Chapter 5: Open Space

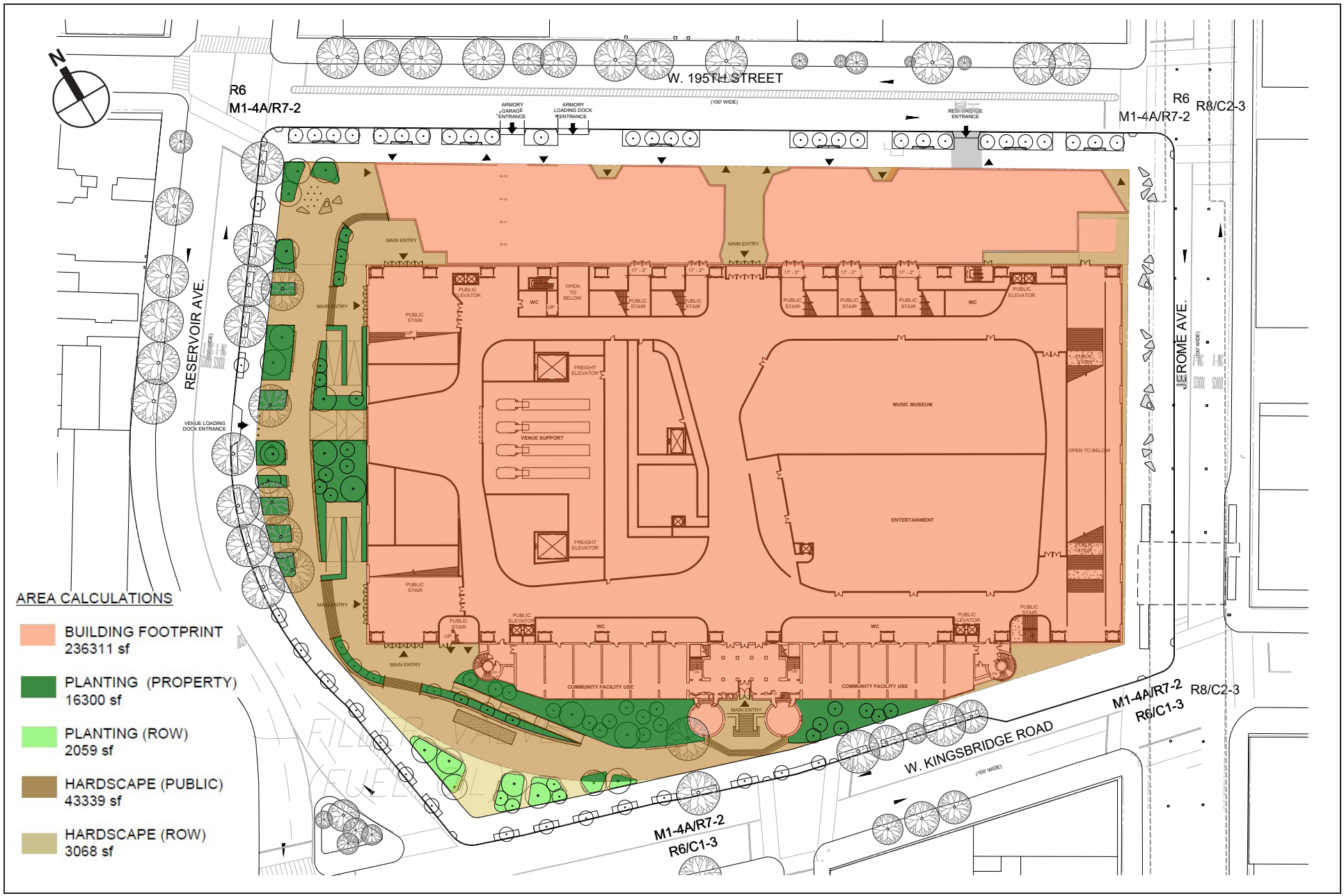
A. INTRODUCTION

This chapter assesses the potential impacts of the Proposed Actions on open space resources. Open space is defined in the 2021 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly- or privately owned land that is available for leisure, play, or sport or serves to protect and enhance the natural environment. An open space assessment should be conducted if a project would have a direct effect on open space, such as eliminating or altering a publicly accessible open space, or an indirect effect, such as when an increase in population could overtax the capacity of an area's existing open spaces to serve the future population. Direct effects could also include a proposed action's effects on open spaces due to increased noise, air pollutant emissions, odor, or shadows.

As described in detail in Chapter 1, "Project Description," the Proposed Project seeks to reuse and redevelop a portion of Block 3247 in the Kingsbridge Heights neighborhood of the Bronx, NY. The Project Site includes the Kingsbridge Armory Site at 1 West Kingsbridge Road, which is occupied by the Kingsbridge Armory, and the New York National Guard Site at 10 West 195th Street. The Proposed Project includes the adaptive reuse of the vacant, approximately 588,765-gross-square-foot (gsf) Kingsbridge Armory to provide up to approximately 735,800 gsf of new uses, including a mix of community facility and cultural space, light manufacturing space, commercial office space, and a 17,000-person-capacity live event venue, and other entertainment uses, along with parking and loading docks. The National Guard Site would be redeveloped with a new residential building (up to approximately 494,500 gsf) containing 500 new permanently affordable dwelling units (DUs) and approximately 14,400 gsf of ground floor retail, replacing a one-story garage and a two-story office building. The Proposed Project would include a total of up to approximately 1,230,300 gsf of development at the Project Site.

The Proposed Project would create approximately 64,800 square feet (sf) (1.49 acres)[1] of new publicly accessible open space on the Project Site, all of which is conservatively considered in this analysis to be passive open space (**Figure 5-1**). However, portions of the new open space would be able to accommodate active outdoor pursuits such as jogging, fitness classes (e.g., salsa, yoga) or pop-up recreational activities such as ping pong tournaments and pickle ball. The new open space would be largely concentrated in the areas southwest of the Armory along Reservoir Avenue and West Kingsbridge Road but would also include areas along the west side of the Armory along Reservoir Avenue. The new open space would include approximately 5,100 sf that is currently within the

[1] The approximately 5,100-sf area is currently a paved curb extension that is used as open and publicly accessible space. The Proposed Project intends to keep this area open and accessible, improving this area with landscaping. However, this is area is owned by the New York City Department of Transportation (DOT) and is not under the Applicants' control or ownership.



