HERKIMER-WILLIAMS EIS
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 or enhance the natural environment. 2021 *CEQR Technical Manual* guidance indicates that an open space analysis should be conducted if a proposed action would result in a direct effect, such as the physical loss or alteration of public open space, or an indirect effect, such as when a substantial new population could place added demand on an area's open spaces.

As described in **Chapter 1, "Project Description,"** approval of the Proposed Actions would facilitate the development of five new buildings and potentially, a small retail kiosk on the projected development sites in the Project Area. The new mixed-use development on the projected development sites would either contain a combined total of approximately 1,589,202 gross square feet (gsf) under the Proposed Development, or a combined total of approximately 1,620,348 gsf under the Alternate Community Facility Scenario. A Reasonable Worst Case Development Scenario (RWCDS) has been established for the Proposed Actions for an analysis year of 2036.

As described herein, both the Proposed Development and the Alternate Community Facility Scenario were analyzed to determine the potential for impacts to open space because of the Proposed Actions.

B. PRINCIPAL CONCLUSIONS

According to the 2021 *CEQR Technical Manual*, a proposed action may result in a significant impact on open space resources if (a) there would be direct displacement or alteration of existing 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 exacerbating a deficiency in open space.

Direct Effects

The Proposed Actions would not result in the physical loss of existing public open space resources. The Proposed Actions would also not result in any significant adverse shadows, operational air quality, operational noise, and construction impacts affecting open space resources.

Indirect Effects

As described in the 2021 *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if it would add enough population, either residential or non-residential, to noticeably diminish the capacity of open space in the area to serve the future population. Typically, an assessment of indirect effects is conducted when a project introduces more than 200 residents or 500 workers to an area. As described in **Chapter 1, "Project Description,"** in terms of population, the Proposed Development would

generate approximately 3,225 incremental residents and 2,174 incremental workers, as compared to the No-Action condition. The Alternate Community Facility Scenario would generate approximately 2,642 incremental residents and 2,629 incremental workers, as compared to the No-Action condition.

In the future with the Proposed Actions, the passive open space ratio within the non-residential study area would decrease by approximately 14.90 percent from the No-Action condition. In the With-Action condition, the passive open space ratio within the non-residential study area of approximately 0.242 acres per 1,000 non-residents would remain above the City's planning guideline of 0.15 acres per 1,000 non-residents. As such, workers in the non-residential study area would continue to have access to passive open space resources above the City's planning guideline, and the Proposed Actions would not result in a significant adverse indirect impact on passive open space resources in the defined non-residential study area.

In the future with the Proposed Actions, the total, active, and passive open space ratios within the residential study area would each decrease by more than five percent from the No-Action condition. Although the total and passive open space ratios would decrease by approximately 6.845 and 6.809 percent, respectively, the total open space ratio (approximately 3.378 acres per 1,000 residents) would remain above the City's guideline of 2.5 acres of total open space per 1,000 residents and the passive open space ratio (approximately 2.993 acres per 1,000 residents) would remain above the City's guideline of 0.5 acres of passive open space per 1,000 residents. Therefore, the Proposed Actions would not result in significant adverse indirect impacts on total and passive open space resources in the defined residential study area.

However, the active open space ratio within the residential study area would decrease by approximately 7.126 percent from the No-Action condition, above the City's percentage change guideline of one percent. The active open space ratio, at approximately 0.386 acres per 1,000 residents, would remain below the City's guideline of 2.0 acres of active open space per 1,000 residents. While a proposed action that would reduce the active open space ratio by more than the general guidelines for the open space percentage changes shown in **Table 5-1** may be considered significant, there are certain qualitative factors that substantially reduce the Proposed Actions' potential impact on the residential study area's active open space ratio. Foremost among these qualitative factors is the approximately 47.49 acres of active open space within Highland Park that are located immediately adjacent to, but outside, the residential study area. While the 2021 *CEQR Technical Manual* outlines that the quantitative analysis only include open space resources located within the residential study area, it would not be reasonable to assume residents of the Proposed Development would only utilize the 5.6-acre Upper Highland Playground portion of Highland Park that is located within the residential study area, and not the approximately 47.49 acres of active open space located immediately beyond the boundary of the residential study area. If the quantitative analysis were to include the entirety of the immediately-adjacent Highland Park and its approximately 47.49 acres of active open space within the residential study area, there would be approximately 1.435 acres of active open space per 1,000 residents in the With-Action condition, which approaches the City's planning guideline for active open space (2.0 acres of active open space per 1,000 residents). Therefore, given the ameliorative effects of these qualitative factors, the Proposed Actions would not result in a significant adverse indirect impact on active open space resources in the defined residential study area.

C. METHODOLOGY

The analysis of open space resources has been conducted in accordance with 2021 *CEQR Technical Manual* guidance. Using CEQR methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio. This quantitative measure is then used to assess the changes in the adequacy of open space resources by the 2036 analysis year, both without and with the Proposed Actions. In addition, qualitative factors are considered in assessing the Proposed Actions' effects on open space resources.

In accordance with 2021 *CEQR Technical Manual* guidance, the study area for open space 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 non-residential (e.g., worker) population. As outlined above and in **Chapter 1, "Project Description,"** compared to the No-Action condition, the Proposed Actions would introduce approximately 3,225 incremental residents (under the Proposed Development) and 2,629 incremental workers (under the Alternate Community Facility Scenario) to the Project Area. As the Proposed Actions have the potential to significantly increase the local residential and non-residential populations, an open space assessment for both the residential and non-residential populations generated by the Proposed Actions is warranted and provided herein.

Study Area

Pursuant to 2021 *CEQR Technical Manual* guidance, the study area includes all census tracts that have at least 50 percent of their area located within quarter- and half-mile radii of the Project Area, as recommended in the 2021 *CEQR Technical Manual*. In this way, the study area allows an analysis of both the publicly accessible open spaces in the study area, as well as the population data.[1]

