available DOE enrollment projection data for CSD 23, Sub-district 1 for 2025 (Enrollment Projections for the NYC Public School 2021-22 to 2030-2031). In the 2025 future without the Proposed Actions, DOE projections show that demand for public elementary schools in CSD 23, Sub-district 1 is anticipated to decrease by nearly two percent (to 2,878) and intermediate enrollment is forecasted to decrease by approximately 24 percent (to 1,085). The enrollment projections focus on the natural growth of the City's student population and other population increases and do not account for new residential developments planned for the area (i.e., No-Action projects).

New residential development is also planned in the study area by the analysis year of 2025. Using numbers derived from the DOE's Projected New Housing Starts for Sub-district 1 of CSD 27, approximately 433 new elementary school students and 189 new intermediate school students will be added to the study area by the 2025 analysis year. As such, 2025 projected elementary and intermediate school enrollment in the future without the Proposed Actions would increase to 3,311 and 1,274, respectively.

Elementary Schools

As discussed above, in the 2025 future without the Proposed Actions, CSD 23, Sub-district 1 elementary school enrollment is expected to increase to 3,311. Based on these changes, elementary schools in Sub-district 1 of CSD 23 are expected to continue to operate below capacity (approximately 71 percent utilization), with 1,337 available seats (see **Table D-2**).

TABLE D-2: 2025 No-Action Estimated Public Elementary and Intermediate School Enrollment, Capacity, and Utilization in CSD 23, Sub-district 1

	2025 Projected Enrollment [1]	Students Generated from Development in No-Action [2]	Total Projected Enrollment in No-Action	Projected Capacity	Seats Available	Utilization (%)
Elementary Schools	2,878	433	3,311	4,648	1,337	71.2
Intermediate Schools	1,085	189	1,274	2,450	1,176	52.0

Notes:
[1] DOE Enrollment Projections (Projected 2021-2030).
[2] DOE Projected New Housing Starts (2020-24)

Intermediate Schools

As shown in **Table D-2**, with no changes to CSD 23, Sub-district 1 intermediate school capacity anticipated in the 2025 future without the Proposed Actions and intermediate school enrollment expected to decrease to 1,274. The utilization rate for intermediate schools in CSD 23, Sub-district 1 is expected to decrease to approximately 52 percent, with 1,176 available seats.

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

As described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the construction of approximately 291 DUs by 2025. Based on *CEQR Technical Manual* student generation rates, the estimated school age population generated would include 41 elementary school students and 17 intermediate school students.

Elementary Schools

In the future with the Proposed Actions, elementary schools in Sub-district 1 of CSD 27 would continue to operate below capacity as under No-Action conditions. As shown in **Table D-3**, the addition of 41 elementary school students generated by the Proposed Actions would increase the utilization by approximately 0.9 percentage points to 72.1 percent. There would be 1,296 seats available in the future with the Proposed Actions.

As the Proposed Actions would generate 41 elementary school students and would result in an increase of only 0.9 percentage points over the No-Action condition, no significant adverse impacts to elementary schools would occur.

TABLE D-3: 2025 With-Action Estimated Public Elementary and Intermediate School Enrollment, Capacity, and Utilization for CSD 23, Sub-district 1

	2025 No-Action Total Projected Enrollment	New Students Generated by Proposed Actions	Total Future With-Action Projected Enrollment	Projected Capacity	Seats Available	Utilization (%)	Increase in Utilization (%) from No-Action condition
Elementary Schools	3352	41	3,352	4,648	1,296	72.1	+0.9
Intermediate Schools	1,274	17	1,291	2,450	1,159	52.7	+0.7

Intermediate Schools

As shown in **Table D-3**, the addition of 17 intermediate school students to CSD 23, Sub-district 1 as a result of the Proposed Project would increase intermediate school enrollment to 1,291 in the With-Action condition. As under No-Action conditions, CSD 23, Sub-district 1 intermediate schools would operate below capacity, with the Proposed Actions expected to increase the study area's intermediate school utilization by 0.7 percentage points to 52.7 percent. There would be 1,159 seats available in the future with the Proposed Actions.

As the Proposed Actions would generate 17 intermediate school students and would result in an increase of only 0.7 percentage points over the No-Action condition, no significant adverse impacts to intermediate schools would occur.

III. INDIRECT EFFECTS ON PUBLICLY FUNDED CHILD CARE CENTERS

Methodology

Publicly financed early childhood programs fall under the auspices of the DOE, early childhood education services. Early childhood programs comprise EarlyLearnNYC (Child Care and Early Head Start), 3-K, and Pre-K for All. While 3-K and Pre-K programs are free for all three and four-year-old children in New York City, there are eligibility requirements for children to enroll in EarlyLearnNYC Child Care and Early Head Start programs. A space for one child in a child care center is called a "seat" (or a "slot"). These seats may be in contracted programs at a child care center run by a provider. Seats may also be in private homes licensed to provide child care services to small numbers of unrelated children. Two types of these services exist: "group family child care," which serves 6 to 12 children; and "family child care," which serves 3 to 6 children. Projects that would create a large number of subsidized residential units are examined for potential impacts on the number of seats available at contracted programs near the project (i.e., the study area). In certain instances, vouchers may be provided that allow an eligible child to access care from private providers. However, because the specific locations of family day care and voucher slots cannot be identified, they are not suitable for a study area analysis. The DOE provides subsidized child care in center-based group child care, family-based child care, informal child care, and Head Start programs. Publicly financed child care services are available for income-eligible children up to the age of 12. The CEQR analysis focuses on services for children under age five, as eligible children aged five through 12 are expected to be in school for most of the day.

Publicly financed Early Childhood Programs are available for eligible children 5 and younger (until the child is eligible to attend kindergarten for a fall start date). Families eligible for Early Childhood Program

subsidized seats must meet financial and social eligibility criteria as established by DOE. In general, children in families that have incomes at or below 200 percent of the Federal Poverty Level (FPL), depending on family size, are financially eligible, although in some cases eligibility can go up to 275 percent of the FPL. The family must also have an approved "reason for care," such as involvement in a child welfare case or participation in a "welfare-to-work" program.

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

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

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

Existing Conditions

As indicated in **Table D-4** and **Figure D-2**, there are 25 publicly funded childcare centers within the study area with a combined capacity of 1,268 slots and 483 available slots (61.9 percent utilization). **Table D-4** details the current capacity and enrollment for each of these facilities. As noted above, although family-based child care facilities and informal care arrangements provide additional slots in the study area, these slots are not included in the quantitative analysis.

TABLE D-4: Publicly Funded Early Childhood Programs Serving the Project Area

Map ID	Program Name	Address	Total Seats (capacity)	Enrollment	Available Seats	Utilization
1	EDWARDS L. CLEAVELAND	1185 PARK PL.	41	21	20	51.2%
2	LIFE-JOHN COKER	1375 BUSHWICK AVE.	66	60	6	90.9%
3	THE FRIENDS OF CROWN HEIGHTS EDUCATIONAL CTRS, INC.	1435 PROSPECT PL.	47	34	13	72.3%
4	WEEKSVILLE GARDEN CHILDREN'S CTR	1640 PACIFIC ST.	15	0	15	0.0%
5	HIGHLIGHTS ACADEMY	1688 PRESIDENT ST.	12	0	12	0.0%
6	SUPERIOR DAYCARE CTR, INC	1741 BROADWAY	41	0	41	0.0%
7	CREATIVE LEARNING ACADEMY - CROWN HEIGHTS	196 ALBANY AVE.	18	0	18	0.0%
8	STRAWBERRRY PATCH DAYCARE CTR, INC	2007 LINDEN BLVD	41	0	41	0.0%
9	SHIRLEY CHISHOLM DAY CARE CTR SITE 1	2023 PACIFIC ST.	123	61	62	49.6%
10	BKS - BREVOORT	250 RALPH AVE.	30	7	23	23.3%
11	BKA OF NY LLC	250 UTICA AVE.	33	0	33	0.0%
12	SHIRLEY CHISHOLM DAY CARE CTR SITE 5 ADVENT CTR	265 SUMPTER ST.	0	29	-29	N.A.
13	AUDREY JOHNSON DCC	272 MOFFAT ST.	66	40	26	60.6%
14	SHIRLEY CHISHOLM CHILD CARE CTR SITE 4 SOMERS	33 SOMERS ST.	123	80	43	65.0%
15	FRIENDS OF CROWN HEIGHTS - 36 FORD STREET	36 FORD ST.	108	85	23	78.7%
16	FRIENDS OF CROWN HEIGHTS - 370 NEW LOTS AVENUE	370 NEW LOTS AVE.	80	33	47	41.3%
17	MOHDC SMARTSTART BLAKE AVE	533 BLAKE AVE.	52	0	52	0.0%
18	CHILDREN'S CORNER	565 LIVONIA AVE.	120	49	71	40.8%
19	BE ABOVE 37	570 CROWN ST.	0	92	-92	N.A.
20	UNITED COMMUNITY CTRS	613 NEW LOTS AVE.	75	39	36	52.0%
21	SARATOGA II - SHIRLEY CHISHOLM CTR	69 SARATOGA AVE.	81	27	54	33.3%
22	ALL MY CHILDREN DAY CARE 14	771 CROWN ST.	0	40	-40	N.A.
23	BUSHWICK UNITED HDFC 8	803 KNICKERBOCKER AVE.	0	37	-37	N.A.
24	BEDFORD STUYVESANT EARLY CHILDHOOD DEVELOPMENT CTR, INC.	813 HANCOCK ST.	12	0	12	0.0%
25	BISHOP SEXTON HEAD START	933 HERKIMER ST.	84	51	33	60.7%
		Total	**1,268**	**785**	**483**	**61.9%**

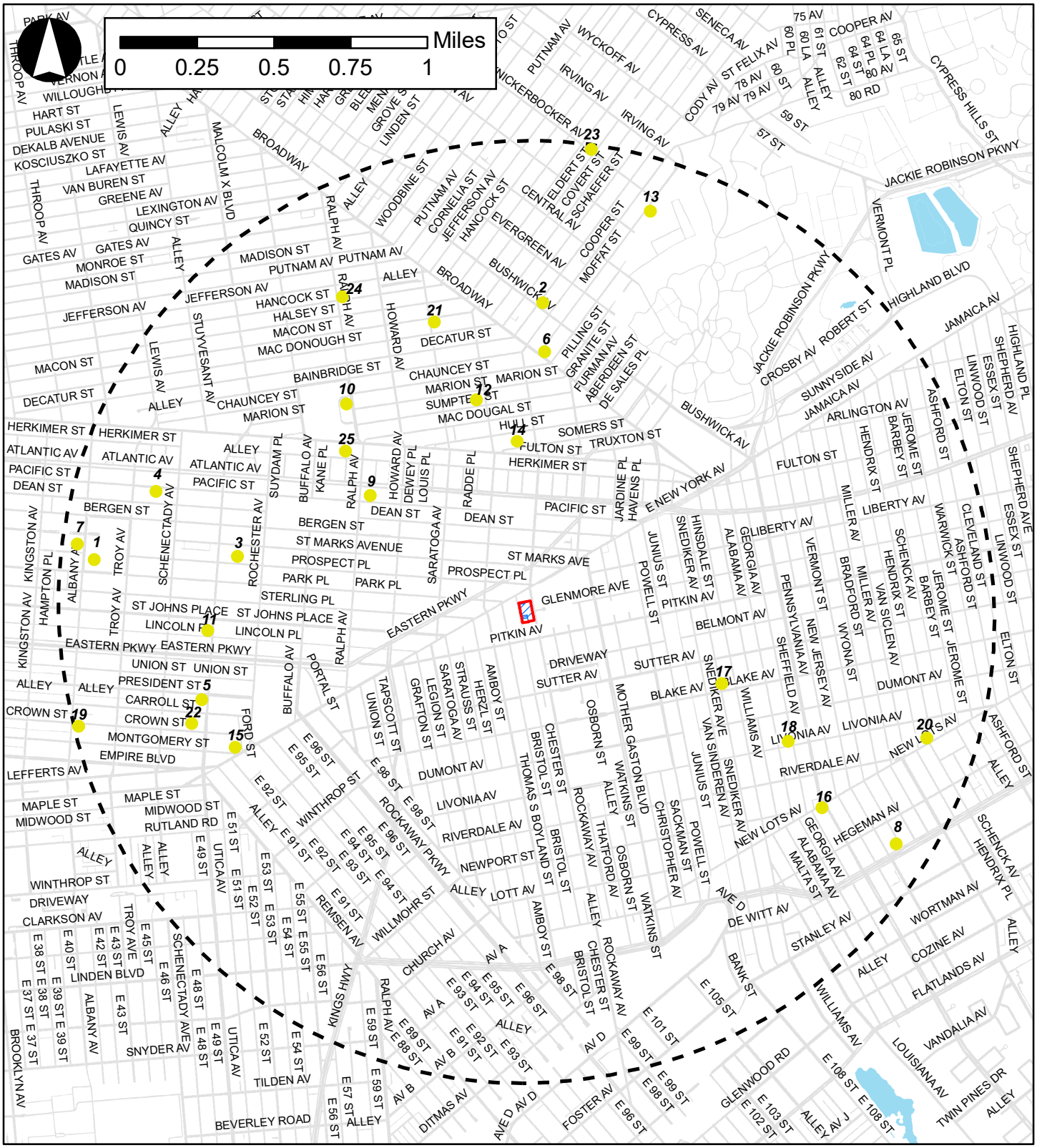
Note: Refer to **Figure D-2**
Source: DOE, February 2022 (via DCP)

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

Although no new affordable residential development is anticipated in the Project Area in the No-Action condition, there are several residential development projects with affordable units planned or under construction in the surrounding area that would be completed by 2025. These development projects will introduce approximately 698 affordable DUs. Based on the *CEQR Technical Manual* generation rates for developments in Brooklyn[2], these incremental No-Action affordable housing units are expected to generate 86 additional publicly funded child care-eligible children under age six to the study area, increasing the total childcare center enrollment to 909. No changes to childcare center capacity are anticipated in the 2025 No-Action condition. As presented in **Table D-5**, the future No-Action child care utilization rate is expected to increase by approximately 9.8 percentage points to 71.7 percent and,

[2] Multiplier for estimating the number of children eligible for early childhood programs is 0.178 for Brooklyn, according to Table 6-1a in the 2021 *CEQR Technical Manual.*

Early Childhood Programs



therefore, the study area's child care centers would continue to operate with available capacity in the future without the Proposed Actions.

TABLE D-5: Comparison of Capacity, Enrollment, Available Slots, and Utilization for Existing Conditions and the 2025 Future No-Action Condition

	Capacity	Enrollment	Available Slots	Utilization
Existing Conditions	1,268	785	483	61.9%
No-Action Increment	0	+124	-124	9.8%
No-Action Condition	1,268	909	359	71.7%

Source: 2021 *CEQR Technical Manual*, Table 6-1a.

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

As discussed above, the *CEQR Technical Manual* requires a detailed analysis of child care centers when a proposed action would produce substantial numbers of subsidized low- to low-to moderate-income family housing units that may therefore generate a sufficient number of eligible children to affect the availability of slots at publicly funded child care centers in the area. As detailed in **Attachment A, "Project Description,"** in the 2025 future with the Proposed Actions, 290 affordable housing units and one superintendent's unit would be constructed in the Project Area. Based on Table 6-1a of the *CEQR Technical Manual*, these additional 290 affordable units would potentially generate 52 children under age six who are eligible for publicly funded child care services (refer to **Table D-6**).

TABLE D-6: Projected Number of Publicly Funded Child Care-Eligible Children Generated by the Proposed Actions

Affordable Units	Brooklyn Generation Rate per Unit (Children ≤ Age 6)	Number of Children ≤ Age 6 Generated by the Proposed Actions
290	0.178	52

Source: 2021 *CEQR Technical Manual*.

According to the *CEQR Technical Manual*, a significant adverse child care center impact could result if a proposed action results in: (1) a collective utilization rate greater than 100 percent in the With-Action condition; and (2) the demand constitutes an increase of five percent or more in the collective capacity of child care centers serving the study area over the No-Action condition. As presented in **Table D-7**, the additional 52 children potentially eligible for publicly funded childcare that could be introduced by the Proposed Actions would increase the study area child care utilization rate to 75.8 percent, an increase of 4.1 percentage points over No-Action condition. As publicly funded child care facilities in the study area would continue to operate with available capacity under With-Action conditions, the Proposed Actions would not result in significant adverse impacts.

TABLE D-7: Comparison of Budget Capacity, Enrollment, Available Slots, and Utilization for 2025 Future No-Action and With-Action Conditions

	Budget Capacity	Enrollment	Available Slots	Utilization
No-Action Conditions	1,268	909	359	71.7%
With-Action Increment	0	+52	-52	+4.1%
With-Action Condition	1,268	961	307	75.8%

Source: 2021 *CEQR Technical Manual*, Table 6-1a.

IV. CONCLUSIONS

Direct Effects

The Proposed Actions would not directly displace or otherwise directly affect any public schools, child care centers, libraries, health care facilities, or police and fire protection services facilities. Therefore, the Proposed Actions would not result in any significant adverse direct effects to community facilities or services.

Indirect Effects

The Proposed Actions would not result in any significant adverse indirect impacts on community facilities or services, including public schools, libraries, outpatient health care facilities, police and fire protection services, or publicly funded child care centers.

Public Schools

According to the *CEQR Technical Manual*, a significant adverse impact may occur if a project would result in both of the following conditions: (1) a utilization rate of the schools in the sub-district study area that is equal to or greater than 100 percent in the future With-Action condition; and (2) 100 or more new students generated from the proposed development past the 100 percent utilization rate.

As detailed below, CSD 23, Sub-District 1 elementary schools would continue to operate with available capacity in the future with the Proposed Actions (as in the future without the Proposed Actions). CSD 23, Sub-District 1 elementary schools would increase from a No-Action utilization rate of approximately 71 percent to 72 percent in the With-Action condition, with 1,296 available elementary school seats. Per *CEQR Technical Manual* guidance, no significant adverse impacts to public elementary schools would occur because of the Proposed Actions.

In the future with the Proposed Actions, CSD 23, Sub-District 1 intermediate schools would continue to operate with available capacity, as under No-Action conditions. CSD 23, Sub-District 1 intermediate schools would increase from a No-Action utilization rate of 52 percent to 52.7 percent in the With-Action condition, with 1,159 available intermediate school seats. As schools would continue to operate below capacity in the future with the Proposed Actions, no significant adverse impacts would occur.

Child Care Services

As detailed below, according to the *CEQR Technical Manual*, a significant adverse child care center impact could result if a proposed action results in: (1) a collective utilization rate greater than 100 percent in the With-Action condition; and (2) the demand constitutes an increase of five percent or more in the collective capacity of child care centers serving the study area over the No-Action condition. The Proposed Actions would introduce approximately 52 children potentially eligible for subsidized child care to the Project Area. The analysis of publicly funded child care services provided below concluded that, in the future with the Proposed Actions, the study area child care utilization rate would increase 4.1 percentage points to a 75.8 percent utilization rate. As publicly funded child care facilities in the study area would continue to

operate with available capacity under With-Action conditions, the Proposed Actions would not result in significant adverse impacts.

ATTACHMENT E
OPEN SPACE

I. INTRODUCTION

An open space assessment may be necessary if a proposed action(s) could potentially have a direct or indirect effect on open space resources in the project area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed action would be sufficient to diminish noticeably the ability of an area's open space to serve the existing or future population. Per the *City Environmental Quality Review (CEQR) Technical Manual*, if a project would generate more than 200 residents or 500 nonresidential users, an open space assessment should be conducted pursuant to CEQR.

While the Proposed Actions would not have a direct effect on existing open space resources, development facilitated by the Proposed Actions is expected to result in an incremental increase of up to 291 dwelling units (DUs) and approximately 25,507 gross square feet (gsf) of community facility space over the 2025 No-Action condition. This would result in an incremental increase of approximately 800 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. Both quantitative and qualitative assessments were conducted to determine whether the Proposed Actions would significantly affect the use and enjoyment of publicly accessible open space in an identified study area. While the Proposed Actions are also expected to introduce a net increment of 89 employees[2] to the Proposed Development Site, as compared to the No-Action condition, based on standard planning assumptions used in CEQR analyses, this is below the *CEQR Technical Manual* preliminary screening threshold for analysis based on nonresidential 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 *CEQR Technical Manual* guidance. Using CEQR methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio (OSR). 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' potential 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.

[1] The estimated number of residents is based on the average household size of 2.75 persons for the Brownsville Neighborhood Tabulation Area (NTA) (2020 Census).

[2] The estimated number of workers is based on standard industry conversion factors of one worker per 333 gsf of community facility space and 1 worker per 25 DUs (*Racial equity report submission guide*, prepared by DCP).

Open Space Study Area

Pursuant to *CEQR Technical Manual* guidance, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a half mile of the proposed rezoning area and all open spaces within it that are publicly accessible.[3] As described above, residents typically walk up to a half (1/2) mile for recreational spaces.

The proposed rezoning area comprises the mid-block of Brooklyn Block 3499 along the west side of Rockaway Avenue and east side of Chester Street between East New York and Pitkin Avenues. As shown in **Figure E-1**, the ½-mile open space study area includes the following census tracts in their entirety: census tracts 301, 303, 361, 363, 365.01, 365.02, 902, 906, 908, 912, and 921. The open space study area extends approximately to Fulton Street and Atlantic Avenue in the north, Van Sinderen Avenue and Mother Gaston Boulevard in the east, Sutter, Livonia, and Blake Avenues in the south, and Saratoga and Ralph Avenues in the west.

Analysis Framework

Indirect Effects Analysis

As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action 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 populations. Indirect effects may occur when the population generated by a proposed action 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.

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 walking distance of a park by 2030. Existing areas located within a WtPSA are within walking distance of a park (i.e., 0.5-miles). Areas not located within a WtPSA are considered "walk gaps;" they are areas of New York City that are not within walking distance to a park. As shown in **Figure E-2**, the proposed rezoning area is located within an area that has been identified as a WtPSA as it is within walking distance of a park (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 guidelines. The qualitative assessment examines other factors that can affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this attachment includes:

- Characteristics of residential users. To determine the number of residents in the study area, 2020 Census data have been compiled for the census tracts comprising the open space study area.

[3] 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.



Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

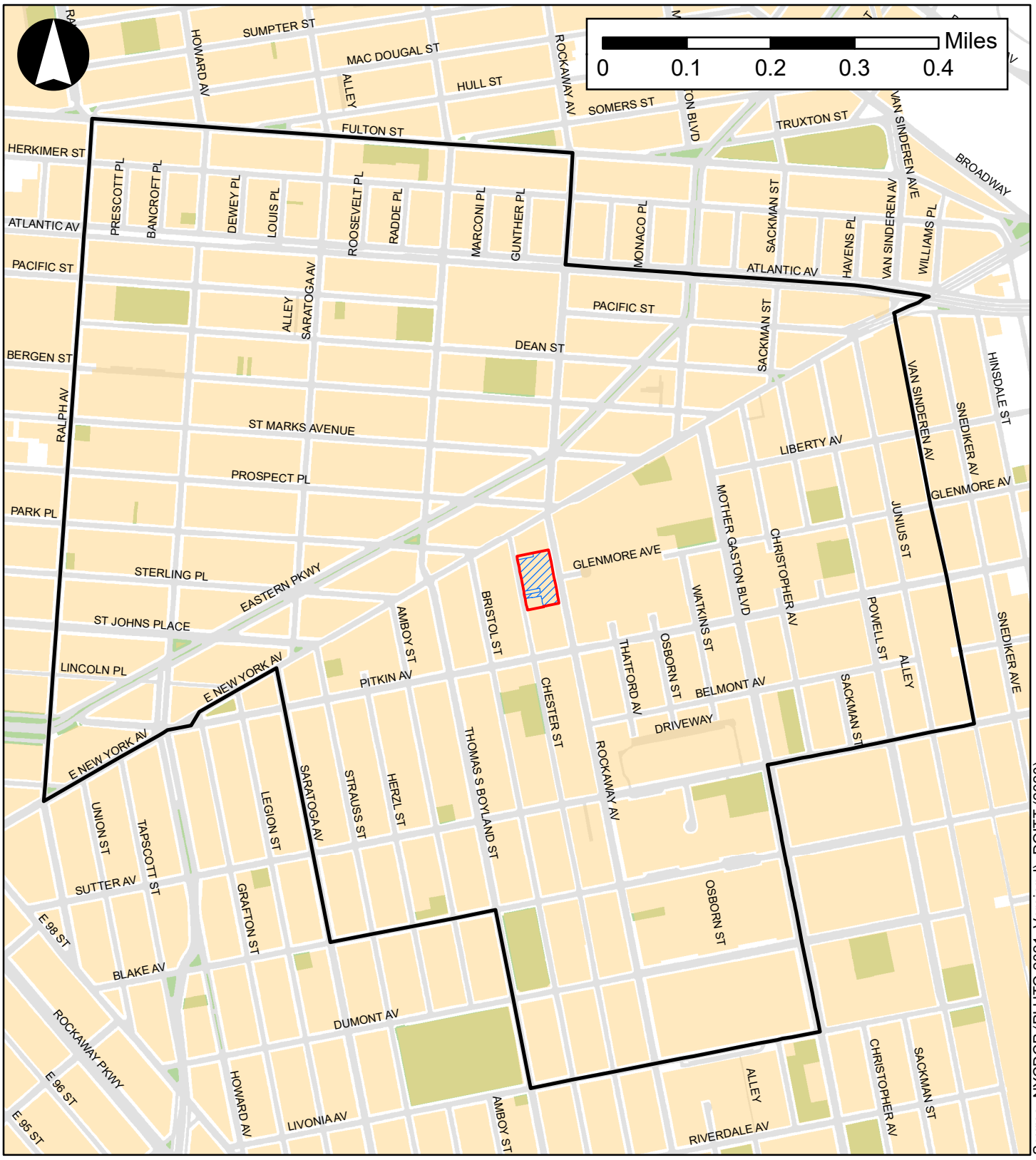
Legend

Proposed Rezoning Area | Proposed Development Site | Half-Mile Radius | Residential Study Area | 924 Census Tracts | Open Space

Brownsville Arts Center and Apartments

Figure E-1
Open Space Study Area

Figure E-2
Walk to Park Service Area



Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

Legend

- Proposed Rezoning Area
- Residential Study Area (Half-Mile Radius)
- Proposed Development Site
- Walk to a Park Service Area

- An inventory of all publicly accessible passive and active recreational facilities in the open space study area.
- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with 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 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 Actions. 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 an action, including its location, the quality and quantity of the open space in the future With-Action condition, and any new open space provided by an 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*, a project that would reduce the open space ratio by more than the general guidelines for the open space percentage change shown in **Table E-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 E-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 E-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.*

It should be noted that the City's optimal open space ratios and percentage reductions shown in **Table E-1** do not constitute an absolute impact threshold and the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. Furthermore, as discussed in Section 321 of Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual*, projects located outside of the WPSA should be further assessed for qualitative impacts. As such, projects that may result in significant quantitative impacts on open space are typically further assessed in a qualitative assessment to determine the overall significance of the impact.

The qualitative assessment supplements the quantitative assessment and considers the distribution of open space, whether a site is within the WPSA, the distance from the site to regional parks, the connectivity of open space(s), and any additional open space created by the Proposed Actions not available to the general public, if applicable, and determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment.

III. DETAILED ANALYSIS

Existing Conditions

Study Area Population

To determine the residential population served by existing open space resources, 2020 Census data were compiled for the census tracts comprising the ½-mile study area. As shown in **Table E-2**, the study area has a total residential population of approximately 45,576.

Within a given area, the age distribution of a population affects the way open spaces 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 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 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.

TABLE E-2: Existing Residential Population in the ½-Mile Study Area

Census Tract	Residential Population
301	2,970
303	4,952
361	2,964
363	5,385
365.01	2,959
365.02	1,902
902	3,817
906	4,534
908	5,893
912	6,572
924	3,628
Total	***45,576***

Source: 2020 Census

The residential population of the study area was also broken down by age group.[4] As shown in **Table E-3**, people between the ages of 20 and 64 make up the majority (61.8 percent) of the residential population. Children and teenagers (0 to 19 years old) account for approximately 27 percent of the entire residential population, and persons 65 years and over account for slightly more than 11 percent of the residential study area population. Based on this data, the peak hours of open space demand would be expected to be concentrated during weekends and the early morning and late afternoon to evening hours during the week, as it could be assumed that most residents aged 20 to 64 would work or attend school on weekdays.

TABLE E-3: Residential Population Age Distribution in the ½-Mile Study Area

Age Category*	Residential Population	Percent of Population
Under 5 years old	3,356	7.4%
5 to 9 years	2,768	6.1%
10 to 14 years	2,962	6.5%
15 to 19 years	3,227	7.1%
20 to 64 years	28,161	61.8%
65 years and older	5,102	11.2%

Note: *Age group percentages based on 2015-2019 Five Year ACS data
Source: 2020 Census and 2015-2019 Five-Year American Community Survey (ACS)

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*, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under CEQR guidance, whereas private open space is not accessible to the public on a regular basis and is therefore only considered qualitatively. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

An open space 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

[4] Aside from age groups under/over 18 years of age, the 2020 US Census data does not include detailed information about residential age groups. As such, the residential population age groups were determined based on the percentage of age group characteristics provided in the 2015-2019 Five-Year American Community Survey (ACS) data and applied to 2020 Census data.

ball-playing, skipping rope, etc.). Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas.

Within the defined study area, all publicly accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. The information used for this analysis was gathered through field inventories conducted in March 2021, DPR's website, and other secondary sources of information.

The condition of each open space facility was categorized as "Excellent," "Good," "Fair," or "Poor." A facility was considered in excellent condition if the area was clean and attractive and if all equipment was present and in good repair. A good facility had minor problems such as litter or older but operative equipment. A fair or poor facility 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. Determinations were made subjectively, based on a visual assessment of the facilities.

Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday afternoon. If a facility seemed to be at or near capacity (i.e., the majority of benches or equipment was in use), then utilization was considered heavy. 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 E-4** identifies the address, ownership, hours, and acreage of active and passive open spaces in the study area, as well as their condition and utilization. **Figure E-3** maps their location in the study area.

Open Space Resources

As shown in **Table E-4**, just over 15 acres of open space are included in the quantitative analysis, of which approximately 12.5 acres are considered active open space and slightly less than three acres are passive open space. Most of the open spaces in the study area are neighborhood playgrounds and parks. The playgrounds generally feature play equipment, benches, and drinking fountains, and the seating areas typically offer green spaces and benches. Two parks have undergone substantial renovation (Hilltop Playground and Betsy Head Park), and two additional parks (Chester Playground and Ocean Hill Playground) will undergo or are currently undergoing renovations. These four parks comprise roughly 40 percent of the study area open space acreage.

A majority of the publicly accessible open space resources included in the quantitative indirect open space impact assessment are in good to excellent condition. In terms of utilization, all of the study are open space resources exhibit low to moderate utilization.