Proposed Open Space

KINGSBRIDGE ARMORY REDEVELOPMENT

Figure 5-1

DOT right-of-way (ROW) but is closed to vehicular traffic and functions as an informal sidewalk extension. The design and maintenance of this portion of the open space is being developed in coordination with DOT. The new open space—absent the DOT ROW area—would comprise more than 20 percent of the overall Project Site. The open space is being designed to maximize the Project Site's optimal location by creating a flexible plaza that can support community interests while also providing varied programming to complement the new uses at the Armory. The open space would include landscaping, planted areas, paved public plazas, and seating areas.

The Proposed Actions would result in an incremental increase of up to approximately 649 workers and approximately 1,395 residents, as compared to future conditions absent the Proposed Actions—resulting in additional demand for open space in the surrounding area. Therefore, in accordance with *CEQR Technical Manual* guidance, residential and non-residential open space assessments were conducted to determine whether the Proposed Actions would result in a significant adverse open space impact.

PRINCIPAL CONCLUSIONS

The Proposed Actions would not result in a significant adverse indirect impact to open space under operational conditions. According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse impact on open space resources if (a) there would be direct displacement/alteration of existing publicly accessible open space within the study area that would have a significant adverse effect on existing users; or (b) it would reduce the open space ratio and consequently result in the overburdening of existing facilities or further exacerbation of a deficiency in open space. The Proposed Project would not have a direct effect on any open space. In terms of indirect effects, within the ½-mile study area the Project Site there would be an increase in the total and passive open space ratios, and a 1.66 percent decrease in the active open space ratio. Within the ¼-mile study area, the Proposed Project would result in a decrease in the passive open space ratio for the combined non-residential and residential study area, but the passive open space ratio would remain well above the City's goal.

The Proposed Project would result in the development of new open space on the Project Site. The open space area that would be improved with the Proposed Project would total approximately 1.49 acres of passive open space on land that is currently vacant and inaccessible to the public. While the open space analysis assumes that all of the new open space would be passive, portions would be able to accommodate active outdoor pursuits, such as jogging, fitness classes (e.g., salsa, yoga) or pop-up recreational activities such as ping pong tournaments and pickle ball.

In addition, the Proposed Project would include approximately 60,800 sf of active recreation space inside the Armory that would be utilized by local schools and also made available to the general public at certain times. The space would be designed to accommodate a variety of sports. As the details of the Proposed Project's design and operation progress, the days/hours that the space would be publicly accessible would be determined.

The proposed residential building is being designed to include a fitness center accessible to tenants. The on-site space, which would be approximately 2,000 gsf, would work toward addressing the active recreational needs of the new residential population generated by the Proposed Project.

The study area is also near a regional park that could augment the existing open space in the study area—the 718-acre Bronx Park, which features abundant passive and active open space including the Bronx Zoo, the New York Botanical Gardens, numerous playgrounds, bicycle paths, baseball diamonds, tennis and basketball courts and football and soccer fields.

Overall, the Proposed Project would not result in a significant adverse open space impact.

B. METHODOLOGY

DIRECT EFFECTS

According to the *CEQR Technical Manual*, a project would directly affect open space conditions if it causes the loss of publicly accessible open space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or results in increased noise or air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of publicly accessible open space. Additionally, a project can directly affect an open space by enhancing its design or increasing its accessibility to the public. No open space resources would be physically displaced as a result of the Proposed Actions. This chapter uses information from Chapters 6, "Shadows," 14, "Air Quality," and 16, "Noise," to determine whether the Proposed Actions could have the potential to directly affect any open spaces that are in close proximity to the Project Site.

INDIRECT EFFECTS

PRELIMINARY ASSESSMENT

Following the methodology of the *CEQR Technical Manual*, indirect open space effects may occur when a project would add enough population, either residents or workers, to noticeably diminish the ability of an area's open space to serve the future population. The preliminary screening threshold to determine if an assessment of indirect effects is warranted is if a project would introduce more than 200 residents or 500 workers to an area. The Proposed Actions are anticipated to introduce an incremental increase of approximately 1,395 residents and 649 workers to the area by the 2032 analysis year. Since the Proposed Actions would introduce more than 200 residents and 500 workers, a preliminary assessment of indirect effects is warranted.

DETAILED ANALYSIS FRAMEWORK

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 within the study area and compares this ratio with open space adequacy guidelines set forth by the *CEQR Technical Manual*. The qualitative assessment examines other factors that may 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 assessment considers:

- Characteristics of the residents likely to utilize study area open spaces. To determine the number of residents in the study area, 2020 U.S. Census data and New York City Department of City Planning (DCP) Housing Database has been compiled for census tracts composing the residential open space study area.
- An inventory of all publicly accessible passive and active recreational facilities in the open space study area.
- An assessment of the quantitative ratio of open space in the study area, conducted by computing the ratio of open space acreage to the residential population in the study area and comparing this open space ratio with open space adequacy guidelines.
- An assessment of expected changes in future levels of open space supply and demand in the 2032 analysis year both in the No Action and With Action conditions. Open space adequacy in the No Action condition is based on planned development projects within the open space study area. To estimate the residential population expected in the study area in the No Action condition, an average household size for the Bronx Community District 7 of 2.79 persons was applied to the number of new housing units expected in the residential study area. There are no new open space or recreational facilities that are anticipated to be operational by the analysis year.
- Open space ratios are determined for both the No Action and With Action conditions and compared to determine potential changes to open space adequacy in the 2032 analysis year.
- An evaluation of qualitative factors affecting open space use, including weekend and weekday utilization and the condition of facility equipment. Utilization level is assessed by field observation and is defined in Chapter 7 of the *CEQR Technical Manual*: low utilization is considered 25 percent capacity utilization or less at the peak hour, meaning that much of the space, facility, or equipment is available for use; moderate utilization is considered 25 to 75 percent capacity utilization at peak hour, meaning that some passive spaces and/or active facilities are available for use; and heavy utilization is considered 75 percent or greater capacity utilization at peak hours, meaning that few or none of the open space facilities are available for use.
- A determination of the adequacy of open spaces within the open space study area in the Existing, No Action, and With Action conditions. Adequacy is determined based on both quantitative and qualitative features of open space resources and is defined in Chapter 7 of the *CEQR Technical Manual*.

The following sections describe the specific methodology for the analysis of indirect effects on open space, including establishing the study area, identifying open space user populations, creating an inventory of open space resources, and assessing the adequacy of open space resources.

STUDY AREAS

The *CEQR Technical Manual* recommends establishing study area boundaries as the first step in an open space analysis. In accordance with the guidance contained in the *CEQR Technical Manual*, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources, which differs by user.