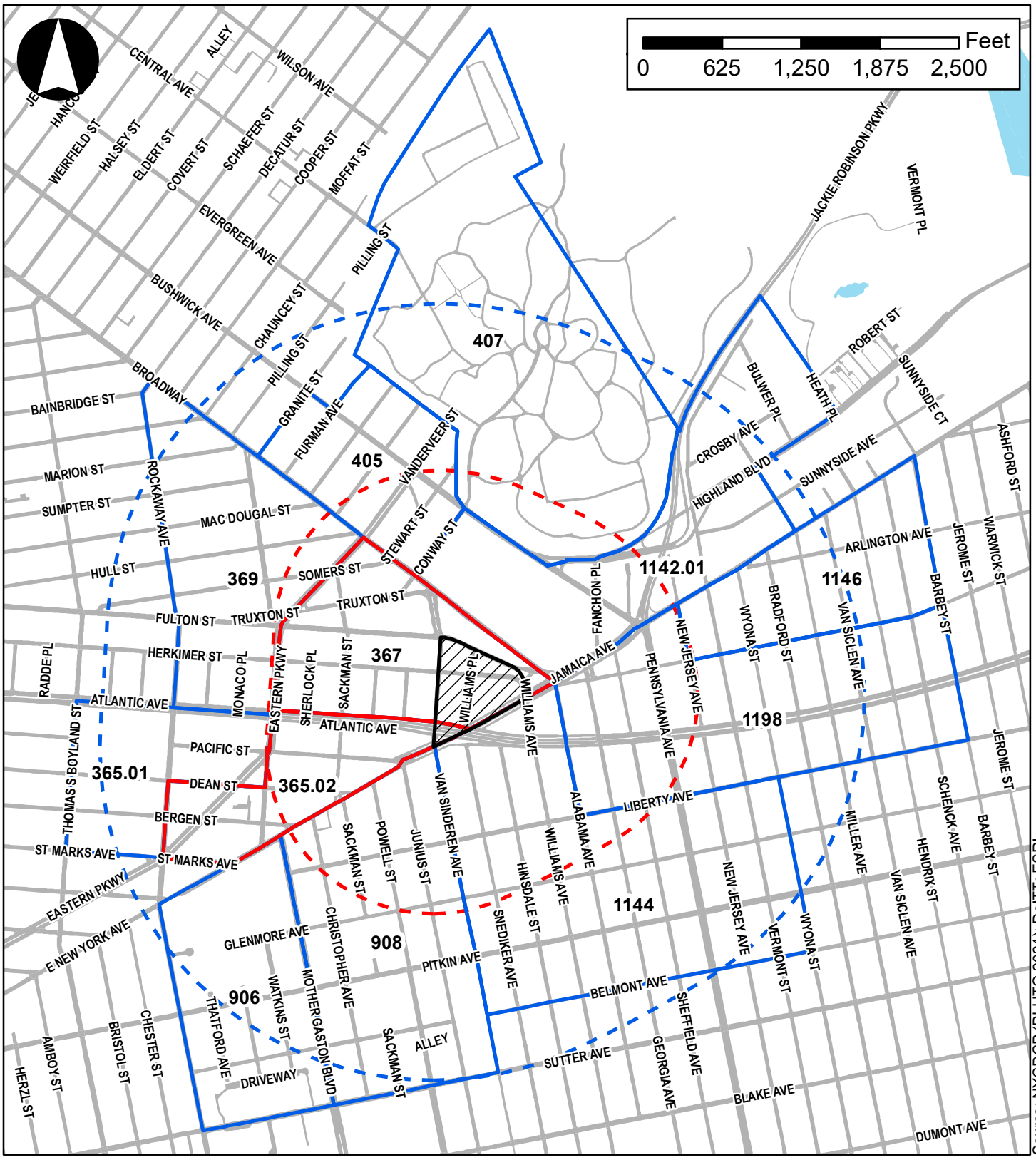
As shown in **Figure 5-1**, the quarter-mile radius includes the entirety of census tracts 365.02 and 367. The non-residential study area is generally bounded by Broadway and Eastern Parkway to the north, Jamaica Avenue to the south, Eastern Parkway and Rockaway Avenue to the west, and the intersection of Jamaica Avenue and Broadway to the east. In addition to the two census tracts in the non-residential study area, the residential study area includes an additional 10 census tracts, including census tracts 365.01, 369, 405, 407, 906, 908, 1142.01, 1146, 1144, and 1198. The residential study area extends to the Cemetery of the Evergreens to the north, Sutter and Belmont avenues to the south, Thomas S Boyland Street and Rockaway Avenue to the west, and Barbey Street to the east (refer to **Figure 5-1**).

Analysis Framework

Direct Effects Analysis

According to the 2021 *CEQR Technical Manual*, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased air or noise pollutant emissions,

[1] Pursuant to the 2021 *CEQR Technical Manual*, "public" open space that is analyzed pursuant to 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.



Legend

- Project Area
- 367 Non-Residential (Quarter-Mile) Study Area
- 405 Residential (Half-Mile) Study Area
- Quarter-Mile Radius
- Half-Mile Radius

odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As no open space resources would be physically altered or displaced because of the Proposed Actions, this chapter uses information from **Chapter 6, "Shadows," Chapter 14, "Air Quality," Chapter 16, "Noise,"** and **Chapter 19, "Construction"** to determine whether the Proposed Actions have the potential to directly affect any open space resources near the Project Area. As (1) there are no publicly accessible open space resources located within the Project Area, and (2) the Proposed Actions would not result in significant adverse shadows, operational air quality, operational noise, or construction impacts on open space resources, the Proposed Actions would not have any direct effects on open space resources and no further analysis is warranted.

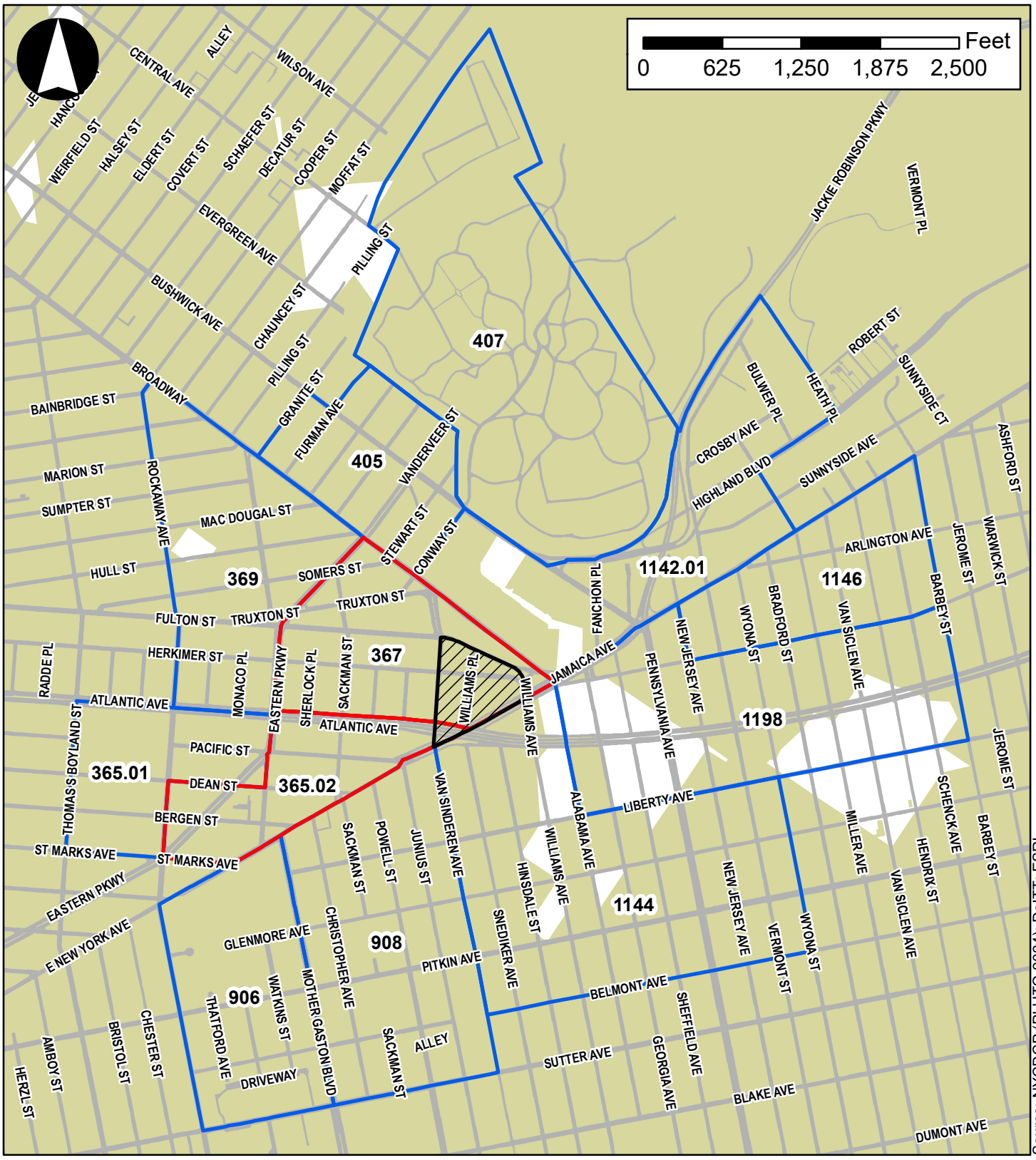
Indirect Effects Analysis

As described in the 2021 *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add enough population, either residents or non-residents (e.g., workers), 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 in an area of the City identified as a "Walk to a Park Service Area." A Walk to a Park Service Area is a component of the City's *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 Walk to a Park Service Area are within walking distance of a park (i.e., half-a-mile). Areas not located within a Walk to a Park Service Area are considered "walk gaps;" they are areas of New York City that are not within walking distance to a park. As shown in **Figure 5-2**, the Project Area is located within an area that has been identified as a Walk to a Park Service Area. Therefore, the Project Area is within walking distance of a park (i.e., not located within 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 study area's population. Specifically, the analysis in this attachment includes:

- Characteristics of the existing residential population. To determine the number of residents in the study area, 2020 Census data have been compiled for census tracts comprising the study area. To determine the number of workers in the study area, worker data provided by the U.S. Census Bureau's OnTheMap application, which is based on Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics have been compiled for census tracts comprising the study area.
- An inventory of all publicly accessible passive and active recreational facilities in the study area.
- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with certain guidelines. For the residential population, the 2021 *CEQR Technical Manual* planning guideline is 2.5 acres of total open space per 1,000 residents, including 2.0 acres of active open space and 0.5 acres of passive open space. For the non-residential population, the 2021 *CEQR Technical Manual* planning guideline is 0.15 acres of passive open space per 1,000 non-residents.