TABLE E-4: Inventory of Existing Open Space and Recreational Resources in Study Area

Map No. [1]	Name	Address	Owner/ Agency [3]	Amenities	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
							Acres	%	Acres	%	
Open Space Resources Included in Quantitative Assessment											
1	Fish Playground	Fulton St, b/w Saratoga & Hopkinson Aves	DOE/ F	Basketball & Handball Courts, Seating, Playgrounds	6 AM – 9 PM, except when school is in session	1.03	0.93	90%	0.10	10%	Fair/ Moderate
2	Weeksville Playground	Howard Ave, b/w Atlantic Ave & Herkimer St	NYCParks	Playgrounds, Seating	6 AM – 9 PM	0.29	0.26	90%	0.03	10%	Good/Low
3	South Pacific Playground	Howard Ave, b/w Pacific & Dean Sts.	NYCParks	Basketball Courts, Playgrounds, Spray Showers	6 AM - 9 PM	2.26	1.70	75%	0.57	25%	Good/Low
4	Hilltop Playground	Hopkinson Ave, b/w Pacific & Dean Sts.	DOE/ NYCParks	Basketball Courts, Play Equipment, Spray Showers, Community Gathering Green, Multipurpose Field, Track, Fitness Equipment	6 AM – 9 PM	1.09	0.82	75%	0.27	25%	Excellent/ Moderate
5	Ocean Hill Playground	Dean and Bergen Sts, b/w Rockaway & Hopkinson Aves	DOE/ NYCParks	Basketball, Handball, & Tennis Courts, Playgrounds, Spray Showers, Benches	6 AM – 9 PM, except when school is in session	1.59	1.19	75%	0.40	25%	Fair-Good/ Moderate
6	Howard Playground	Mother Gaston Blvd & Glenmore Ave	NYCParks	Basketball & Handball Courts, Playgrounds, Spray Showers	6 AM – 9 PM	1.00	0.75	75%	0.25	25%	Good/Low
7	Houston Playground	Glenmore Ave, b/w Powell & Sackman Sts.	DOE/ NYCParks	Basketball & Handball Courts, Playgrounds, Spray Showers	6 AM - 9 PM	0.92	0.69	75%	0.23	25%	Excellent/ Low
8	Powell Playground	Powell St, b/w Glenmore & Pitkin Aves	NYCParks	Handball Courts, Playgrounds, Spray Showers, Fitness Equipment, Seating	6 AM - 9 PM	1.02	0.77	75%	0.26	25%	Excellent/ Low
9	Carter G. Woodson Children's Park	Christopher Ave, b/w Sutter & Belmont Aves	NYCParks	Playgrounds, Spray Showers	6 AM - 9 PM	0.92	0.83	90%	0.09	10%	Fair/Low
10	Dr. Green Playground	Mother Gaston Blvd & Sutter Ave	DOE/ NYCParks	Basketball & Handball Courts, Playgrounds, Spray Showers	6 AM - 9 PM	1.79	1.61	90%	0.18	10%	Good/Low



Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

Brownsville Arts Center and Apartments

Figure E-3
Open Space Analysis

11	Chester Playground	Chester St to Bristol St, b/w Sutter & Pitkin Aves	DOE/ NYCParks	Basketball & Handball Courts, Playgrounds, Spray Showers	6 AM – 9 PM, except when school is in session	1.00	0.75	75%	0.25	25%	Fair-Good/Low
12	P.S. 125 Playground	Rockaway Ave, b/w Blake & Dumont Aves	DOE/ NYCParks	Playgrounds, Spray Showers	6 AM - 9 PM	0.21	0.16	75%	0.05	25%	Fair/Low
13	Betsy Head Park [2]	Blake Ave, Bristol St., Dumont Ave, Thomas Boyland St.	NYCParks	Baseball Fields, Basketball & Handball Courts, Playgrounds, Skate Park	6 AM - 1 AM	2.30	2.07	90%	0.23	10%	Excellent/ Moderate
½-Mile Study Area Total						**15.42**	**12.51**	**81.2%**	**2.91**	**18.8%**	

Sources: NYC OASIS, NYC Parks, March 2021 field visits.

Notes:

[1] Refer to **Figure E-3**.

[2] Only part of Betsy Head Park is within the ½-mile study area. The portion of Betsy Head Park located south of Dumont Avenue (comprising 8.26 acres) is located just outside of the study area and is not considered in the quantitative assessment.

[3] NYCParks = New York City Department of Parks and Recreation; DOE=New York City Department of Education

TABLE E-4 (cont.): Inventory of Existing Open Space and Recreational Resources in Study Area

Map No .[1]	Name	Address	Owner/ Agency [3]	Amenities	Hours of Access	Total Acres	Active		Passive	
							Acres	%	Acres	%
Open Space Resources Not Included in Quantitative Assessment										
A	Marge Matthews Garden	13 Louis Pl.	NYCParks/ Green Thumb	Community Garden	Not posted	0.04	0.00	0%	0.04	100%
B	Sh'ma Yisrael Garden	2084-90 Pacific St.	NYCParks/ Green Thumb	Community Garden	Not posted	0.15	0.00	0%	0.15	100%
C	Farmer's Garden	1901 Bergen St.	NYCParks/ Green Thumb	Community Garden	20 hrs./week, Apr 1 – Oct 31	0.17	0.00	0%	0.17	100%
D	Tehuti Ma'at Community Garden (St. Mark's Block Assoc.)	750 Howard Ave.	NYCParks/ Green Thumb	Community Garden	Not posted	0.22	0.00	0%	0.22	100%
E	Preston Community Garden	1711 Park Pl.	NYCParks/ Green Thumb	Community Garden	20 hrs./week, Apr 1 – Oct 31	0.07	0.00	0%	0.07	100%
F	Sterling Community Group	1701 Sterling Pl.	NYCParks/ Green Thumb	Community Garden	20 hrs./week, Apr 1 – Oct 31	0.12	0.00	0%	0.12	100%
G	Fred MacLeod Community Garden (Marcus Garvey Tenant's Assoc. Garden)	1833 Strauss St.	NYCParks/ Green Thumb	Community Garden	Not posted	0.25	0.00	0%	0.25	100%
H	Jes Good Rewards Children's Garden	155 Amboy St.	NYCParks/ Green Thumb	Community Garden	20 hrs./week, Apr 1 – Oct 31	0.25	0.00	0%	0.25	100%
I	Amboy Neighborhood Garden	208 Amboy St.	NYCParks/ GreenThumb	Trees, Shrubs, Vegetable & Flower Beds, Benches, Picnic Tables, BBQ	20 hrs./week, Apr 1 – Oct 31	0.40	0.00	0%	0.40	100%
0.5-Mile Study Area Total						**3.02**	**0.0**	**0.0%**	**0.12**	**100%**

Sources: NYC OASIS, NYC Parks, March 2021 field visits.

Notes:

[1] Refer to **Figure E-3**.

[2] Only part of Betsy Head Park is within the ½-mile study area. The portion of Betsy Head Park located south of Dumont Avenue (comprising 8.26 acres) is located just outside of the study area and is not considered in the quantitative assessment.

[3] NYCParks = New York City Department of Parks and Recreation; DOE=New York City Department of Education

Assessment of Open Space Adequacy

Quantitative Assessment

The following analysis of the adequacy of existing open space resources within the study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents. As an optimal planning goal, the City tries to achieve an overall residential open space ratio of 2.5 acres per 1,000 residents (80 percent [2 acres] active and 20 percent [0.5 acres] passive) for large-scale plans and proposals. Although a typical population mix may call for such a goal, it is often not feasible for many areas of the City (especially higher density areas). As such, the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold and a qualitative assessment might be warranted to determine the overall significance of the impact.

In calculating the open space ratio per 1,000-user population for the study area, all of the resources listed in the "Open Space Resources Included in the Quantitative Analysis" section of **Table E-5** were included; Resources A to K were not included in the calculations pursuant to *CEQR Technical Manual* guidance, as they have limited accessibility/hours. **Table E-5** shows that, with an existing study area residential population of approximately 45,576 people, the existing total open space ratio in the study area is approximately 0.338 acres per 1,000 residents; the study area has 0.275 acres of active open space per 1,000 residents and 0.064 acres of passive open space per 1,000 residents. As indicated in **Table E-5**, the existing total residential open space ratio is below the City's open space planning goals of 2.5 acres per 1,000 residents.

TABLE E-5: Adequacy of Open Space Resource in the Study Area – Existing Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	45,576	15.42	2.91	12.51	0.338	0.064	0.275	2.50	0.50	2.0

Qualitative Assessment

The open space resources that exist within the open space study area fall below City guidelines for the provision of publicly accessible open space. The existing open space ratios per 1,000 residents fall below the City's planning goal of 2.5 acres per 1,000 residents.

The quantitative deficiency of open space resources within the defined study area may be partially ameliorated by several factors. First, all of the open spaces in the study area are considered in good or excellent condition. The 1.09-acre Hilltop Playground, which underwent a $3 million renovation, is located just 0.4 miles north of the Proposed Project. Hilltop Park includes new play equipment for children of all ages, an interactive spray shower, a synthetic turf multipurpose play field, and full and half-court basketball courts, as well as a community gathering green, walking track and outdoor fitness equipment. Betsy Head Park also underwent a $30 million redesign, reopening in late 2020. It includes Imagination Playground, a parkour fitness course, a bank shot basketball circuit, a flexible event space with amphitheater-style seating, and a destination skate park designed by Spohn Ranch in collaboration with landscape architects Abel Bainnson Butz, LLP. Open space resources with two ratings for condition (i.e., Fair-Good) are undergoing or have undergone partial renovations—therefore, it's expected that once full renovations are complete, the parks will be in good to excellent condition. Both Ocean Hill Playground and Chester Playground will undergo $5 to $10 million reconstruction. Ocean Hill Playground (0.3 miles from the Proposed Project) is scheduled to be complete by July 2023, while Chester Playground (0.2 miles from the Proposed Project) is scheduled to be complete by 2025.

The study area also contains a good mix of recreational facilities that include play equipment, pools, basketball and handball courts, a track, skate park, and outdoor fitness equipment serving the study area's population, with roughly 81 percent dedicated to active uses and 19 percent to passive recreation. This mix of recreational facilities is consistent with the City's optimal planning goal of 80 percent active and 20 percent passive uses.

As shown in **Figure E-3** and listed in **Table E-4**, there are nine additional open space resources located within the study area boundary, which provide an additional 1.68 acres of open space that are not included in the quantitative analysis. These spaces include nine community gardens, which are passive open spaces.

It should also be noted that there are a few significant publicly accessible open spaces located just beyond the study area boundary, which could add considerable accessible active and passive open spaces for the study area's population. The larger portion of Betsy Head Park, comprising more than eight acres is located just outside of the ½-mile study area but within the ½-mile radius of the rezoning area. It features a 129,000-sf synthetic turf multisport field, running track, handball and basketball courts, seating areas, exercise equipment, an outdoor pool, and the historic Betsy Head Play Center. The 17.1-acre Lincoln Terrace / Arthur S. Somers Park, which occupies Brooklyn Blocks 1398 and 1405, is located just southwest of the study area and bounded by Eastern Parkway to the north, Portal Street to the east, East New York Avenue to the south, and Rochester Avenue to the west. The park has undergone many renovations over the last several years, including the opening of a new playground in April 2019, and features baseball fields, basketball courts, dog-friendly areas, fitness equipment, football fields, handball courts, playgrounds, spray showers, and tennis courts. In addition, Callahan-Kelly Playground, which comprises portions of two irregular-shaped blocks along Van Sinderen Avenue, Fulton and Truxton Streets, is located one block north of the study area and is approximately three acres. The park is slated to undergo major renovation, including reconstruction of the playground, spray shower, perimeter sidewalks and walls, basketball courts, fitness equipment, and sitting areas, as well as construction of a new skate park and park entrances. These parks provide an additional 28-acres of open space for residents in the study area. It is expected that a proportion of open space users in the study would frequent these spaces given their proximity, size, and range of amenities.

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

In the absence of the Proposed Actions, it is expected that the development site would not be redeveloped, and the site would remain vacant and underutilized. No other changes would take place within the proposed rezoning area by 2025.

Study Area Population

As presented below in **Table E-6** and shown in **Figure E-4**, a considerable amount of new development is currently planned or anticipated to be completed within the ½-mile open space study area in the future without the Proposed Actions by 2025, which would increase the residential population within the study area. These No-Action developments are anticipated to add 1,091 new residential units to the study area. **Table E-6** shows that these No-Action developments are anticipated to increase the ½-mile study area population by approximately 3,000 residents,[5] for a total residential population of 48,576 by 2025.

[5] The estimated number of residents added due to No-Action development is based on average household sizes of 2.75 persons for Brownsville Neighborhood Tabulation Area (NTA) according to the 2020 Census.

Open Space Resources

No changes to study area open space resources are anticipated in the 2025 No-Action condition. As such, as under existing conditions, open space in the ½-mile open space study area would total 15.42 acres, comprised of 2.91 acres of passive open space and 12.51 acres of active open space.

TABLE E-6: Known Planned No-Action Developments within the ½-Mile Study Area

Map No.[1]	Address	Dwelling Units (DUs)	Estimated Residents [2]
1	343 Ralph Ave	20	55
2	20 Prescott Pl	49	135
3	1911 Atlantic Ave	236	649
4	1040 Herkimer St	3	8
5	1042 Herkimer St	3	8
6	1049 Herkimer St	2	6
7	2114 Fulton St	8	22
8	1267 Herkimer St	7	19
9	1269 Herkimer St	7	19
10	1889 Bergen St	7	19
11	1915 Bergen St	3	8
12	2164 Dean St	3	8
13	2178 Dean St	3	8
14	1633 Saint Marks Ave	3	8
15	2315 Pacific St	3	8
16	2317 Pacific St	3	8
17	1864 Eastern Parkway	67	184
18	126 Sackman St	136	374
19	2427 Dean St	7	19
20	253 Mother Gaston Blvd	19	52
21	38 Christopher Ave	3	8
22	273 Mother Gaston Blvd	3	8
23	281 Mother Gaston Blvd	3	8
24	299 Mother Gaston Blvd	3	8
25	1709 Park Pl	8	22
26	1598 Eastern Parkway	19	58
27	416 Thomas S. Boyland St	8	17
28	1470 Eastern Parkway	21	58
29	435 Rockaway Ave	6	17
30	110 Thatford Ave	23	63
31	179 Herzl St	8	22
32	195 Herzl St	8	22
33	169 Livonia Ave	78	215
34	215 Livonia Ave	96	264
35	326 Rockaway Ave	215	591
	Half-Mile Total	***1,091***	***3,000***

Source: NYC DOB, June 2022

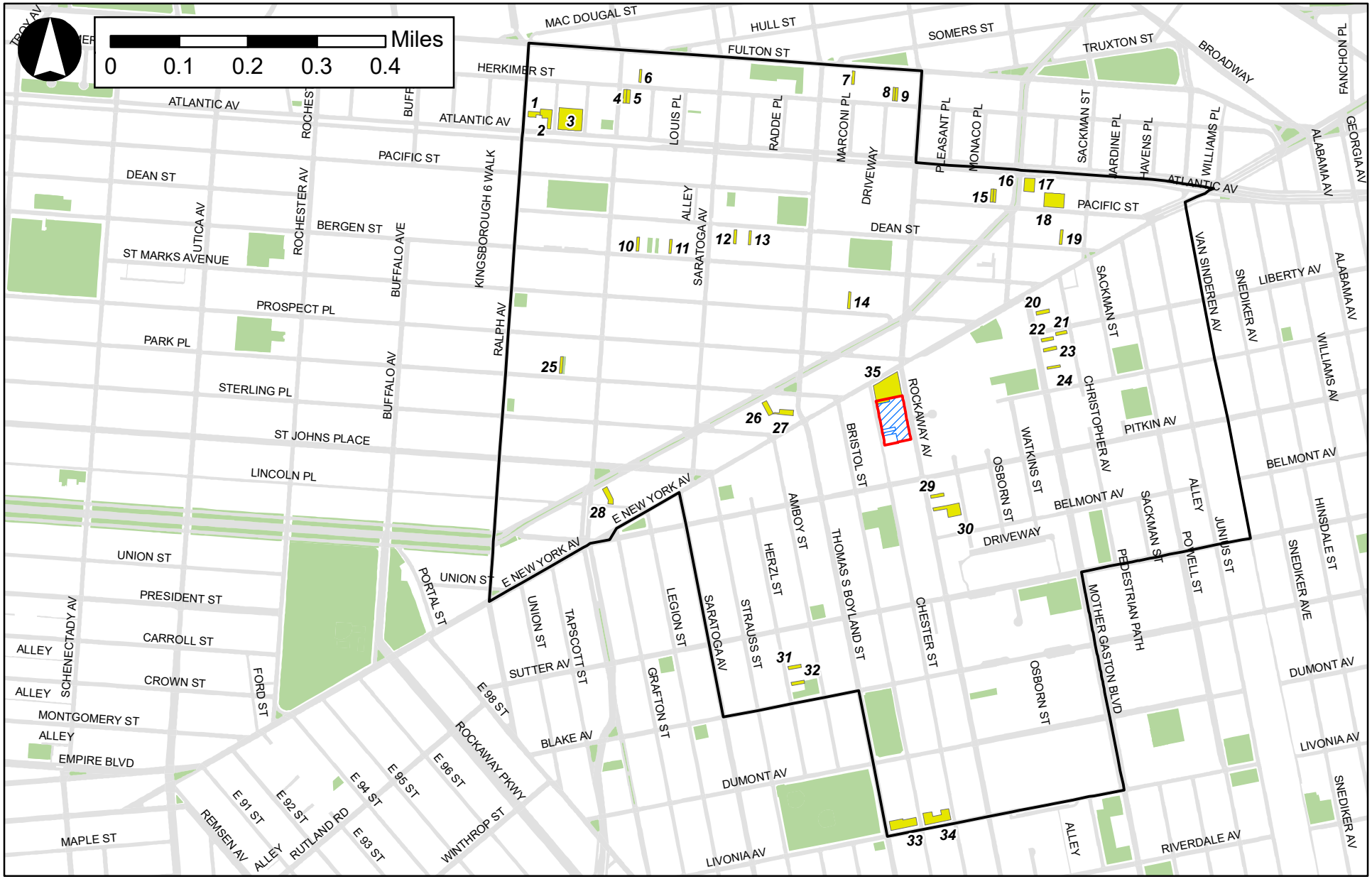
Notes:

[1] Refer to **Figure E-4**

[2] Estimated number of residents based on 2.75 average household size for Brownsville Neighborhood Tabulation Area (NTA), 2020 Census via NYC Population FactFinder

Open Space Adequacy

Table E-7, below, presents the No-Action open space ratios for the ½-mile study area, based on the anticipated population increases outlined previously. Similar to existing conditions, the total, passive, and



Legend

Residential Study Area (Half-Mile Radius) | Proposed Rezoning Area | Proposed Development Site | 1 No-Build Sites | Open Space

Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

Brownsville Arts Center and Apartments

Figure E-4
Residential No-Build Development Sites

active open space ratios in the No-Action condition would be less than the City's open space planning goals of 2.5 acres of open space per 1,000 residents (including 0.5 acres of passive open space and two acres of active open space). The total open space ratio is expected to decrease to 0.317 acres per 1,000 residents in the No-Action condition, with No-Action passive and active open space ratios of 0.060 and 0.258 acres per 1,000 residents, respectively. Similar to existing conditions, residents of the study area are expected to continue to utilize other study area open space resources conservatively not included in the quantitative assessment in absence of the Proposed Actions.

TABLE E-7: Adequacy of Open Space Resource in the Study Area – No-Action Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	48,576	15.42	2.91	12.51	0.317	0.061	0.260	2.50	0.50	2.0

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

This section describes the open space conditions that would result from the Proposed Actions by 2025. It evaluates the potential for the Proposed Actions to result in significant adverse indirect impacts to open space resources based on a comparison of the No-Action condition (described above) to the With-Action condition.

Study Area Population

As described in **Attachment A, "Project Description,"** in the future with the Proposed Actions, the Proposed Project would introduce approximately 291 DUs to the proposed development site. Using the same planning assumptions as the No-Action conditions of 2.75 residents per DU, the Proposed Actions are expected to introduce a net increase of approximately 800 residents and would therefore increase the study area's population to 49,376 residents in the 2025 With-Action condition.

Open Space Resources

The Proposed Actions would introduce both publicly accessible and private accessory open spaces to the Proposed Development Site as part of the Proposed Project. As described in **Attachment A, "Project Description,"** the Proposed Project would introduce approximately 14,575 sf of outdoor passive open spaces, including two small private plazas (9,393 sf) for building residents and tenants and one publicly-accessible plaza on Rockaway Avenue (5,182 sf). The publicly accessible open space is envisioned to feature seating, tables, and landscaping. As such, publicly accessible open space in the ½-mile open space study area would increase to total 15.54 acres, comprised of 3.03 acres of passive open space and 12.51 acres of active open space.

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.

Under the With-Action condition, the total open space ratio in the study area would decrease from 0.317 in the No-Action to 0.315 acres per 1,000 residents in the With-Action (see **Table E-8**). The active open space ratio would also decrease compared to No-Action conditions, from 0.258 to 0.253 acres per 1,000 residents, which would continue to be below the city's guidance ratio of 2.0 acres per 1,000 residents. The passive open space ratio per 1,000 residents would increase from 0.060 to 0.061 acres per 1,000 residents as compared to No-Action conditions and would remain below the city's guideline ratio of 0.50.

TABLE E-8: Adequacy of Open Space Resource in the Study Area – With-Action Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	49,376	15.54	3.03	12.51	0.315	0.061	0.253	2.50	0.50	2.0

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 proposed actions would reduce the open space ratio by more than the general guidelines for the open space percentage change provided in Table E-9.

TABLE E-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 ratio 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 2.00	1.21 to 1.60	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 1.00	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%
* 2.5 open space ratio is the planning goal in NYC, with optimal distribution goal of 2.0 active open space ratio and 0.5 passive open space ratio.			

Source: Table 7-5 in Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual.*

Table E-10 expresses the percentage change from No-Action to With-Action conditions 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 E-10**, the study area's total open space ratio in the future with the Proposed Actions would be 0.315 acres per 1,000 residents, which represents a reduction of approximately 0.9 percent (0.002 acres per 1,000 residents) from No-Action conditions. The active open space ratio in the study area would decrease from 0.258 acres per 1,000 residents to 0.253 acres per 1,000 residents in the With-Action condition, a 1.6 percent decrease. The passive open space ratio for residents would increase from 0.060 to 0.061 acres per 1,000 residents in the With-Action condition, a 2.4 percent increase.

TABLE E-10: Comparison of No-Action to With-Action Open Space Ratios in the ½-Mile Study Area

Ratio	*CEQR Technical Manual* Open Space Optimal Planning Goal (acres per 1,000)	Open Space Ratios Per 1,000			Percent Change
		Existing	No-Action	With-Action	Future No-Action to Future With-Action
Total – Residents	2.50	0.338	0.317	0.315	-0.9%
Passive – Residents	0.50	0.064	0.060	0.061	2.4%
Active – Residents	2.00	0.275	0.258	0.253	-1.6%

As shown in **Table E-10**, the Proposed Actions would exceed the guidelines detailed in **Table E-9**; however, according to *CEQR Technical Manual* guidance, these optimal open space ratios and percentage reductions do not solely constitute an impact threshold and a project's location, the quality, quantity, and types of nearby open space, and the balance of passive and active open space should be considered in the determination of significance. As shown in **Table E-2**, the study area contains more than four times as much active open space as passive open space and as noted above, study area open spaces are in good condition, provide a variety of facilities, and moderately used. In addition, as shown in **Figure E-2**, the proposed rezoning area is located within a WtPSA and, therefore, is not located within a walk gap area (i.e., an area of the City that is not within walking distance to a park).

However, projects that may result in quantitative impacts on open space are typically further assessed in a qualitative assessment approach to determine the overall significance of the impact. The qualitative assessment below also indicates that the quality and number of the study area open spaces combined with the availability of open spaces outside the study area which would help to ameliorate the open space shortfall in the future With-Action conditions.

Qualitative Assessment

In the future with the Proposed Actions, the study area would continue to have a shortfall of open space similar to the existing and No-Actions conditions. Although the open space ratios in the study area would remain less than the DCP planning goals, the deficiency of open space resources in the study area would be ameliorated by several factors. Most of the open space resources included in the quantitative analysis were found to be in good or excellent condition. In addition, the open spaces offer a variety of passive and active recreational amenities, ranging from sitting areas, playgrounds, basketball and handball courts, spray showers, and outdoor pools.

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 noticeably affect utilization of the area's open spaces. As noted above, most of the study area open space resources are in good condition, offer a variety of amenities which, therefore, could likely handle some increased demand. In addition, the population generated by the Proposed Actions is not expected to have any special characteristics, such as a disproportionately older or younger population, that would place heavy demands on facilities that cater to specific user groups; the residents in the future with the Proposed Actions are expected to exhibit similar characteristics to the current residents of the study area and the breakdown of the population is expected to remain the same.

As described above, the Proposed Project would introduce approximately 14,575 sf of passive open space, including two small private plazas and one publicly accessible plaza. The private spaces include a gated space on the north side of the site (4,016 sf), which would also serve as a community facility space, and a

L-shaped non-gated space on the south side of the site (5,377 sf). The publicly accessible plaza (5,182 sf) would open to Rockaway Avenue and feature landscaping, benches, and wooden risers. This additional open space will help ameliorate additional demand, too.

Additionally, the proximity of the larger approximately 8.26-acre Betsey Head Park/Pool, approximately 20.1-acre Lincoln Terrace/Arthur S. Somers Park and 4-acre Callahan-Kelly Playground would continue to be factors in alleviating the study area's open space deficiency. These open spaces are neighborhood parks located just outside of the study area boundary that contain a wide range of recreational amenities. It is expected that a proportion of open space users in the study area would likely frequent these spaces given their proximity, size, and range of amenities.

IV. CONCLUSIONS

The Proposed Actions would not result in significant adverse open space impacts. While the residential open space study area would continue to have a shortfall of open space in the future with the Proposed Actions, the demand for open space generated due to the Proposed Actions is not expected to significantly exacerbate the No-Action deficiency. Moreover, the population added due to the Proposed Actions is not expected to affect utilization adversely of the area's open spaces. The Proposed Actions would result in less than a one percent decrease in total open space ratio as compared to No-Action conditions.

The study area's open space resources are numerous and in good to excellent condition, offering a range of amenities, and could therefore handle limited additional demand. Residents of the study area would also continue to use additional open space resources not included in the quantitative assessment. Therefore, while the Proposed Actions would result in an incremental decrease in total and active open space ratios in the future, given the level of decrease anticipated, the number, condition and array of amenities of study area open spaces, and the availability of additional open spaces conservatively not included in the quantitative analysis, the Proposed Actions are not expected result in a significant adverse impact on open space. In addition, the Proposed Actions would not have a direct effect on any study area open spaces due to construction or operation. The Proposed Actions would introduce an approximately 5,182-sf publicly accessible plaza as well as two private accessory passive open spaces for the building's future tenants and residents. The Proposed Actions would not result in the imposition of noise, air pollutant emissions, odors, or significant new shadows on public open spaces that may alter usability. Therefore, the Proposed Actions would not result in a significant adverse open space impact, and further analysis is not needed.

ATTACHMENT F
URBAN DESIGN & VISUAL RESOURCES

I. INTRODUCTION

This attachment considers the potential effects of the Proposed Actions and subsequent development on urban design and visual resources. As defined in the *City Environmental Quality Review* (CEQR) *Technical Manual*, urban design is the totality of elements that shape and 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 a single, nine-story, mixed-use residential and community facility building on Block 3499, Lot 15 (the "Proposed Development Site") 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 and natural environment (the With-Action Condition). As described in **Attachment B, "Supplemental Screening,"** the Proposed Actions involve zoning changes that would increase the allowable density and would result in new development that would differ from what is currently permitted as-of-right. Under the Proposed Actions, an affordable housing and community facility development would be constructed at the Proposed Development Site, replacing vacant and underutilized land. The proposed development is expected to be constructed and fully occupied by 2025. None of the other tax lots affected by the proposed zoning map changes are expected to be redeveloped or enlarged in the future with the Proposed Actions. In absence of the Proposed Actions, it is anticipated that the Proposed Development Site would remain vacant and underutilized land. The effect of the Proposed Actions represents the incremental effect on conditions resulting from the net change in development at the development site between No-Action and With-Action Conditions. As compared to the No-Action condition, the With-Action condition would introduce a net increase of 291 dwelling units (DUs) and 25,507 gsf of community facility 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 and natural environment.

As described in the *CEQR Technical Manual*, a preliminary urban design analysis is appropriate when there is potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. A preliminary analysis provides a "snapshot" of the project, comparing existing and future conditions with and without the Proposed Actions. The following analysis examines each of the elements that play an important role in the pedestrian experience, including street hierarchy and

streetscape (including the arrangement and orientation of streets); building scale, form and arrangement; and natural features, open space, and topography.

Per criteria of Section 230 of the *CEQR Technical Manual,* a wind condition analysis is not warranted for the Proposed Actions. The proposed rezoning area and Proposed Development Site 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 and surrounding area. 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 area's 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, the built environment, and pedestrian's experiences in the public realm surrounding the project area. 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. 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 area) 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.

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 areas. **Figure F-1** also provides a photograph key for the approximate locations of where each of the photographs included in **Figures F-2a through F-3b** had been taken.



Legend

*Aerial image is from 2021. Warehouse on Lot 25, Block 3499 has been demolished.

Proposed Rezoning Area | Proposed Development Site | 400-Foot Radius (Secondary Study Area) | (1) Photo Location (refer to Figures F-2 and F-3)

Brownsville Arts Center and Apartments

Figure F-1
Aerial Map



1. View looking north along Chester Street adjacent to the Proposed Development Site.



2. View looking south on Chester Street adjacent to the Proposed Development Site. Existing 3-story residential building at 45 Chester Street visible in background.



3. View looking south on Rockaway Avenue adjacent to the Proposed Development site.

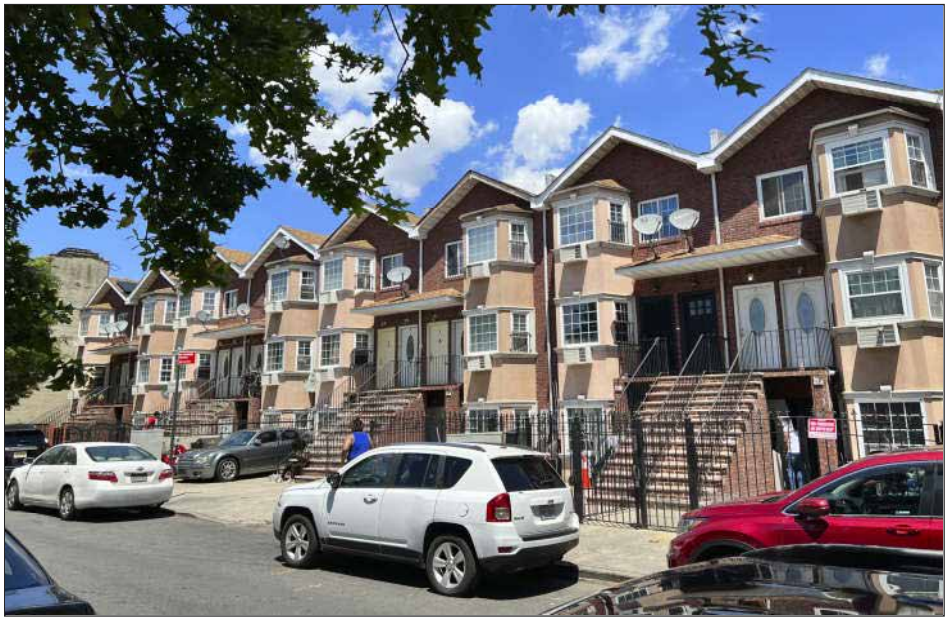
Site photos taken in Spring 2021 and June 2022.



4. View looking north on Rockaway Avenue adjacent to the Proposed Development Site.

Brownsville Arts Center and Apartments

Figure F-2a
Streetscape Views in the Primary Study Area



5. Multifamily walkup buildings located along the west side of the Proposed Development Site at 49 to 55 Chester Street (Block 3499, Lots 113-116).



6. A freestanding multifamily walkup building at 45 Chester Street (Block 3499, Lot 16).

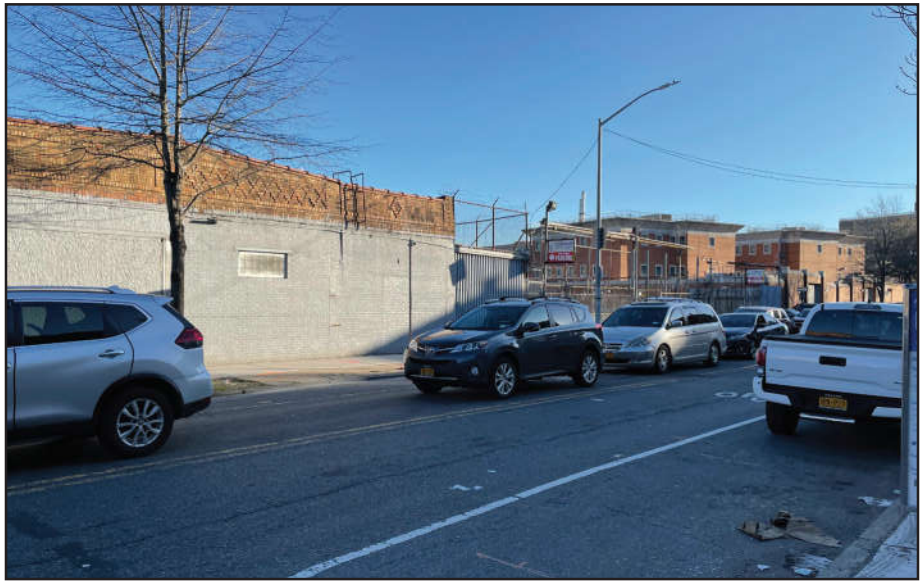


7. View of Lot 25 from Chester Street. Formerly, Lot 25 included a low-rise warehouse at 13 Chester Street that has been demolished.