Residential Study Area (½-mile)

Residents are assumed to walk approximately 10 minutes, or ½-mile to an open space. Therefore, as recommended in the *CEQR Technical Manual*, a ½-mile residential study area is used to analyze the Proposed Actions' indirect effects on open space. Consistent with CEQR guidance, the study area was adjusted to include all census tracts with at least 50 percent of their area within a ½-mile of the Project Site. The residential study area includes Census Tracts 237.02, 261, 263, 265, 267.01, 267.02, 273, 399.01, 401, 403.03, 403.04, 405.01, 405.02, 407,01.

Combined Non-Residential and Residential Study Area (¼-mile)

Workers and other non-residential populations (such as students) typically use passive open spaces within a short walking distance of their workplaces. Residents are more likely to travel farther to reach parks and recreational facilities, and they use both passive and active neighborhood open spaces. Workers and visitors are assumed to travel up to ¼-mile to use open space and recreation areas. Therefore, as recommended in the *CEQR Technical Manual*, a ¼-mile study area is used to analyze the Proposed Action's potential indirect effects on open space, taking into account both residential and non-residential populations. The combined study area includes Census Tracts 265, 267.01, 267.02, 401, 403.02, 403.03, 403.04.

OPEN SPACE USER POPULATIONS

Existing Conditions

Data on the existing residential population within the study area was compiled from the 2020 U.S. Census and the DCP Housing Database for the census tracts that comprise the residential study area. The non-residential worker population estimates were compiled from the U.S. Census Longitudinal Employer-Household Dynamics (LEHD) via OnTheMap for the census tracts that comprise the non-residential ¼-mile study area.

No Action Condition

The future residential population was projected by multiplying the number of new housing units planned for the residential study area in the No Action condition by the average household size of 2.79 people, and adding it to the existing residential population.

With Action Condition

The future residential population in the With Action condition was determined by adding the number of residents anticipated from the Proposed Actions to the population in the 2032 No Action condition.

INVENTORY OF OPEN SPACE RESOURCES

Publicly accessible open spaces and recreational facilities located within the study area were inventoried using information from the New York City Department of Parks and Recreation (NYC Parks). The *CEQR Technical Manual* defines publicly accessible open space as open space that is regularly open to the public during designated daily periods. Open spaces that do not fit this definition because they are not available to the public on a regular basis or are available only to a limited set of users are considered private open space and are not included in the quantitative open space analysis.

The character, condition, and use of the publicly accessible open spaces and recreational facilities within the study area were determined based on field observations made in January 2025 and supplemented with online research and recent environmental review documents. Active and passive amenities were noted at each open space. Active facilities are intended for vigorous activities, such as jogging, field sports, and children's active play. Such facilities might include basketball and handball courts, jogging paths, ball fields, and playground equipment. Passive facilities encourage such activities as strolling, reading, sunbathing, and people watching. Passive open spaces are characterized by picnic areas, walking paths, seating area, or gardens. Certain areas, such as lawns or public esplanades, can serve as both active and passive open spaces. The analysis also accounts for any open spaces within the study area that will be created in the No Action or With Action condition.

ADEQUACY OF OPEN SPACE RESOURCES

The adequacy of open space in the study area is quantitatively assessed using a ratio of usable open space acreage to the study area population; this is referred to as the open space ratio. To assess the adequacy of open space resources, open space ratios are compared with planning goals set by the City for the residential population as described in the *CEQR Technical Manual*.

For residential populations, the *CEQR Technical Manual* guideline for the citywide median ratio at the New York City Community District (CD) level is 1.50 acres of open space per 1,000 residents. In addition to this median ratio, the City has set a planning goal of 2.50 acres per 1,000 residents, which includes 0.50 acres of passive space and 2.00 acres of active space per 1,000 residents. This planning goal is consequently used as an optimal benchmark for residential populations. It should be noted that the City's open space planning goals are often not feasible for many areas of the City, and they are not considered a threshold for a significant adverse effect.

IMPACT ASSESSMENT

The assessment of the potential for significant adverse impacts on open space is both quantitative and qualitative. Quantitatively, Table 7-5 of the *CEQR Technical Manual* provides percentage change guidance to determine a possible open space impact. In addition to the quantitative factors cited above, the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts, including the availability of nearby destination open space, the beneficial effects of new open space resources provided by a project, or other factors. It is recognized that the open space ratios of the City guidelines presented are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks that indicate how well an area is served by open space.

When assessing the effects of a change in the open space ratio, the assessment should consider the balance of passive and active open space resources appropriate to support the affected population and the condition of existing open spaces within the study area. Determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment. Qualitative considerations—such as the distribution of open space, the distance to regional parks, the connectivity of

open space, and any additional open space provided by the project—should be considered in a determination of significance.

NYC PARKS WALK TO A PARK INITIATIVE

New York City, as part of OneNYC 2050—Building a Strong and Fair City, has put forth a goal that calls for 85 percent of New York City residents to be living within a walking distance of a park by 2030. To help the City reach this goal, NYC Parks has a Walk to a Park initiative that focuses on increasing access to parks and open space in areas of the City where residents live further than a walk to a park. The Walk to a Park Service Area, which shows areas of the City that are within a walking distance of a park, is shown on **Figure 5-2**. Areas that are not covered by a Walk to a Park Service Area are considered "walk gaps"—i.e., areas of the City that are not within a walking distance to a park.

According to the 2021 *CEQR Technical Manual*, as part of the preliminary assessment for open space, a project should be reviewed to determine if it is located within a Walk to a Park Service Area. For project sites that are located outside of a Walk to a Park Service Area (i.e., located in a known walk gap area) there may be a need for a detailed analysis to be performed to determine if the project may further exacerbate a condition of residents living in areas of the City with inadequate park access, potentially leading to a significant impact.

C. EXISTING CONDITIONS

STUDY AREA POPULATION

RESIDENTIAL STUDY AREA (½-MILE)