Source: NYCDCP (PLUTO 2024); DoITT; ESRI

Legend

- Project Area
- 367 Quarter-Mile Non-Residential Study Area
- 405 Half-Mile Study Area
- Quarter-Mile Radius
- Half-Mile Radius
- Walk to a Park Service Area

- An evaluation of qualitative factors affecting open space use.
- A final determination of the adequacy of open space in the study area.
- An assessment of expected changes in future levels of open space supply and demand in the 2036 analysis year, based on known or planned development projects within the study area. To estimate the residential population expected in the study area in the future without the Proposed Actions, known or planned No-Action developments are accounted for within the study area. Any new open space or recreational facilities that are anticipated to be operational by the 2036 analysis year are also accounted for. The open space ratio is calculated for the future No-Action condition and compared with existing ratios to determine changes in future levels of open space adequacy.

Preliminary Assessment

Determination of impacts is based, in part, on how a project would change the open space ratios in the study areas. According to the 2021 *CEQR Technical Manual*, a decrease in the open space ratio resulting from a proposed action, generally, may be considered to constitute a significant adverse impact, warranting a detailed analysis, if it would approach or exceed five percent. If a study area exhibits a low open space ratio (e.g., below 0.5 acres of open space per 1,000 residents or 0.15 acres of passive space per 1,000 non-residents), indicating a shortfall of open space, smaller decreases in the open space ratio as a result of the proposed action may constitute significant adverse impacts. In addition to the quantitative factors cited above, the 2021 *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. These include the availability of nearby destination resources, the beneficial effects of new open space resources provided by a proposed action, and the comparison of projected open space ratios with established City planning guidelines and optimal benchmarks. It is recognized that the City's planning guidelines described above are not feasible for many areas of the City, and they are not considered impact thresholds alone. Rather, these are benchmarks that indicate how well an area is served by open space.

Impact Assessment

As described in the 2021 *CEQR Technical Manual*, the significance of a proposed action's effects on an area's open spaces is determined using both quantitative and qualitative factors, as compared to the No-Action condition. The determination of significance is based upon the context of a proposed action, including its location, the quality and quantity of the open space in the future With-Action condition, the types of open space provided, and any new open space provided by the proposed action.

A proposed 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 2021 *CEQR Technical Manual*, a project that would reduce the open space ratio by more than the general guidelines for the open space percentage changes shown in **Table 5-1** may be considered significant, as these reductions may result in the overburdening of existing facilities or further exacerbating an existing deficiency in open space.

TABLE 5-1
Guidance for Percentage Change in Open Space Ratio

Open Space Ratio Range	Percentage 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%
*2.50 open space ratio is the planning guideline in New York City.	

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

As shown in **Table 5-1**, the guidance for a tolerated percentage change in the open space ratio is determined based on the open space ratio ranges outlined in the 2021 *CEQR Technical Manual*. In areas that are within a Walk to a Park Service Area, a greater percentage of change (more than five percent) may be tolerated. According to the 2021 *CEQR Technical Manual*, proposed actions that would reduce the open space ratio for a non-residential population would not follow the guidance presented below in **Table 5-1** but would consider the proposed action's effect on passive open space in the study area. The more the open space ratio falls below the optimal ratio of 0.15 acres of passive space per 1,000 non-residents, the more likely the decrease would lead to a significant adverse impact.

In addition to the quantitative factors cited above, the 2021 *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for significant adverse impacts. These include the availability of nearby destination resources, the beneficial effects of new open space resources provided by a project, and the comparison of projected open space ratios with the City's established planning guidelines for open space.[2] The assessment should consider the balance of passive and active open space. A larger percentage of active space is usually preferred; given the physical space requirement for active open space uses are significantly greater. Determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment. Qualitative considerations such as the distribution of open space, whether a site is within a Walk to a Park Service Area, the distance to regional parks, the connectivity of existing open space, and any additional open space provided by the proposed action, should be considered in a determination of impact significance. As such, proposed actions 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.

D. EXISTING CONDITIONS

Study Area Population

Non-Residential (Quarter-Mile) Study Area

To determine the population served by existing open space resources, Census data were compiled for the census tracts comprising the non-residential study area. As described above and shown in **Figure 5-1**, the non-residential study area is comprised of two census tracts (tracts 365.02 and 367). As shown in **Table**

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

5-2, based on worker data compiled by the U.S. Census Bureau, the existing worker population for the non-residential study area is estimated at approximately 2,811 workers.

TABLE 5-2
Non-Residential Study Area Population

Census Tract	Non-Residential (Worker) Population
365.02	193
367	2,618
Non-Residential Study Area Total	***2,811***

Source: U.S. Census Bureau, LEHD Origin-Destination Employment Statistics (LODES) Version 8 for 2021 (accessed via OnTheMap).

Residential (Half-Mile) Study Area

As shown in **Table 5-3**, 2020 Decennial Census data indicate that the residential study area has a residential population of approximately 36,179 residents.

TABLE 5-3
Residential Study Area Population

Census Tract	Residential Population
365.01	2,959
365.02	1,902
367	1,796
369	6,136
405	1,829
407	6
906	4,534
908	5,893
1142.01	1,880
1144	2,414
1146	3,134
1198	3,696
Residential Study Area Total	***36,179***

Source: U.S. Census Bureau, 2020 Decennial Census.

As shown in **Table 5-4**, people between the ages of 20 and 64 make up the majority (approximately 62.0 percent) of the ~~residential~~ population in the residential study area, children and teenagers (0 to 19 years old) account for approximately 28.1 percent of the residential study area population, and persons 65 years and over account for approximately 9.9 percent of the residential study area population. As also shown in **Table 5-4**, the age breakdown of the residential study area includes a higher percentage of children and teenagers as compared to Brooklyn and New York City as a whole. Conversely, the residential study area includes a lower percentage of adults aged 20 to 64 and persons 65 years and older as compared to Brooklyn and New York City as a whole.

TABLE 5-4
Residential Study Area Population Breakdown

Census Tract	Total Residential Population	Age Distribution												Median Age
		Under 5		5 to 9		10 to 14		15 to 19		20 to 64		65+		
		#	%	#	%	#	%	#	%	#	%	#	%	
365.01	2,959	114	3.9	175	5.9	184	6.2	147	5.0	1,945	65.7	394	13.3	37.9
365.02	1,902	102	5.4	96	5.0	138	7.3	84	4.4	1,187	62.4	295	15.5	39
367	1,796	122	6.8	122	6.8	115	6.4	111	6.2	1,191	66.3	135	7.5	30.7
369	6,136	324	5.3	337	5.5	362	5.9	351	5.7	4,224	68.8	538	8.8	31.8
405	1,829	95	5.2	107	5.9	97	5.3	107	5.9	1,313	71.8	110	6.0	30.7
407	6	0	0.0	1	16.7	1	16.7	1	16.7	3	50.0	0	0.0	22
906	4,534	357	7.9	388	8.6	393	8.7	422	9.3	2,533	55.9	441	9.7	29.9
908	5,893	595	10.1	726	12.3	616	10.5	516	8.8	3,095	52.5	345	5.9	25.8
1142.01	1,880	92	4.9	118	6.3	108	5.7	133	7.1	1,104	58.7	325	17.3	39.5
1144	2,414	127	5.3	166	6.9	202	8.4	179	7.4	1,516	62.8	224	9.3	34.1
1146	3,134	177	5.6	186	5.9	219	7.0	249	7.9	1,963	62.6	340	10.8	35.3
1198	3,696	218	5.9	220	6.0	246	6.7	230	6.2	2,345	63.4	437	11.8	35.8
Study Area	***36,179***	***2,323***	***6.4***	***2,642***	***7.3***	***2,681***	***7.4***	***2,530***	***7.0***	***22,419***	***62.0***	***3,584***	***9.9***	***32.6***
Total for Brooklyn	***2,736,074***	***169,016***	***6.2***	***166,390***	***6.1***	***164,899***	***6.0***	***158,117***	***5.8***	***1,705,040***	***62.3***	***372,629***	***13.6***	***35.2***
Total for NYC	***8,804,190***	***475,637***	***5.4***	***479,017***	***5.4***	***491,325***	***5.6***	***505,700***	***5.7***	***5,542,287***	***63.0***	***1,310,224***	***14.9***	***37.4***

Source: U.S. Census Bureau, 2020 Decennial Census.