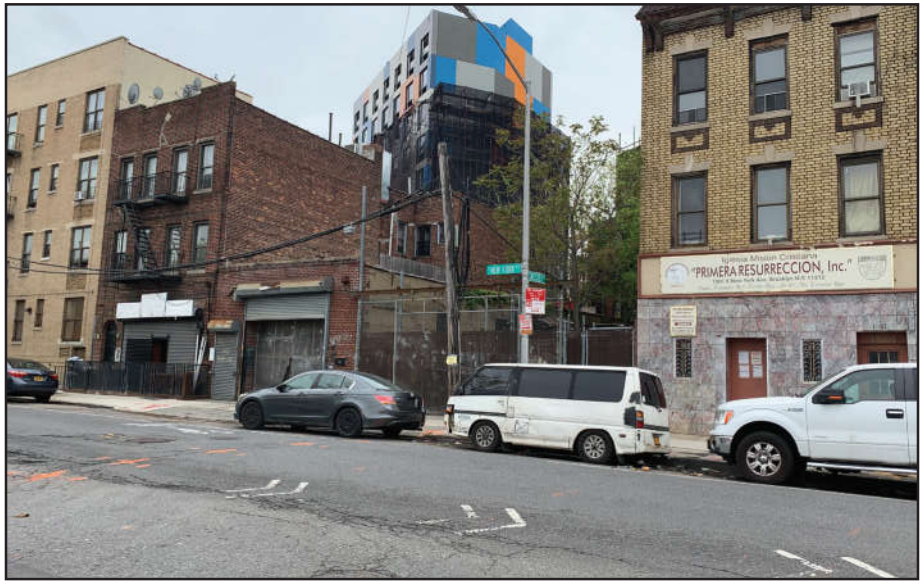
Site photos taken in Spring 2021 and June 2022.



8. View of the vacant vegetated, chain-link enclosed Proposed Development Site from its eastern edge on Rockaway Avenue.



9. View of East New York Avenue located directly north of the Proposed Development Site. It's a two-way street that runs generally east-west and diagonally through Brooklyn.



10. View of the intersection of Chester Street and East New York Avenue. Construction of the six-story Ocean Hill Hotel is visible in the background.

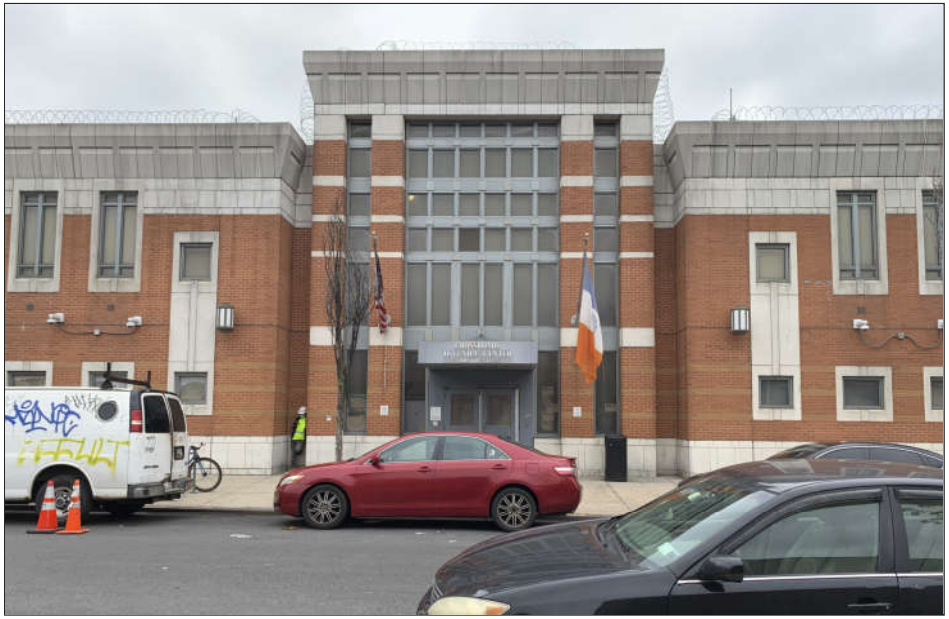


11. View looking east on Pitkin Avenue, a commercial corridor that is part of the Pitkin Avenue Business Improvement District (BID).



12. View looking south on Rockaway Avenue, north of the Proposed Development Site.

Site photos taken in Spring 2021 and June 2022.



13. View of the main entrance to the Crossroads Juvenile Center at 17 Bristol Street.



14. View of the 7-story multiunit residential building at 54 Bristol Street.



15. View of the 4-story walkup mulitunit residential building along East New York Avenue.



16. View looking on Glenmore Avenue to NYCHA Howard Houses.

Site photos taken in Spring 2021 and June 2022.

Urban Design

Primary Study Area

Figure F-2a provides views of the primary study area streetscape and **Figure F-2b** provides views of the existing buildings in the primary study area.

The primary study area comprises the proposed rezoning area, which is located midblock on the west side of Rockaway Avenue and east side of Chester Street between East New York and Pitkin Avenues. Chester Street and Rockaway Avenue are defined as narrow streets with widths of 50-feet and 70-feet, respectively. The proposed rezoning area includes approximately 69,064 sf and consists of portions of seven contiguous lots on Block 3499, including parts of Lots 25 and 113, as well as Lots 15, 16, and 114-116, in their entirety.

Lot 15 is a large, irregularly shaped, interior lot that comprises approximately 57,013-sf of lot area. It has 345 feet of frontage on the west side of Chester Street, and approximately 225 feet of frontage on the east side of Rockaway Avenue. Lot 15 is City-owned and accounts for most of the area to be rezoned and is the Proposed Development Site. The remaining six lots included in the proposed rezoning area are under separate private ownership.

Except for Lots 15 and 25, most of the lots are small, rectangular-shaped, interior lots that range in size from less than 1,750 sf to 2,450 sf. Lots 16 and 113 to 116 in the primary study area each have less than 25 feet of frontage on Chester Street. Lot 25 is a large, irregularly shaped lot that comprises the northern 32,826-sf portion of Block 3499, with frontage on Chester Street, East New York Avenue and Rockaway Avenue. However, only the southernmost portion (approximately 2,500 sf) of Lot 25, with frontage along Chester Street, would be rezoned as part of the Proposed Actions.

Building Bulk, Use, Type, and Arrangement

As noted previously, the Proposed Development Site comprises approximately 1.3 acres with approximately 345 feet of continuous frontage on Rockaway Avenue and 224 feet of frontage on Chester Street, which is broken up by an existing three-story walkup residential building at 45 Chester Street. The Proposed Development Site is predominately vacant and occupied by ungroomed foliage (see **Figure F-2b, photograph #8**) with the exception of the northernmost portion of the lot, which is paved and being utilized as an electrical supply open storage yard associated with the adjacent business to the north (Colonial Electric) at 326 Rockaway Avenue (Lot 25). The Proposed Development site is enclosed by chain-link fencing with two gated entrances secured with padlocks, one on Chester and the other on Rockaway Avenue (**Figure F-2a, photographs #1 to #4**).

The remaining six lots in the primary study area have frontage along Chester Street and include low-rise existing buildings. Residential buildings occupy Lots 16 and 113-116 (see **Figure F-2b**, **photographs #5 and #6**). Lot 16 (2,500 sf) has 25 feet of frontage and is occupied by an older, three-family, three-story (28 feet tall) walkup residential building built at the property line with an accessory building in the rear of the lot. The two buildings on Lot 16 include approximately 2,760 gsf (1.13 FAR). Lots 113-115 (1,742 sf each) each have 17.42 feet of frontage and are occupied by three-family, three-story buildings (32 feet tall), approximately 2,718 gsf (1.56 FAR). Lot 116 (1,862 sf) has approximately 18.25 feet of frontage and is also occupied by a three-family, three-story building (32 feet tall), approximately 2,853 gsf (1.53 FAR). The

three-family homes on Lots 113-116 are setback from the street and feature open accessory parking spaces and stairways leading up to the second floor. As shown in **Figure F-2b, Photographs #5 and #6**, these residential buildings are comprised of brick, cinder, and concrete. The New York City Department of Buildings (DOB) estimates that the buildings on Lots 113-116 were constructed in 2006, while the building on Lot 16 was constructed in 1910.

The remaining lot within the primary rezoning area (Lot 25) is irregularly shaped and comprises the northern portion of the block with approximately 143 feet of frontage on Chester Street, 211 feet of frontage on East New York Avenue and 186 feet of frontage on Rockaway Avenue. Only the southernmost 2,500-sf portion of Lot 25 would be rezoned. This portion of Lot 25 had formerly been occupied by a single-story, approximately 2,250 gsf warehouse erected in 2010 that has been demolished (see **Figure F-2b, photograph #7**).

Table F-1 provides a description of each lot in the primary study area. All of the existing buildings are low-rise, low-density uses with existing FARs that range from 0.45 to 1.56. All buildings are also oriented to the street.

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

Lot	Address	Area (sf)	Land Use	Typology	Building (gsf)	Built FAR	Height (feet)[1]	Build Year
15	27-31, 47 Chester St; 848-392 Rockaway Ave.	57,013	Vacant	-	-	0	-	-
16	45 Chester St	2,450	3-story residential (3 DUs)	Brick, cinder, concrete	2,760	1.13	38	1910
25*	13 Chester St	32,826	Vacant	-	-	-	-	-
113*	55 Chester St	1,742	3-story residential (3 DUs)	Red brick, cinder, concrete	2,718	1.56	32	2006
114	53 Chester St	1,742	3-story residential (3 DUs)	Red brick, cinder, concrete	2,718	1.56	32	2006
115	51 Chester St	1,742	3-story residential (3 DUs)	Red brick, cinder, concrete	2,718	1.56	32	2006
116	49 Chester St	1,862	3-story residential (3 DUs)	Red brick, cinder, concrete	2,853	1.53	32	2006

[1] Height is approximate measurement in feet
*Lot is partially included within the proposed rezoning area.

Block Form, Street Pattern, and Street Hierarchy

The subject block is slightly irregular because of East New York Avenue traversing diagonally through the street grid directly north of the primary study area. Rockaway Avenue is a two-way, north-south major arterial, running roughly from Broadway to Rockaway Parkway. Chester Street is a one-way northbound roadway running between East New York and Ditmas Avenues. Both streets include on-street parking. They are considered by zoning to be "narrow streets." Rockaway Avenue runs down the center of the Brownsville neighborhood, connecting it to the northern Ocean Hill neighborhood and southern Canarsie neighborhood. Near the primary study area, Rockaway Avenue is lined with a mix of land uses, whereas Chester Street is more residential lined with residential and public facilities (refer to **Figure F-2a**).

Streetscape Elements

Streetscape elements along the proposed rezoning area's street frontages include signage advertising the Pitkin Avenue BID, parking signage, parking meters, street lamps, and fire hydrants. There are also a few street trees located along Chester Street. The sidewalks are narrow at about 10 feet with little pedestrian activity given that most of the primary study area is occupied by vacant land. Near the Proposed Development Site, the sidewalks are littered with scattered debris and trash.

Topography, Natural Features and Open Space

The topography of the primary study area is generally flat. In the northern portion of the Proposed Development site, there is a vegetative soil stockpile. 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. As shown in **Figure F-1**, it is generally bound by Eastern Parkway to the northwest, Thatford Avenue to the east, Pitkin Avenue to the south, and Bristol Street to the west. **Figure F-3a** provides views of the secondary study area streetscape and **Figure F-3b** provides views of existing buildings in the secondary study area.

Building Bulk, Use, Type, and Arrangement

The study area is urban and most properties in the study area are developed though there are a handful of vacant properties along the east side of Rockaway Avenue and the north side of Park Place. There are also a few parking/vehicle storage lots in the secondary study area.

Table C-1 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 **Table C-1** and shown in **Figure C-2**, land use in the secondary study area is varied.

Mixed commercial/residential is the most prevalent land use throughout the study area and constitutes the highest percentage of tax lots (nearly 30 percent). Most mixed commercial and residential buildings occupy small, narrow tax lots that have frontage along the main corridors of the secondary study area, including Pitkin, East New York, and Rockaway Avenues. Generally, most mixed-use residential and commercial buildings range in height from two to five-stories and have high lot coverage. Pitkin Avenue is an active corridor that generally characterized by low-rise commercial and residential uses, like restaurants and local retail, as well as signage related to the Pitkin Avenue Business Improvement District (BID) (see **Figure F-3a, photograph #11**). East New York Avenue is also lined with a variety of uses, including multi-family walkups (see **Figure F-3b, photograph #15**), mixed residential and commercial buildings, institutional uses, and a few lots of light industrial/warehouse uses. Most buildings along Rockaway Avenue include retail or other commercial uses and services (see **Figure F-3a, photograph #12**).

Residential uses largely consist of low-rise multifamily walkup apartment buildings that include two- to four-stories and occupy small, narrow lots. The secondary study area also includes taller five- to seven-story multifamily elevator residential building located along the eastern and western edges of the study

area that occupy larger properties, including the New York City Housing Authority (NYCHA) Howard Houses.

Public facilities and institutional uses comprise the largest percentage of lot area, accounting for approximately 34 percent of lot area within the secondary study area, and the highest percentage of building area. They are distributed throughout the study area, located to the east of Rockaway Avenue and in the northeast corner of the secondary study area along East New York Avenue and Prospect Place. They also occupy larger lots. Directly west of the Project Area, occupying a majority of Block 3498, between Chester and Bristol Streets, is the three-story, approximately 105,223-gsf Crossroads Juvenile Center at 17 Bristol Street (see **Figure F-3b, photograph #13**). The Crossroads Juvenile Center occupies an expansive 2.7-acre site. It is enclosed by an approximately 20-foot-tall brick wall that extends along East New York Avenue and Chester Street. The 3-story building occupies the northern two-thirds of the site and has its entrance along Bristol Street. Directly west of Crossroads Juvenile Center, the 73rd Police Precinct is located at 1470 East New York City and occupies a 1.7-acre property. The 73rd Precinct is a low-rise, two-story, approximately 50,020 gsf building at the southeast corner of East New York Avenue and Thomas S. Boyland Street and is surrounded by parking.

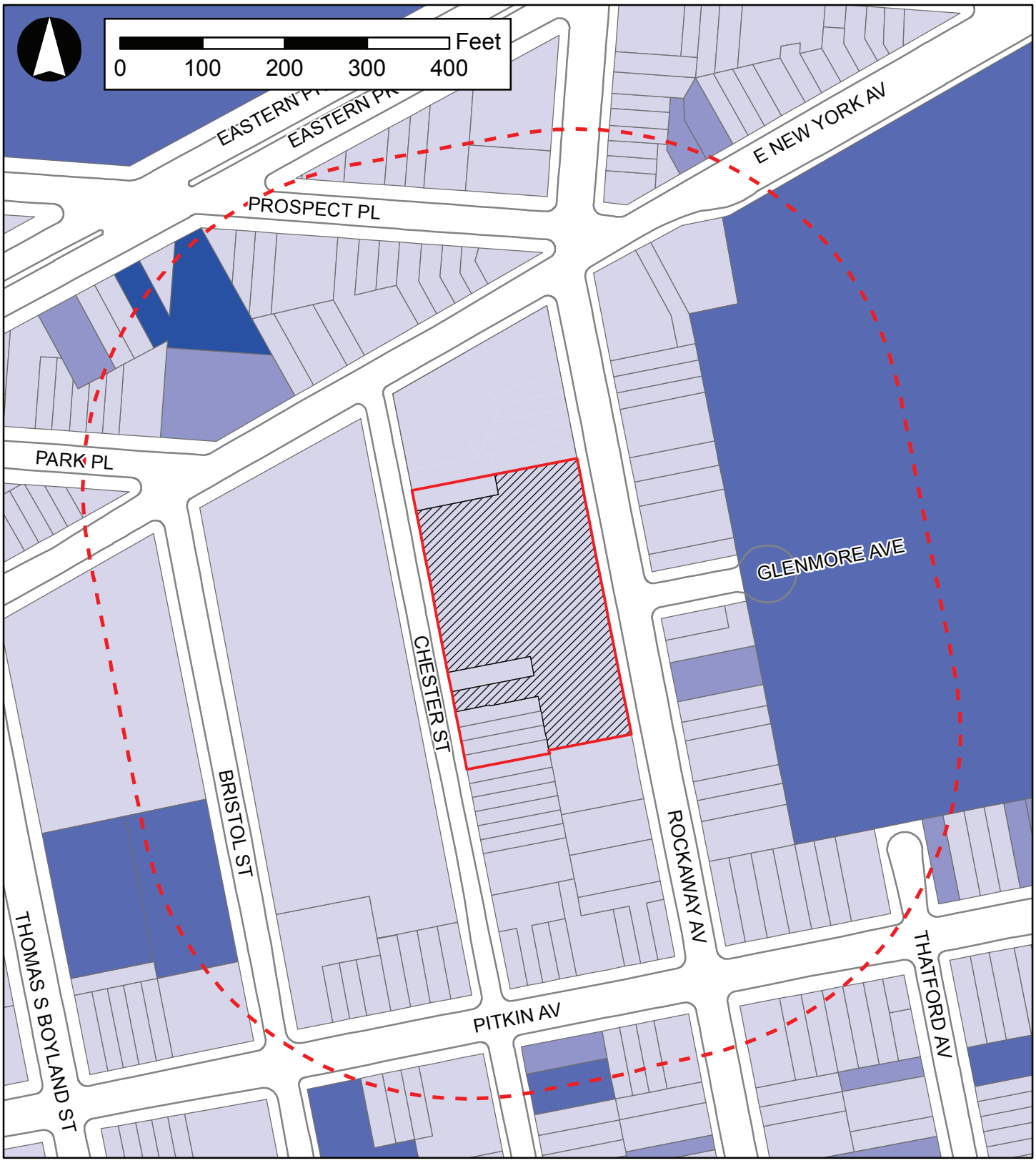
The secondary study area includes a wide variety of building forms. As shown in **Figure F-3a and Figure F-4**, most buildings within the study area are low-rise and include three or fewer stories. There are a few taller buildings located along the periphery of the secondary study area. For example, in the northwest corner of the study area is the planned six-story Ocean Hill Hotel (at 1668 Eastern Parkway, which is still under construction), and in the southwest corner is a seven-story multi-family elevator building at 54 Bristol Street (**Figures F-3a, photograph #10 and Figure F-3b, photograph #14**). A seven-story Quality Hotel is located at 95 Chester Street along the southern edge of the study area and the NYCHA Howard Houses consist of seven-story residential buildings (see **Figure F-3b, photograph #16**).

Most buildings are oriented to the street, and largely built at the street line, or include shallow-fenced front yards. Most buildings also have high lot coverage and occupy the entire property. Various built FARs are scattered throughout the study area, and range in between 0 and 4.37. As shown in **Figure F-5**, most existing development in the secondary study area has an FAR of 2.0 or less.

Block Form, Street Pattern, and Street Hierarchy

Streets in the study area generally follow a grid pattern, made irregular by East New York Avenue traversing diagonally through the street grid directly north of the primary study area. This block form has generally resulted in regular rectangular-shaped lots that vary in size and width. At the eastern edge of the study area, NYCHA's Howard Houses occupy a large superblock roughly bounded by East New York Avenue to the north, Mother Gaston Boulevard to the east, Glenmore and Pitkin Avenues to the south, and Rockaway Avenue to the west.

The area street network consists of arterials and smaller cross streets, with significant traffic volumes on East New York, Rockaway, and Pitkin Avenues. East New York, Rockaway and Pitkin Avenue support a mix of land uses. All of these streets have travel lanes in two directions: East New York (60 feet wide) and Pitkin Avenues (80 feet wide) run east-west, while Rockaway Avenue (70 feet wide), which connects them, runs north-south. The east-west arterial roads also have shared bike lanes, and East New York Avenue is a designated local truck route. Rockaway Avenue to the north of East New York Avenue is also a designated DOT truck route. Bristol (60 feet wide) and Chester Streets (50 feet wide), as well as Prospect



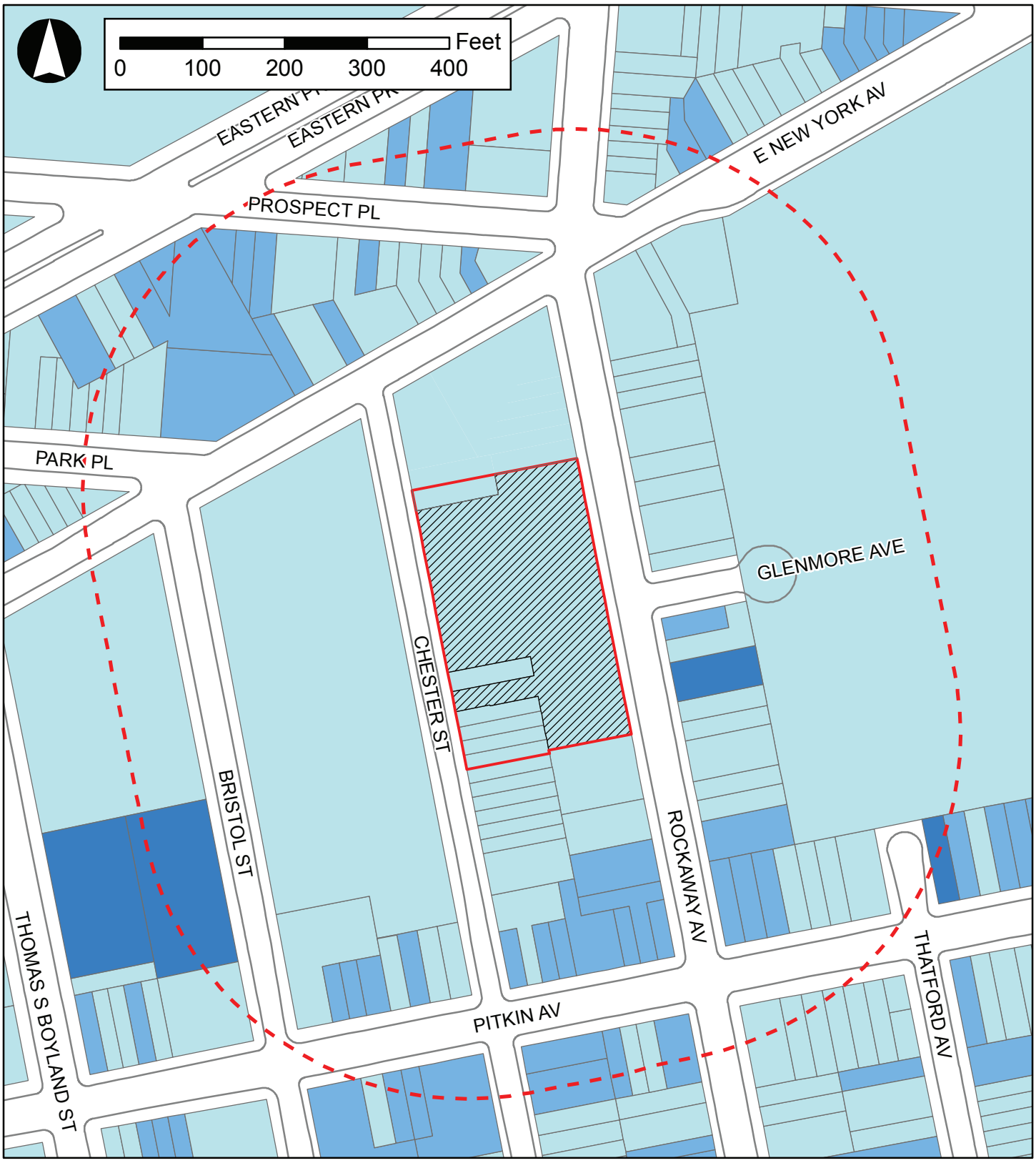
Legend

- Proposed Rezoning Area
- Proposed Development Site
- Secondary Study Area (400-Foot Radius)

NumFloors

- 1 - 3 Floors
- 4 - 5 Floors
- 6 - 7 Floors
- 8 - 10 Floors
- 10+ Floors

Building Densities



Source: NYCDCP (PLUTO 2021. Version I); DoITT (2020)

Legend

- Proposed Rezoning Area
- Proposed Development Site
- Secondary Study Area (400-Foot Radius)

Built FAR

- Up to 2.0 FAR
- 2.1 - 4.0 FAR
- 4.0 - 6.0 FAR
- 6.1 - 8.0 FAR
- 8.1+ FAR

Place (70 feet wide) are one-way streets. All streets in the secondary study area generally have on-street parking.

Streetscape Elements

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

Topography, Natural Features and Open Space

As the area is an urbanized location, the topography of the secondary study area is generally flat. There are no natural features or publicly accessible open spaces.

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.

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, Lot 25, which is located directly north of the Proposed Development Site and is partially within the proposed rezoning area, would be redeveloped with a 14-story (155-foot tall) mixed-use residential and community facility building (4.76 FAR) at 326 Rockaway Avenue. The planned development would comply with the site's existing R6/C2-3 zoning and would include 215 affordable housing units and approximately 5,000 gsf of community facility space.

The Proposed Development Site 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 proposed in either the primary or secondary study area.

Two new commercial developments, including two new buildings, are anticipated to be completed by 2025 in the secondary study area. A new six-story, 72-room hotel is planned at 1668 Eastern Parkway, and another six-story 30-room hotel at 393 Rockaway Avenue will be located across the street from the Proposed Development Site. Both hotels would be constructed pursuant to existing zoning. The six-story hotel at 1668 Eastern Parkway will be setback from Eastern Parkway with accessory parking located in the front yard. The hotel will rise the six-stories without any setbacks. The six-story hotel at 393 Rockaway

Avenue will replace a three-story mixed-use commercial and residential building. The new hotel would be constructed at the property line and have a four-story streetwall. At the fifth floor, the hotel will setback 20 feet from Rockaway Avenue and rise up to 6-stories.

In keeping with City policy, it is anticipated that street trees would be planted around new development within the primary and secondary study areas. In addition, with the introduction of new commercial and community facility uses, the adjacent streetscapes at 326 Rockaway Avenue, 1668 Eastern Parkway and 393 Rockaway Avenue are anticipated to experience increased pedestrian-oriented activity.

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 2025 and evaluates the potential for significant adverse impacts on urban design and visual resources.

As described in **Attachment A, "Project Description,"** the Proposed Actions involve zoning map and text amendments, an Urban Development action Area (UDAA) designation, Urban Development Action Area Project (UDAAP) approval, disposition of a City-owned lot, and mayoral override approval. The Proposed Actions would facilitate a new mixed-use residential and community facility development, including 290 affordable residential units plus a superintendent's unit, and arts and cultural spaces, as well as outdoor private and publicly accessible plazas. The proposed 9-story, approximately 291,027-gsf building (4.44 FAR) and outdoor plazas would replace vacant and underutilized land. The proposed building would include entrances on both Rockaway Avenue and Chester Street frontages. It would include two residential lobbies, one accessible from Rockaway Avenue and the other from Chester Street. The arts and cultural spaces would have entrances on both Rockaway Avenue and Chester Street. The outdoor plazas would include two small private plazas (total of 9,393 sf) for building residents and tenants on Chester Street, and one publicly-accessible plaza on Rockaway Avenue (5,182 sf). In the 2025 future with the Proposed Actions, the requested zoning changes and UDAA designation and UDAPP approval and associated disposition would be approved, and the Proposed Development would be completed and occupied. As discussed in **Attachment A**, 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 services and amenities.

Urban Design

Primary Study Area (Project Area)

Development facilitated by the Proposed Actions would be built on an existing block, 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 a new nine-story (95-foot tall) mixed-use residential and community facility building and outdoor accessory private and publicly accessible plazas at the Proposed Development Site. The proposed building 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 3.0 FAR to 4.6 FAR. The proposed building would be taller than most

existing buildings in the surrounding area, but shorter than the planned No-Action mixed-use development directly north of the site at 326 Rockaway Avenue.

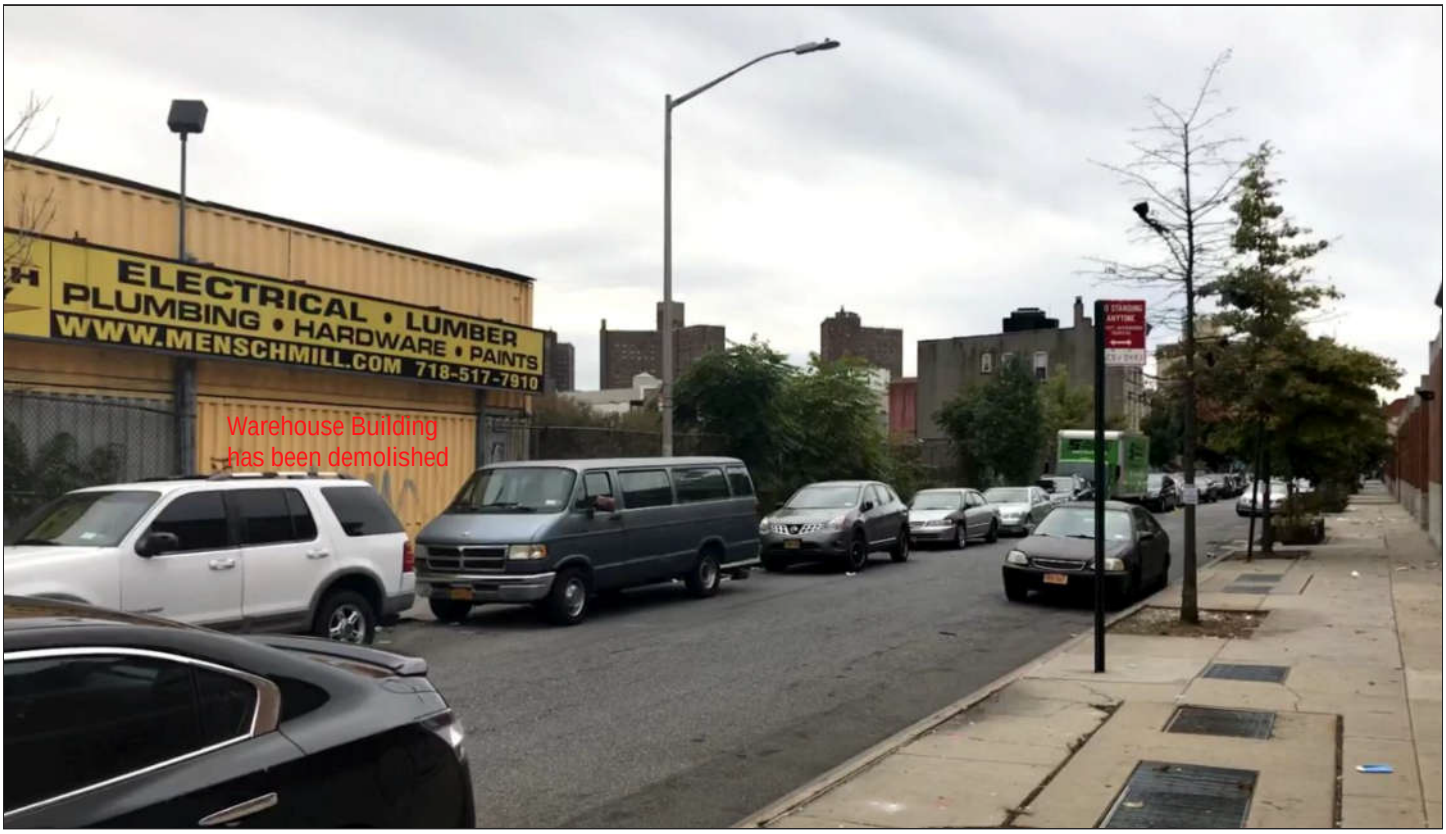
The proposed development would result in a noticeable change in the pedestrian perspective in comparison to No-Action conditions and would introduce new height and scale to both Rockaway Avenue and Chester Street along the midblocks between Pitkin and East New York Avenues. With a maximum building height of 95 feet and building square footage of approximately 291,027 gsf (4.44 FAR), the height and bulk of the With-Action building would be taller and larger than the existing surrounding buildings in the primary study area, which do not exceed three stories and have FARs of less than 2.0. However, the Proposed Project would be comparable to the planned mixed-use development at 326 Rockaway Avenue, directly north of the site, which would rise 14-stories tall. The Proposed Project is expected to complement the surrounding area's varied built context of older and newer structures that vary in use, height, form, and materials. In accordance with the proposed zoning, the Proposed Development Site would be built close to the street line along Rockaway Avenue and Chester Street forming strong street wall presences (see **Figures F-6a and F-6b**).