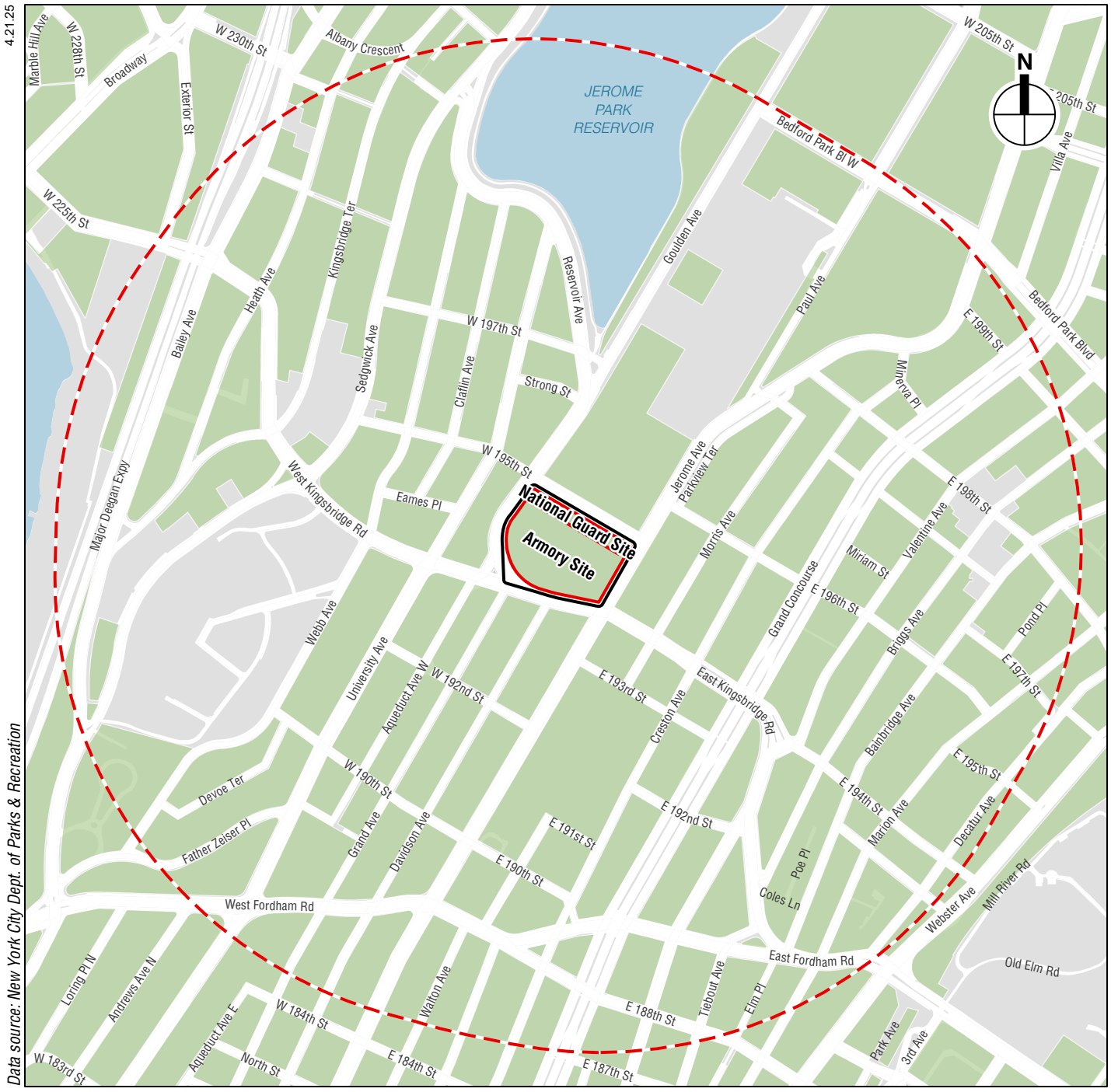
As presented in **Table 5-1**, based on the 2020 Census population, plus population from the housing units constructed since 2020, the residential study area has a total population of 77,733.

COMBINED NON-RESIDENTIAL AND RESIDENTIAL STUDY AREA (¼ MILE)

As shown in **Table 5-2**, based on the 2022 LEHD Origin-Destination Employment Statistics (LODES), the existing non-residential population within the ¼-mile study area is 2,928. Additionally, the ¼-mile study area has a residential population of 33,683.

TOTAL USER POPULATION

Within the combined non-residential and residential ¼-mile study area, the total population is estimated at 36,611 (see **Table 5-2**). As noted above, although this analysis conservatively assumes that the residents and employees are separate populations, it is likely that some of the residents live near their workplace or work from home. As a result, there is likely to be some double-counting of the daily user population in which residential and non-residential populations overlap, resulting in a more conservative analysis.



Walk to a Park Service Area

KINGSBRIDGE ARMORY REDEVELOPMENT

Figure 5-2

Table 5-1
Residential Population within the Residential Study Area

Geography	Population
Census Tract 237.02	2,060
Census Tract 261	6,788
Census Tract 263	7,166
Census Tract 265	3,983
Census Tract 267.01	7,022
Census Tract 267.02	7,939
Census Tract 273	1,179
Census Tract 273.02	5,254
Census Tract 399.01	5,009
Census Tract 401	4,197
Census Tract 403.02	4,843
Census Tract 403.03	4,125
Census Tract 403.04	4,385
Census Tract 405.01	7,320
Census Tract 405.02	3,235
Census Tract 407.01	2,060
2020 Census Subtotal	*74,505*
Residential Population Growth Since 2020	*3,228*
Total Residential Population	**77,733**
Source: 2020 Census, U.S. Census Bureau; DCP Housing Database (2020-2024).	

Table 5-2
Total Population Non-Residential Study Area

Geography	Population
Total Residential Population	33,683
Total Worker Population	2,928
¼-Mile Study Area Total Population	36,611
Sources: 2020 Census, U.S. Census Bureau; 2020-2024 housing construction from DCP's Housing Database (DCP Housing Database (2020-2024)); U.S. Census Bureau's Housing Center for Economic Studies, LEHD Origin-Destination Employment Statistics (2022).	

OPEN SPACE INVENTORY

There are nine quantitatively assessed publicly accessible open spaces within the ½-mile study area, providing a total of 27.08 acres, of which 12.05 acres are active recreation and 15.03 acres are passive recreation (see **Table 5-3**). Furthermore, there is one qualitative resource within the study area.