As also shown in **Table 5-4**, the residential study area's average median age is approximately 32.6, compared to approximately 35.2 in Brooklyn and approximately 37.4 in New York City as a whole. Excluding census tract 407 (which is entirely occupied by Cemetery of the Evergreens), the residential study area median ages by census tract range from a low of approximately 25.8 years (in census tract 908, which contains industrial land uses alongside the New York City Housing Authority [NYCHA] Seth Low Houses) to a high of approximately 39.5 years (in census tract 1142.01, which primarily contains low-rise, single-family residential buildings).

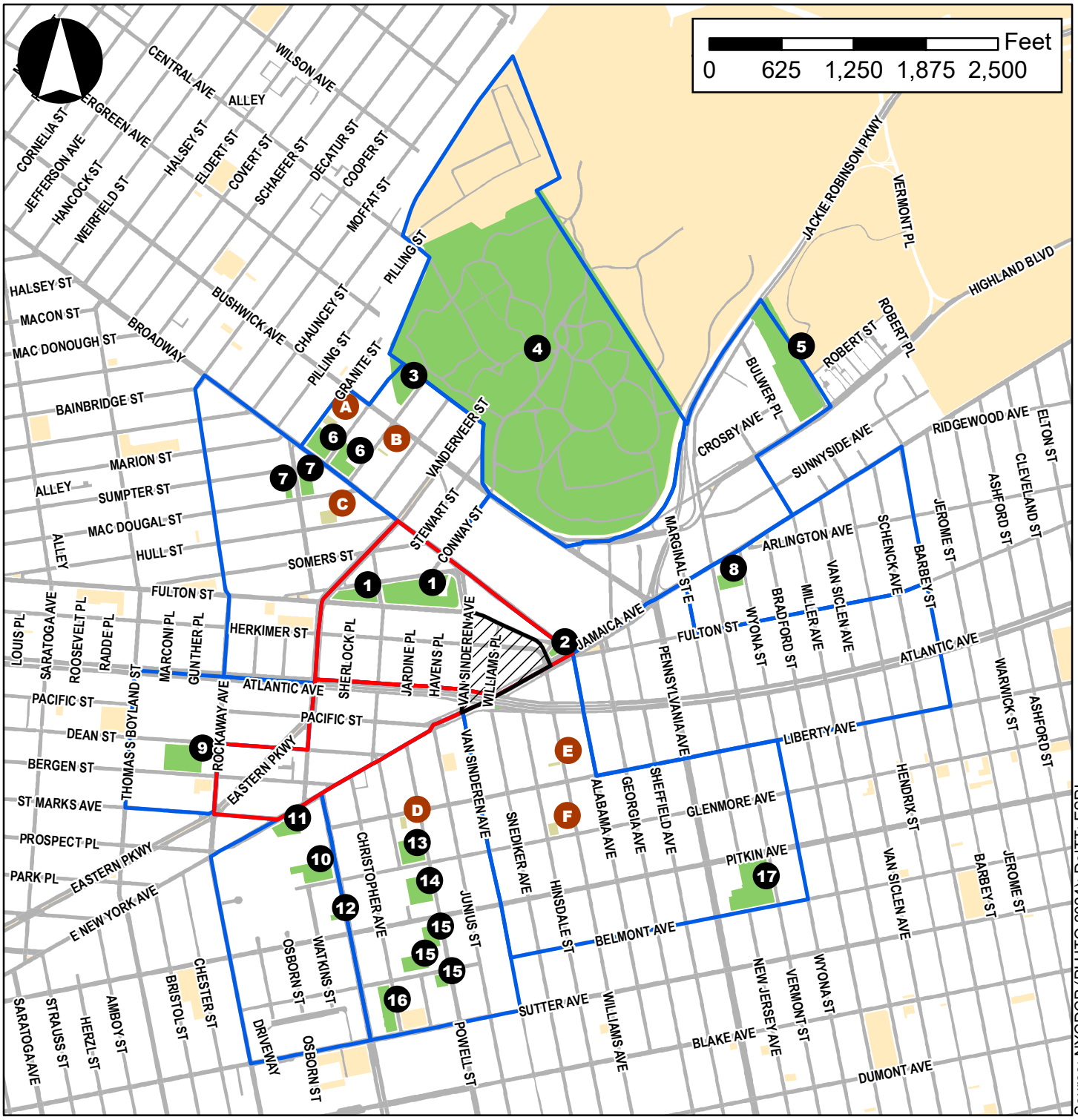
Within a given area, the age distribution of a population affects the way open spaces are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages 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 between the ages of 10 and 14 use playground equipment, court spaces, Little League fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities and fields for sports, as well as more individualized recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and roadways. Adults also gather with families for picnicking, ad hoc active sports, 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. The demographic data for the residential study area suggests a demand for facilities geared toward the recreational needs of a wide range of children, as the residential study area exhibits a high percentage of residents in the 0-19-year age demographic.

Inventory of Publicly Accessible Open Space

According to the 2021 *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the 2021 *CEQR Technical Manual*, publicly accessible open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts using both a quantitative and a qualitative analysis, whereas private open space is not accessible to the public on a regular basis and is considered only qualitatively. Secondary sources and 2024 field surveys were used to determine the number, availability, and condition of publicly accessible open space resources in the non-residential and residential study areas.

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, lawns, and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas. However, some passive spaces can be used for both passive and active recreation; such as a lawn or riverfront walkway, which can also be used for ball playing, jogging, or rollerblading.

All the publicly accessible open space and recreational resources within the defined non-residential and residential study areas are identified in **Figure 5-3** and listed in **Table 5-5**. Additional open spaces not meeting the CEQR criteria for inclusion in the quantitative analysis are listed in **Table 5-6**.



Legend

- Project Area
- Non-Residential (Quarter-Mile) Study Area
- Residential (Half-Mile) Study Area
- 1 Quantitative Open Space Resource (refer to Table 5-5)
- A Qualitatitve Open Space Resource (refer to Table 5-6)
- Excluded Open Space Resources