The With-Action building would be U-shaped and include nine stories with a maximum height of approximately 95 feet. Along Rockaway Avenue, the proposed building is expected to have a five-story (55 feet tall) streetwall width of approximately 293 feet. The building would setback at the fifth and eighth stories. At the northeast corner of the site along Rockaway Avenue, the Proposed Development Site would accommodate an approximately 4,091 sf, rectangular shaped publicly accessible plaza that would have 50 feet of frontage along Rockaway Avenue. Along Chester Street, the proposed building is expected to have a five-story (55 feet tall) streetwall extending for a width of 160 feet with building setbacks at the fifth and eighth stories. At the northwest corner of the site, the site would include a gated private plaza with 40 feet of frontage along Chester Avenue. At the southwestern corner of the site would be an L-shaped private accessory plaza with roughly 25 feet of frontage on Chester Street.

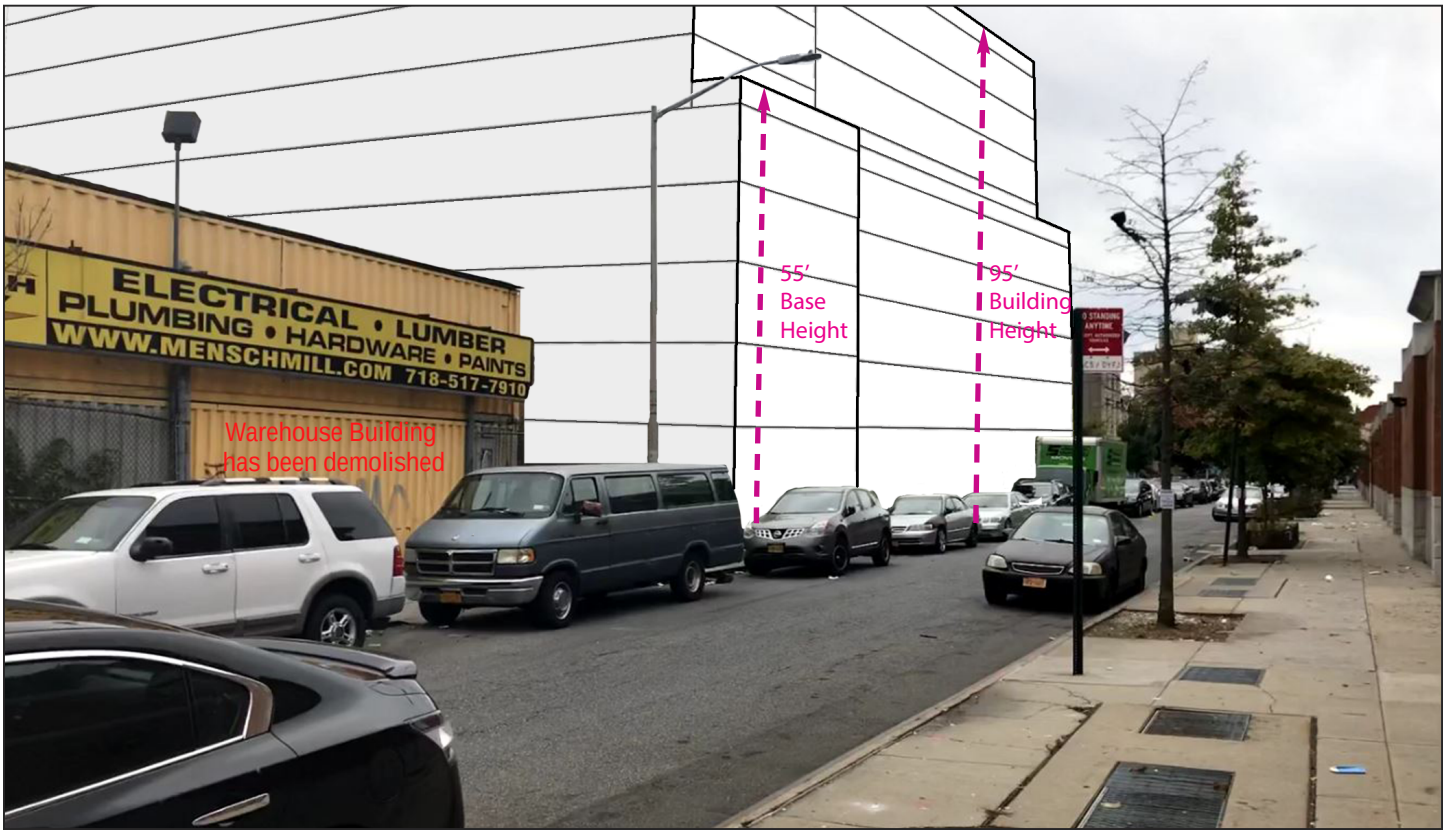
The proposed development would enhance the streetscape experience of the Proposed Development Site. As noted above, the proposed development would include approximately 5,182 sf of publicly accessible plaza that would introduce passive recreational open space amenity to the surrounding area. In addition, the proposed development would include a range of arts and cultural spaces that would further enliven and activate the Rockaway Avenue and Chester Street streetscapes and complement existing residential and community-oriented uses of the neighborhood. The proposed community facility spaces would increase foot traffic in the immediate vicinity of the primary study area, further activating the streetscape and improving the pedestrian experience.

The Proposed Actions would permit the modification of the rear yard equivalent requirements, but these changes would not be visible to pedestrians from either Rockaway Avenue or Chester Street. In addition, the Mayoral Override would permit the modification of setback requirements along a narrow street, which would permit the proposed building to setback only eight feet above the base height along a narrow street instead of required 15-foot setback. The proposed Mayoral Override would allow greater design flexibility for the purposes of added additional affordable housing. No additional bulk or change in use.

Compared to the future without the proposed actions, in the future with the proposed actions, the visual appearance of the pedestrian experience of the Proposed Development Site would change, as a nine-story building 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



No-Action: View looking south on Chester Street



With-Action: View looking south on Chester Street



No-Action: View looking north on Rockaway Avenue.



With-Action: View looking north on Rockaway Avenue.

the arrangement, appearance, or functionality of the Project Area such that the alteration would negatively affect a pedestrian's experience of the area.

Secondary Study Area

The Proposed Actions 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 the Project Development Site within the primary study area. The Proposed Actions would not alter any street patterns, street hierarchies, block forms, building uses, and bulk regulations in the secondary study area. The Proposed Actions would facilitate the construction of a new mixed-use residential and community facility building that 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, and would introduce additional publicly accessible plaza into the area.

The proposed building would be a prominent and distinctive addition to the surrounding area's built environment. The proposed building would be taller and have greater scale and density than existing development in the secondary study area, but would be comparable to the planned, No-Action, 14-story mixed-use development at 326 Rockaway Avenue. With a maximum building height of 95 feet, the upper floors of the building would be visible from surrounding streets. The proposed R7A zoning district 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 development would introduce strong streetwalls along Rockaway Avenue that would be consistent with surrounding development. Given the proposed building would be nine stories tall and taller than most surrounding development in the study area, it would be noticeable from surrounding streets. While the With-Action building would represent a departure from the urban design character of the secondary study area in terms of height and bulk, it would be consistent with the varied building typologies of the study area and complement the study area mixed land uses, including active ground floors uses, and building placement and orientation along the property line.

The proposed zoning changes are intended to facilitate development that would be appropriate for a transit accessible area along a major thoroughfare. The proposed building would be located less than one block from the cross-section at East New York Avenue to the north, as well as Pitkin Avenue to the south, two 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 development site. The With-Action development 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 ground floor community facility arts and cultural uses are also expected to enhance the pedestrian realm making the surrounding area more inviting to pedestrians.

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

As such, the proposed actions are not expected to result in any significant adverse impacts to urban design in the study area surrounding the Project Area, 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 development would occur on an existing block that contains no visual resources, the Proposed Development would not block, obstruct, or encroach on any significant public views. The new building at the Proposed Development Site is expected to further define view corridors in the secondary study area, filling in a gap, by replacing several vacant lots with a new predominantly residential development that would be constructed near the street line. The Proposed Actions would introduce both private and publicly accessible street level plazas to the development site that would further enhance the pedestrian experience near the site.

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 the area's urban design and visual resources. The Proposed Actions would facilitate the construction of a new mixed-use residential and community facility development at a single site with frontage along a major north-south arterial in Brownsville, Brooklyn. The proposed building would replace vacant and underutilized land located in the midblock of Block 3499 between Rockaway Avenue and Chester Streets, East New York and Pitkin Avenues. Consistent with the proposed R7A and R7A/C2-4 contextual zoning districts, the With-Action development would be constructed near the street line along Rockaway Avenue and Chester Street creating strong streetwalls consistent with surrounding development. The proposed ground floor uses with entrances along Rockaway Avenue and Chester Street would further activate the streetscape by increasing pedestrian traffic and creating visual interest.

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 proposed development would be larger and taller than most existing buildings and consistent with planned development in the No-Action condition in the study area. The proposed development is expected to complement the existing varied context, which includes a diverse mix of building typologies and uses. The With-Action building would also be consistent with the surrounding neighborhood context in terms of use and lot placement, forming consistent streetwalls with buildings lining Rockaway Avenue.

Although the Proposed Actions would result in a building that is larger in height and bulk (scale) than most buildings found in the immediate surrounding neighborhood, from a pedestrian's perspective, the

building would not obstruct important view corridors. The With-Action development would be prominent along both Rockaway Avenue and Chester Street and would be comparable to the planned 14-story mixed-use building at 326 Rockaway Avenue located directly north. However, located less than one block from the cross-sections of Rockaway Avenue with East New York and Pitkin Avenues (two 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 development site and 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
WATER & SEWER INFRASTRUCTURE

I. INTRODUCTION

As defined in the 2021 *City Environmental Quality Review* (CEQR) *Technical Manual*, infrastructure comprises the physical systems that support populations and includes structures such as water mains and sewers, bridges and tunnels, roadways, and electrical substations. These structures are static and thus have defined capabilities that may be affected by growth in a particular area.

As described in **Attachment A, "Project Description,"** the Proposed Project consists of an affordable housing development with approximately 290 affordable dwelling units (DUs) plus a single superintendent's unit, and approximately 25,507 gross square feet (gsf) of community facility space that is envisioned to accommodate cultural and arts spaces. This attachment provides an evaluation of the potential effect of the Proposed Project on the City's water and sewer infrastructure. Other City infrastructure identified in the *CEQR Technical Manual*, including the transportation network and public transportation systems, are discussed in separate attachments of this Environmental Assessment Statement (EAS). Included is a description of the existing sewer infrastructure in the immediate study area, as well as any changes to sewer infrastructure conditions that would occur in the 2025 future with and without the Proposed Project.

II. METHODOLOGY

This analysis follows the methodologies set forth in the *CEQR Technical Manual*. Pursuant to CEQR, a preliminary water analysis is needed if a project would result in an exceptionally large demand of water (over 1,000,000 gallons per day [gpd]) or is located in an area that experiences low water pressure. The Proposed Development Site, comprising an approximately 57,013-sf City-owned lot[1], is located in the Brownsville neighborhood of Brooklyn and is not located in an area that experiences low water pressure (i.e., it is not located at the end of the water supply distribution system, such as the Rockaway Peninsula or Coney Island). Based water usage and sewage generation rates outlined in Table 13-2 of the *CEQR Technical Manual,* the Proposed Project is expected to generate a water demand of approximately 90,458 gpd (including water related to sanitary and domestic uses) compared with the No-Action conditions. While this would represent an increase in demand on the New York City water supply system, it does not meet the *CEQR Technical Manual* threshold requiring a detailed analysis. Therefore, an analysis of water supply is not warranted, and it is expected that there would be adequate water service to meet the incremental water demand, and there would be no significant adverse impacts on the City's water supply. Based on DEP's review of the project, the existing 20-inch water main along Rockaway Avenue should be capable to handle the estimated increase in water demand (refer to **Appendix I**). DEP also recommended that the fire system for the project be connected to the 20-inch water main along Rockaway Avenue, as the existing water main on Chester Street is 6-inch.

[1] Lot 15, Block 3499

According to *CEQR Technical Manual* guidance, a preliminary sewer analysis is warranted if a project site, comprising one or more acres, in the Jamaica Bay watershed or certain specific drainage areas (including Fresh Creek[2]) where the amount of impervious surface would increase because of a proposed action(s). As the Proposed Development Site comprises approximately 1.31 acres (57,013 sf) and is located within the Fresh Creek drainage area of the Jamaica Bay Watershed, where the amount of impervious surface would increase under the Proposed Actions, a preliminary sewer analysis is warranted pursuant to *CEQR Technical Manual* guidance.

Existing and future sanitary sewage generation is calculated based on use generation rates set forth in Table 13-2 of the *CEQR Technical Manual*. The Proposed Development Site is located in an area of the City that is served by combined sewers. The DEP Volume Calculation Matrix is then used to calculate the overall combined sanitary sewage and stormwater runoff volume discharged to the combined sewer systems for four rainfall volume scenarios with varying durations. Stormwater runoff volumes are determined by estimating the amount of pervious and impervious surfaces occupying the Proposed Development Site. The ability of the City's water and sewer infrastructure to handle the estimated demand/generation that is anticipated from the Proposed Project is assessed by estimating existing, No-Action, and With-Action water demand and sewage generation. With-Action water demand and wastewater generation is compared to the No-Action condition, and With-Action combined stormwater runoff and wastewater generation volumes are compared to existing conditions.

III. EXISTING CONDITIONS

Conveyance System

According to the *CEQR Technical Manual*, wastewater is considered to include sanitary sewage, wastewater generated by industries, and stormwater. Water used for air conditioning generates a negligible amount of wastewater as it recirculates or evaporates in the cooling and heating process.

New York City's sewer system consists of a grid of sewers beneath the streets that send wastewater flows to fourteen different wastewater resource recovery facilities (WRRFs). The City's WRRFs are regulated by the New York State Department of Environmental Conservation (NYSDEC), which issues permits regulating the discharge of treated effluent. Combined, all fourteen WRRFs in New York City have a State Pollution Discharge Elimination System (SPDES) permitted total capacity of 1.8 billion gpd and combined treat approximately 1.2 billion gallons of wastewater daily. The area served by each plant is called a "drainage area" or "catchment area."

The majority of New York City's sewers are combined sewers, since they receive both sanitary wastewater and stormwater runoff. During wet weather, large volumes of rainfall runoff enter the combined system through storm drains and catch basins in streets and mix with sanitary sewage, then flow through regulators (relief valves), before being sent to the WRRFs through interceptor sewers. During such wet-weather events, excessive volumes of stormwater runoff (ten to 50 times the dry-weather flow) can enter the combined sewer system and, if transported to the WRRF, could exceed the treatment design capacity. For limited periods, WRRFs are designed for only twice the average dry-weather flow. Flow into the interceptor sewers are controlled by regulators along the length of the interceptor sewers. The purpose

[2] Fresh Creek is a tributary of Jamaica Bay.

of the regulators is to divert sanitary flow from the existing combined sewers to the interceptor sewers during normal flow periods (dry weather) and limit the flow to the interceptor sewers to twice dry weather flow during storm periods (wet weather). The existing tide gates placed on the combined sewer overflows (CSOs) downstream of the regulators are designed to keep tidal water from entering the existing combined sewers and the interceptor sewers. Tide gates can be part of the regulator structure or stand-alone chambers. The New York City sewer system currently treats approximately 1.3 billion gpd of municipal wastewater and a portion of combined sewer flow during wet weather events.

Sanitary sewers can be one to two feet in diameter on side streets and three or four feet in diameter under larger roadways. They connect to trunk sewers, which are generally five to seven feet in diameter. Combined sewers discharge to regulators and the inceptors carry wastewater to the WRRFs for treatment.

The wastewater collection system near the Proposed Development Site consists of combined sewers that are located within both Rockaway Avenue and Chester Street. In Rockaway Avenue, there is a 54-inch reinforced concrete combined sewer and in Chester Street is a 12-inch pipe combined sewer of unknown material. From the project area, the combined sewer flows are directed south and east and eventually lead to the Coney Island WRRF.

The Coney Island WRRF treats wastewater from a 15,087-acre area located in the south and central Brooklyn. The Coney Island WRRF, which has been operating since 1935, is regulated by a SPDES permitted dry weather capacity of 110 million gallons per day (mgd). As presented in **Table G-1**, over the most recent 12-month period, the Coney Island WRRF handled an average of 83 mgd of flows, which is less than the facility's permitted capacity of 110 mgd. The Coney Island WRRF is currently undergoing a $57 million renovation to reduce discharges of nitrogen to improve the health of Jamaica Bay.

TABLE G-1:
Existing Coney Island WRRF Average Daily Sewer Flows

Year	Month	Average Daily Flows (mgd)
2020	October	93
	November	86
	December	85
2021	January	78
	February	82
	March	78
	April	80
	May	78
	June	76
	July	83
	August	89
	September	91
	October	98
	November	86
	December	110
12-Month Average		83

Source: DEP Wastewater Treatment Plant Performance Data, "Monthly Operating Efficiency" tables.

Sanitary Flows

As described in Attachment A, "Project Description," the 57,013-sf Proposed Development Site is currently unimproved and occupied by unkempt vegetative foliage. There are no existing uses at the site and no wastewater is generated at the site.

Stormwater Flows

The Proposed Development Site has a total area of approximately 57,013 sf. **Table G-2** provides a breakdown of the existing pervious and impervious surface types comprising the site. As presented in **Table G-2**, the entire site is vacant and occupied by unkempt vegetated foliage. Based on the existing surface area breakdown and standard DEP runoff coefficients, the Proposed Development Site has an existing runoff coefficient of 0.20.

For this analysis, standard DEP runoff coefficients were used to calculate the amount of stormwater runoff for various rainfall intensities and durations, with rainfall ranging from 0.00 inches to 2.50 inches over durations of 3.80 to 19.50 hours. **Table G-3** shows the Proposed Development Site's existing combined stormwater runoff and wastewater generation. As indicated in the table, the site currently generates between 0.00 and 0.02 mg of combined sanitary and stormwater flows within the Coney Island WRRF for the different rainfall intensities.

TABLE G-2: Existing Surface Types at the Proposed Development Site

Surface Type	Roof [1]	Pavement and Walks	Other	Grass and Softscape	Total
Area (%)	0	0	0	100	100
Surface Area (sf)	0	0	0	57,013	57,013
Runoff Coefficient [2]	1.0	0.85	0.85	0.20	0.20

Notes:
[1] Total roof area on site.
[2] Runoff coefficients for each surface area type per DEP.

TABLE G-3: Existing Combined Stormwater Runoff and Wastewater Generation

Rainfall (inches)	Duration (Hours)	Total Area (Acres)	Runoff Coefficient	Runoff Volume to CSS (MG)	Sanitary to CSS (MG)	Total (MG)
0.00	3.80	1.31	0.20	0.00	0.00	0.00
0.40	3.80			0.00	0.00	0.00
1.20	11.30			0.01	0.00	0.01
2.50	19.50			0.02	0.00	0.02

Notes:
CSS = combined sewer system
MG = million gallons

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

As described in **Attachment A, "Project Description,"** no changes to the Proposed Development Site would occur in the future without the Proposed Actions. As such, the existing dry weather and wet weather flows that are currently generated by the site would remain unchanged in the No-Action condition.

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

In the 2025 With-Action condition, the project sponsor would construct the Proposed Project. Specifically, as described in **Attachment A, "Project Description,"** the Proposed Project would be comprised of approximately 290 affordable DUs plus one superintendent's unit, and approximately 25,507 gsf of community facility space.

Sanitary Flows

In the future with the Proposed Actions, wastewater from the Proposed Project would continue to be treated by the Coney Island WRRF, which has an SPDES-permitted dry weather flow capacity of 110 mgd. As shown in **Table H-4**, the Proposed Project would generate approximately 86,122 gpd of sanitary sewage, with a total water demand of approximately 90,458 gpd. While this would represent an increase in sanitary flows, it would be equivalent to less than 0.08 percent of the average daily flow at the Coney Island WRRF and would not result in an exceedance of the plant's permitted capacity of 110 mgd. In addition, in accordance with the New York City Plumbing Code (Local Law 33 of 2007), the Proposed Project would be required to utilized low-flow plumbing fixtures, which would reduce sanitary flows to the plant. Therefore, the Proposed Project is not expected to result in a significant adverse impact to the City's sanitary sewage conveyance and treatment system.

TABLE G-4: With-Action Water Consumption and Wastewater Generation by the Proposed Project

Land Use	Rate [1,2]	Area (sf)	Domestic Water/ Wastewater Generation (gpd)	A/C (gpd)
Residential	Domestic: 100 gpd/person	291 units (approx. 800 residents [2])	80,000	0
Community Facility	Domestic: 0.24 gpd/sf A/C: 0.17 gpd/sf	25,507	6,122	4,336
		Total Water Consumption	90,458	
		Total Wastewater Generation	86,122	

Notes:

[1] Rates are based on water demand rates provided in the *CEQR Technical Manual.* Community facility use assumes retail rate.

[2] Based on average household size of 2.75 for Brownsville Neighborhood Tabulation Area (NTA) (2020 Census).

Connecting to the City's sewer system requires certification from NYCDEP as part of the building permit process, which is not a discretionary approval. The Project Sponsor would be required to file a Site Connection Proposal Application (SCP) for approval from NYCDEP to tie into the sewer system. In this process, before a building permit can be issued, site connection proposals must be certified for sewer availability by NYCDEP. The Project Sponsor would be required to demonstrate that the existing sanitary system could handle the sanitary flows from the Proposed Project. Because the City's sewers are sized and designed based on the designated zoning of an area and related population density and surface

coverage characteristics, the proposed zoning changes may result in development that is inconsistent with the design of the existing built sewer system. To be issued a permit to connect to the City sewer, a site-specific hydraulic analysis will likely be required to determine whether the existing sewer system is capable of supporting higher density development and related increases in sanitary flows. Completion of sewer improvements and/or a new drainage plan may also be required at the time of the site connection proposal.

Stormwater Flows

In the future with the Proposed Actions, the amount of impervious surface area would increase at the Proposed Development Site as compared to existing and No-Action conditions. **Table G-5** shows the surface types that are expected on the Proposed Development Site under 2025 With-Action conditions. As presented in **Table G-5**, the runoff coefficient for the Proposed Development Site would increase to 0.86, as compared to 0.20 under existing conditions, in the future with the Proposed Actions.

TABLE G-5: With-Action Surface Types at the Proposed Development Site

Surface Type	Roof [1]	Pavement and Walks	Other	Grass and Softscape	Total
Area (%)	32	34	0	33	100
Surface Area (sf)	36,209	13,349	0	7,455	57,013
Runoff Coefficient [2]	1.0	0.85	0.85	0.20	0.86

Notes:
[1] Total roof area on site.
[2] Runoff coefficients for each surface type are as per DEP.

Table G-6 compares the estimated combined flows (stormwater runoff and sanitary flows) to the combined sewer system under existing and With-Action conditions using the DEP Flow Volume Calculation Matrix. As shown in the table, depending on the rainfall volume and duration, the total projected With-Action volume flow to the combined sewer system could be between 0.01 and 0.14 mg. Compared to existing conditions, this would represent an increase in combined sewer flows of 0.01 to 0.12 mg, depending on rainfall intensities.

TABLE G-6: Existing and With-Action Combined Stormwater Runoff and Wastewater Generation at the Proposed Development Site

Rainfall (inches)	Duration (Hours)	Existing Conditions			With-Action Condition			Increased Total Volume to CSS (MG)
		Stormwater Runoff (MG)	Sanitary to CSS (MG)	Total (MG)	Stormwater Runoff (MG)	Sanitary to CSS (MG)	Total (MG)	
0.00	3.80	0.00	0.00	0.00	0.00	0.012	0.01	0.01
0.40	3.80	0.00	0.00	0.00	0.01	0.012	0.02	0.02
1.20	11.30	0.01	0.00	0.01	0.04	0.035	0.08	0.07
2.50	19.50	0.02	0.00	0.02	0.08	0.060	0.14	0.12

Notes:
MG = million gallons

The Flow Volume Matrix calculations do not reflect the use of any sanitary and stormwater source control Best Management Practices (BMPs) to reduce sanitary flow and stormwater runoff volumes to the combined sewer system. As part of the DEP site connection approval process, the project must comply with the required stormwater release rate. It should also be noted that DEP has finalized a Unified Stormwater Rule ("USWR")

that increases the amount of stormwater to be managed on-site as part of new development, and further restricts the release rate for sites that require a connection to a municipal combined sewer. The DEP Unified Stormwater Rule (USWR), which became effective in February 2022 decreases the maximum allowable stormwater release rate from project sites to the DEP combined sewer system to 0.1 cubic feet per second (cfs) per acre or 0.046 cfs, whichever is greater. It also requires addressing water quality by managing the water quality volume on-site with DEP-approved BMPs for the retention or detention of at least 1.5 inches. For sites within municipal separate storm sewer system ("MS4") areas, the release rate is limited to 1.0 cfs per acre or 0.046 cfs, whichever is greater.

Stormwater BMPs would be required as part of the DEP site connection approval process in order to bring the proposed development into compliance with the required stormwater release rate at the time of project construction. As required by DEP and DOB, all storm water would be retained or detained on site before releasing into the City's combined sewer lines. Specific BMP methods will be determined with further refinement of the building's design and in consultation with DEP.

The implementation of low-flow fixtures, as per the New York City Plumbing Code, Local Law 33 of 2007, and the U.S. Environmental Protection Agency's WaterSense Program, would help control sanitary flows for the Proposed Development Site. In addition, the following typical BMP measures could be used to help manage stormwater flows: the implementation of BMPs described in the New York City Green Infrastructure Plan and/or green technologies, such as blue and green roofs, subsurface detention and infiltration, porous pavement, enhanced tree pits, and rain cisterns, depending on site conditions.

Therefore, with the incorporation of appropriate BMPs that would be required as part of the site connection approval process to be reviewed and approved by NYCDEP, the overall volume of sanitary sewer discharge and stormwater runoff, as well as the peak stormwater runoff rate, would be reduced. Sewer conveyance infrastructure near the site and treatment capacity at the Coney Island WRRF would be sufficient to handle wastewater flow resulting from the Proposed Project. Therefore, there would be no significant adverse impacts on wastewater treatment or stormwater conveyance infrastructure as a result of the Proposed Actions.

VI. CONCLUSIONS

The Proposed Project would not result in significant adverse impacts on wastewater treatment or stormwater conveyance infrastructure. Approximately 86,122 gpd of sanitary sewage would be generated by Proposed Project in the With-Action condition. This increase in sewage generation would be less than 0.08 percent of the average daily flow at the Coney Island WRRF, and would not result in an exceedance of the plant's permitted capacity. The Project Sponsor would be required to file a site connection proposal for approval from DEP for the proposed building to tie into the City's sewer system. In order to obtain a sewer connection permit from NYCDEP, the Project Sponsor would be required to demonstrate that the existing system could handle the increased flows due to the Proposed Project. Any analysis and improvements, if required, would be undertaken prior to construction of the Proposed Project and would be coordinated with DEP for review and approval.

Depending on the rainfall volume and duration, the total With-Action volume to the combined sewer system could be between 0.01 and 0.14 million gallons (mg). Compared to existing conditions, this would represent an increase in combined sewer flows of 0.01 to 0.12 mg, depending on rainfall intensities. With

the incorporation of selected stormwater source control BMPs that would be required, as part of the site connection approval process, subject to the review and approval of DEP, the peak stormwater runoff rates would be reduced. As required by DEP and DOB, all storm water would be retained on site or detained on site before releasing into the municipal combined sewer lines. In addition, as noted above, as part of the site connection proposal process, sewer improvements and/or an amended drainage plan may be required, if determined warranted by DEP. Overall, the proposed project would not result in significant adverse impacts on the City's sewage conveyance and treatment systems.

ATTACHMENT H
TRANSPORTATION

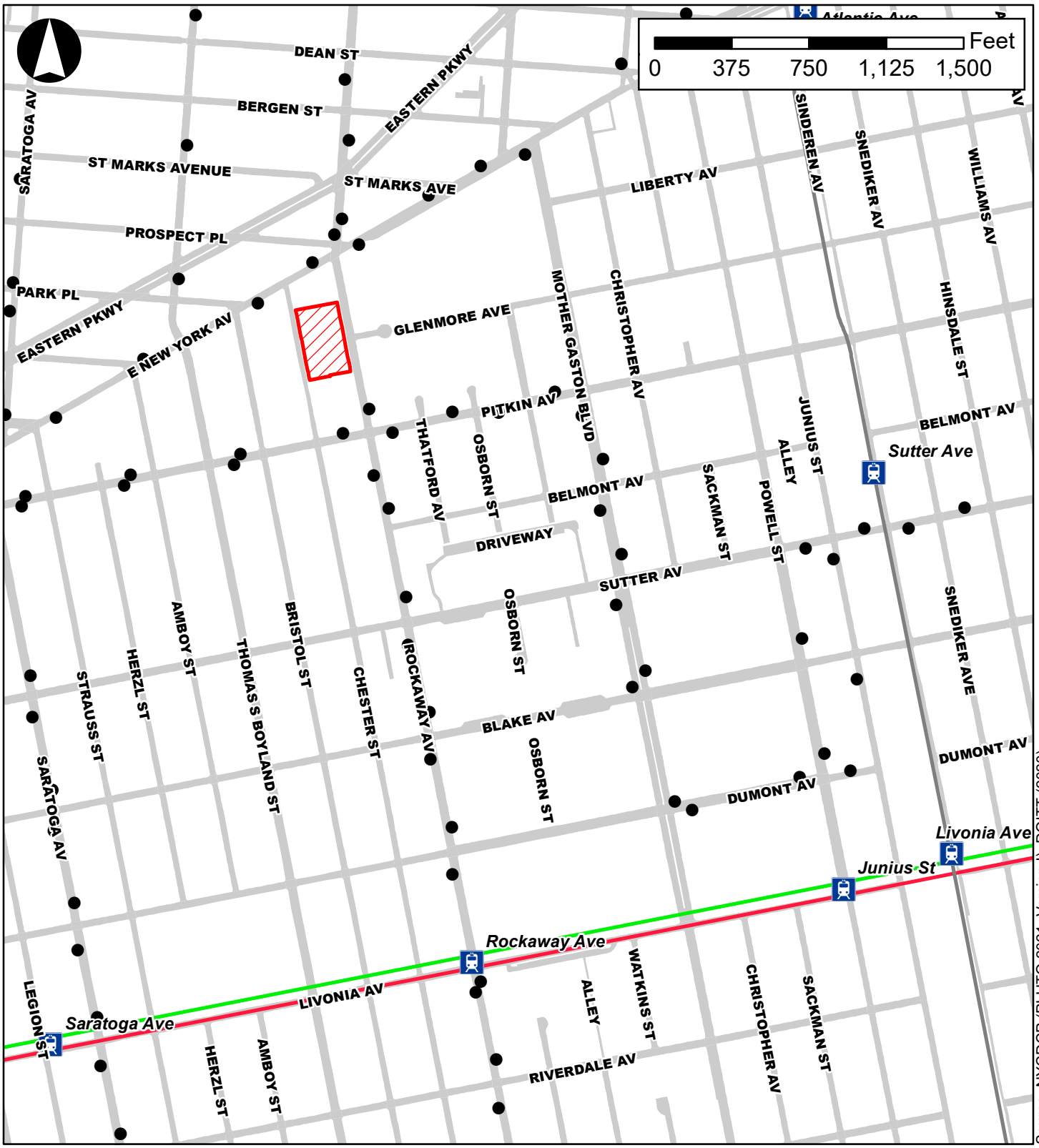
I. INTRODUCTION

This attachment presents the findings from the analysis of traffic, transit, and pedestrian conditions for the Proposed Actions and associated Proposed Project. As described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of a mixed-use development. The proposed development would consist of 290 affordable dwelling units (DUs) and one superintendent's unit (291 DUs), approximately 25,507 gross square feet (gsf) of community facility space that would accommodate a range of arts and cultural spaces, and 14,575 sf of open space, including both private and publicly accessible open space (the "Proposed Project") at the Proposed Development Site (Lot 15 on Block 3499). The Proposed Project would replace approximately 57,013-sf of vacant and underutilized land that occupies the midblock portion of Block 3499 in the Brownsville neighborhood of Brooklyn Community District 16 (CD16). The Proposed Development Site has approximately 340 feet of frontage along Rockaway Avenue to the east and approximately 225 feet of frontage along Chester Street to the west between Pitkin and East New York Avenues (see **Figure H-1**).