Table 5-3
Study Area Open Space Inventory

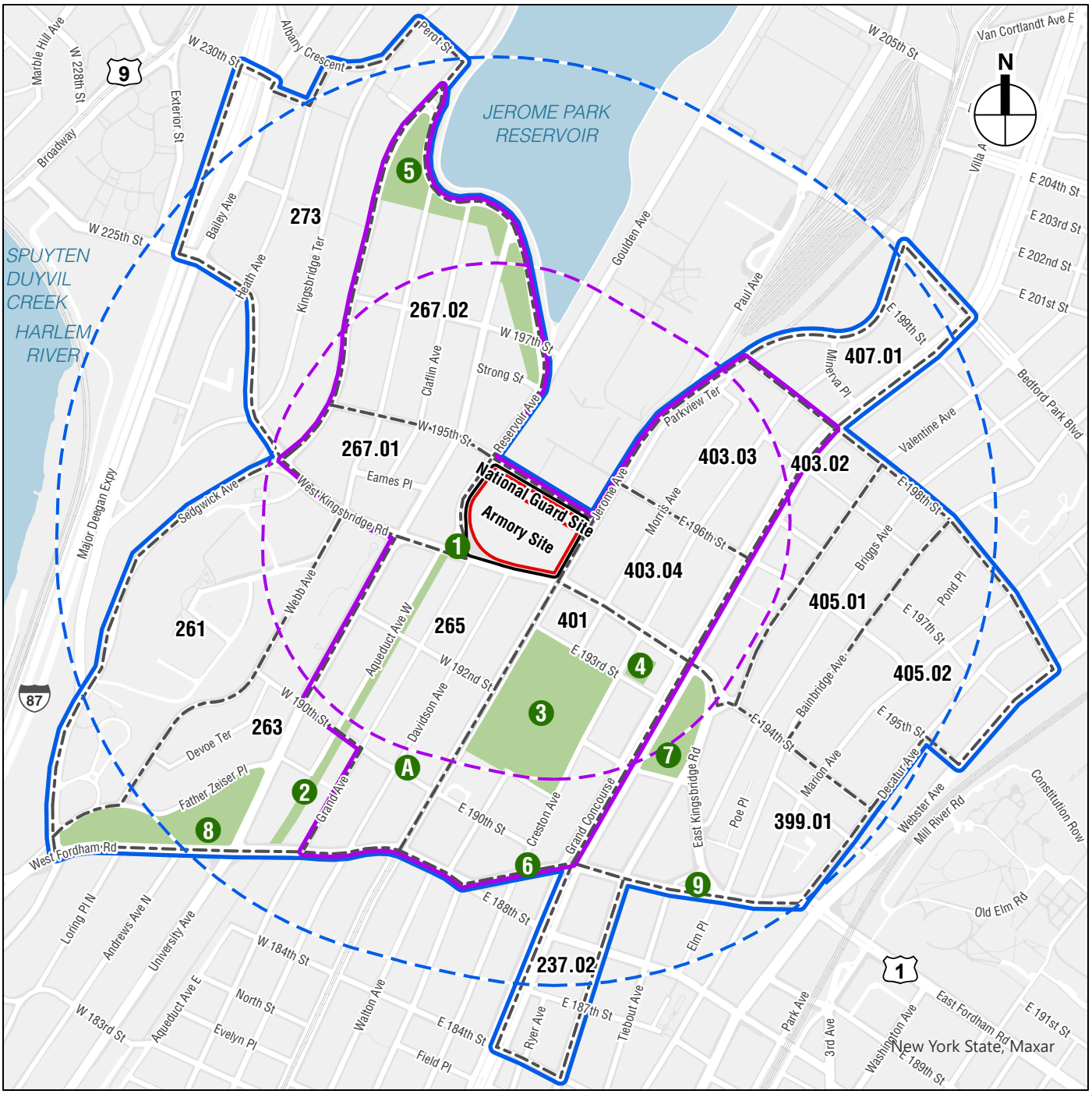
Map No.[1]	Name	Location	Owner	Total Acres	Active	Passive	Amenities	Condition/Utilization[4]
Open Spaces within the Combined Non-Residential and Residential 1/4-mile Study Area								
1	Barnhill Square	2690 Reservoir Avenue	NYC Parks	0.01	0.00	0.01	Triangle Plaza with seating and planted area	Good/Moderate
2	Aqueduct Walk	Aqueduct Ave. W. bet. W. Fordham Rd. and W. Kingsbridge Rd.	NYC Parks	1.34	0.00	1.34	Pedestrian path with seating	Good/Moderate
3	St. James Park	2550 Jerome Avenue	NYC Parks	11.39	2.28	9.11	Large open green space, pedestrian paths, seating, playground, restrooms, tennis courts, soccer fields, basketball courts, dog park, and connected to a recreation center	Excellent/High
4	P.S. 246 Poe Center	2641 Grand Concourse	DOE	0.52	0.31	0.21	Schoolyard playground	Excellent/Low
5	Washington's Walk	2890 Sedgwick Avenue	NYC Parks	4.64	2.32	2.32	Pedestrian path, seating, picnic areas, basketball courts, playgrounds, restrooms	Good/Low
6	Muller Triangle	E. Fordham Rd., Creston Ave., E. 190 St.	NYC Parks	0.04	0	0.04	Paved area with seating and planters	Good/Moderate
¼-mile Study Area Total				17.94	4.91	13.03		
Open Spaces within the Residential 1/2-mile Study Area								
2*	Aqueduct Walk	Aqueduct Ave. W. bet. W. Fordham Rd. and W. Kingsbridge Rd.	NYC Parks	2.56	0.00	2.56	Pedestrian path with seating	Good/Moderate
7	Poe Park	2640 Grand Concourse	NYC Parks	2.33	0.12	2.21	Visitor Center, playground, pedestrian paths, seating, paved plaza with Rotunda, Poe cottage	Good/Moderate
8	Devoe Park	101 West Fordham Road	NYC Parks	5.44	1.36	4.08	Large green spaces, pedestrian paths, seating, basketball courts, and playgrounds	Good/Moderate
9	Bryan Park	321 East Fordham Road	NYC Parks	0.15	0	0.15	Paved area with seating and planters	Fair/Moderate
½-mile Study Area Total				**27.08**	**6.39**	**20.70**		

Notes:
[1] See **Figure 5-3** for open space resources.
[2] A field survey was conducted in January 2025.
* Aqueduct Walk is a linear resource that extends through both the 1/2- and 1/4-mile study areas.
DOE = New York City Department of Education
Sources: NYC Parks; ArcGIS World Imagery

The largest open space in the study area is St. James Park, which provides approximately 11.39 acres of open space, of which approximately 2.28 acres are used for active recreation (20 percent) and 9.11 acres are used for passive recreation (80 percent). St. James Park active open space amenities include a children's playground, tennis courts, soccer fields, basketball courts, dog run, large open green space, as well as a recreation center that is open to the public. Passive recreational amenities include seating areas, planted landscaping, and benches. The park is in excellent condition and experiences high utilization by children and adults.

Devoe Park provides approximately 4.08 acres of passive open space and 1.36 acres of active open space, for a combined total of 5.44 acres of open space. Devoe Park active open space amenities include large open green spaces, basketball courts, and playgrounds. Passive recreational amenities include seating areas, planted landscaping, picnic areas and pedestrian paths throughout the park. The park is in excellent condition and experiences moderate-high utilization by children and adults.