TABLE 5-5
Quantitative Open Space Resources

Map No.[1]	Name	Address/Location	Owner/ Agency*	Amenities	User Groups	Hours of Operation	Total Acres	Active		Passive		Condition/ Utilization
								#	%	#	%	
Open Space Resources Included in Quantitative Analysis – Non-Residential (Quarter-Mile) Study Area												
1	Callahan-Kelly Playground	Fulton St., Truxton St. b/w Eastern Pkwy. and Van Sinderen Ave.	NYC Parks	Fitness Equipment, Skate Park, Playgrounds, Basketball Courts, Handball Courts, Benches	Children, Adolescents, Adults, Seniors	6AM – 10PM	3.25	2.76	85	0.49	15	Excellent/ Moderate
2	Jewel Square	Bounded by Williams Ave., Fulton St., Broadway, and East New York Ave.	DOT	Benches, Plantings	Adults, Seniors	24 hours	0.13	0.00	0	0.13	100	Good/Moderate
Non-Residential (Quarter-Mile) Study Area Quantitative Totals							***3.38***	***2.76***	***82***	***0.62***	***18***	
Open Space Resources Included in Quantitative Analysis – Residential (Half-Mile) Study Area												
3	Rudd Playground	Furman Ave. and Aberdeen St. by Bushwick Ave.	DOT/NYC Parks	Basketball Courts, Skate Park, Playground, Spray Showers, Bathrooms, Benches, Aberdeen Street Community Garden	Children, Adolescents, Adults	6AM - 1AM	1.28	1.09	85	0.19	15	Excellent/ Moderate
4	Cemetery of the Evergreens	Bushwick Ave. and Conway St. (Main Entrance)	Cemetery of the Evergreens	Cemetery, Bench Seating	Adults, Seniors	8AM - 4:30PM	128.23	0.00	0	128.23	100	Excellent/Light
5	Upper Highland Playground	Highland Blvd. and Heath Pl.	NYC Parks	Basketball Court, Softball Fields, Playground, Restrooms, Benches, Landscaping	Children, Adolescents, Adults, Seniors	6AM - 10 PM	5.60	2.80	50	2.80	50	Excellent/ Moderate
6	Thomas Boyland Park	Broadway b/w Granite St. and Aberdeen St.	NYC Parks	Baseball Field, Basketball Court, Handball Courts, Volleyball Court, Fitness Equipment, Playgrounds, Spray Showers, Benches	Children, Adolescents, Adults, Seniors	6AM - 1AM	1.82	1.55	85	0.27	15	Fair/Light
7	Ocean Hill Houses Open Space	Mother Gaston Blvd. and MacDougal St.	NYCHA	Playground Equipment, Benches, Landscaping	Children	6AM - 10PM	0.58	0.17	30	0.41	70	Fair/Light
8	George Walker Jr. Park	57 Vermont St.	NYC Parks	Playground, Spray Shower, Benches	Children	6AM - 1AM	0.59	0.47	80	0.12	20	Fair/Light
9	Ocean Hill Playground	Dean St., Bergen St. b/w Rockaway Ave. and Hopkinson Ave.	NYC Parks/DOE	Basketball Courts, Handballs Courts, Playgrounds, Spray Showers, Benches	Children, Adolescents, Adults	6AM - 10PM	1.59	1.35	85	0.24	15	Excellent/High

TABLE 5-5 (Cont.)
Quantitative Open Space Resources

Map No.[1]	Name	Address/Location	Owner/ Agency*	Amenities	User Groups	Hours of Operation	Total Acres	Active		Passive		Condition/ Utilization
								#	%	#	%	
Open Space Resources Included in Quantitative Analysis – Residential (Half-Mile) Study Area (Cont.)												
10	Howard Playground	Mother Gaston Blvd. and Glenmore Ave.	NYC Parks	Basketball Courts, Handball Courts, Playgrounds, Spray Showers, Benches	Children, Adolescents, Adults, Seniors	6AM - 1AM	1.00	0.90	90	0.10	10	Good/High
11	Howard Pool	East New York Ave. at St. Marks Ave.	NYC Parks	Outdoor Pools	Children, Adolescents, Adults, Seniors	6AM - 1AM	0.67	0.67	100	0.00	0	Good/High
12	Glenmore Plaza Open Space	Mother Gaston Blvd. and Pitkin Ave.	NYCHA	Playground Equipment, Benches, Landscaping	Children	6AM - 10PM	0.09	0.02	25	0.07	75	Fair/Light
13	Houston Playground	145 Glenmore Ave.	NYC Parks/DOE	Basketball Courts, Handball Courts, Playgrounds, Spray Showers, Benches	Children, Adolescents, Adults	6AM - 10PM	0.92	0.73	80	0.18	20	Good/Moderate
14	Powell Playground	130 Powell St.	NYC Parks	Basketball Courts, Handball Courts, Fitness Equipment, Playground, Spray Showers, Benches	Children, Adolescents, Adults	6AM - 1AM	1.02	0.97	95	0.05	5	Fair/Light
15	Seth Low Houses Open Space	Belmont and Pitkin Aves., b/w Powell St. and Christopher Ave.	NYCHA	Playground Equipment, Benches, Landscaping	Children, Adolescents	6AM - 10PM	1.44	0.72	50	0.72	50	Fair/Light
16	Carter G. Woodson Children's Park	Christopher Ave. b/w Sutter and Belmont Aves.	NYC Parks	Playground, Spray Shower, Running Track, Seating Area, Ball Courts, Benches	Children, Adolescents	6AM - 1AM	0.92	0.78	85	0.14	15	Fair/Moderate
17	Grace Playground	2126 Pitkin Ave.	NYC Parks/DOE	Basketball Courts, Handball Courts, Fitness Equipment, Playground, Baseball Field, Benches, Landscaping	Children, Adolescents, Adults, Seniors	6AM - 1AM	2.74	2.47	90	0.27	10	Fair/Moderate
Residential (Half-Mile) Study Area Quantitative Totals							***151.87***	***17.45***	***11***	***134.41***	***89***	

Sources: NYC Parks, 2024 Primary Land Us Tax Lot Output (PLUTO) data, field visits conducted in June 2024.
Notes:
[1] Refer to **Figure 5-3**.
* NYC Parks = New York City Department of Parks and Recreation; DOE = New York City Department of Education; DOT = New York City Department of Transportation; NYCHA = New York City Housing Authority.

TABLE 5-6
Qualitative Open Space Resources

Map No.[1]	Name	Address/Location	Owner/ Agency*	Amenities	User Groups	Hours of Operation	Total Acres	Active		Passive		Condition/ Utilization
								#	%	#	%	
Open Space Resources Included in Qualitative Analysis – Residential (Half-Mile) Study Area												
A	Granite Street Community Garden	30 Granite St.	NYC Parks	Raised Beds, Plantings, Seating	Adults, Seniors	Apr 1 - Oct 31: Fri.: 4PM - 7PM, Sat.: 1PM - 7PM, Sun.: 3PM - 7PM	0.17	0.00	0	0.17	100	Good/Light
B	Infant Jesus Community Garden	36 Aberdeen St.	New York Restoration Project	Seating Area, Pathways, Sculptures	Adults, Seniors	10AM - 6PM	0.05	0.00	0	0.05	100	Excellent/Light
C	Betty's Community Garden at Hull Street	227 Hull St.	NYC Parks	Toolshed, Playground, Tables	Adults, Seniors	10AM - 6PM during summer	0.06	0.00	0	0.06	100	Excellent/Light
D	McLeod Community Garden	130 Liberty Ave.	New York Restoration Project	Toolshed, Seating Area, Gazebo, Raised Beds, Pathways, Grill, Tables	Adults, Seniors	Apr 1 - Oct 31: Sat. and Sun. – 1PM - 2:30PM Mon. – Fri.: 11AM - 1:30PM	0.11	0.00	0	0.11	100	Excellent/Light
E	Williams Avenue Community Garden	88 Williams Ave.	New York Restoration Project	Toolshed, Tables	Adults, Seniors	20 hrs./week	0.06	0.00	0	0.06	100	Excellent/Light
F	TLC Sculpture Park Garden	275 Glenmore Ave.	NYC Parks	Plantings, Raised Beds, Gazebo, Shed, Seating, Pathways	Adults, Seniors	10AM - 4PM	0.17	0.00	0	0.17	100	Good/Light
G	Highland Park (Portion of park excluding the Upper Highland Playground)	Bulwer Pl., Highland Park Greenway, and Jamaica Ave. to Jackie Robinson Pkwy.	NYC Parks	Basketball/Handball/Tennis Courts, Baseball Fields, Disc Golf Course, Fitness Equipment, Playgrounds, Spray Showers, Walking/Biking Paths, Benches, Landscaping	Children, Adolescents, Adults, Seniors	6AM - 10PM	135.68	47.49	35	88.19	65	Good/Moderate
Residential (Half-Mile) Study Area Non-Quantitative Totals							***136.30***	***47.49***	***35***	***88.81***	***65***	

Sources: NYC Parks, 2024 Primary Land Us Tax Lot Output (PLUTO) data, field visits conducted in June 2024.

Notes:

[1] Refer to **Figure 5-3**.

* NYC Parks = New York City Department of Parks and Recreation.

Non-Residential (Quarter-Mile) Study Area

As shown in **Figure 5-3** and listed in **Table 5-5**, the non-residential study area contains two open space resources which contain a total of approximately 3.38 acres of publicly accessible open space, of which approximately 0.62 acres (approximately 18 percent) are used for passive recreation and approximately 2.76 acres (approximately 82 percent) are used for active recreation. The largest of the two resources is Callahan-Kelly Playground, located to the northwest of the Project Area, while Jewel Square is located directly to the east of the Project Area.