The Proposed Project is expected to be completed and occupied by 2025. Absent the Proposed Actions (the "No-Action condition"), the proposed zoning changes and other associated actions would not be approved and Proposed Development Site would not be redeveloped. No changes are anticipated in absence of the Proposed Actions in the Project Area and all existing lots and buildings are anticipated to remain in their existing form.

II. PRELIMINARY ANALYSIS METHODOLOGY

The incremental difference between the No-Action and With-Action scenarios serves as the basis of the transportation impact analysis, which was conducted in accordance with the 2021 *City Environmental Quality Review* (*CEQR) Technical Manual*. The *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine if a more detailed analysis of transportation conditions is warranted. The preliminary analysis first analyzes trip generations (Level 1) to estimate the number of person and vehicle trips attributable to the Proposed Actions and subsequent development. According to the *CEQR Technical Manual*, if the Proposed Actions are expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further analysis is not warranted. If the Proposed Actions and resultant development would exceed these trip thresholds, detailed trip assignments (Level 2) are performed to estimate the incremental trips that may occur at specific transportation elements and to identify potential locations for further analysis. If the trip assignments show that the Proposed Actions would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area, or crosswalk, then further analysis may be warranted, depending on which threshold is exceeded, to assess the potential for significant adverse impacts on traffic, transit, pedestrians, and vehicular and pedestrian safety.



Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

Legend

- Project Area
- Subway Station
- **Subway Routes**
  - 4 Train
  - 3 Train
  - L Train
- Bus Stop Location

Table H-1 shows the Proposed Project increment resulting from the Proposed Actions and provides a comparison of the 2025 No-Action and With-Action conditions at the Proposed Development Site. As shown in **Table H-1**, under the Proposed Actions, there would be a net incremental increase of 291 DUs, 20,504 gsf of arts and cultural space, 4,480 gsf (150 seats) of multipurpose theater/rehearsal/teaching space, 523 gsf of non-profit office space, and approximately 14,575 sf (0.31 acres) of open space.

Table H-1: 2025 No-Action and With-Action Land Uses at the Proposed Development Site

Use	No-Action Scenario	With-Action Scenario	Project Increment
Residential			
Residential	0 DUs	291 DUs	+291 DUs
Total Residential	***0 DUs***	***291 DUs***	***+291 DUs***
Community Facility			
Arts and Cultural Space	0 gsf	20,504 gsf	**+20,504 gsf**
Non-Profit Office	0 gsf	523 gsf	**+523 gsf**
Multipurpose Theater/Rehearsal/ Teaching Space	0 gsf	4,480 gsf (150 seats)	**+4,480 gsf (+150 seats)**
Total Community Facility	***0 gsf***	***25,507 gsf***	***+25,507 gsf***
Open Space			
Open Space	0 gsf	0.31 acres (14,575 gsf)	+0.31 acres (14,575 gsf)
Total Open Space	***0 gsf***	**0.31 acres (14,575 gsf)**	**+0.31 acres (14,575 gsf)**

III. LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the number of person and vehicle trips by mode expected to be generated by the Proposed Project during the weekday AM, midday and PM, and Saturday midday peak hours. These estimates were then compared to the *CEQR Technical Manual* analysis thresholds of 50 peak hour vehicle trips, 200 peak hour subway/rail riders, 50 peak hour bus riders per route per direction, and 200 peak hour pedestrian trips to determine if a Level 2 screening and/or quantified operational analysis may be warranted. The travel demand assumptions used for the assessment are discussed below and a detailed travel demand forecast is provided.

Transportation Planning Factors

Table H-2 below shows the transportation planning factors used to forecast the travel demand generated by the proposed uses in the weekday AM, midday and PM, and Saturday midday peak hours. These include trip generation rates, temporal and directional distributions, mode choice factors, vehicle occupancies, and truck trip factors for the program described above.

Residential

The residential travel demand forecasts were based on person trip and truck trip generation rates, temporal distributions, and directional in/out splits cited in the *CEQR Technical Manual*. The modal splits and vehicle occupancies for residential uses were derived from 2015-2019 Five Year American Community Survey (ACS) journey-to-work data. Although residential-based trips in the weekday midday and Saturday peak hours would likely be more local in nature than in the commuter peak hours (and therefore have a

higher walk share, for example), the modal splits based on the ACS journey-to-work data were conservatively assumed for all periods.

Art and Cultural Space

The trip generation rates, temporal distributions and modal splits for the arts and cultural uses were based on data from the 2022 *Innovation QNS DEIS*. The directional in/out splits, vehicle occupancies and truck trip generation rates and temporal distributions were based on data from the same source.

Non-Profit Office

The person and truck trip generation rates, temporal distributions, and directional in/out splits for the non-profit office use were based on data from the *CEQR Technical Manual*. The modal splits and vehicle occupancies were based on 2012-2016 American Association of State Highway Transportation Officials (AASHTO) Census Transportation Planning Products (CTPP) reverse journey-to-work data and data from the 2016 *East New York Rezoning Proposal FEIS*.

Theater/Rehearsal/Teaching Space

The trip generation rates temporal distributions and modal splits for the multipurpose theater/rehearsal/teaching space were based on data from the 2022 *Innovation Urban Village FEIS*. The directional in/out splits, vehicle occupancies and truck trip generation rates and temporal distributions were based on data from the same source.

Open Space

The person trip generation rates, temporal distributions, and directional in/out splits for the open space use were based on data from the *CEQR Technical Manual*. The modal splits, vehicle occupancies, and truck trip generations were based on data from the 2022 *Innovation QNS DEIS*.

TRIP GENERATION

The net incremental change in person and vehicle trips expected to result from the Proposed Project by the 2025 analysis year was derived based on the net change in land uses shown in **Table H-1** and the transportation planning factors shown in **Table H-2**. **Tables H-3** and **H-4** show an estimate of the total net incremental change in peak hour person trips and vehicle trips (versus the No-Action condition) that would occur in 2025 with implementation of the Proposed Actions.

As shown in **Table H-3**, the Proposed Actions would generate a net increase of approximately 276 person trips in the weekday AM peak hour, 320 in the weekday midday, 382 in the weekday PM peak hour and 400 in the Saturday peak hour. These in/out combined person trips are further broken down by mode and summarized in **Table H-4**.

Table H-2: Transportation Planning Factors

Land Use:	**Residential**	**Arts and Cultural Space**	**Non-Profit Office**	**Theater/ Rehersal/Teaching Space**	**Open Space**
Trip Generation:	(1)	(3)	(1)	(6)	(1)
Weekday	8.18	76.00	18	27.0 per 1,000 sf	44.0
Saturday	9.08	50.74	3.9	2.7 per seat	62.0
	per DU	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per acre
Temporal Distribution:	(1)	(3)	(1)	(6)	(1)
AM	9.3%	3.0%	12.4%	1%	3%
Midday	5.6%	10.3%	11.0%	16%	14%
PM	8.5%	10.2%	10.5%	13%	14%
Saturday	8.4%	12.5%	14.1%	10%	16%
Modal Splits:	(2)	(3)	(4,5)	(6)	(3)
	All Periods	All Periods	AM/PM/SAT MD	All Periods	All Periods
Auto	17.6%	36.0%	46.6% 2.0%	19.5%	5.0%
Taxi	0.7%	12.0%	0.6% 3.0%	10.0%	0.0%
Subway	61.3%	25.0%	25.7% 6.0%	20.0%	5.0%
Transit Bus	11.6%	25.0%	12.1% 6.0%	20.0%	5.0%
Walk/Other	8.8%	2.0%	15.0% 83.0%	30.5%	85.0%
	100.0%	100.0%	100.0% 100.0%	100.0%	100.0%

In/Out Splits:	(1)		(3)		(1)		(6)		(1)	
	In	Out	In	Out	In	Out	In	Out	In	Out
AM	22%	78%	56%	44%	86%	14%	61%	39%	59%	41%
Midday	50%	50%	14%	86%	52%	48%	55%	45%	55%	45%
PM	62%	38%	5%	95%	16%	84%	29%	71%	55%	45%
Saturday	55%	45%	25%	75%	48%	52%	0%	100%	55%	45%

Vehicle Occupancy:	(2,3)	(3)		(4,5)	(6)		(3)
	All Periods	Weekday	Saturday	All Periods	Weekday	Saturday	All Periods
Auto	1.07	2.00	3.00	1.14	1.60	2.90	2.80
Taxi	1.30	2.00	3.00	1.20	1.20	2.30	2.80

Truck Trip Generation:	(1)	(3)	(1)	(6)	(3)
Weekday	0.06	0.35	0.32	0.14	0.02
Saturday	0.02	0.02	0.01	0.04	0.02
	per DU	per 1,000 gsf	per 1,000 sf	per 1,000 sf	per acre
Truck Temporal Distribution:	(1)	(3)	(1)	(6)	(3)
AM	12%	7.9%	10.0%	1.0%	6.0%
MD	9%	14.7%	11.0%	11.0%	6.0%
PM	2%	1.1%	2.0%	2.0%	1.0%
Saturday	9%	14.7%	11.0%	11.0%	6.0%

Truck Directional Distribution:	In	Out	In	Out	In	Out	In	Out	In	Out
AM	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
MD	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
PM	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Saturday	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%

Notes :

(1) *2021 City Environmental Quality Review (CEQR) Technical Manual.*
(2) 2015-2019 ACS journey-to-work data for Brooklyn Census Tracts 361, 363, 902, 906 and 924.
(3) Based on data from Innovation QNS DEIS, 2022.
(4) 2012-2016 AASHTO CTTP reverse journey-to-work data for Brooklyn Census Tracts 361, 363, 902, 906 and 924.
(5) Based on data from the *East New York Rezoning Proposal FEIS* , 2016.
(6) Based on data from the *Innovation Urban Village FEIS* , 2022.

Table H-3: Proposed Project Travel Demand Forecast by Land Use

Land Use:	Residential		Arts and Cultural Space		Non-Profit Office		Theater/ Rehersal/Teaching Space		Open Space		Total	
Size/Units:	291 DUs		20,504 gsf		523 gsf		4,480 gsf 150 seats		0.31 acres			
Peak Hour Trips:												
AM	222		48		2		2		2		276	
Midday	134		162		2		20		2		320	
PM	202		160		2		16		2		382	
Saturday	222		132		0		42		4		400	
Person Trips:												
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	9	30	9	8	1	0	0	0	0	0	19	38
Taxi	0	1	3	3	0	0	0	0	0	0	3	4
Subway	30	107	7	5	1	0	0	0	0	0	38	112
Bus	6	20	7	5	0	0	1	0	0	0	14	25
Walk/Other	4	15	1	0	0	0	1	0	1	1	7	16
Total	49	173	27	21	2	0	2	0	1	1	81	195
Midday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	12	12	8	49	0	0	2	2	0	0	22	63
Taxi	0	0	3	17	0	0	1	1	0	0	4	18
Subway	41	41	6	35	0	0	2	2	0	0	49	78
Bus	8	8	6	35	0	0	2	2	0	0	16	45
Walk/Other	6	6	0	3	1	1	3	3	1	1	11	14
Total	67	67	23	139	1	1	10	10	1	1	102	218
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	22	14	3	55	0	1	1	2	0	0	26	72
Taxi	1	0	1	18	0	0	0	1	0	0	2	19
Subway	76	47	2	38	0	1	1	2	0	0	79	88
Bus	15	9	2	38	0	0	1	3	0	0	18	50
Walk/Other	11	7	0	3	0	0	1	4	1	1	13	15
Total	125	77	8	152	0	2	4	12	1	1	138	244
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	21	18	12	35	0	0	0	8	0	0	33	61
Taxi	1	1	4	12	0	0	0	4	0	0	5	17
Subway	75	60	8	25	0	0	0	8	0	0	83	93
Bus	14	12	8	25	0	0	0	8	0	0	22	45
Walk/Other	11	9	1	2	0	0	0	14	2	2	14	27
Total	122	100	33	99	0	0	0	42	2	2	157	243
Vehicle Trips :												
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	8	28	5	4	1	0	0	0	0	0	14	32
Taxi	0	1	2	2	0	0	0	0	0	0	2	3
Taxi (Balanced)	1	1	4	4	0	0	0	0	0	0	5	5
Truck	1	1	0	0	0	0	0	0	0	0	1	1
Total	10	30	9	8	1	0	0	0	0	0	20	38
Midday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	11	11	4	25	0	0	1	1	0	0	16	37
Taxi	0	0	2	9	0	0	1	1	0	0	3	10
Taxi (Balanced)	0	0	11	11	0	0	2	2	0	0	13	13
Truck	1	1	1	1	0	0	0	0	0	0	2	2
Total	12	12	16	37	0	0	3	3	0	0	31	52
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	21	13	2	28	0	1	1	1	0	0	24	43
Taxi	1	0	1	9	0	0	0	1	0	0	2	10
Taxi (Balanced)	1	1	10	10	0	0	1	1	0	0	12	12
Truck	0	0	0	0	0	0	0	0	0	0	0	0
Total	22	14	12	38	0	1	2	2	0	0	36	55
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	20	17	4	12	0	0	0	3	0	0	24	32
Taxi	1	1	1	4	0	0	0	2	0	0	2	7
Taxi (Balanced)	2	2	5	5	0	0	2	2	0	0	9	9
Truck	0	0	0	0	0	0	0	0	0	0	0	0
Total	22	19	9	17	0	0	2	5	0	0	33	41

Table H-4: Travel Demand Forecast Summary for the Proposed Project

Peak Hour	Vehicle Trips			Person Trips														
				Auto			Subway			Bus			Walk/Other			Total Pedestrian Trips[1]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	20	38	58	19	38	57	38	112	150	14	25	39	7	16	23	78	191	269
Midday	31	52	83	22	63	85	49	78	127	16	45	61	11	14	25	98	200	298
PM	36	55	91	26	72	98	79	88	167	18	50	68	13	15	28	136	225	361
Saturday	33	41	74	33	61	94	83	93	176	22	45	67	14	27	41	152	226	378

Notes:
[1]Includes walk-only trips and pedestrians en route to/from nearby on- and off-street parking spaces, subway stations and bus stops.

As shown in **Table H-4**, peak hour vehicle trips (including auto, truck, and taxi trips balanced to reflect that taxis would arrive or depart empty) would increase by a net total of approximately 58, 83, 91 and 74 (in and out combined) in the weekday AM, midday and PM peak hours, and the Saturday peak hour, respectively.

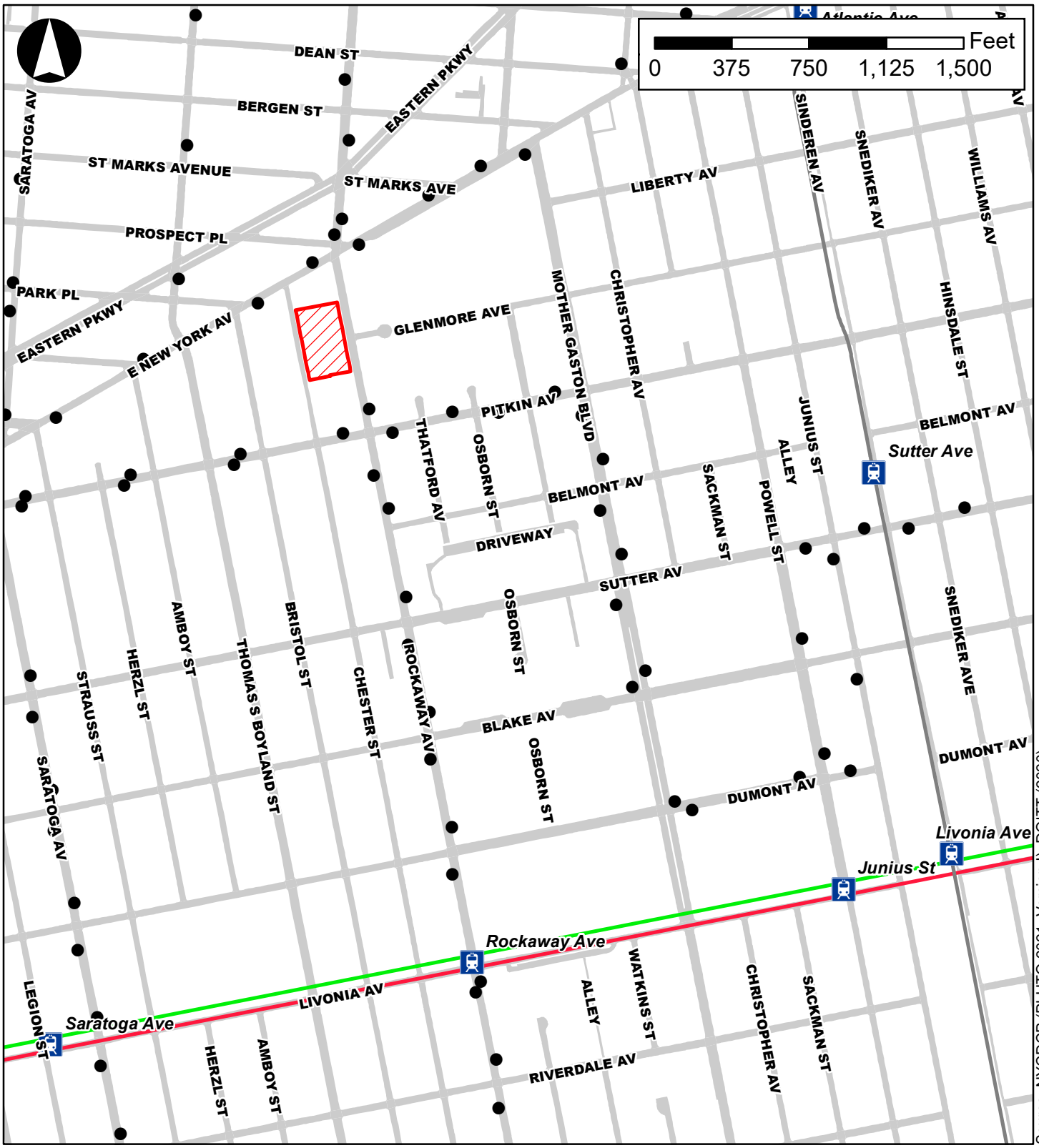
As shown in **Table H-4**, peak hour subway trips would increase by a net total of approximately 150, 127, 167 and 176 during these periods, respectively, while transit bus trips would increase by approximately 39, 61, 68 and 67, respectively. Lastly, walk-only trips would increase by 23, 25, 28 and 41 trips during the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively. As a result, the total pedestrian trips (auto, subway, bus, and walk-only trips combined) would increase by 269, 298, 361, and 378 trips during the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively.

Under *CEQR Technical Manual* criteria, if Proposed Actions generate 50 or more vehicle trips per peak hour, there is likely a need for further analysis. As the net number of incremental vehicle trips would exceed the 50-trip CEQR threshold in the Saturday midday peak hour under the Proposed Actions, a Level 2 screening analysis is therefore warranted to determine which if any intersection(s) would require quantified analysis.

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and cited in the *CEQR Technical Manual*, detailed transit analyses are generally not required if the Proposed Actions are projected to result in fewer than 200 peak hour rail or bus transit riders. If the Proposed Actions would result in 50 or more bus passengers being assigned to a single bus route in one direction, or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours, as it is during these periods that overall demand on the subway and bus systems is usually highest. The local transit network is shown in **Figure H-2**.

The Proposed Actions are expected to generate approximately 150 and 167 incremental subway trips in the weekday AM and PM peak hours, respectively. In addition, as shown in **Table H-4**, the Proposed Actions are expected to generate approximately 39 and 68 incremental bus trips in the weekday AM and PM peak hours, respectively. Therefore, as the *CEQR Technical Manual's* thresholds would not be met during any peak hour, and no significant adverse transit impacts are expected as a result of the Proposed Actions.

An analysis of pedestrian conditions is required where a substantial number of trips are generated by an action. This analysis focuses on sidewalks, corner areas, and crosswalks. According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As the number of total pedestrian trips (including walk-only and pedestrians en route to and from nearby parking, subway stations, and bus stops) in all peak hours would exceed the 200-trip



Source: NYCDCP (PLUTO 2021, Version I); DOITT (2020)

Legend

- Proposed Rezoning Area
- Subway Station
- **Subway Routes**
  - 4 Train
  - 3 Train
  - L Train
- Bus Stop Location

threshold, a Level 2 screening assessment was undertaken to identify specific pedestrian elements where additional detailed analyses may be warranted.

IV. LEVEL 2 SCREENING ASSESSMENT

A Level 2 screening assessment involves the assignment and distribution of project-generated trips to the study area street network, pedestrian elements, and transit facilities, and the identification of specific locations where the incremental increase in demand may potentially exceed *CEQR Technical Manual* analysis thresholds and therefore require a quantitative analysis. These assignments for vehicular traffic and pedestrian elements are discussed below.

Traffic

Area Street Network

As shown in **Figure H-1**, the street network in proximity to the Project Area is comprised of an irregular grid pattern of collector and local streets. Intersections are a mix of stop-controlled and signalized.

The Project Area is bounded by East New York Avenue to the north, Rockaway Avenue to the east, Pitkin Avenue to the south, and Chester Street to the west. **East New York Avenue** extends in a northeast-southwest direction with one moving lane in each direction and parking along both curbs. Near the Project Area, it is traversed by the New York City Transit (NYCT) B12 local buses and is a designated New York City Department of Transportation (NYCDOT) Local Truck Route. **Rockaway Avenue** operates as a two-way, north-south street with one moving lane in each direction and parking along both curbs. It is also traversed by NYCT B60 local buses and is a designated NYCDOT Local Truck Route to the north of the Project Area. **Pitkin Avenue** operates as a two-way, east-west street with one moving lane in each direction and parking along both curbs. **Chester Street** operates as a one-way northbound street with one moving lane and parking along both curbs.

Traffic Assignment and Analyzed Intersections

As shown in **Table H-4** and discussed above, the Proposed Actions are expected to result in a net incremental increase of approximately 58, 83, 91 and 74 vehicle trips during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. As these traffic volumes would exceed 50 trips in the weekday PM and Saturday peak hours (the *CEQR Technical Manual* Level 1 screening threshold for a detailed analysis), an assignment of net increment traffic volumes was prepared for the weekday PM and Saturday midday peak periods to help identify individual intersections for analysis (a Level 2 screening assessment).

The assignments of auto and taxi trips to the street network in proximity to the Project Area were based on the anticipated origins and destinations of vehicle trips associated with the different land uses projected under the Proposed Project. The origins/destinations were based on census data and the local street network surrounding the Project Area. The origins/destinations of the residential trips used for the assignments were based upon 2012-2016 ACS journey-to-work data for Brooklyn census tracts 361, 363, 902, 906, and 924. The origins/destinations of the office trips were based on 2012-2016 Reverse Journey to Work data. The origins/destinations for the remaining uses were based on population density in neighborhoods within a half-mile radius of the Project Area. Using these distributions, auto trips were first assigned to various portals on the periphery of the Brownsville neighborhood, and from there via the most

direct route to the Project Area. As shown in **Figure H-1**, the Project Area has frontages on both Rockaway Avenue and Chester Street. As the Proposed Project would not include on-site accessory parking, auto trips were assigned to a nearby off-street facility and on-street parking in the surrounding area.

As shown in **Figure H-3**, there is only one off-street public parking facility located within ½-mile of the Project Area. This parking lot is located to the south of the Project Area along Rockaway Avenue, and the peak hour utilization and availability is shown below in **Table H-5**. As shown in **Table H-5**, based on June 2022 surveys, there are approximately 20, 10, 7, and 35 available parking spaces within the parking lot during the weekday AM, midday, PM, and Saturday peak hours, respectively. As such, all of the inbound and outbound auto trips (for all uses) in the weekday AM (14 inbound and 32 outbound) and Saturday (26 inbound and 40 outbound) were assigned to this off-street parking lot.

During the weekday midday and PM peak hours, residential auto trips were assigned to the off-street parking lot based on existing availability during these periods. The vehicles that could not be assigned to the off-street lot were conservatively assigned to the building's frontages on Rockaway Avenue and Chestnut Street, and then subsequently assigned to the surrounding network as they search for on-street parking. This can be considered a conservative approach with respect to the traffic impact analysis as it concentrates project traffic at intersections near the Project Area and then disperses the traffic to outlying streets. During the weekday midday peak hour, approximately 8 inbound and 8 outbound trips were assigned to the off-street parking lot, and the remaining 8 inbound and 29 outbound auto trips were assigned to on-street parking. Similarly, during the weekday PM peak hour, approximately 5 inbound and 3 outbound trips were assigned to the off-street parking lot, and the remaining 19 inbound and 40 outbound auto trips were assigned to on-street parking.

Table H-5
Existing Off-Street Public Parking Facilities

Map No.	Name	Address	License No.	Hours of Operation	Licensed Capacity	Weekday AM		Weekday Midday		Weekday PM		Saturday	
						Estimated Utilization (%)	Available Capacity	Estimated Utilization (%)	Available Capacity	Estimated Utilization (%)	Available Capacity	Estimated Utilization (%)	Available Capacity
1	Pitkin Parking Inc	402 Rockaway Ave	1347212	24 Hrs Daily	75	73%	20	87%	10	91%	7	53%	35

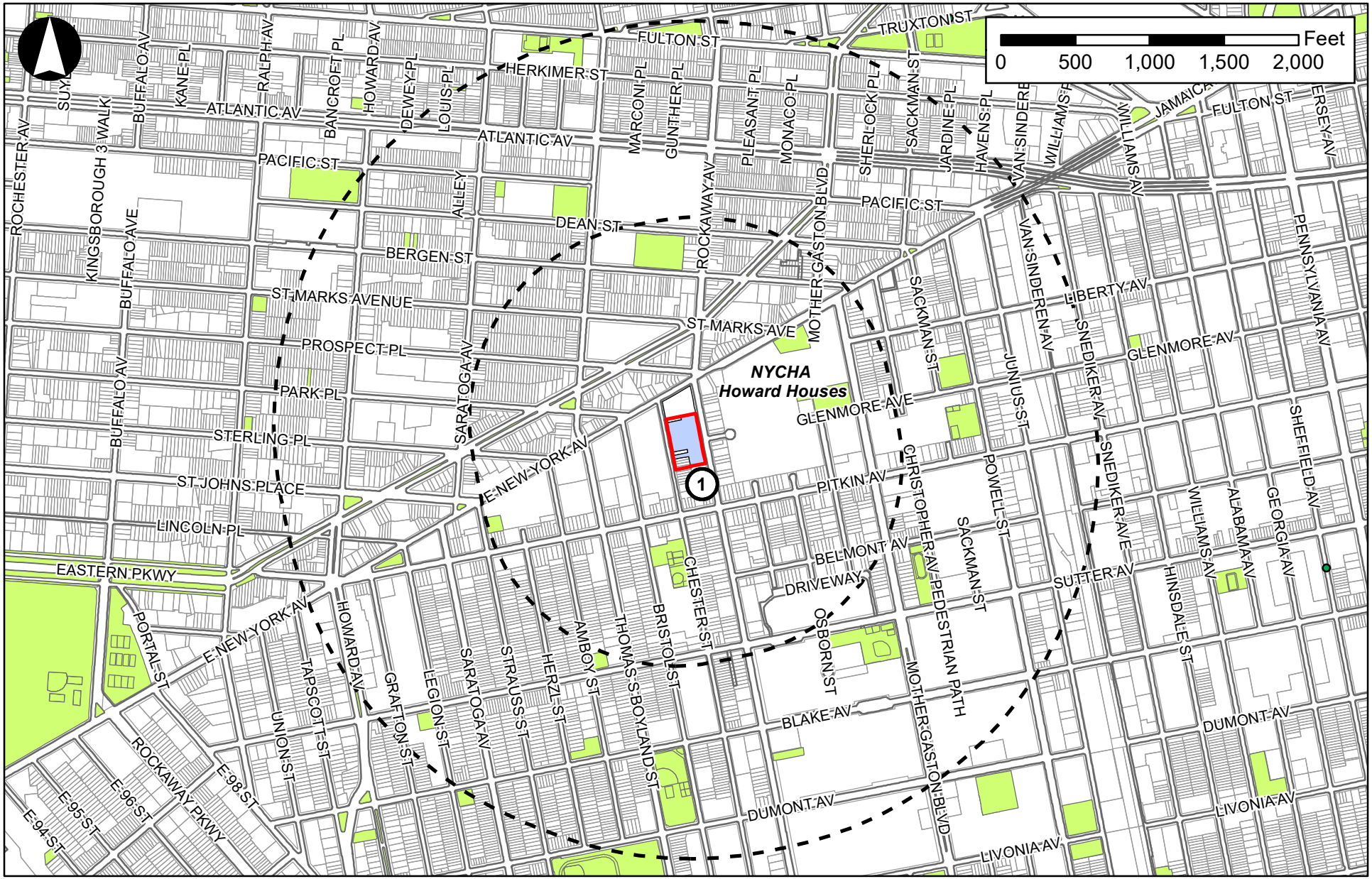
Notes:
Source: June 2022 PHA field surveys and interviews with parking facility operators.
Conservatively assumes full utilization at 98 percent of licensed capacity as per *CEQR Technical Manual* guidance.

The assignment of net incremental peak hour vehicle trips at intersections near the Project Area are shown in **Figure H-4**. As shown in **Figure H-4**, no intersection is expected to experience an increase of 50 or more vehicle trips during any analyzed peak hour. Therefore, no significant adverse impacts are expected and a detailed traffic analysis is not warranted. Per *CEQR Technical Manual* guidance, a detailed parking assessment is not needed if the threshold for traffic analysis would not be exceeded.