4.21.25



Project Site

Armory and National Guard Sites

1/4-mile Perimeter

Non Residential Study Area

1/2-mile Perimeter

Residential Study Area

100.1 *Census Tracts*

1 *Open Space Resources*

Open Space

KINGSBRIDGE ARMORY REDEVELOPMENT

Figure 5-3

Aqueduct Walk is an approximately 1.5-mile-long linear park, with a total of 4.93 acres. However, only a portion of the total park acreage is within the study area. The portion of the park within the ¼-mile study area offers approximately 1.34 acres of open space and the portion within the ½-mile study area includes 2.56 acres of open space. All of the open space within the study area is considered passive open space and park amenities include a linear pedestrian path, planted areas, and benches. The park is in good condition and experiences moderate usage by primarily adults walking through the neighborhood.

Washington's Walk is an approximately 4.64-acre park. The park features approximately 2.32 acres of active recreation amenities, including basketball courts, and playgrounds. The park also features 2.32 acres of passive recreation amenities, including pedestrian paths, picnic areas, and seating throughout the park. The southeastern portion of the park, between west 197th Street and Strong Street, known as the Strong Street playground, is currently under construction. Construction is expected to be completed in Spring 2025 and includes 0.36 acres of active open space.

Poe Park is a 2.33-acre park dedicated to Edgar Allen Poe. The park features the historic Poe Cottage. The park also features approximately 0.12 acres of active recreation resources including a large, paved plaza and playground. The park offers approximately 2.21 acres of passive recreation resources including pedestrian paths, seating, and a visitor's center.

Remaining open spaces within the study area are approximately 1 acre or less in size and are described further in **Table 5-3**. They include local playgrounds, and paved seating areas located at busy intersections. These open spaces range in condition from fair to excellent and range in utilization from low to moderate. The more passive resources primarily accommodate adults while resources with more active space, such as the schoolyard playground at P.S. 246, accommodate children with an abundance of playground equipment.

ASSESSMENT OF OPEN SPACE ADEQUACY

QUANTITATIVE ASSESSMENT

Residential Study Area Study (½ mile)

The ½-mile residential study area has a total open space ratio of 0.35 acres per 1,000 residents, with an active open space ratio of 0.08 acres per 1,000 residents, and a passive open space ratio of 0.27 acres per 1,000 residents (see **Table 5-4**). The total open space ratio is lower than the Citywide median of 1.50 acres per 1,000 residents and the City's planning goal of 2.50 acres of total open space. Similarly, the passive open space ratio is lower than the City's planning goal of 2.00 acres per 1,000 residents, and the active open space ratio is lower than the City's planning goal of 0.50 acres per 1,000 residents.

Table 5-4
Existing Conditions: Adequacy of Open Space Resources—
Residenital Study Area (½ mile)

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	77,733	27.08	6.39	20.70	0.35	0.08	0.27	2.50	2.00	0.50
Source: 2020 U.S. Census; NYC Parks; AKRF field survey, January 2025										

Combined Non-Residential and Residential Study Area (¼-mile)

The ¼-mile study area has a total of 13.03 acres of passive open space. As noted above, non-residential populations typically use passive open space. With an estimated worker population of 2,928, the study area has a passive open space ratio of 4.45 acres per 1,000 workers (see **Table 5-5**). This is well above the City's goal of 0.15 acres of passive space per 1,000 workers. However, the combined passive open space ratio of 0.36 acres per 1,000 non-residents and residents is below the weighted open space goal of 0.47 acres of passive space per 1,000 workers and residents.[2]

Table 5-5
Existing Conditions: Adequacy of Open Space Resources—
Combined Non-Residential and Residential Study Area (¼-mile)

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Non-Residential	2,928	17.94	4.91	13.031	6.13	1.68	4.45	-	-	0.15
Combined Non-Residential and Residential	36,611	17.94	4.91	13.031	0.49	0.13	0.36	-	-	0.47
Source: 2020 U.S. Census; NYC Parks; AKRF field survey, January 2025										

D. THE FUTURE WITHOUT THE PROPOSED ACTIONS

INDIRECT EFFECTS

STUDY AREA POPULATION

Anticipated development projects within the study area that are expected to be completed by the 2032 analysis year would generate new residents. These projects are anticipated to include 318 dwelling units (DUs) within a ¼-mile study area and 885 DUs within a ½-mile study area. Using the Bronx average household size of 2.79 people for Community District 7, an additional 887 residents are anticipated to be generated from these

[2] The passive open space goal for the combined open space ratio is established by using a weighted average of the amount of open space necessary to meet the CEQR Benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents. For each scenario, the percentage of non-residents in the combined total is multiplied by 0.15 and the percentage of residents in the combined total is multiplied by 0.50. The resulting numbers are added to establish the combined open space goal.

development projects within the ¼-mile study area and 2,469 residents are anticipated within the ½-mile study area. Therefore, the residential population is expected to increase to 34,570 and 80,202 residents in the ¼- and ½-mile study areas in the No Action condition, respectively. There is no expected increase to the worker population in the ¼-mile study area.

STUDY AREA OPEN SPACES

Within Washington's Walk Park, the Strong Street Playground is currently under construction and is expected to be completed in the spring of 2025. The completed playground will add an additional 0.36 acres of active open space to the study area. There are no other open space resources that are anticipated to be available to residents by the 2032 analysis year. Therefore, in the ¼-mile study area, the total open space acreage will be 17.94 acres, with 9.0 acres of active space and 8.94 acres of passive space in the No Action condition. In the ½ -mile study area, the total open space acreage will increase to 27.08 acres, with 12.30 acres of active space and 14.78 acres of passive space in the No Action condition.

ASSESSMENT OF OPEN SPACE ADEQUACY

Quantitative Assessment

Residential Study Area (½-mile)

In the No Action condition, the total open space ratio will remain the same as the existing condition of 0.34 acres per 1,000 residents; it will remain below the Citywide median of 1.50 and the City's planning goal of 2.50 acres per 1,000 residents (see **Table 5-6**). The active open space ratio will remain at 0.15 acres per 1,000 residents and remain below the City's goal of 0.50 active acres per 1,000 residents. The passive open space ratio will decrease from 0.19 to 0.18 acres per 1,000 residents, remaining below the City's goals for passive open space.

Table 5-6
No Action Condition: Adequacy of Open Space Resources– Residential Study Area (½-mile)

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	80,202	27.08	12.30	14.78	0.34	0.15	0.18	2.50	2.00	0.50
Sources: 2020 U.S. Census, NYC Parks, AKRF field survey, January 2025										

Combined Non-Residential and Residential Study Area (¼-mile)

As shown in **Table 5-7**, with a total worker population of 2,928 and 8.94 acres of passive open space, the passive open space ratio will remain the same, 3.05 acres per 1,000 workers in the No Action condition. The passive open space ratio will remain well above the City's goal of 0.15 acres per 1,000 workers.