Callahan-Kelly Playground is an approximately 3.25-acre public park bounded by Truxton Street to the north, Van Sinderen Avenue to the east, and Eastern Parkway to the west. The open space contains a skate park, handball courts, playgrounds, basketball courts, spray showers, and fitness equipment, as well as benches and landscaping. Jewel Square is an approximate 0.13-acre public plaza bounded by East New York Avenue, Fulton Street, Broadway, and Williams Avenue. The open space features benches and landscaping.

Residential (Half-Mile) Study Area

As shown in **Figure 5-3** and listed in **Table 5-5**, the residential study area includes the two open space resources in the non-residential study area as well as 15 additional open space resources totaling approximately 148.49 acres. As listed in **Table 5-5**, the residential study area contains a total of approximately 151.87 acres of publicly accessible open space. Of this sum, approximately 134.41 acres (approximately 89 percent) are used for passive recreation and approximately 17.45 acres (approximately 11 percent) are used for active recreation.

At approximately 128.23 acres, the largest open space resource in the residential study area is Cemetery of the Evergreens, located in the northern portion of the residential study area. The open space resource is open to the public daily from 8:30 AM to 4:30 PM and features a cemetery with bench seating.

At approximately 2.74 acres, the second largest open space resource in the residential study area is Grace Playground, located in the southeastern portion of the residential study area. The open space resource features basketball courts, handball courts, a baseball field, a playground, fitness equipment, and benches.

Thomas Boyland Park is an approximate 1.82-acre open space located in the northern portion of the residential study area along Broadway between Furman Avenue and Aberdeen Street. The open space resource features a baseball field, fitness equipment, a basketball court, handball courts, a volleyball court, playgrounds, and spray showers, in addition to benches and landscaping.

Houston Playground is an approximate 0.92-acre open space bounded by Sackman Street to the west, Glenmore Avenue to the south, and Powell Street to the east. A jointly operated playground with DOE, Houston Playground features basketball courts, handball courts, playgrounds, spray showers, and benches.

Howard Playground is an approximately 1.00-acre open space resource located in the southwestern portion of the residential study area, adjacent to the NYCHA Howard Houses. The open space resource features basketball courts, handball courts, playgrounds, spray showers, and benches.

Howard Pool is an approximate 0.67-acre open space resource located in the southwestern portion of the residential study area, adjacent to the NYCHA Howard Houses. The open space resource features several outdoor pools as well as seating.

Rudd Playground is an approximate 1.28-acre open space resource located in the northern portion of the residential study area. The open space resource features bathrooms, basketball courts, a skate park, playgrounds, spray showers, benches, as well as the Aberdeen Street Community Garden.

George Walker Jr. Park is an approximate 0.59-acre open space resource located in the northeastern portion of the residential study area. The open space resource contains playground equipment and spray showers, along with benches and landscaping.

Powell Playground is an approximately 1.02-acre open space resource located in the southern portion of the residential study area. The open space resource features basketball courts, handball courts, fitness equipment, a playground, and spray showers, as well as benches and landscaping.

Carter G. Woodson Children's Park is an approximate 0.92-acre open space resource located in the southern portion of the residential study area. The open space resource features a running track, a playground, a spray shower, ball courts, and benches.

Several open space resources located within NYCHA campuses were included in the residential study area open space inventory. The approximately 0.58-acre open space resource located at the NYCHA Ocean Hill Houses contains playground equipment, as well as benches and landscaping. Similar amenities are offered at the approximately 0.09-acre open space resource located at the NYCHA Glenmore Plaza and the approximately 1.44-acre open space resource located at the NYCHA Seth Low Houses.

Assessment of Open Space Adequacy

Non-Residential (Quarter-Mile) Study Area

As described above, the analysis of the non-residential study area focuses on passive open spaces that may be used by non-residents in the non-residential study area. To assess the adequacy of open spaces in the non-residential study area, the ratio of non-residents to acres of passive open space is compared to the City's planning guideline of 0.15 acres of passive open space per 1,000 non-residents.

Quantitative Assessment

The non-residential study area includes a total of approximately 3.38 acres of open space, of which approximately 0.62 acres contain passive open space uses and approximately 2.76 acres contain active open space uses.[3] A total of approximately 2,811 people work within the non-residential study area. As shown in **Table 5-7**, the non-residential study area exhibits an existing passive open space ratio of approximately 0.221 acres per 1,000 non-residents, which is above the City's planning guideline of 0.15 acres per 1,000 non-residents. As such, non-residents in the non-residential study area are well-served by passive open space resources under existing conditions, in accordance with 2021 *CEQR Technical Manual* guidance.

[3] It should be noted that the acreage of passive, active, and total open space are rounded figures.

TABLE 5-7
Adequacy of Open Space Resources – Existing Conditions

	Population	Open Space Acreage			Open Space Ratios per 1,000 Persons			2021 *CEQR Technical Manual* Open Space Optimal Planning Guideline		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Non-Residential (Quarter-Mile) Study Area										
Non-residents	2,811	3.38	0.62	2.76	N/A	0.221	N/A		0.15	
Residential (Half-Mile) Study Area										
Residents	36,179	151.87	134.41	17.45	4.198	3.715	0.482	2.50	0.50	2.00

Qualitative Assessment

As shown in **Table 5-5**, the non-residential study area's open space resources are well-maintained and moderately utilized.

Residential (Half-Mile) Study Area

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

Quantitative Assessment

The residential study area contains approximately 151.87 acres of publicly accessible open space. Of this sum, approximately 134.41 acres (approximately 89 percent) contain passive open space uses and approximately 17.45 acres (approximately 11 percent) contain active open space uses. As shown in **Table 5-7**, under existing conditions, the residential study area has a total open space ratio of approximately 4.198 acres per 1,000 residents. This open space ratio is greater than the City's planning guideline of 2.5 acres of total open space per 1,000 residents. As shown in **Table 5-7**, under existing conditions, the residential study area has a passive open space ratio of approximately 3.715 acres per 1,000 residents. This open space ratio is greater than the City's planning guideline of 0.50 acres of passive open space per 1,000 residents. As shown in **Table 5-7**, under existing conditions, the residential study area has an active open space ratio of approximately 0.482 acres per 1,000 residents. This open space ratio is below the City's planning guideline of 2.0 acres of active open space per 1,000 residents as outlined in the 2021 *CEQR Technical Manual*. As such, under existing conditions, there is a shortfall of active open space in the residential study area.

Qualitative Assessment

The deficiency of active open space resources within the residential study area is partially ameliorated by several factors. As shown in **Table 5-5**, the residential study area open spaces include a variety of actively programmed open spaces appropriate for the residential user groups of the residential study area, including numerous playgrounds for children and teenagers, and several neighborhood parks for adults and senior citizens. As shown in **Figure 5-3**, the approximately 141.28-acre Highland Park, which is not included in the quantitative analysis but is located immediately adjacent to the boundary of the residential study area[4], is a large public park located directly adjacent to the residential study area (although the

[4] Please note that the Heath Place entrance to Highland Park (i.e., the closest park entrance that also provides connections to the remaining areas of Highland Park located outside of the residential study area) is an approximate 17-minute walk from the Project Area.