Transit

Bus Service

According to the general thresholds used by the MTA and specified in the *CEQR Technical Manual*, a detailed analysis of bus conditions is generally not warranted if a proposed action is projected to result in fewer than 50 peak hour trips being assigned to a single bus route (in one direction), as this level of new



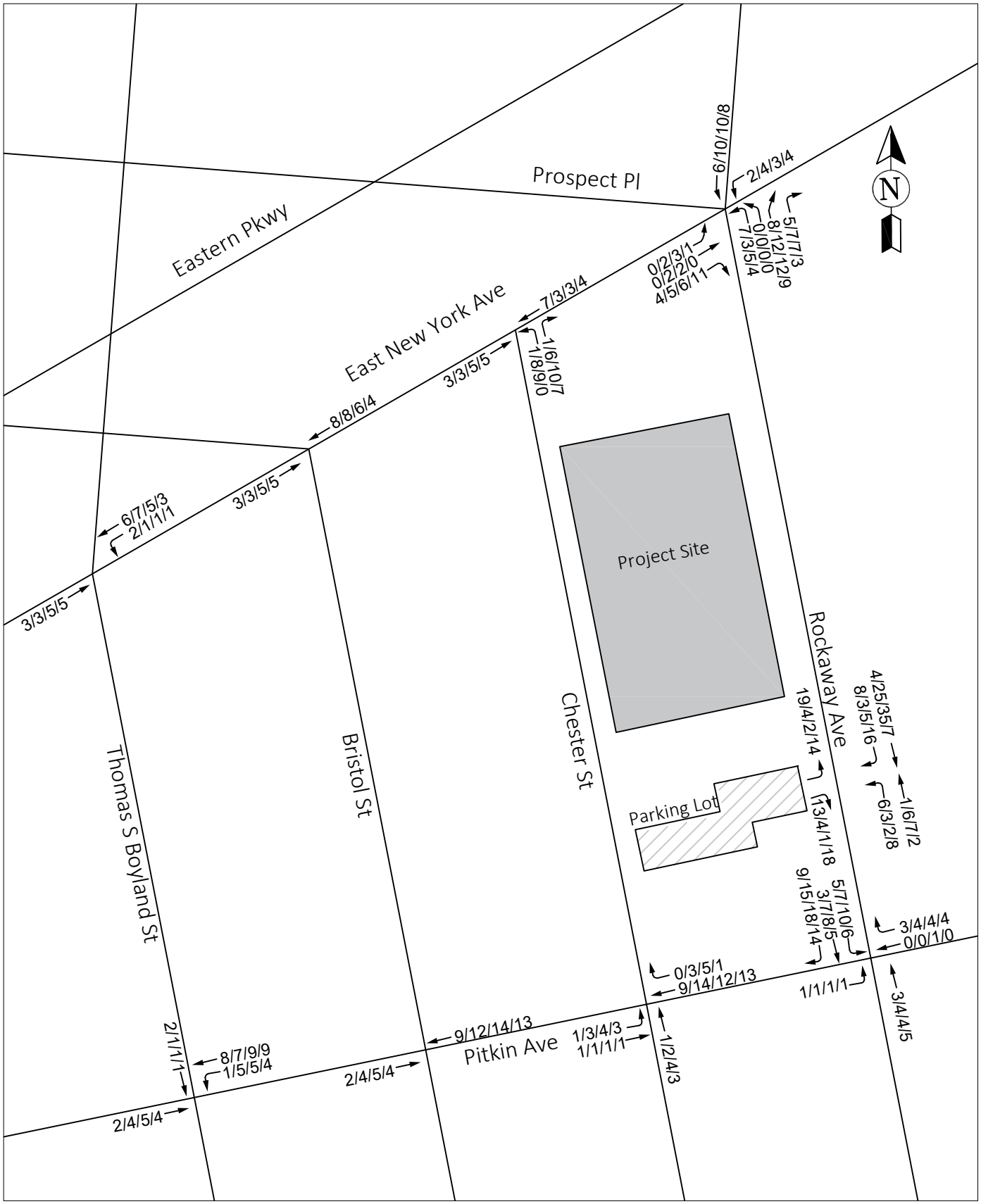
Legend

Proposed Rezoning Area | Proposed Development Site | 1/4-Mile Radius | 1/2-Mile Radius | Open Space | Tax Lot | 1 Off-Street Parking Facility

Brownsville Arts Center and Apartments

Figure H-3
Off-Street Parking Facilities

Incremental Vehicle Volumes



LEGEND:

Project Site

xx/xx/xx/xx - Weekday AM/Midday/PM/SAT Incremental Traffic Volumes

Existing Off-Street Public Parking Lot

demand is considered unlikely to result in significant adverse impacts. As noted previously, transit analyses typically focus on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the subway and bus systems is usually highest. As shown in **Table H-4**, the Proposed Actions are expected to generate approximately 39 and 68 incremental bus trips in the weekday AM and PM peak hours, respectively. As such, preliminary assignments of project-generated bus trips during the weekday PM peak hour were prepared.

A total of three local bus routes – the B12, B14, and B60 – operated by the Metropolitan Transit Authority provide service in proximity to the Development Site. The B12 bus route operates to the north of the Development Site along East New York Avenue and provides local service between Brownsville and Prospect-Lefferts Gardens. The B14 bus route operates to the south of the Development Site along Pitkin Avenue and provides local service between Brooklyn General Mail Facility and Crown Heights. Additionally, the B60 bus route operates to the northeast of the project site along Rockaway Avenue and provides local service between Canarsie and Williamsburg Bridge Plaza.

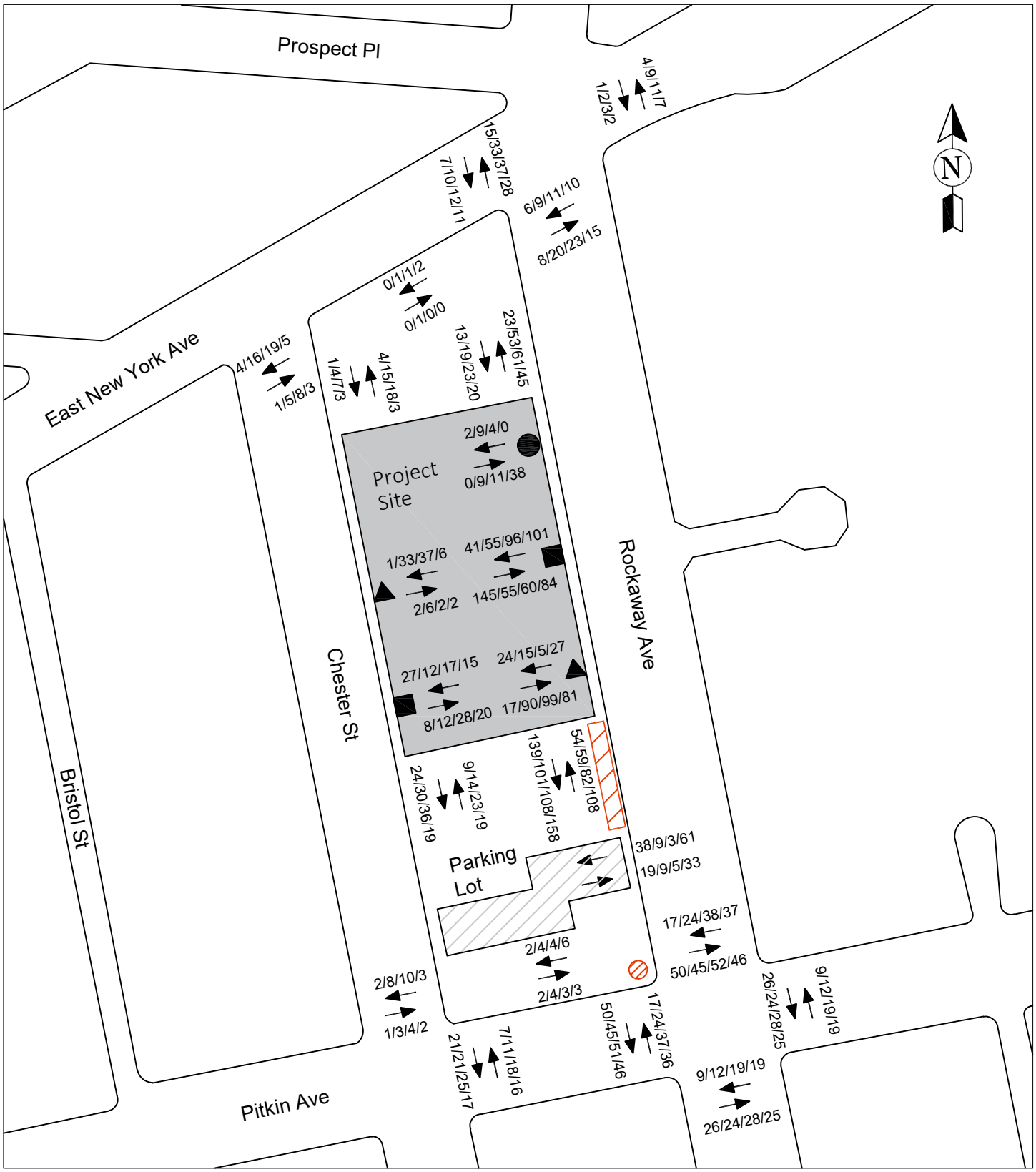
Table H-6 shows the anticipated numbers of new riders on each of the three local bus routes in the PM peak hour. As shown in **Table H-6**, the B12, B14, and B60 bus routes would experience an incremental increase of approximately 31, 15, and 22 project generated bus trips during the weekday PM peak hour. As the number of additional trips in the weekday PM peak hour would not exceed the 50-trip threshold on any route, a detailed analysis of bus conditions is not warranted based on *CEQR Technical Manual* guidance.

Table H-6
Incremental Local Bus Trips by Route

Bus Route	Bus Tips (PM Peak Hour)		
	In	Out	Total
B12	8	23	31
B14	4	11	15
B60	6	16	22
Total	18	50	68

Pedestrians

Under *CEQR Technical Manual* guidance, detailed pedestrian analyses are generally warranted if a proposed action is projected to result in 200 or more new peak hour pedestrians at any sidewalk, corner reservoir area, or crosswalk. As shown in **Table H-4**, the Proposed Actions are expected to generate approximately 23 walk-only trips in the weekday AM peak hour, 25 in the weekday midday peak hour, 28 in the weekday PM peak hour, and 41 in the Saturday peak hour. Persons en route to and from nearby parking, subway station entrances and bus stops would add approximately 246, 273, 333, and 337 additional pedestrian trips to sidewalks and crosswalks in proximity to the Project Area during these same periods, respectively. Bus, subway, and walk-only trips would each have a different assignment pattern. Bus trips were assigned based on the distributions discussed above, and subway trips were assigned to the Rockway Avenue (No. 3) and Sutter Avenue (L) subway stations based on existing ridership data. Walk-only trips were assigned based on population density in neighborhoods within a half-mile radius of the Project Area. As such, a pedestrian assignment is shown in **Figure H-5** for each peak hour. Pedestrian trips were assigned by use to the site entrances on both Rockaway Avenue and Chester Street.



LEGEND:

- Project Site
- xx/xx/xx/xx - Weekday AM/MD/PM/SAT Pedestrian Volume
- Pedestrian Analysis Location - Sidewalk
- Residential Entrance
- Art/Cultural Space & Office Entrance
- Performance Space Entrance
- Pedestrian Analysis Location - Corner

As shown in **Figure H-5**, two pedestrian elements (one sidewalk and one corner area) are expected to experience an increase of 200 or more pedestrian trips at any one point during the Saturday peak hour. The analyzed elements are located along Rockaway Avenue, adjacent to the Development Site, and are listed below.

Pedestrian Analysis Locations

Sidewalk

1. West sidewalk on Rockaway Avenue between East New York Avenue and Pitkin Avenue (Saturday Peak Hour)

Corner

2. Rockaway Avenue and Pitkin Avenue – Northwest Corner (Saturday Peak Hour)

IV. TRANSPORTATION ANALYSIS METHODOLOGIES

Pedestrians

Analysis Methodology

Data on peak period pedestrian flow volumes were collected along analyzed sidewalks, corner areas, and crosswalks in the vicinity of the Project Site in June 2022. The Saturday peak hour (12:00 – 1:00 PM) was determined by comparing rolling hourly averages, and the highest 15-minute volumes within the selected peak hours were used for analysis.

Peak 15-minute pedestrian flow conditions during the Saturday peak hour are analyzed using the *Highway Capacity Manual 2010* methodology and procedures outlined in the *CEQR Technical Manual*. Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volume, measuring the sidewalk or crosswalk width, determining the available pedestrian capacity, and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared with LOS standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street crosswalks and corners is more complicated as these spaces cannot be treated as corridors due to the time incurred waiting for traffic lights. To effectively evaluate these facilities a "time-space" analysis methodology is employed, which takes into consideration the traffic light cycle at intersections.

LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. **Table H-7** defines the LOS criteria for pedestrian crosswalk/corner area and sidewalk conditions, as based on the *Highway Capacity Manual* methodology.

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

Significant Impact Criteria

Sidewalks

The *CEQR Technical Manual* impact criteria for a non-central business district (non-CBD) location are used to identify significant adverse impacts due to the Proposed Action. These criteria define a significant adverse sidewalk impact to have occurred under platoon conditions if the average pedestrian space under the No-Action condition is greater than or equal to 44.3 square feet/pedestrian (sf/ped), and the average pedestrian space under the With-Action condition is 40.0 sf/ped or less (LOS D or worse). If the average pedestrian space under the With-Action condition is greater than 40.0 sf/ped (LOS C or better), the impact should not be considered significant. If the No-Action condition pedestrian space is between 6.4 and 44.3 sf/ped, a reduction in pedestrian space under the With-Action condition should be considered significant based on **Table H-8**, which shows a sliding-scale that identifies what decrease in pedestrian space is considered a significant impact for a given pedestrian space value in the No-Action condition. If the reduction in pedestrian space is less than the value in **Table H-8**, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than or equal to 6.3 sf/ped, then a reduction in pedestrian space greater than or equal to 0.3 sf/ped, under the With-Action condition, should be considered significant.

TABLE H-7
Pedestrian Crosswalk/Corner Area and Sidewalk Levels of Service Descriptions

LOS	Crosswalk/Corner	Crosswalk/Corner Area Criteria (sf/ped)	Non-Platoon Sidewalk Criteria (sf/ped)	Platoon Sidewalk Criteria (sf/ped)
A	(Unrestricted)	> 60	> 60	> 530
B	(Slightly Restricted)	> 40 to 60	> 40 to 60	> 90 to 530
C	(Restricted but fluid)	> 24 to 40	> 24 to 40	> 40 to 90
D	(Restricted, necessary to continuously alter walking stride and direction)	> 15 to 24	> 15 to 24	> 23 to 40
E	(Severely restricted)	> 8 to 15	> 8 to 15	> 11 to 23
F	(Forward progress only by shuffling; no reverse movement possible)	≤ 8	≤ 8	≤ 11

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

TABLE H-8
Significant Impact Criteria for Sidewalks with Platooned Flow in a Non-CBD Location

No-Action Condition Pedestrian Flow (sf/ped)			With-Action Condition Pedestrian Flow Increment to be Considered a Significant Impact (sf/ped)
≥44.3			With-Action Condition ≤ 40.0
43.5	to	44.3	Reduction ≥ 4.3
42.5	to	43.4	Reduction ≥ 4.2
41.6	to	42.4	Reduction ≥ 4.1
40.6	to	41.5	Reduction ≥ 4.0
39.7	to	40.5	Reduction ≥ 3.9
38.7	to	39.6	Reduction ≥ 3.8
37.8	to	38.6	Reduction ≥ 3.7
36.8	to	37.7	Reduction ≥ 3.6
35.9	to	36.7	Reduction ≥ 3.5
34.9	to	35.8	Reduction ≥ 3.4
34.0	to	34.8	Reduction ≥ 3.3
33.0	to	33.9	Reduction ≥ 3.2
32.1	to	32.9	Reduction ≥ 3.1
31.1	to	32.0	Reduction ≥ 3.0
30.2	to	31.0	Reduction ≥ 2.9
29.2	to	30.1	Reduction ≥ 2.8
28.3	to	29.1	Reduction ≥ 2.7
27.3	to	28.2	Reduction ≥ 2.6
26.4	to	27.2	Reduction ≥ 2.5
25.4	to	26.3	Reduction ≥ 2.4
24.5	to	25.3	Reduction ≥ 2.3
23.5	to	24.4	Reduction ≥ 2.2
22.6	to	23.4	Reduction ≥ 2.1
21.6	to	22.5	Reduction ≥ 2.0
20.7	to	21.5	Reduction ≥ 1.9
19.7	to	20.6	Reduction ≥ 1.8
18.8	to	19.6	Reduction ≥ 1.7
17.8	to	18.7	Reduction ≥ 1.6
16.9	to	17.7	Reduction ≥ 1.5
15.9	to	16.8	Reduction ≥ 1.4
15.0	to	15.8	Reduction ≥ 1.3
14.0	to	14.9	Reduction ≥ 1.2
13.1	to	13.9	Reduction ≥ 1.1
12.1	to	13.0	Reduction ≥ 1.0
11.2	to	12.0	Reduction ≥ 0.9
10.2	to	11.1	Reduction ≥ 0.8
9.3	to	10.1	Reduction ≥ 0.7
8.3	to	9.2	Reduction ≥ 0.6
7.4	to	8.2	Reduction ≥ 0.5
6.4	to	7.3	Reduction ≥ 0.4
≤6.3			Reduction ≥ 0.3

Source: *CEQR Technical Manual*

TABLE H-9

Significant Impact Criteria for Corners and Crosswalks in a Non-CBD Location

No-Action Condition Pedestrian Space (sf/ped)	With-Action Condition Pedestrian Space Reduction to be Considered a Significant Impact (sf/ped)
≥ 26.6	With-Action Condition ≤ 24.0
25.8 to 26.5	Reduction ≥ 2.6
24.9 to 25.7	Reduction ≥ 2.5
24.0 to 24.8	Reduction ≥ 2.4
23.1 to 23.9	Reduction ≥ 2.3
22.2 to 23.0	Reduction ≥ 2.2
21.3 to 22.1	Reduction ≥ 2.1
20.4 to 21.2	Reduction ≥ 2.0
19.5 to 20.3	Reduction ≥ 1.9
18.6 to 19.4	Reduction ≥ 1.8
17.7 to 18.5	Reduction ≥ 1.7
16.8 to 17.6	Reduction ≥ 1.6
15.9 to 16.7	Reduction ≥ 1.5
15.0 to 15.8	Reduction ≥ 1.4
14.1 to 14.9	Reduction ≥ 1.3
13.2 to 14.0	Reduction ≥ 1.2
12.3 to 13.1	Reduction ≥ 1.1
11.4 to 12.2	Reduction ≥ 1.0
10.5 to 11.3	Reduction ≥ 0.9
9.6 to 10.4	Reduction ≥ 0.8
8.7 to 9.5	Reduction ≥ 0.7
7.8 to 8.6	Reduction ≥ 0.6
6.9 to 7.7	Reduction ≥ 0.5
6.0 to 6.8	Reduction ≥ 0.4
5.1 to 5.9	Reduction ≥ 0.3
≤ 5.0	Reduction ≥ 0.2

Source: *CEQR Technical Manual*

CORNER AREAS AND CROSSWALKS

For non-CBD areas, CEQR Technical Manual criteria define a significant adverse corner area or crosswalk impact to have occurred if the average pedestrian space under the No-Action condition is greater than or equal to 26.6 sf/ped and, under the With-Action condition, the average pedestrian space decreases to 24 sf/ped or less (LOS D or worse). If the pedestrian space under the With-Action condition is greater than 24 sf/ped (LOS C or better), the impact should not be considered significant. If the average pedestrian space under the No-Action condition is between 5.1 and 26.6 sf/ped, a decrease in pedestrian space under the With-Action condition should be considered significant based on **Table H-9** which shows a sliding-scale that identifies what decrease in pedestrian space is considered a significant impact for a given amount of pedestrian space in the No-Action condition. If the decrease in pedestrian space is less than the value in **Table H-9**, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than or equal to 5.0 sf/ped, then a decrease in pedestrian space greater than or equal to 0.2 sf/ped should be considered significant.

Vehicle and Pedestrian Safety Evaluation

Under *CEQR Technical Manual* guidance, an evaluation of vehicular and pedestrian safety is needed for locations within the traffic and pedestrian study areas that have been identified as high crash locations. A high crash location is defined as a Vision Zero priority intersection, or a location with five or more pedestrian/bicyclist injury crashes in any consecutive 12 months of the most recent three-year period for which data are available. In addition, any location along a Vision Zero priority corridor with three or more pedestrian/bicycle injury crashes in any consecutive 12 month of the most recent three-year period for which data is available should be identified as a high crash location. For these locations, crash trends would be identified to determine whether projected vehicular and pedestrian traffic would further impact safety, or whether existing unsafe conditions could adversely impact the flow of the projected new trips. The determination of potential significant safety impacts depends on the type of area where the project site is located, traffic and pedestrian volumes, crash types and severity, and other contributing factors. Where appropriate, measures to improve traffic and pedestrian safety should be identified and coordinated with DOT.

V. PEDESTRIANS

Existing Conditions

As discussed previously in Section IV, "Level 2 Screening Assessment," the analysis of pedestrian conditions focuses on a total of two pedestrian elements where new trips generated by the Proposed Project are expected to exceed the 200-trip *CEQR Technical Manual* analysis threshold in one or more peak hours. As shown in **Figure H-5**, these elements— one sidewalk and one corner area—are located in the immediate proximity of the Project Site along Rockaway Avenue. The existing pedestrian volumes at both analyzed elements are shown in **Figure H-6** for the Saturday peak hour.

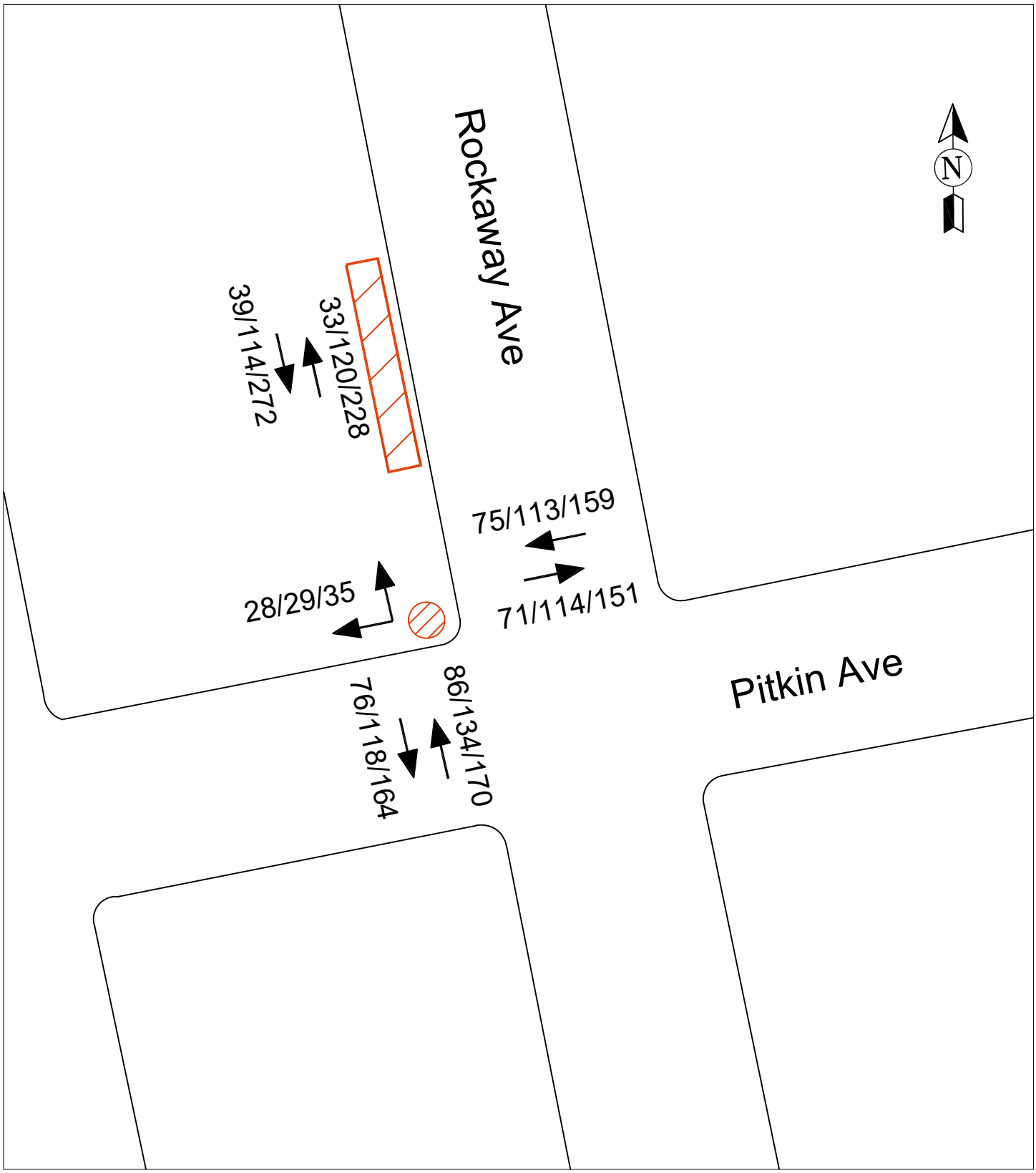
Sidewalks

As shown in **Table H-10**, the analyzed sidewalk is located along Rockaway Avenue between East New York Avenue and Pitkin Avenue. Features present along these sidewalks that reduce the effective width available for pedestrian flow include tree pits and fences.

Table H-10 shows the existing peak hour pedestrian volumes, average pedestrian space (in sf/ped), and platoon-adjusted LOS at the analyzed sidewalk during the Saturday peak hour. As shown in **Table H-10**, the analyzed sidewalk currently operates at LOS B during the analyzed Saturday peak hour.

Table H-10
Existing Sidewalk Conditions

Location	Sidewalk	Total Width	Effective Width	Peak Hour Volume SAT	Average Space (ft^2/ped) SAT	Platoon-Adjusted Level of Service SAT
Rockaway Ave between East New York Ave & Pitkin Ave	West	15.0	2.75	72	496.0	B



LEGEND:

28/29/35 - Existing/No-action/With-action SAT Pedestrian Volume

Pedestrian Analysis Location_Siedwalk

Pedestrian Analysis Location_Corner

Corner Areas

Table H-11 shows the peak hour volumes, average pedestrian space (in sf/ped) and levels of service at the analyzed corner area. As shown in **Table H-11**, the analyzed corner area currently operates at LOS A during the Saturday peak hour.

Table H-11
Existing Corner Conditions

Location	Corner	Average Pedestrian Space (ft^2/ped)	Level of Service
		Sat	Sat
Pitkin Ave & Rockaway Ave	NW	381.9	A

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

Pedestrian volumes along the analyzed sidewalks and corner areas are expected to increase through 2025 as a result of background growth as well as demand from No-Action development projects (see **Table C-3** in **Attachment C, "Land Use, Zoning, and Public Policy"**). The No-Action pedestrian volumes at both analyzed elements are shown in **Figure H-6** for the Saturday peak hour.

Sidewalks

Table H-12 shows the No-Action condition peak hour pedestrian volumes, average pedestrian space, and platoon-adjusted LOS at the analyzed sidewalk. As shown in **Table H-12**, the analyzed sidewalk is expected to continue to operate at LOS B during the Saturday peak hour in the future without the Proposed Action.

Table H-12
No-Action Sidewalk Conditions

Location	Sidewalk	Total Width	Effective Width	Peak Hour Volume	Average Space (ft^2/ped)	Platoon-Adjusted Level of Service
				SAT	SAT	SAT
Rockaway Ave between East New York Ave & Pitkin Ave	West	15.0	2.75	234	152.3	B

Corner Areas

Table H-13 shows the peak hour volumes, average pedestrian space, and LOS at analyzed corner area in the No-Action condition. As shown in **Table H-13**, the analyzed corner area is expected to continue to operate at LOS A during the Saturday peak hour in the future without the Proposed Action.

Table H-13
No-Action Corner Conditions

Location	Corner	Average Pedestrian Space (ft^2/ped)	Level of Service
		Sat	Sat
Pitkin Ave & Rockaway Ave	NW	249.3	A

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

The Proposed Action would generate new pedestrian demand on analyzed sidewalks, crosswalks, and corner areas by 2025. This new demand would include trips made solely by walking, as well as pedestrian trips en route to and from nearby parking facilities, subway station entrances and bus stops. Pedestrian trips generated by the Proposed Action are expected to be most concentrated in proximity to the Project Site and along corridors connecting the site to area transit services.

As shown in **Table H-4**, the Proposed Action is expected to generate a net total of approximately 23 incremental walk-only trips in the weekday AM peak hour, 25 in the weekday midday peak hour, 28 in the weekday PM peak hour, and 41 in the Saturday peak hour. Persons walking to and from nearby parking, subway station entrances, and bus stops would add approximately 246, 273, 333, and 337 incremental pedestrian trips to sidewalks and crosswalks in the vicinity of the Project Area during the weekday AM, midday, PM, and Saturday peak hours, respectively. These pedestrian volumes were added to the projected No-Action condition volumes to generate the With-Action condition pedestrian volumes for analysis.

Anticipated conditions at the analyzed sidewalk and corner area in the future with the Proposed Action are shown in **Tables H-14 and H-15**, respectively. As discussed below, all analyzed pedestrian elements would continue to operate at acceptable levels of service in the Saturday peak hour under the With-Action condition. The With-Action pedestrian volumes at both analyzed elements are shown in **Figure H-6** for the Saturday peak hour.

Sidewalks

Table H-14 shows the incremental change in peak hour pedestrian volumes attributable to the Proposed Action and the total With-Action condition pedestrian volumes, average pedestrian space, and platoon-adjusted LOS at the analyzed sidewalk. As shown in **Table H-14**, the analyzed sidewalk is expected to operate at an uncongested LOS C during the Saturday peak hour in the future With-Action conditions. Therefore, the Proposed Project would not result in any significant adverse sidewalk impacts based on the *CEQR Technical Manual* impact criteria discussed above in Section IV "Transportation Analyses Methodologies."

Table H-14
With-Action Sidewalk Conditions

Location	Sidewalk	Total Width	Effective Width	No-Action Average Pedestrian Space (ft^2/ped)	No-Action Platoon-Adjusted Level of Service	Project Increment	With-Action Peak Hour Volume	With-Action Average Pedestrian Space (ft^2/ped)	With-Action Platoon-Adjusted Level of Service
				SAT	SAT	SAT	SAT	SAT	SAT
Rockaway Ave between East New York Ave & Pitkin Ave	West	15.0	2.75	152.3	B	266	500	70.7	C

Corner Areas

Table H-15 shows the total With-Action condition pedestrian volumes, average pedestrian space, and LOS at the analyzed corner area. As shown in **Table H-15**, in the With-Action condition, the analyzed corner area would continue to operate at an uncongested LOS A during the Saturday peak hour. Therefore, the Proposed Action would not result in any significant adverse corner area impacts based on the *CEQR Technical Manual* impact criteria discussed above in Section IV "Transportation Analyses Methodologies."

Table H-15
With-Action Corner Conditions

Location	Corner	No-Action Average Pedestrian Space (ft^2/ped)	No-Action Level of Service	With-Action Average Pedestrian Space (ft^2/ped)	With-Action Level of Service
		Sat	Sat	Sat	Sat
Pitkin Ave & Rockaway Ave	NW	249.3	A	183.5	A

VI. STREET USER SAFETY

Vision Zero Brooklyn Pedestrian Safety Action Plan

The City's Vision Zero initiative seeks to eliminate all deaths from traffic crashes regardless of whether on foot, bicycle, or inside a motor vehicle. In an effort to drive these fatalities down, NYCDOT and the New York City Police Department (NYPD) developed a set of five plans, each of which analyzes the unique conditions of one New York City borough and recommends actions to address the borough's specific challenges to pedestrian safety. These plans pinpoint the conditions and characteristics of pedestrian fatalities and severe injuries; they also identify priority corridors, intersections, and areas that disproportionately account for pedestrian fatalities and severe injuries, prioritizing them for safety interventions. The plans outline a series of recommended actions comprised of engineering, enforcement, and education measures that intend to alter the physical and behavioral conditions on City streets that lead to pedestrian fatality and injury.

The *Vision Zero Brooklyn Pedestrian Safety Action Plan* was released on February 19, 2015. The *Vision Zero Brooklyn Pedestrian Safety Action Plan Update*, released in 2019, identifies the study area as a "Priority Area", Eastern Parkway, in the vicinity of the Project Area, as a "Priority Corridor", and the intersection of Eastern Parkway and Rockaway Avenue/St. Marks Place as a "Priority Intersection." Actions recommended in the *Vision Zero Brooklyn Pedestrian Safety Action Plan* to enhance pedestrian safety in Brooklyn are summarized below.

ENGINEERING AND PLANNING

- Implement at least 50 Vision Zero safety engineering improvements at Priority Corridors, Intersections, and Areas citywide, informed by community input;
- Expand exclusive pedestrian crossing time, install expanded speed limit signage, and modify signal timing to reduce off-speak speeding on Priority Corridors and Intersections where feasible;
- Expand community outreach and engagement with regard to Priority Corridors, Intersections, and Areas;
- Install additional lighting under elevated trains and around other key transit stops;
- Install 60 new speed bumps in Brooklyn annually;
- Develop additional Neighborhood Slow Zones in Priority Areas;
- Coordinate with MTA to ensure bus operations contribute to a safe pedestrian environment;
- Expand a bicycle network in Brooklyn that improves safety for all road users; and
- Proactively design for pedestrian safety in high-growth areas in Brooklyn

ENFORCEMENT

- Deploy speed camera at Priority Corridors, Intersections, and Areas;
- Focus enforcement and deploy dedicated resources to Brooklyn NYPD precincts that overlap substantially with Priority Areas; and
- Prioritize targeted enforcement at all Priority Corridors, Intersections, and Areas annually.