The study area will have a residential population of 34,405, which will result in a combined non-residential and residential population of 37,498. The combined passive open space ratio of 0.24 acres per 1,000 non-residents and residents will remain the same as the

existing condition which is below the City's goal of 0.47 acres of passive space per 1,000 non-residents and residents.

Table 5-7
No Action Condition: Adequacy of Open Space Resources—Combined Non-Residential and Residential Study Area (¼-mile)

	Population	Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Non-Residential	2,928	17.94	9.00	8.94	6.13	3.07	3.05	-	-	0.15
Combined Non-Residential and Residential	37,498	17.94	9.00	8.94	0.48	0.24	0.24	-	-	0.47

Source: 2020 U.S. Census; NYC Parks; AKRF field survey, January 2025

E. THE FUTURE WITH THE PROPOSED ACTIONS

DIRECT EFFECTS

The Proposed Actions would not result in any direct effects related to encroachments on or loss of open space, or changes in open space such that it no longer serves the same user population, and there are no anticipated direct effects related to air quality or operational noise.

INDIRECT EFFECTS

STUDY AREA POPULATION

In the With Action condition, the Proposed Project would be expected to add approximately 1,395 new residents and 649 new workers to the study area. Therefore, in the With Action condition, the study area population is expected to increase to a total of 39,542 combined workers and residents in the ¼-mile study area and 81,597 residents in the ½-mile study area.

STUDY AREA OPEN SPACES

The Proposed Project would create approximately 64,800 sf (1.49 acres)[3] of new publicly accessible open space on the Project Site, all of which is conservatively considered in this analysis to be passive open space (**Figure 5-1**). However, portions of the new open space would be able to accommodate active outdoor pursuits such as jogging, fitness classes (e.g., salsa, yoga) or pop-up recreational activities such as ping pong tournaments and pickle ball. The new open space would be largely concentrated in the areas southwest of the Armory along Reservoir Avenue and West Kingsbridge Road, but would also include areas along the west side of the Armory along Reservoir Avenue. The new open space would include approximately 5,100 sf that is currently within DOT ROW but is closed to

[3] The approximately 5,100-sf area is currently a paved curb extension that is used as open and publicly accessible space. The Proposed Project intends to keep this area open and accessible, improving this area with landscaping. However, this is area is owned by DOT and is not under the Applicants' control or ownership.

vehicular traffic and functions as an informal sidewalk extension. The design and maintenance of this portion of the open space is being developed in coordination with DOT. The new open space—absent the DOT ROW area—would comprise more than 20 percent of the overall Project Site. The open space is being designed to maximize the Project Site's optimal location by creating a flexible plaza that can support community interests while also providing varied programming to complement the new uses at the Armory. The open space would include landscaping, planted areas, paved public plazas, and seating areas.

The creation of 1.49 acres of newly accessible public open space represents approximately a 5.5 percent increase in accessible open space within the ½-mile Residential Study Area and an approximately 8.3 percent increase in accessible open space within the ¼-mile Non-residential and Residential combined study area.

ASSESSMENT OF OPEN SPACE ADEQUACY

Quantitative Assessment

Residential Study Area (½ mile)

As shown in **Table 5-8**, in the With Action condition, the ½-mile study area's total open space ratio would be 0.35 acres per 1,000 residents; it would remain well below the Citywide median of 1.50 and the City's goal of 2.50 acres per 1,000 residents. The active open space ratio would remain the same at 0.08 acres per 1,000 residents and would remain below the City's planning goal of 2.00 active acres per 1,000 residents. The passive open space ratio would increase slightly to 0.27 acres per 1,000 residents and would remain below the City's goal of 0.50 acres per 1,000 residents for passive open space.

Table 5-8
With Action: Adequacy of Open Space Resources – Residential Study Area (½ mile)

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	81,597	28.93	6.75	22.18	0.35	0.08	0.27	2.50	2.00	0.50
Source: 2020 U.S. Census; NYC Parks; AKRF field survey, January 2025										

Table 7-5 of the *CEQR Technical Manual* indicates that a decrease in the total open space ratio of 1 percent in areas with a total open space ratio range of 0.50 or less, an active open space ratio range between 0.01 and 0.40, and a passive open space ratio range between 0.01 and 0.10, could result in an open space impact. It is important to note that the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold; but rather projects are further assessed qualitatively to determine the overall significance of the impact.

The Proposed Actions would result in approximately 3.62 percent increase in the total open space ratio, with a 1.66 percent decrease in the active open space and a 5.39 percent increase in the passive open space ratio, respectively (see **Table 5-9**). The total, active and passive open space ratios in the study are currently low and would remain low in the With Action condition. Because the Proposed Project would result in a decrease in

the active open space ratio that is greater than the *CEQR Technical Manual* threshold of 1 percent in an area with an active open space ratio between 0.01 and 0.40, passive open space ratio of 0.01 to 0.10 and total open space ratio of less than 0.5, further qualitative considerations are warranted to determine if the changes in open space ratios would result in a significant adverse impact.

Table 5-9
With Action Condition Passive Open Space Ratios Summary – Residential Study Area (½ mile)

Ratio	City Goal (acres per 1,000 People)	No Action Condition	With Action Condition	Percent Change
Total/Residential	2.50	0.34	0.35	3.62%
Active/Residential	2.00	0.08	0.08	-1.66%
Passive/Residential	0.50	0.26	0.27	5.39%

Combined Non-Residential and Residential Study Area (¼ mile)

As shown in **Table 5-10,** the ¼-mile study area would have a total non-residential population of 3,678 with 14.52 acres of passive open space in the With Action condition. As a result, the passive open space ratio would decrease from 4.45 to 4.06 acres per 1,000 workers. The open space ratio would remain well above the City's goal of 0.15 acres per 1,000 workers.

With a combined non-residential and residential population of 39,542, the passive open space ratio would increase from 0.35 to 0.37 acres per 1,000 workers and residents. Although, there is a slight increase in the passive open space ratio when compared to the No Action condition, the ratio would still remain below the City's goal of 0.47 acres of passive space per 1,000 workers and residents.

Table 5-10
With Action Condition: Adequacy of Open Space Resources— Combined Non-Residential and Residential Study Area (¼ mile)

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Non-Residential	3,577	19.79	5.27	14.52	5.53	1.47	4.06	-	-	0.15
Combined Non-Residential and Residential	39,542				0.50	0.13	0.37	-	-	0.47
Source: 2020 U.S. Census; NYC Parks; AKRF field survey, January 2025										

Table 7-5 of the *CEQR Technical Manual* indicates that a decrease in the passive open space ratio of 3 percent in areas with a passive open space ratio range between 0.21 to 0.30 warrants a detailed assessment. It is important to note that the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold; but rather projects are further assessed qualitatively to determine the overall significance of the impact.