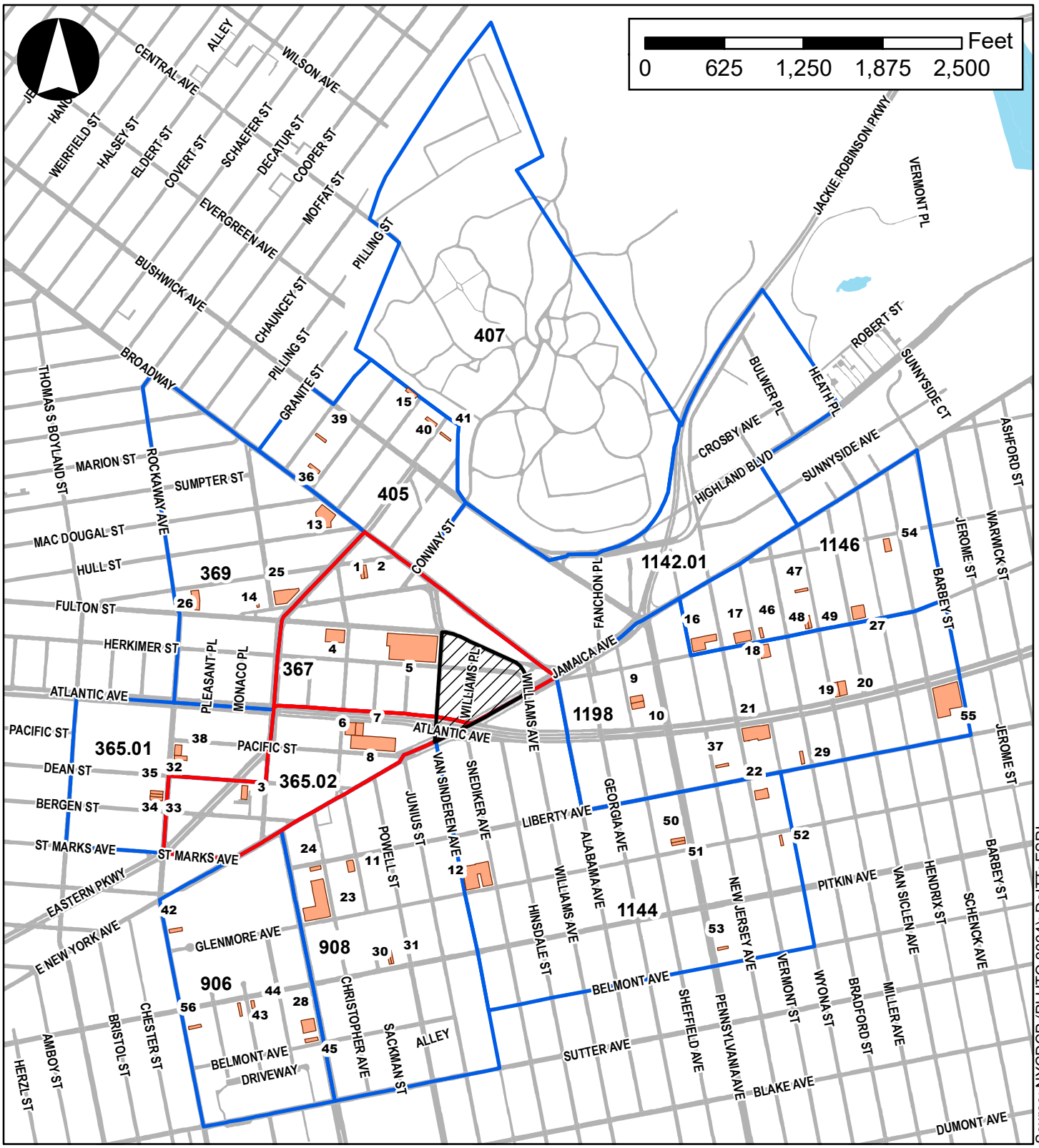
approximately 5.6-acre Upper Highland Playground is located within the residential study area and is therefore included in the quantitative analysis) and is programmed with a diverse mix of recreational activities, including athletic courts and fields, fitness equipment, playgrounds, trails for hiking, walking, and biking, and spray showers. If the approximately 47.49 acres of active open space located within the immediately-adjacent Highland Park were included in the quantitative inventory of open space resources, the active open space ratio under existing conditions would increase to approximately 1.795 acres per 1,000 residents in the residential study area, which approaches the City's planning guideline of 2.0 acres of active open space per 1,000 residents. In addition, and as noted in **Table 5-5**, most open space resources included in the quantitative analysis are in good or excellent condition and feature light or moderate utilization levels (i.e., typically appearing to have capacity to accommodate additional users).

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

Study Area Population

In the 2036 future without the Proposed Actions (the No-Action condition), the Proposed Actions would not be approved, and the projected development sites in the Project Area would remain as under existing conditions. However, as shown in **Table 5-8** and **Figure 5-4**, there are 56 known No-Action condition development projects expected to be completed within the non-residential and residential study areas by the 2036 analysis year.

In total, these combined No-Action condition developments are expected to introduce approximately 1,366 non-residents to the non-residential study area and approximately 5,855 residents to the residential study area by the 2036 analysis year.



Legend

- Project Area
- 405 — Residential (Half-Mile) Study Area
- 367 — Non-Residential (Quarter-Mile) Study Area
- 1 — No-Action Developments (refer to Table 5-8)

TABLE 5-8
No-Action Condition Developments in the Study Areas

Map Number[1]	Address	Residential Population Generated[2]	Non-Residential Population Generated[3]
Non-Residential (Quarter-Mile) Study Area			
1	156 Somers Street	29	0
2	158 Somers Street	29	0
3	2380 Dean Street	61	1
4	2246 Fulton Street	357	6
5	2440 Fulton Street	0	1,260
6	2384 Atlantic Avenue	0	39
7	2396 Atlantic Avenue	0	28
8	2435 Pacific Street	684	30
	Totals	***1,160***	***1,366***
Residential (Half-Mile) Study Area			
9	51 Sheffield Avenue	0	26
10	55 Sheffield Avenue	0	26
11	120 Liberty Avenue	38	1
12	114 Snediker Avenue	0	8
13	1882 Broadway	191	37
14	25 Truxton Street	23	0
15	91 De Sales Place	29	N/A
16	2667 Fulton Street	319	N/A
17	2715 Fulton Street	174	N/A
18	2718 Fulton Street	0	N/A
19	2767 Atlantic Avenue	119	N/A
20	2777 Atlantic Avenue	183	N/A
21	2700 Atlantic Avenue	658	N/A
22	221 Vermont Street	32	N/A
23	97 Glenmore Avenue	676	N/A
24	38 Christopher Avenue	9	N/A
25	2380 Dean Street	61	N/A
26	48 Somers Street	84	N/A
27	2795 Fulton Street	148	N/A
28	402 Mother Gaston Boulevard	180	N/A
29	453 Liberty Avenue	29	N/A
30	1845 Pitkin Avenue	23	N/A
31	1847 Pitkin Avenue	23	N/A
32	219 Rockaway Avenue	29	N/A
33	260 Rockaway Avenue	23	N/A
34	262 Rockaway Avenue	23	N/A
35	258 Rockaway Avenue	26	N/A
36	11 Aberdeen Street	26	N/A
37	197 New Jersey Avenue	26	N/A
38	216 Rockaway Avenue	6	N/A
39	34 Furman Avenue	3	N/A
40	103 Vanderveer Street	23	N/A
41	100 Vanderveer Street	3	N/A
42	353 Rockaway Avenue	20	N/A
43	1736 Pitkin Avenue	9	N/A
44	1742 Pitkin Avenue	6	N/A
45	412 Mother Gaston Boulevard	29	N/A
46	2719 Fulton Street	29	N/A
47	108 Miller Avenue	6	N/A
48	2757 Fulton Street	23	N/A
49	2759 Fulton Street	23	N/A
50	180 Pennsylvania Avenue	23	N/A
51	182 Pennsylvania Avenue	145	N/A
52	452 Glenmore Avenue	3	N/A
53	271 Pennsylvania Avenue	23	N/A
54	114 Arlington Avenue	12	N/A
55	2840 Atlantic Avenue	931	N/A
56	435 Rockaway Avenue	17	N/A
	Totals	***5,855***	***1,366***

Notes:
[1] Keyed to **Figure 5-4**.
[2] The residential populations are based on 2020 Census data for the average household size for dwelling units in Brooklyn CD 5 (i.e., 2.90 persons per household).
[3] The non-residential populations are based on the following assumptions: one worker per 250 sf of commercial office space; three workers per 1,000 sf of retail space; three workers per 1,000 sf of community facility space; one worker per 1,000 sf light industrial space; one worker per 25 DUs or 25 shelter beds; one worker per 2.67 hotel rooms; and one worker per 50 attended parking spaces.
Sources: New York City Department of Buildings (DOB) Building Information System (BIS); Articles from *CityRealty*, *Curbed NY*, *The Real Deal*, and *YIMBY*.