EDUCATION AND AWARENESS CAMPAIGNS

- Target child and senior safety education at Priority Corridors and Priority Areas
- Launch multilingual public information campaigns in Priority Areas
- Target intensive street-level outreach at Priority Corridors, Intersections, and Areas

Study Area High Crash Locations

Pursuant to *CEQR Technical Manual* guidance, an evaluation of vehicular and pedestrian safety is needed for locations within the traffic and pedestrian study areas that have been identified as high crash locations. These are defined as locations along a Vision Zero priority intersection or locations where five or more pedestrian/bicyclist injury crashes have occurred in any consecutive 12 months of the most recent three-year period for which data are available. In addition, any location along a Vision Zero priority corridor with three or more pedestrian/bicyclist injury crashes in any consecutive 12 months of the most recent three-year period for which data is available should be identified as a high crash location.

For these locations, crash trends would be identified to determine whether projected vehicular and pedestrian traffic would further impact safety, or whether existing unsafe conditions could adversely affect the flow of the projected new trips. The determination of potential significant adverse safety impacts depends on the type of area where the project site is located, traffic volumes, crash types and severity, and other contributing factors. Where appropriate, measures to improve traffic and pedestrian safety should be identified and coordinated with NYCDOT.

Table H-16 shows the crash data summary for the three-year reporting period between January 1, 2017, and December 31, 2019 that were obtained from NYCDOT. This is the most recent three-year period for

which data are available. The table shows the number of crashes each year involving pedestrians and cyclists and the total number of crashes each year at intersections in proximity to the Proposed Development Site where the majority of new vehicular and pedestrian trips would be concentrated. In addition, three intersections along Eastern Parkway located just north of the Development Site were also included, as this street has been identified as a Vision Zero Priority Corridor by NYCDOT.

As shown in **Table H-16**, a total of three pedestrian and bicycle injury crashes were reported at the intersection of Eastern Parkway and Rockaway Avenue/St. Marks Avenue in 2017. This includes two pedestrian injury crashes and one bicycle injury crash in 2017. This intersection is located to the northeast of the Proposed Development Site and is signalized with pedestrian signals and striped crosswalks at each approach. In the vicinity of this intersection, Eastern Parkway operates with two to three moving lanes in each direction and St. Marks Avenue operates as a one-way eastbound street with one moving lane. This intersection is expected to experience minimal increases in vehicular and pedestrian traffic as a result of the Proposed Actions. Potential safety improvements that could be made to this intersection include augmenting each of the crosswalks with high visibility striping.

Additionally, a total of five pedestrian and bicycle injury crashes were reported at the intersection of East New York Avenue and Prospect Place/Rockaway Avenue in both 2017 and 2018. This includes five pedestrian crashes and zero bicycle crashes reported in both 2017 and 2018. This intersection is located at the northeast corner of the block containing the Proposed Development Site and is signalized with pedestrian signals, leading pedestrian intervals, and striped crosswalks at each approach. Near the Project Area, East New York Avenue operates with one moving lane in each direction, and each lane operates as a shared lane for vehicles and bicycles. While this intersection is expected to experience a slight increase in vehicular traffic as a result of the Proposed Actions, it would experience increases in pedestrian volumes. Potential safety improvements that could be made to this intersection include augmenting each of the crosswalks with high visibility striping.

In addition, a total of five pedestrian and bicycle injury crashes were reported at the intersection of Pitkin Avenue and Rockaway Avenue in 2019. This includes four pedestrian crashes and one bicycle crash in 2019. This intersection is located at the southeast corner of the block containing the Proposed Development Site and is signalized with pedestrian signals and striped crosswalks at each approach. In the vicinity of this intersection, Pitkin Avenue operates with one moving lane in each direction, and each lane operates as a shared lane for vehicles and bicycles. While this intersection is expected to experience a slight increase in vehicular traffic as a result of the Proposed Actions, it would experience increases in pedestrian volumes. Potential safety improvements that could be made to this intersection include augmenting each of the crosswalks with high visibility striping.

Table H-16: Summary of Motor Vehicle Crash Data 2017-2019

Intersection		Pedestrian Injury Crashes			Bicycle Injury Crashes			Total Pedestrian/ Bicycle Injury Crashes			Total Crashes		
East-West	**North-South**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**
Eastern Parkway	Thomas S. Boyland Street	0	1	0	0	0	0	0	1	0	5	7	11
	Prospect Place	0	0	0	1	0	0	1	0	0	6	10	7
	Rockaway Avenue / St. Marks Avenue	2	1	1	1	1	0	**3**	2	1	8	30	17
East New York Avenue	Chester Street	0	1	0	0	0	0	0	1	0	0	4	3
	Prospect Place / Rockaway Avenue	5	5	1	0	0	0	**5**	**5**	1	6	13	9
Pitkin Avenue	Chester Street	1	0	0	0	1	0	1	1	0	3	2	2
	Rockaway Avenue	1	2	4	0	0	1	1	2	**5**	7	8	13

Source: NYSDMV/DOT

ATTACHMENT I
AIR QUALITY

I. INTRODUCTION

The applicant is seeking a series of discreationary approvals, including a zoning map change (the "Proposed Actions"), to facilitate the construction of a mixed-use development consisting of new affordable housing, community facility space, and open space uses on Lot 15, Block 3499 (the "Proposed Development Site") in Brownsville, Brooklyn Community District (CD) 16. The Proposed Development Site is shown in **Figure 1 within the EAS Form**. The proposed development (or "Proposed Project") on Lot 15 would be a new nine-story (approximately 95-foot-tall) building with approximatley 291,027 gross square feet (gsf). It would include approximately 290 affordable dwelling units (DUs) plus a single superintendent's unit, 14,575 gsf of open space, including both private and publicly accessible open space, and approximatley 25,507 gsf of community facility space. The community facility space is expected to accommodate a range of arts and cultural spaces, such as art and media center, a performance arts school, a music school, and a multipurpose theater/ rehearsal/teaching space. No additional or other new development would occur as a result of the proposed zoning changes.

As a single new building would be constructed at the Proposed Development Site, no project-on-project stationary source air quality analysis is required. The HVAC system for the Proposed Project, as it is currently designed, would not utilize fossil fuel-powered boiler(s) for the HVAC systems. Rather, the Proposed Project has been designed to utilize electricity for both heat and hot water. Therefore, no on-site emissions would result, and no further analysis of the Proposed Project's HVAC systems is warranted. Therefore, no significant adverse stationary source air quality impacts from the Proposed Project's HVAC systems are expected in the future with the Proposed Actions.

There are no major or large combustion emission sources are identified within 1,000 feet of the project area. As described in **Attachment B**, **"Supplemental Screening,"** based on a field survey, there is one industrial facility, an autobody shop (D & D Diamond) within 400 feet of the project area at 1495 East New York Avenue, which specializes in autobody and tire repairs that appears to paint on-site. Although the facility does not have a DEP air permit for a spray booth, an air dispersion analysis of the existing auto repair facility at 1495 East New York Avenue was conducted to determine whether emissions would result in potentially significant adverse impacts on the Proposed Project.

As also described in **Attachment B, "Supplemental Screening**," the Proposed Actions would not generate peak hour vehicle volumes in exceedance of the CEQR threshold of 170 vehicle trips, nor 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.[1] Therefore, further analysis of air quality mobile sources from action-generated vehicle trips has been screened out in accordance with *CEQR Technical Manual* guidance.

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

II. STATIONARY SOURCE AIR DISPERSION ANALYSIS

D & D Diamond Auto Body Repairs Detailed Analysis

Per the *CEQR Technical Manual*, projects that would result in new uses (particularly schools, hospitals, parks, and residences) within 400 feet of manufacturing processing facilities may result in potentially significant adverse impacts. A field visit determined the existence of such facilities within a 400-foot radius of the Proposed Development Site. The D & D Diamond Auto Body Repairs facility, located approximately 190 feet north of the Proposed Development Site at 392 Rockaway Avenue (Brooklyn Block 3499, Lot 15), was identified as a facility that is potentially conducting auto body repair. A detailed analysis is required as the facility is located within 400 feet of the Proposed Development Site. No other processing manufacturing facilities were identified within 400 feet of the Proposed Development Site.

Emission Profile

The D & D Diamond Auto Body Repairs facility has no New York City Department of Environmental Protection (DEP) or New York State Department of Environmental Conservation (NYSDEC) Air Facility Registration Certificate. Emissions of spray-painting processing comprise of particulate and solvents. Solvents are volatile organic compounds (VOCs). The particulates (solids) bind to the sprayed article, giving it the desired look and color. However, some of the sprayed solids are over-sprayed and could be emitted to the outside air. The VOCs evaporate during the spraying activity and while the coating substance dries. The particulate and VOC emissions of the D & D Diamond Auto Body Repairs facility were based on a coating compound consumption rate of 0.5 gallons per hour during 4 hours per day and 250 days per year activity, based on the New York City Department of Environmental Protection (DEP) guidance.

An average of 10 pounds per gallon of coating compound was used to calculate emissions. Particulate emissions were based on an average solid content of 5 pounds per gallon and a transfer efficiency of 40 percent (60 percent of the solids are over-sprayed). VOC emissions were based on an average of 5 pounds per gallon, where all the VOC is emitted into the outside air. **Table I-9** shows the D & D Diamond Auto Body Repairs facility emissions of particulate and VOC and the facility activity rate.

Table I-9: Particulate and VOC Emissions

Facility	Particulate (PM)		VOC		Activity Rate	
	(lb./hr.)	(lb./yr.)	(lb./hr.)	(lb./yr.)	(hr./day)	(day/yr.)
D & D Diamond Auto Body Repairs	1.5	1500	2.5	2500	4	250

Particulate emissions shown in **Table I-9** include PM, PM_{10}, and $PM_{2.5}$ combined. Particle size distribution (PM_{10} and $PM_{2.5}$) associated with the spray-painting processing emission specified in the EPA *AP-42 Manual Appendix B.1-12, Automobile and Light-Duty Truck Surface Coating Operations: Automobile Spray Booths (Water-Base Enamel)*, was used to derive the facility's PM_{10} and $PM_{2.5}$ emission. The facility hour per day activity was used to calculate the 24-hour average emission. **Table I-10** shows the D & D Diamond Auto Body Repairs facility's short-term and annual particulate emissions.

Table I-10: D & D Diamond Auto Body Repairs - $PM_{2.5}$ and PM_{10} emissions

Contaminant	Percent Weight	(lb./day)	(lb./yr.)
$PM_{2.5}$	28.6 %	1.72	429
PM_{10}	46.7%	2.80	701

The VOC chemical composition, or weight percentage presented in **Table I-11**, is estimated based on DEP permits (Permit Numbers PW001217) from a representative automotive repair shop located at 2250 McDonald Avenue (Block 7103, Lot 32), 2256 McDonald Avenue (Block 7103, Lot 56), and 2260 McDonald Avenue (Block 7103, Lot 36) in Brooklyn for a total of 9,374 gsf facility. The chemicals that comprise the VOC group by percent weight, listed in permit PW001217, correspond to the coating compounds (paint, clear coats, reducer, and thinner) as-applied (e.g., accounting for mixing of paint and thinner) usage distribution. The topcoat paint, clear coats, reducer, and thinner are all PPG products. PPG is a major international coating compound manufacturer, that many autobody facilities in New York City, based on general fieldwork observations, use their products. As such, the chemical compositions specified in the DEP permit PW001217 were believed to be a good representative and were used to estimate emitted chemicals and their emission rates from Carter Bros Auto Repair. **Table I-11** shows the representative coating compound VOC (mostly VOC) chemical composition by percent weight and the chemical emission rates assumed for D & D Diamond Auto Body Repairs facility, based on the hourly and annual usage.

Table I-11: D & D Diamond Auto Body Repairs - VOC Emissions

Chemical	CAS No.	Percent Weight	Emission	
		percent	lb./hr.	lb./yr.
Isopropyl Alcohol	67-63-0	1.4%	0.0358	35.8
Acetone	67-64-1	17.0%	0.4248	424.8
Butanone	78-93-3	6.2%	0.1551	155.1
Benyzl Butyl Phthalate	85-68-7	0.8%	0.0199	19.9
Ethylbezene	100-41-4	0.7%	0.0179	17.9
4-Methylpentan	108-10-1	0.5%	0.0119	11.9
2-Methoxy-1-Methylethyl Acetate	108-65-6	3.6%	0.0907	90.7
Methylcyclohexane	108-87-2	2.1%	0.0537	53.7
Toluene	108-88-3	12.7%	0.3186	318.6
Isopropyl Acetate	110-19-0	2.7%	0.0664	66.4
Heptan-2-one	110-43-0	0.2%	0.0060	6.0
N-Butyl Acetate	123-86-4	36.3%	0.9071	907.1
Heptane	142-82-5	6.2%	0.1551	155.1
Ethyl 3-Ethoxypropionate	763-69-9	1.2%	0.0310	31.0
Xylenes	1330-20-7	3.7%	0.0929	92.9
Ligroine	8032-32-4	3.6%	0.0907	90.7
2-(2H-Benzotriazol-2-yl)-4,6-Ditertpentylphenol	25973-55-1	0.5%	0.0119	11.9
Solvent Naphtha	64742-89-8	1.0%	0.0239	23.9

Dispersion Analysis

Particulate (PM_{10} and $PM_{2.5}$) concentrations were evaluated with the National Ambient Air Quality Standards (NAAQS). The U.S. Environmental Protection Agency (EPA) has established NAAQS for six of the most common air pollutants—known as "criteria" pollutants -- and air toxics or toxic air pollutants known as noncriteria pollutants, which include hazardous air pollutants (HAPs) and many other pollutants. The presence of these pollutants in ambient air is generally due to numerous diverse and widespread sources of emissions. Determination of significant impact related to criteria pollutants accounts for pollutant concentrations in the ambient air, which include background concentrations. Background concentrations (2020 concentrations) were obtained from the New York State Department of Environmental Conservation (NYSDEC) at the nearest federally mandated monitoring station(s) (Division Street Site No. 36-061-0134 for PM_{10}, JHS 126 Site No. 36-047-0122 for $PM_{2.5}$).

New York State has adopted the national standard, NAAQS. In addition, the NYSDEC has established guidelines for the maximum allowable concentration of noncriteria air contaminants, also referred to as toxic air contaminants, which are potentially toxic or carcinogenic pollutants. These include 188 hazardous air pollutants (HAPs), which the EPA also regulates. The maximum allowable guidelines set maximum 1-hour and annual averaging time concentrations published (February 12, 2021 publication) in the DAR-1 Annual and Short-term Guideline Concentration (AGC/SGC Table). In addition, DAR-1 also includes standards for pollutants' cumulative risk assessment.

The *CEQR Technical Manual* Industrial Source Screen methodology was used to predict pollutant concentrations. The *CEQR Technical Manual* Industrial Source Screen methodology can be used to predict a pollutant concentration emitted from a single source at various distances (from 30 to 400 feet). A distance of 180 feet (the D & D Diamond Auto Body Repairs facility is located 190 feet from the Proposed Development Site) was used in the screening analysis. **Table I-12** shows the VOC air dispersion analysis results.

As seen in **Table I-12**, the noncriteria pollutant concentrations are within the SGC/AGC standard. In addition, the carcinogen pollutants inhalation risk is 0.13 (less than 1), and the Hazardous Index is 0.005 (less than 1) for the non-carcinogenic pollutants.

The criteria pollutants dispersion analysis results are presented in **Table I-13**. As shown in **Table I-13**, $PM_{2.5}$ and PM_{10} concentrations are within the NAAQS. Predicted contaminants (criteria pollutants and noncriteria pollutants) concentrations at the Proposed Development Site would not exceed the NAAQS or the SGC/AGC, and the noncriteria pollutants risk assessment (cancer risk and hazard index) is within the acceptable design values. Therefore, no significant adverse air quality impacts are expected in the future with the Proposed Actions.

Table I-12: Noncriteria pollutants dispersion analysis result

Contaminant	CAS No.	1-Hour (µg/m³)		Annual	
		Conc.	SGC	Conc.	AGC
Isopropyl Alcohol	67-63-0	15.8	98000.0	0.093	7000.0
Acetone	67-64-1	187.9	180000.0	1.1	30000.0
Butanone	78-93-3	68.6	13000.0	0.40	5000.0
Benyzl Butyl Phthalate ***	85-68-7	8.8	---	0.052	0.42
Ethylbezene ***	100-41-4	7.9	---	0.047	1000.0
4-Methylpentan ***	108-10-1	5.3	31000.0	0.031	3000.0
2-Methoxy-1-Methylethyl Acetate	108-65-6	40.1	36850.0	0.24	2000.0
Methylcyclohexane	108-87-2	23.7	---	0.14	3800.0
Toluene ***	108-88-3	140.9	37000.0	0.83	5000.0
Isopropyl Acetate	110-19-0	29.4	71300.0	0.17	565.0
Heptan-2-one	110-43-0	2.6	---	0.016	550.0
N-Butyl Acetate	123-86-4	401.2	71300.0	2.4	565.0
Heptane	142-82-5	68.6	210000.0	0.40	3900.0
Ethyl 3-Ethoxypropionate ***	763-69-9	13.7	140.0	0.081	64.0
Xylenes ***	1330-20-7	41.1	22000.0	0.24	100.0
Ligroine	8032-32-4	40.1	---	0.24	900.0
2-(2H-Benzotriazol-2-yl)-4,6-	25973-55-1	5.3	---	0.031	---
Solvent Naphtha	64742-89-8	10.6	---	0.062	3200.0

*** Indicates a HAP or AGC equivalent to one in a million excess cancer risk.

Table I-13: Criteria pollutants dispersion analysis results

Criteria Pollutant	Increment (Modeled) Concentration (µg/m³)	Background Concentration (µg/m³) (1)	Evaluated Concentration (µg/m³)	NAAQS (µg/m³)
$PM_{2.5}$ 24-Hour	12.56	18.7 (2)	31.3	35
$PM_{2.5}$ Annual	1.12	7.6 (2)	8.72	12
PM_{10} 24-Hour	20.5	24 (2)	45	150

Note:

1. NYSDEC (2020). New York State Ambient Air Quality Report for 2020. dec.ny.gov/chemical/8406.html#Quality.
2. Background concentration Station(s): PM_{10} – Division Street, $PM_{2.5}$ – JHS 126.

IV. CONCLUSION

The HVAC system for the Proposed Project, as it is currently designed, would provide heat by electrically powered units, and therefore, there would be no on-site emissions from the space heating. Emissions would still be generated by a traditional natural gas-fueled boiler designed to provide hot water to the Proposed Project. The results of the detailed stationary source air quality analysis from the proposed

building's hot water system determined that that no significant adverse air quality impacts would occur. Emissions and dispersion of NO_2 from the Proposed Project's hot water system indicate that these emissions would not result in a violation of NAAQS. In addition, the maximum predicted PM2.5 incremental concentrations from the hot water emissions of the Proposed Project would be less than the applicable 24-hour and annual average *CEQR* significant impact thresholds. To ensure that there are no significant adverse impacts, resulting from the Proposed Project due to heating and hot water system emissions, certain restrictions would be required. These restrictions would be imposed by a condition of the Land Disposition Agreement (LDA) or other legally binding document to be executed between New York City Department of Housing Preservation and Development (HPD) and the project sponsor, which would restrict the hot water boiler to natural gas. 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 J
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 Proposed Actions include a zoning map amendment to rezone a midblock portion of Brooklyn Block 3499 (the "Project Area) from the existing R6/C2-3 and C4-3 districts to R7A with a C2-4 commercial overlay mapped along the west side of Rockaway Avenue; a zoning text amendment to designate the Project Area as a Mandatory Inclusionary Housing (MIH) Area; Urban Development Action Area and Urban Development Action Area Project designations and associated disposition of City-owned Lot 15 on Block 3499 (the "Proposed Development Site"); and Mayoral override approval, as well as public financing. Approval of the Proposed Actions would facilitate the development of a new approximately 291,027 gross-square-foot (gsf), mixed-use development containing 291 dwelling units (DUs), approximately 25,507 gsf of community facility space, and 14,575 sf of open space (9,393 sf private and 5,182 sf public) in the Brownsville neighborhood of Brooklyn (the "Proposed Project"). In addition, discretionary funding may be sought by the Project Sponsor to facilitate construction the Proposed Project.

As discussed in **Attachment B, "Supplemental Screening,"** the Proposed Actions would introduce new noise-sensitive uses (known as "receptors") within the Project Area. However, as the Proposed Actions would not generate sufficient traffic to trigger a detailed traffic analysis (see **Attachment B**), it is unlikely that the Proposed Actions would result in a significant noise impact due to mobile sources (i.e., it would not result in a doubling of noise passenger car equivalents [PCEs] which would be necessary to a cause a 3 dBA increase in noise levels). As such, a noise assessment was conducted to determine the level of building attenuation necessary to ensure that interior noise levels within the Proposed Project would satisfy applicable noise exposure criteria.

Additionally, based on a field survey of land uses in the area, it was determined that no stationary noise sources contribute significantly to noise levels in the area, and a stationary source noise analysis was not warranted.

II. NOISE FUNDAMENTALS

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

"A"-Weighted Sound Level (dBA)

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

TABLE J-1: Common Noise Levels

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

Source: *2021 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.

Notes: A 10 dBA increase appears to double the loudness, and a 10 dBA decrease appears to halve the apparent loudness.

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 $L_{eq(1)}$, or 24 hours, denoted as $L_{eq(24)}$), conveys the same sound-energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and x percent of the time, respectively. Discrete event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

The one-hour equivalent continuous noise level ($L_{eq\,(1h)}$ in dBA), the tenth percentile level L_{10} and the day-night average sound level L_{dn} were selected as the noise descriptors for the purposes of this assessment.

Hourly statistical noise levels (particularly L_{10} and L_{eq} levels) were used to characterize the relevant noise sources and their relative importance at each receptor location.

Applicable Noise Codes and Impact Criteria

New York City Noise Code

The New York City Noise Control Code, amended in December 2005, contains prohibitions regarding unreasonable noise and specific noise standards, including plainly audible criteria for specific noise sources. In addition, the amended code specifies that no sound source operating in connection with any commercial or business enterprise may exceed the decibel levels in the designated octave bands at specified receiving properties. The New York City Department of Environmental Protection (DEP) has set external noise exposure standards. These standards are shown in **Table J-2**. **Table J-3** provides the required attenuation values to achieve acceptable interior noise levels.

TABLE J-2: Noise Exposure Guidance 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 & 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	

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

Notes: (i) In addition, any new activity shall comply with the Impact Thresholds detailed in Section 410;

[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).

TABLE J-3: Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Vehicular Traffic	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Attenuation	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	See Note C

Note: [A] The above composite window-wall attenuation values are for residential dwellings and community facility development. 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.

C The required attenuation value is the difference between L_{Build} and $L_{interior}$, using the appropriate descriptor:

Where:

L_{Build} is the projected noise level under the build condition rounded up to the whole number.

$L_{interior}$ is the designed interior noise level (45dB(A) for vehicular noise.

Source: New York City Department of Environmental Protection / 2021 *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 J-4**). 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 J-4: HUD Exterior Noise Standards

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

Source: HUD

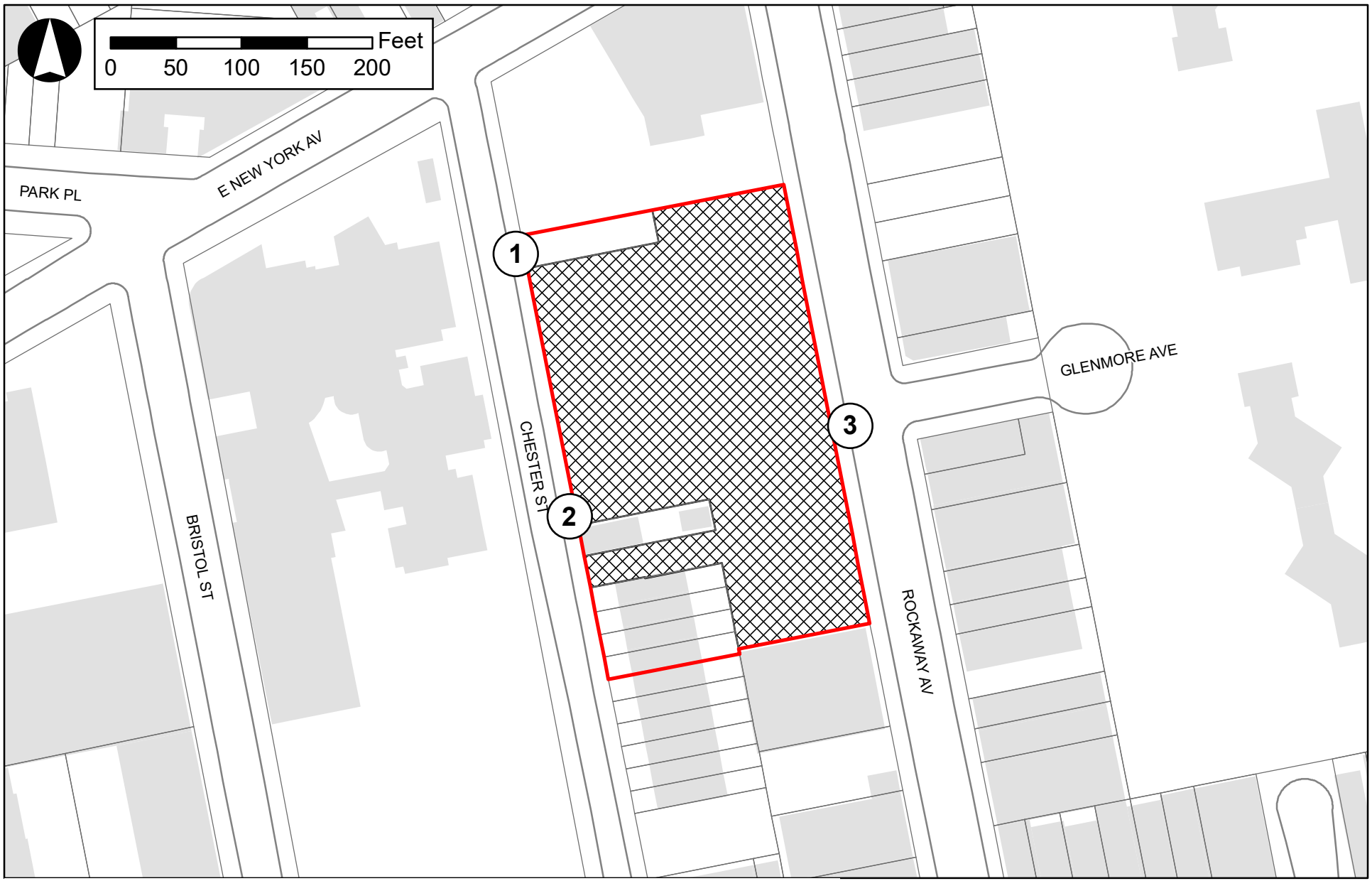
For this analysis, L_{dn} levels were estimated using the following equation:

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

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. EXISTING CONDITIONS

As shown in **Figure J-1**, the Project Area has two frontages: one on the western side of Rockaway Avenue and one on the eastern side of Chester Street. In proximity to the site, Rockaway Avenue is a 70-foot narrow street operating two-way with one northbound and one southbound travel lane and parallel parking lanes along both curbs. Chester Street, 50 feet in mapped width, is also a narrow street operating with one northbound travel lane and two curb side parking lanes.



Legend

Proposed Development Site | Proposed Rezoning Area | Existing Buildings

Brownsville Arts Center and Apartments

Figure J-1
Noise Monitor Locations

Selection of Noise Receptor Locations

As discussed above, local traffic is the dominant source of noise near the Project Area. The noise receptor locations were selected to be along each frontage of the Project Area and are described in **Table J-5** and presented in **Figure J-1**. The assumption was made that all windows on all frontages of the buildings would be operable.

TABLE J-5: Noise Receptor Locations

Receptor Location / Map ID[1]	Monitoring Location
1	Northwestern-most point of Chester Street frontage (approximately 143 feet south of East New York Avenue)
2	Approximate midpoint of Chester Street frontage (approximately 300 feet south of East New York Avenue)
3	Approximately midpoint of Rockaway Avenue frontage (approximately 350 feet south of East New York Avenue)

Notes: [1] Refer to **Figure J-1** for noise receptor locations.

Noise Monitoring

At all three receptor locations, 20-minute spot measurements of existing noise levels were conducted for each of the three noise analysis time periods - weekday AM peak hour (8:00AM to 9:00AM), weekday midday (MD) peak hour (12:00PM to 1:00PM), and weekday PM peak hour (5:00PM to 6:00PM). Noise monitoring was performed on Thursday, March 25, 2021, and Tuesday, April 13, 2021. On March 25, the weather was partly cloudy with a high temperature of 60 ºF. On April 13, the weather was sunny with a high temperature of 64 ºF.

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 5 feet above the ground surface on a tripod and at least 6 feet away from any sound-reflecting surfaces to avoid major interference with source sound level that is being measured. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at the 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. Only traffic-related noise was measured; noise from other sources (e.g., emergency sirens, irregular aircraft flyovers, etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at the Noise Receptor Locations

Measured Noise Levels

The noise monitoring results are shown in **Table J-6**. Area traffic was the dominant source of noise at each of the receptor locations. The existing noise levels reflect the minimal level of vehicular activity on the

roadways adjacent to the Project Area, with the highest existing noise levels observed at receptor location 3 during the PM monitoring period. As shown in **Table J-6**, as the L_{eq} noise levels were higher than the L_{10} noise levels at receptor locations 1 and 2, the L_{eq} levels were used to determine attenuation requirements.

As shown in **Table J-6**, the highest L_{eq} value was recorded at receptor location 3 in the PM peak hour (68.7 dBA), placing this receptor location in the "Marginally Unacceptable" CEQR Noise Exposure category pursuant to the guidance of the *CEQR Technical Manual*. At receptor location 1, the highest L_{10} value was recorded in the midday peak hour (60.8 dBA), placing this receptor location in the "Marginally Acceptable" CEQR Noise Exposure category. At receptor location 2, the highest L_{eq} value was recorded in the AM peak hour (60.5 dBA), also placing this receptor location in the "Marginally Acceptable" CEQR Noise Exposure category.

TABLE J-6: Existing Noise Levels (in dBA) at the Monitoring Locations

Receptor Location	Time	L_{eq}	L_{max}	L_{min}	L_1	L_{10}[2]	L_{50}	L_{90}	CEQR Noise Exposure Category
1	AM	55.7	72.3	48.8	64.9	58.0	53.1	51.0	Marginally Acceptable
	MD	57.2	71.7	48.8	65.2	**60.8**	53.9	51.1	
	PM	56.6	71.8	47.7	66.5	59.5	53.6	50.8	
2	AM	**60.5**	81.5	47.6	73.3	59.2	50.9	49.0	Marginally Acceptable[3]
	MD	54.9	75.8	46.4	65.0	56.2	49.7	47.8	
	PM	56.2	72.4	48.6	65.8	58.9	52.9	50.1	
3	AM	66.3	91.2	52.4	75.9	67.6	61.1	55.2	Marginally Unacceptable[3]
	MD	62.7	85.2	48.1	71.8	64.3	57.5	51.3	
	PM	**68.7**	91.9	54.5	80.0	67.6	60.0	56.9	

Notes: Field measurements were performed by Philip Habib & Associates on March 25, 2021, and April 13, 2021.

[1] Refer to **Figure J-1** for noise monitoring receptor location.

[2] The highest noise levels at each monitoring location are shown in **bold**.

[3] As the highest existing L_{eq} noise levels at Receptor Locations 2 (60.5 dBA) and 3 (68.7 dBA) during the weekday AM and PM peak period, respectively, exceeds that of the corresponding highest existing L_{10} noise level (59.2 dBA and 67.6 dBA, respectively), the higher L_{eq} noise levels were used in place of the highest L_{10} noise levels to determine the appropriate CEQR Noise Exposure category, and thus, any relevant noise attenuation requirements.