The Proposed Actions would result in approximately 6 percent increase in the passive open space ratio for the combined non-residential and residential study area (see **Table 5-11**). Although the passive open space ratio in the With Action condition is below the City's goal of 0.47, it increases the ratio from 0.35 to 0.37 acres per 1,000 non-residents

and residents. Therefore, the Proposed Actions would not result in a significant adverse impact.

Table 5-11
With Action Condition Passive Open Space Ratios Summary – Combined Non-Residential and Residential Study Area (¼ mile)

Ratio	City Goal (acres per 1,000 People)	No Action Condition	With Action Condition	Percent Change
Non-Residential	0.15	4.45	4.06	-8.80%
Combined Non-Residential and Residential	0.47	0.35	0.37	5.67%

Qualitative Assessment

As noted above, the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts, when warranted. These include the capacity and utilization of open space resources, the connectivity of open space, the distance to regional parks or other parks just outside the study area, and the beneficial effects of new open space provided by the Proposed Actions.

The Proposed Project would result in the development of new open space on the Project Site. The publicly accessible open space (shown in **Figure 5-1**) would be located along the frontages of Reservoir Avenue and Kingsbridge Road. The currently vacant and inaccessible areas immediately surrounding the Project Site would provide new outdoor open space and desirable connections to other open spaces in the study area including Barnhill Square and Aqueduct Walk. Based on conceptual designs, this space is expected to include walking paths, trees and landscaping, and seating areas. The northern portion of the open space on the Project Site is adjacent to a number of schools and would incorporate a variety of seating along the north streetscape adjacent the school corridor, further connecting the new open space to the community. The open space area that would be improved with the Proposed Project would total approximately 1.49 acres of passive open space on land that is currently vacant and inaccessible to the public. As described in Chapter 1, “Project Description,” the Proposed Project would include athletic fields inside the Armory that would share space with the event venue. This would be approximately 64,800 sf of active recreation space. The intention is for the space to be utilized by local schools, but it would also be made available to the general public. The space would be designed to accommodate a variety of sports. As the details of the Proposed Project’s design and operation progress, the days/hours that the space would be publicly accessible would be determined.

In addition, the proposed residential building is being designed to include a fitness center accessible to tenants. The on-site space, which would be approximately 2,000 gsf, would work toward addressing the active recreational needs of the new residential population generated by the Proposed Project.

The study area is located near a regional park that could augment the existing open space in the study area: Bronx Park, which features 718 acres of abundant passive and active open space including the Bronx Zoo, the New York Botanical Gardens, numerous playgrounds, bicycle paths, baseball diamonds, tennis and basketball courts and football and soccer fields. Although, a majority of the public active space within Bronx Park is

located on the east side of the Park, there is a park entrance located approximately 1.2 miles from the Project Site (an approximately 27-minute walk).

The study area open spaces are utilized to varying degrees, with St. James Park experiencing the heaviest utilization. The condition of these open space resources also varies, although most are in good condition or better. Open space resources that are newer or recently rehabilitated tend to be in excellent condition. Most resources within the study area have the capacity for higher utilization.

The study area open spaces, generally local playgrounds and parks are utilized by children, adults and teenagers. As indicated in the *CEQR Technical Manual*, adults tend to utilize active recreational amenities (such as handball and basketball courts and sports fields), active individualized amenities such as walking, biking, and jogging as well as passive recreational amenities (such as promenades).

In addition to parks and playgrounds, the study area includes the approximately 0.11-acre New Beginnings community garden that provides passive space that primarily caters to adults. This community garden offers space for contemplative thought and respite. The community garden may be used by residents within the study area. Public access to community gardens is not uniform and the duration and timing of public access varies from garden to garden. Generally, public hours for several days of the week are posted at the entrance to the community garden, with most gardens being open to the public between April 1 and October 31. While community gardens may be open to the public outside of these posted hours, they are generally locked and inaccessible.

IMPACT DETERMINATION FOR INDIRECT EFFECTS

Residential Study Area (½ mile)

Table 7-5 of the *CEQR Technical Manual* indicates that a decrease in the total open space ratio of 1 percent in areas with a total open space ratio range of 0.50 (0.01 to 0.40 active and 0.01 to 0.10 passive) or less may result in an impact. The Proposed Project would result in an increase in the total and passive open space ratios and a decrease in the active open space ratio. The Proposed Actions would result in an increase in the total open space ratio from 0.34 to 0.35 acres per 1,000 residents, an increase of approximately 3.62 percent in the total open space ratio over the No Action condition (see **Table 5-9**).

There would be a 1.66 percent decrease in the active open space ratio and a 5.39 percent increase in the passive open space ratio. The total, active and passive open space ratios in the study are currently low and would remain low in the With Action condition. It is important to note that the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold; but rather projects are further assessed qualitatively to determine the overall significance of the impact.

Although the open space ratios for the residential study area would be below the City's goal, open space users in the study area would have access to additional nearby open space resources just beyond the study area, including Bronx Park. In addition, as described above, there are a number of qualitative factors that are not considered in the quantitative analysis. The Proposed Project would include multipurpose athletic fields in the Armory that are expected to be used by local schools, but would also be made available to the general public. As the details of the project's design and operation

progress, the days/hours that the space would be publicly accessible would be determined. Finally, the proposed residential building is being designed to include a fitness center for tenants that would help address the active recreational needs of the new residential population generated by the Proposed Project.

Therefore, the Proposed Project would not result in a significant adverse impact to open space ratios in the Residential study area.

Combined Non-Residential and Residential Study Area (¼ mile)

In the With Action condition, the Proposed Project would result in a decrease in the passive open space ratio from 4.45 to 4.06 acres per 1,000 non-residents compared to the No Action condition, a decrease of approximately 9 percent over the No Action condition in the passive open space ratio (see **Table 5-11**). However, at 4.06 acres per 1,000 non-residents, the passive open space ratio would remain well above the City's goal of 0.15 acres per 1,000 non-residents.

For the combined non-residential and residential users, the passive open space ratio would increase, from 0.35 to 0.37, an approximately 6 percent increase over the No Action condition. Although, this combined non-residential and residential passive open space ratio is below the City's goal, it would be an improvement over the No Action condition. In addition, passive open space users in the study area would have access to additional nearby open space resources just beyond the study area. Therefore, the Proposed Project would not result in a significant adverse impact to open space ratios. ✷