Existing L_{dn} Noise Levels

As part of the Proposed Actions, the Proposed Project may receive Federal funding. L_{dn} noise levels were therefore calculated for the corresponding receptor locations, as described above in the "HUD Development Guidelines" section. Using this methodology, the L_{dn} for Receptor Locations 1, 2, and 3 were estimated to be 57.8 dBA, 57.5 dBA, and 65.7 dBA, respectively. According to HUD criteria, the calculated existing L_{dn} noise levels at Receptor Locations 1 and 2 would fall in the "acceptable" category, and Receptor Location 3 would fall in the "normally unacceptable" category.

IV. ATTENUATION REQUIREMENTS

CEQR

As shown above in **Table J-3**, the *CEQR Technical Manual* has set noise attenuation requirements for buildings based on exterior noise levels. Recommended noise attenuation values for buildings are designed to maintain a maximum interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial office uses and are determined based on exterior noise

levels. As noted in **Table J-3**, additional attenuation measures would be required at the site wherever exterior noise levels exceed 70 dBA. As the maximum exterior L_{10}/Leq noise level would be less than 70 dBA at all receptor locations during all peak hours, no additional attenuation would be required to ensure an interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial office uses, as per *CEQR Technical Manual* guidance. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation.

HUD

As described above in the "HUD Development Guidelines" section, the L_{dn} noise levels for Receptor Locations 1, 2, and 3 were estimated using the methodology described above to be 57.8 dBA, 57.5 dBA, and 65.7 dBA, respectively. According to HUD criteria, the calculated L_{dn} noise level at Receptor Locations 1 and 2 would each fall in the "acceptable" category, and therefore no additional noise attenuation requirements along the Proposed Development Site's western frontages facing Chester Street would be required; however, as the L_{dn} noise levels at Receptor Location 3 would fall in the "normally unacceptable" category, additional noise attenuation measures would be required along the Proposed Development Site's eastern frontages facing Rockaway Avenue in the event that the Proposed Project receives federal funding. To satisfy HUD development guidelines, in order to ensure an acceptable interior noise environment, future residential uses at the Proposed Development Site (Block 3499, Lot 15) must provide a closed-window condition with a minimum of 25 dBA of building attenuation on the eastern facades facing Rockaway Avenue. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes but is not limited to, central air conditioning.

With the implementation of the measures and recommendations outlined above, no significant adverse impacts related to building attenuation would be expected to occur as a result of the Proposed Actions and resultant Proposed Project. These measures will be a condition of the Land Disposition Agreement (LDA) or other legally binding document to be executed between HPD and the Project Sponsor (Brownsville Arts Development LLC) to ensure that the Project Sponsor incorporates all building attenuation measures to the satisfaction of HPD and HUD, if applicable.

VIII. OTHER NOISE CONCERNS

Mechanical Equipment

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

Train Noise

An initial train noise impact screening analysis would be warranted if a new receptor would be located within 1,500 feet of existing rail activity and have a direct line of sight to that activity. As the nearest

subway track is roughly 2,385 feet away, a detailed train noise analysis related to rail operations is not warranted.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptor would be located within a 65 dB(A) DNL contour. Since the Proposed Rezoning Area is not within an existing 65 dB(A) DNL contour, no initial aircraft noise impact screening analysis is warranted.

IX. CONCLUSION

The Proposed Actions would not result in significant adverse noise impacts due to mobile source noise. Additionally, the maximum exterior L_{eq}/L_{10} noise levels near the Proposed Development Site and the Project Area would be less than 70 dBA, and therefore, no building attenuation beyond standard construction practices is required for the Proposed Project, pursuant to *CEQR Technical Manual* guidance.

In the event that the Proposed Project receives Federal funding, future residential uses at the Proposed Development Site (Block 3499, Lot 15) must provide a closed-window condition with a minimum of 25 dBA of building attenuation on the eastern facades facing Rockaway Avenue. These measures will be a condition of the LDA or other legally binding document to be executed between HPD and the Project Sponsor (Brownsville Arts Development LLC) to ensure that the Project Sponsor incorporates all building attenuation measures to the satisfaction of HPD and HUD, if applicable. With the implementation of the measures and recommendations outlined above, no significant adverse impacts related to building attenuation would be expected to occur as a result of the Proposed Actions and resultant Proposed Project.

APPENDIX 1
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: HOUSING PRESERVATION AND DEV / LA-CEQR-K
Project: BROWNSVILLE ARTS CENTER
Date Received: 4/6/2021

Properties with no Architectural or Archaeological significance:

1) 47 CHESTER STREET, BBL: 3034990015
2) CHESTER STREET, BBL: 3034990017
3) 31 CHESTER STREET, BBL: 3034990020
4) 29 CHESTER STREET, BBL: 3034990021
5) 27 CHESTER STREET, BBL: 3034990022
6) CHESTER STREET, BBL: 3034990023
7) CHESTER STREET, BBL: 3034990024
8) 348 ROCKAWAY AVENUE, BBL: 3034990045
9) 354 ROCKAWAY AVENUE, BBL: 3034990046
10) 356 ROCKAWAY AVENUE, BBL: 3034990047
11) ROCKAWAY AVENUE, BBL: 3034990048
12) 376 ROCKAWAY AVENUE, BBL: 3034990050
13) 380 ROCKAWAY AVENUE, BBL: 3034990052
14) 382 ROCKAWAY AVENUE, BBL: 3034990053
15) 384 ROCKAWAY AVENUE, BBL: 3034990054
16) 388 ROCKAWAY AVENUE, BBL: 3034990056
17) 390 ROCKAWAY AVENUE, BBL: 3034990057
18) 392 ROCKAWAY AVENUE, BBL: 3034990058

Gina Santucci 4/15/2021

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 35544_FSO_DNP_04152021.docx

Environmental Protection

Rohit T. Aggarwala
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Boulevard
Flushing, NY 11373

T: (718) 595-4398
F: (718) 595-4479
alicata@dep.nyc.gov

MEMORANDUM

To: Alexander Schaefer
HPD

From: Mitchell Wimbish MW
Project Manager
DEP BEPA

Subject: Brownsville Site A Rockaway-Chester
CEQR # 20HPD019K

Date: June 6, 2022

New York City Department of Environmental Protection (DEP) has reviewed the Water and Sewer Infrastructure section of the Environmental Assessment Statement (EAS) for the above referenced project and has the following comments:

Sanitary Sewer
The proposed actions would likely result in an increase in the sanitary flow of the adjacent sewers. A hydraulic analysis of the existing sewer system will likely be required prior to the submittal of the Site Connection Proposal Application (SCP) to determine whether the existing sewer system is capable of supporting higher density development and related increase in wastewater flow, or whether there will be a need to upgrade the existing sewer system. In addition, there might be a need to amend the existing drainage plan based on the hydraulic analysis calculations.

Storm Sewer
As part of the DEP site connection approval process, the development must be in compliance with the required stormwater release rate.

Water System
The existing 20” water main along Rockaway Avenue should be capable to handle the estimated increase in water demand. The fire system for this development should be connected to the 20” water main along Rockaway Avenue as the existing water main on Chester Street is 6”.

cc: Steve Carrea, BWSO
Lixin Cheng, BWSO
Andy Lu, BWSO
Terrell Estesen, BEPA

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4995
www.dec.ny.gov

April 14, 2023

Matthew Lawrence
Brownsville Arts Owner LLC
7 Jackson Walkway
Providence, RI 02903

Re: 366 Rockaway Ave Cabinet Furniture Manufacturing
Site ID No.: C224357
Citizen Participation Plan

Dear Mr. Lawrence:

The New York State Department of Environmental Conservation (NYSDEC) has reviewed the Citizen Participation Plan (CPP) for the above-referenced site dated March 2023, which was prepared by Roux Environmental Engineering and Geology DPC on behalf of Brownsville Arts Owner LLC (the Volunteer).

The NYSDEC has determined that the CPP is adequate and is hereby approved. The CPP outlines citizen participation activities that will be undertaken to address significant public interests/concerns about the project. Citizen participation activities will be carried out primarily by the Volunteer after approval from NYSDEC.

The CPP includes a Site Contact List (SCL), and a document repository which is to be maintained throughout the project. The SCL for this site may be modified by NYSDEC at any time. Any person interested in receiving information about this site can request to be added to the SCL. Fact Sheets will also be required at various stages of the project as defined in the approved CPP. Fact Sheets will be distributed to all persons on the SCL after approval by NYSDEC. In addition, all project-related documents will be made available in the document repositories listed in the CPP.

Please note that the Major Issues of Public Concerns section of the CPP may be revisited or updated any time during the project. Any proposed changes to the CPP must be approved by NYSDEC.

With the approval of the CPP, the requirement for the submission of progress reports as stated in Appendix A, Section XI of the Brownfield Cleanup Agreement is activated. The required content of the progress reports can be found in Section 5.7(b) of DER-10. Please populate the document repositories with hard copies of the approved CPP.

If you have any further questions, please call me at (718) 482-4992 or email me at madeleine.babick@dec.ny.gov.

Sincerely,



Madeleine Babick, EIT
Project Manager

ec: J. O'Connell, C. Maycock, G. Nam, T. Panzone – NYSDEC
S. McLaughlin, C. Budd – NYSDOH
F. Cherena, L. Dolginko – Roux
L. Shaw – Knauf Shaw LLP

NYC Environmental Protection

Vincent Sapienza, P.E.
Commissioner

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Deputy Commissioner of Sustainability

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September 30, 2019

Callista Nazaire
Director, Environmental Planning
New York City Department of Housing Preservation and Development
100 Gold Street
New York, New York 10038

Re: Brownsville Site A – Rockaway/Chester
Block 3499, Lots 15, 17, 20-24, 45-48, 50, 52-54, 56-58
CEQR # 20HPD019K

Dear Ms. Nazaire:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the March 2019 Phase I Environmental Site Assessment (Phase I), the August 2019 Phase II Environmental Site Assessment Work Plan (Phase II Work Plan) and the August 2019 Project Health and Safety Plan (HASP) prepared by Vanasse Hangen Brustlin, Inc., (VHB), on behalf of Blue Sea Development Company LLC., (applicant). It is our understanding that the applicant is seeking:

1. The disposition of 18 contiguous city-owned lots located between Pitkin Avenue and East New York Avenue in the Brownsville neighborhood of Brooklyn Community District 16;
2. A zoning map amendment from the New York City Department of City Planning to rezone the project area from a R6/C2-4 zoning district to a R7A/C2-4 zoning district;
3. A zoning text amendment to Appendix F of the Zoning Resolution to designate the project site as a Mandatory Inclusionary Housing Area;
4. Project approval and designation of the project site as an Urban Development Action Area Project.

The proposed actions would facilitate the development of a new mixed-use building containing approximately 446 affordable housing units, community facility space as well as retail space. It should be noted that the project site is currently vegetated, undeveloped and is enclosed with a chain-link fence.

The March 2019 Phase I report revealed that historical on-site and surrounding area land-uses consists of residential and commercial uses including churches, an auto garage, Wholesale Wallpaper Company, a cabinet manufacturer, a furniture upholsterer, Crossroads Juvenile Center, Colonial Electric Supply, a beauty salon, a deli and grocery store, a drug clinic, auto repair shops, as well as several residential buildings. Regulatory databases such as the New York State Department of Environmental Conservation (NYSDEC) SPILLS, Leaking Storage Tanks (LTANKS), Resource Conservation and Recovery Act Generators, and Petroleum Bulk Storage (PBS) Underground Storage Tanks (USTs) and PBS Aboveground Storage Tanks (ASTs) identified several sites in close proximity to the project site. The SPILLS database reported 13 spills within a 1/8-mile radius of the project site, the PBS USTs and the PBS ASTs databases reported 15 USTs and 21 ASTs within a 1/4-mile radius of the project site and the LTANKS database reported 29

LTANKS within a 1/2-mile radius of the project site. The Phase I also reported two Historical Cleaners within a 1/8-mile radius of the project site.

The August 2019 Phase II Work Plan proposes to install eleven soil borings, three temporary groundwater monitoring wells and four soil vapor probes at the project site. Two soil samples will be collected from each boring; one surficial sample will be taken from the 0-2 feet below grade surface (bgs) interval or just below the grass mat/asphalt pavement and one deeper sample will be taken at the anticipated excavation depth (13-feet bgs) or at refusal, whichever is encountered first. Soil and groundwater samples will be analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds via EPA Method 8270, pesticides via EPA Method 8081, polychlorinated biphenyls via EPA Method 8082 and Target Analyte List metals via EPA Methods 6010 and 7471 (filtered and unfiltered for groundwater samples). Four soil vapor samples will also be collected and analyzed for VOCs via EPA Method TO-15.

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

Phase II Work Plan

- HPD should instruct the applicant that two soil samples should be collected from each test boring, and the samples should be focused on any sections exhibiting evidence of contamination based on field screening. One surface soil sample should be collected from the upper two feet of soil (typically the 0-2 feet bgs interval) and one subsurface soil sample should be collected between 2 feet bgs and the maximum proposed excavation depth (based on visual/olfactory evidence of impacts and/or elevated soil screening readings obtained using accepted field instruments). If no evidence or elevated readings are noted during borehole advancement, the subsurface soil sample should be collected from the two foot interval below the proposed maximum excavation depth and/or the groundwater interface (whichever is encountered first).

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

DEP finds the August 2019 Phase II Work Plan and HASP for the proposed investigation acceptable, as long as the aforementioned information is incorporated into the Phase II Work Plan. HPD should inform the applicant that upon completion of the investigation activities, the applicant should submit a detailed Phase II report to DEP for review and approval. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data and conclusions, comparison of soil, groundwater, and soil vapor analytical results (i.e., NYSDEC 6 NYCRR Part 375, NYSDEC Water Quality Regulations, and New York State Department of Health's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York), updated site plans depicting sample locations, boring logs, and remedial recommendations, if warranted.

Future correspondence and submittals related to this project should include the following CEQR # **20HPD019K.** If you have any questions, you may contact Ms. Cassandra Scantlebury at (718) 595-6756.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

cc: R. Weissbard
T. Estesen
C. Scantlebury
M. Wimbish
R. Lucas
M. Juliana - HPD

APPENDIX 2
JAMAICA BAY TRACKING 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: 20HPD019K 1a. Modification ☐
2. Project Name: Brownsville Arts Center and Apartments
3. Project Description:

The Proposed Actions would facilitate the construction of a mixed-use affordable housing and community facility development, which would include 290 affordable dwelling units plus a single superintendents unit and approximately 25,507 gsf of community facility space.

4. Project Sponsor:
5. Required approvals: zoning map and text changes, UDAA/UDAAP approval, mayoral override, funding
6. Project schedule (build year and construction schedule): 2025

B. PROJECT LOCATION:

1. Street address: 13-55 Chester Street, 348-392 Rockaway Avenue
2. Tax block(s): 3499 Tax Lot(s): 15
3. Identify existing land use and zoning on the project site: vacant; R6/C2-3 and C4-3
4. Identify proposed land use and zoning on the project site: residential/com fac; R7A & R7A/C2-4
5. Identify land use of adjacent sites (include any open space): residential, vacant, public facility
6. Describe existing density on the project site and the proposed density:

Existing Condition	Proposed Condition
0.0 FAR	4.44 FAR

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): 57,013 sf
2. Will soil be removed (if so, what is the volume in cubic yards)? 79,780 cubic yards
3. Subsurface soil classification:
   (per the New York City Soil and Water Conservation Board): Flatbush-Greenbelt complex 0-3% slo
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:

   According to the Phase I, groundwater near the site is approx. 9 ft. above mean sea level (amsl). Based on the surface elevation of approximately 48-feet amsl, depth to groundwater at the site is estimated to be 39-feet below grade surface (bgs).

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 adjacent to any existing open space or natural areas.

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	36,209 sf
Pavement/walkway:	0 sf	13,349 sf
Grass/softscape:	57,013 sf	7,455 sf
Other (describe):	0 sf	0 sf
2. ***Wetland*** (regulated or non-regulated) area and classification:	N/A (no wetland area at site)	N/A
3. ***Water surface area:***	N/A (no water surface area)	N/A

4. ***Stormwater management*** (describe):

Existing – how is the site drained?

There is no existing development at the site. It is occupied by vacant land.

Proposed – describe, including any infrastructure improvements necessary off-site:

Stormwater BMPs would be required as part of the DEP site connection approval process in order to bring the proposed development into compliance with the required stormwater release rate and limit stormwater discharge from the site.

APPENDIX 3
EXECUTIVE SUMMARIES FOR
PHASE I ESA
PHASE II ESA

Phase I Environmental Site Assessment

Vacant Parcels

Rockaway Avenue and Chester Street
Brooklyn, New York

PREPARED FOR

Blue Sea Development Company, LLC
164 Main Street
Huntington, New York 11743

PREPARED BY

vhb
One Penn Plaza, Suite 715
New York, New York 10119

March 11, 2019

Executive Summary

This Phase I Environmental Site Assessment (ESA) has been prepared in accordance with procedures established by environmental professionals and in concert with the guidance of regulatory agencies and funding institutions and American Society for Testing and Materials (ASTM) Practice E1527-13, inclusive of the United States Environmental Protection Agency (USEPA) "All Appropriate Inquiry" requirement amended in the Federal Register on December 30, 2013. This Phase I ESA has been prepared to determine evidence of recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), historic recognized environmental conditions (HRECs) and business environmental risks (BERs) in connection with 18 vacant parcels located on the east side of Chester Street and the west side of Rockaway Avenue. between East New York Avenue to the north and Pitkin Avenue to the south, in the Brownsville neighborhood of the Borough of Brooklyn, City of New York, Kings County, New York (hereinafter referred to as the "subject properties"). The subject properties are identified by the street addresses and New York City (NYC) Tax Map Block and Lot Nos. noted below:

Parcel	Block	Lot	Address
1	3499	15	47 Chester Street
2	3499	17	Chester Street
3	3499	20	31 Chester Street
4	3499	21	29 Chester Street
5	3499	22	27 Chester Street
6	3499	23	Chester Street
7	3499	24	Chester Street
8	3499	45	348 Rockaway Avenue
9	3499	46	354 Rockaway Avenue
10	3499	47	356 Rockaway Avenue
11	3499	48	Rockaway Avenue
12	3499	50	376 Rockaway Avenue
13	3499	52	380 Rockaway Avenue
14	3499	53	382 Rockaway Avenue
15	3499	54	384 Rockaway Avenue
16	3499	56	388 Rockaway Avenue
17	3499	57	390 Rockaway Avenue
18	3499	58	392 Rockaway Avenue

The subject properties have a topographic elevation of approximately 48-feet above mean sea level (amsl) with a relatively flat topographic gradient, that slopes gently downward to the southeast. Review of the USGS *Water Table Elevation and Potentiometric-Surface Altitudes in the Upper Glacial, Magothy, and Lloyd Aquifers beneath Long Island, New York, April-May 2013*, indicates groundwater in the vicinity of the subject properties is approximately nine-feet above mean sea level (amsl). Based on the surface elevation of approximately 48-feet amsl, depth to groundwater beneath the subject properties is estimated to be 39-feet below grade surface (bgs). Regional groundwater is expected to flow to the south-southeast, toward Jamaica Bay.

The subject properties consist of eighteen (18) contiguous parcels that are predominantly vacant and vegetated, with the exception of Lot 45 (348 Rockaway Avenue) which is partially being utilized as an electrical supply storage yard, associated with the adjacent to the north business, Colonial Electrical Supply, located at 326 Rockaway Avenue.

The subject properties are predominantly vegetated and enclosed by a chain-link fence on all sides. Two gated entrances are secured with padlocks, one on Chester Street and the other on Rockaway Avenue. Two storage containers are located in the northeastern and southeastern portions of the subject properties. In the northern portion of the subject properties, there is a vegetated soil stockpile, a downed tree, and various refuse and garbage strewn about. Under the downed tree, at least six plastic drums were observed. The southwestern portion of the subject properties appears to be utilized as a driveway for the adjacent to the south residential structure, containing a vehicle behind a locked chain-link fence/gate.

Based on a review of historic resources including aerial photographs and Sanborn Fire Insurance maps, VHB was able to establish a history of the subject properties as early as 1907, when the subject properties were improved with various mixed-use commercial and residential structures. Between 1977 and 1986, each of the former buildings located at the subject properties were demolished and the subject properties became vacant. The subject properties have remained at a similar configuration since demolition.

Based upon the results of the results of this Phase I ESA, the following REC was identified in connection with the subject properties:

- Given the development history of the subject properties, several manufacturing uses were identified on Lot Nos. 48, 50, 54, 56, 57, and 58. Specifically, several furniture upholsterers, cabinet manufacturing, and stone cutting and manufacturing operations occupied these parcels. Former manufacturing relating to furniture upholstering has the potential to have impacted subsurface conditions based on the products utilized during these processes. Same represent a REC for the subject properties.

The following BERs were identified in association with the subject properties:

- Based upon available New York City Department of Buildings (NYCDOB) records, fuel oil burner applications were identified for several of the former buildings on Lot Nos. 17, 46, 50, and 56. As such, there is a potential for fuel oil to have been previously utilized in the former on-site buildings. The site-reconnaissance identified former building foundations and slabs across the subject properties. It is possible that any potential tanks, including basement aboveground storage tanks (ASTs), may have been removed prior to demolition. However, VHB was unable to verify the existence of any potential petroleum storage tanks at the subject property based on the lack of tank documentation including registrations and municipal records. As such, the potential presence of petroleum storage tanks at the subject properties represents a BER.

- Based on a review of historic Sanborn Fire Insurance maps, historic aerial photographs, and NYCDOB records, the subject properties were improved with residential and commercial structures since at least 1907 until the mid-1980s, when all structures were demolished. During the site reconnaissance, VHB observed evidence of several former building foundations. This would indicate that at least some of the former buildings were demolished into their basements. Given the history of the subject properties and lack of demolition records, the presence of urban fill material can be expected. Although the presence of urban fill material is typical in densely developed portions of New York City, it should be dealt with accordingly prior to any potential redevelopment. The likely presence of fill materials beneath the subject properties is considered a BER.

- Although the subject properties are currently vacant and undeveloped, several of the former structures were listed in the NYCDOB records database as containing elevators. Given that the subject properties have been developed with various commercial and residential structures since at least 1907, the ages of the former on-site buildings would indicate the potential for building materials to contain polychlorinated biphenyls (PCBs). As demolition of all on-site buildings occurred between 1972 and 1984, it cannot be verified whether any PCB containing materials were properly disposed prior to demolition. Therefore, based on the potential presence of PCBs in demolition debris, same is considered a BER.

- A visual inspection of potential painted surfaces was conducted during the site reconnaissance. Although, no painted surfaces were observed, based upon the ages of the former on-site buildings and lack of demolition records, there is a potential for lead-based paint (LBP) to be present in demolition debris. Same is considered a BER for the subject properties.

- No suspect asbestos-containing materials (ACM) was observed during the visual inspections. However, given the age of the former on-site buildings, the demolition debris could potentially contain roofing materials or insulation that

have the potential to be considered ACM. Same is considered a BER for the subject properties.

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Vacant Parcels

Rockaway Avenue & Chester Street

Brooklyn, New York

PREPARED FOR

Blue Sea Development Company, LLC
164 Main Street
Huntington, New York 11743

PREPARED BY

One Penn Plaza, Suite 715
New York, New York 10119

November 12, 2020

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One Penn Plaza, Suite 715
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November 12, 2020

Executive Summary

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) has prepared this report to document the results of a Phase II Environmental Site Assessment (ESA) performed in October 2020 in connection with eighteen (18) vacant parcels located on the east side of Chester Street and the west side of Rockaway Avenue, between East New York Avenue to the north and Pitkin Avenue to the south, in the Brownsville neighborhood of the Borough of Brooklyn, City and State of New York.

The subsurface investigation associated with this Phase II ESA was performed in accordance with the Work Plan and Health and Safety Plan (HASP) approved by the New York City Department of Environmental Protection (NYCDEP) in correspondence dated September 20, 2019 issued to the lead agency, the New York City Department of Housing Preservation and Development (NYCHPD). This Phase II ESA was prepared in connection with the redevelopment of the Site with a mixed-use building containing approximately 446 affordable housing units, community facility space as well as retail space.

The following Site conditions below were identified as a result of the subsurface investigation.

Soils

There were no volatile organic compounds (VOCs) detected in soils above New York State Department of Environmental Conservation (NYSDEC) Part 375 Track One Unrestricted Use Soil Cleanup Objectives (UUSCOs) with the exception of xylenes, which were detected in one surficial soil sample, SB-02 (0-2'). There were no VOCs detected above NYSDEC Part 375 Track Two Restricted-Use Restricted-Residential Soil Cleanup Objectives (RRSCOs). The

detection of xylenes in one soil sample can be considered an isolated occurrence due to the lack of any additional VOC detections above regulatory standards throughout the Site.

Semi-volatile organic compounds (SVOCs) were detected in the majority of the soil borings; primarily in shallow and mid-range soil samples. SVOC exceedances above NYSDEC Part 375 Track Two RRSCOs were detected in SB-01 (0-2'), SB-02 (5-7'), SB-03 (5-7'), SB-05 (0-2'), SB-06 (0-2'), SB-06 (2-4'), SB-07 (0-2') and SB-10 (0-2'). Additional SVOCs were also detected in those respective samples that exceeded NYSDEC Part 375 Track One UUUSCOs but below Track Two RRSCOs. The widespread detection of the SVOCs benzo(a)anthracene, benzo(a)pyrene benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene are typical compounds found in historic/urban fill materials from previous site development. There were no detections of SVOCs above UUSCOs in the underlying native sand samples.

Metals were detected in several soil borings above NYSDEC Part 375 Track Two RRSCOs. These soil samples include SB-03 (5-7') (arsenic and lead) and SB-06 (2-4') (barium and lead). Additional metals were detected that exceeded NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. These samples included SB-01 (0-2') (copper, lead, mercury and zinc), SB-02 (15-17') (mercury), SB-03 (0-2') (lead and zinc), SB-03 (5-7') (copper and zinc), SB-05 (0-2') (copper, lead, mercury and zinc), SB-06 (0-2') (barium, lead, mercury and zinc), SB-06 (2-4') (copper, mercury and zinc), SB-07 (0-2') (lead), SB-09 (0-2') (barium, lead, mercury and zinc) and SB-11 (0-2') (lead and zinc). The presence of metals in surficial and mid-range soil samples can likely be attributed to the presence of contaminated historic/urban fill that was observed throughout the majority of the Site. Only one sample collected from the underlying native sands had a detection of metals above UUSCOs – mercury at SB-02 (15-17').

There were no pesticides detected above NYSDEC Part 375 Track Two RRSCOs. However, several soil samples, mainly surficial and mid-range, were identified with concentrations of pesticides that exceed NYSDEC Part 375 Track One UUSCOs. These soil samples include SB-01 (0-2') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-02 (0-2') (4,4'-DDE and 4,4'-DDT), SB-02 (5-7') (4,4'-DDT), SB-03 (0-2') (4,4'-DDE, 4,4'-DDT and dieldrin), SB-03 (5-7') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-05 (0-2') (4,4'-DDT), SB-06 (0-2') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-06 (2-4') (4,4'-DDE, 4,4'-DDT and dieldrin), SB-08 (0-2') (4,4'-DDT) and SB-10 (0-2') (4,4'-DDT). The presence of pesticides can likely be attributed to contaminated urban/historic fill that was observed throughout the majority of the Site. Pesticides were not detected above the UUSCOs in any of the underlying native sand soil samples.

There were no concentrations of polychlorinated biphenyls (PCBs) that exceeded NYSDEC Part 375 Track Two RRSCOs. However, total PCB concentrations in SB-01 (0-2') and SB-10 (4-6') were detected at concentrations that exceeded the NYSDEC Part 375 Track One UUSCO.

VHB recommends that soils within the project that will be excavated during site development be considered as *impaired* or *impacted*. Soils containing UUSCO and RRSCO exceedances within the redevelopment areas should properly characterized prior to removal from the Site. Contaminated soils should be properly manifested and transported to an appropriate disposal facility capable of accepting soils impacted with VOCs, SVOCs, metals, pesticides and PCBs. Both the shallow and deeper soils horizons sampled during this investigation are proposed to be excavated as part of the future Site redevelopment. As an alternative, soils could also be transported to an alternate location that is capable of accepting and utilizing impacted backfill. These uses include may commercial, industrial and beneficial use facilities.

Groundwater

Based upon the results of the groundwater sampling, there were no pesticides or PCBs detected above NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs). One VOC, tetrachloroethylene (PCE), was detected at a concentration of 5.8 micrograms per liter (µg/L) in GW-03, which exceeds the NYSDEC AWQSGV of 5 µg/L. One SVOC, benzo(b)fluoranthene, was detected but below the limit of quantitation in GW-02 at an estimated concentration 0.02 µg/L, which exceeds the NYSDEC AWQSGV of 0.002 mµg/L. No additional VOCs or SVOCs were detected above NYSDEC AWQSGVs.

PCE was not detected in any of the on-Site groundwater or soil samples. As such, the detection of PCE in the off-Site groundwater monitoring well GW-03 is not likely related to current or former Site uses, but rather an off-Site source. The presence of the permanent off-Site groundwater monitoring well GW-03 suggests that it is used to monitor an off-site environmental or geotechnical condition.

Elevated total concentrations of metals could be attributed to high turbidity. Dissolved concentrations of manganese that exceed NYSDEC AWQSGV were detected in GW-01 and GW-02. The presence of manganese in groundwater is typical in New York City and can often be attributed to the dissolution of from surrounding minerals and leaching from soil. Manganese is also naturally occurring in groundwater that has little oxygen and where groundwater flow is considered slow. Dissolved concentrations of sodium were detected in all three groundwater samples (GW-01, GW-02 and GW-03) that exceeded the NYSDEC AWQSGV. The presence of dissolved sodium is also typical in New York City and can be attributed to the Site's proximity to the coast, as well as the leaching of dissolved rock salt utilized for snow melting in urban areas. Further, thallium was detected at an estimated dissolve concentration of 1.68 µg/L, which exceeds the NYSDEC AWQSGV of 0.5 µg/L in GW-03. There is no correlation between soil sample results and the presence of dissolved thallium detected in GW-03. The presence of thallium is typical of ore processing and manufacturing uses. Based upon the known historic use of the Site, it is likely the detection of thallium can be attributed to an off-Site source.

Soil Vapor

Based upon the results of the soil vapor sampling, VOCs were detected at the screening depths within the project area. VOCs included 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3-butadiene, 2,2,4-trimethylpentane, 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, chloromethane, cyclohexane, dichlorodifluoromethane, ethyl alcohol, ethylbenzene, heptane, isopropyl alcohol, n-hexane, xylenes, tert-butyl-alcohol, tetrahydrofuran, toluene and trichlorofluoromethane. Additional chlorinated VOCs subject to the New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air matrices were detected including 111-TCA (SV-02 and SV-04), methylene chloride (SV-02, SV-03 and SV-04) and PCE (SV-02). Each of the compounds subject to NYSDOH matrices were subject to NYSDOH Soil Vapor/Indoor Air Matrix B and the maximum detection was reported at 9.88 micrograms per cubic meter ($\mu g/m^3$). Although no sub-slab soil vapor samples or indoor air samples were collected, the soil vapor results were compared to the NYSDOH Soil Vapor/Indoor Air Matrix B, NYSDOH recommends "No Further Action" for sub-slab concentrations less than 100 $\mu g/m^3$.

Given the presence of petroleum- and refrigerant-related VOCs in the soil vapor beneath the Site, as well as the presence of chlorinated VOCs subject to the NYSDOH Soil Vapor/Indoor Air Matrices including 1,1,1-Trichloroethane (111-TCA), PCE and methylene chloride, VHB recommends that soil vapor beneath the Site be considered as *impaired* or slightly *impacted*. The VOCs found in soil vapor at the Site are typical throughout New York City including the borough of the Brooklyn, due to the extensive and dense development history. Given these conditions, VHB believes that no further action would be required with respect to soil vapor at this time. Furthermore, it is expected that the future development at the Site will include a building slab that will act as a barrier to protect future Site occupants from the impacted soil vapor beneath the Site, or as a conservative measure, a soil vapor barrier could be incorporated into the proposed Site development.