As shown in **Table 5-9**, the anticipated No-Action condition developments are expected to increase the non-residential study area population to approximately 4,177 non-residents and the residential study area population to approximately 42,034 residents.

TABLE 5-9
No-Action Condition Study Area Populations

	Existing Population	Population Introduced by No-Action Condition Developments	2036 No-Action Condition Total Population
Non-Residential (Quarter-Mile) Study Area			
Non-Residents	2,811	1,366	4,177
Residential (Half-Mile) Study Area			
Residents	36,179	5,855	42,034

Open Space Resources

In the No-Action condition, there is one capital project planned that would increase the overall acreage of passive open space in the non-residential and residential study areas. The New York City Economic Development Corporation (NYCEDC) is planning public realm improvements at the Broadway Junction Subway Station complex. As currently contemplated, the public realm improvements are planned to include two new public plazas introducing approximately 25,000 sf of new open space, as well as streetscape and pedestrian safety improvements (lighting, signage, street furniture, and bike infrastructure) on Van Sinderen Avenue between Atlantic Avenue and Fulton Street.[5] The ULURP application for the two new public plazas was certified on April 21, 2025 (CEQR No. 25NYP001K; ULURP No. 2025K0339). The public realm improvements are anticipated to commence construction in 2029 and complete construction by 2031. Therefore, one acre of new publicly accessible passive open space would be added to the non-residential and residential study areas.

In addition, NYC Parks has one capital project planned in the residential study area – Carter G. Woodson Children's Park Reconstruction. The capital project will reconstruct the playground, passive recreation and sitting area, dog run, and sidewalk in Carter G. Woodson Children's Park. The capital project is currently in the design phase, which began in October 2024; at this time, the design phase has no assigned conclusion date. However, it is anticipated that the Carter G. Woodson Children's Park Reconstruction would be fully implemented by the 2036 analysis year. While the capital project would not add additional open space acreage to the residential study area, the capital project would improve the condition and usability of Carter G. Woodson Children's Park.

Assessment of Open Space Adequacy

Non-Residential (Quarter-Mile) Study Area

As described above, it is anticipated that new development in the non-residential study area would result in an increase in the non-residential population in the future without the Proposed Actions. In addition, one acre of new publicly accessible passive open space would be added to the non-residential study area. As a result of these anticipated No-Action condition population and open space acreage changes, as shown in **Table 5-10**, the passive open space ratio per 1,000 non-residents would increase to

[5] https://edc.nyc/project/broadway-junction-east-new-york

approximately 0.285 (from approximately 0.221 acres under existing conditions), which would remain above the City's planning guideline of 0.15 acres of passive open space per 1,000 non-residents.

TABLE 5-10
Adequacy of Open Space Resources in the Non-Residential Study Area – No-Action Condition

		Open Space Acreage			Open Space Ratios per 1,000 Persons			2021 *CEQR Technical Manual* Open Space Optimal Planning Guideline		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Non-Residential (Quarter-Mile) Study Area										
Non-residents	4,177	3.95	1.19	2.76	N/A	0.285	N/A		0.15	
Residential (Half-Mile) Study Area										
Residents	42,034	152.44	134.98	17.45	3.627	3.211	0.415	2.50	0.50	2.00

Residential (Half-Mile) Study Area

It is anticipated that new development in the residential study area would result in an increase in the residential population in the future without the Proposed Actions. In addition, one acre of new publicly accessible passive open space would be added to the residential study area.

As a result of these anticipated No-Action condition population and open space acreage changes, as shown in **Table 5-10**, the residential study area's total open space ratio would decrease to approximately 3.627 acres per 1,000 residents (from approximately 4.198 acres under existing conditions). In the No-Action condition, the total open space ratio would remain greater than the City's planning guideline of 2.5 acres of total open space per 1,000 residents. As also shown in **Table 5-10**, the residential study area's passive open space ratio would decrease to approximately 3.211 acres per 1,000 residents (from approximately 3.715 acres under existing conditions). In the No-Action condition, the passive open space ratio would remain greater than the City's planning guideline of 0.50 acres per 1,000 residents. As also shown in **Table 5-10**, the residential study area's active open space ratio would decrease to approximately 0.415 acres per 1,000 residents (from approximately 0.482 acres under existing conditions). In the No-Action condition, the active open space ratio would remain below the City's planning guideline of 2.0 acres of active open space per 1,000 residents as outlined in the 2021 *CEQR Technical Manual*. As such, in the No-Action condition, as under existing conditions, the residential study area would continue to exhibit a shortfall of active open space.

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

In the 2036 future with the Proposed Actions (the With-Action condition), the Proposed Actions would be approved, and the projected development sites in the Project Area would be redeveloped with the Proposed Development.

As described in **Chapter 1, "Project Description,"** in terms of population, the Proposed Development would generate approximately 3,225 incremental residents and 2,174 incremental workers, as compared to the No-Action condition. The Alternate Community Facility Scenario would generate approximately 2,642 incremental residents and 2,629 incremental workers, as compared to the No-Action condition. As such, the residential population introduced by the Proposed Development (3,225 residents) and the non-residential population introduced by the Alternate Community Facility Scenario (2,629 workers) were analyzed in the open space assessment for the residential and non-residential populations.

Direct Effects

No publicly accessible open space resources are located within the Project Area. Therefore, the Proposed Actions would not result in the physical loss of existing public open space resources. In addition, as discussed in **Chapter 6, "Shadows," Chapter 14, "Air Quality," Chapter 16, "Noise,"** and **Chapter 19, "Construction,"** the Proposed Actions would also not result in any significant adverse shadows, operational air quality, operational noise, and construction impacts affecting open space resources.

Indirect Effects

Study Area Population

In total, the With-Action condition would introduce approximately 2,629 additional workers and 3,225 additional residents over the No-Action condition. As shown in **Table 5-11**, these additional populations are expected to increase the non-residential study area's non-resident population to approximately 6,806, while the residential study area's residential population is expected to increase to approximately 45,259.

TABLE 5-11
With-Action Condition Study Area Populations

	No-Action Condition Population	Incremental Population Added in Project Area	2036 With-Action Condition Total Population
Non-Residential (Quarter-Mile) Study Area			
Non-Residents	4,177	2,629[1]	6,806
Residential (Half-Mile) Study Area			
Residents	42,034	3,225[2]	45,259

Notes:
[1] The incremental worker population was conservatively based on the Alternate Community Facility Scenario. The Alternate Community Facility Scenario's worker population estimates are based on the following assumptions: one worker per 250 sf of commercial office space; three workers per 1,000 sf of retail space; three workers per 1,000 sf of community facility space; one worker per 1,000 sf light industrial space; one worker per 25 DUs; and one worker per 50 attended parking spaces.
[2] The incremental residential population was conservatively based on the Proposed Development. The Proposed Development's residential population is based on 2020 Census data for the average household size for dwelling units in Brooklyn CD 5 (i.e., 2.90 persons per household).

Open Space Resources

As discussed in **Chapter 1, "Project Description,"** both the Proposed Development and Alternate Community Facility Scenario would include approximately 20,080 sf (approximately 0.46 acres) of PAA space. Refer to **Appendix A** for an illustrative plan of the proposed PAA space. For conservative analysis purposes, the proposed PAA space introduced under the Proposed Actions was assumed to be 100 percent passive open space.

On Projected Development Site 1A, the proposed PAA space would measure approximately 4,904 sf and provide passive recreation space and amenities, inclusive of a pathway running diagonally from Van Sinderen Avenue to Herkimer Street, along with several planters, trees, seating options (i.e., bench seating with and without backs), PAA signage, and a small lawn on the northern portion of the site.

On Projected Development Site 1C, the proposed PAA space would measure approximately 4,190 sf and consist of sidewalk widenings along Williams Place and Fulton Street, with more centralized meeting and gathering spaces along Herkimer Street and near the corner of Projected Development Site 1C towards the junction of Herkimer Street, Fulton Street, and East New York Avenue. The inclusion of sidewalk widenings would promote increased pedestrian usability and walkability along the site's frontages. The

largest portion of the PAA space would contain several planters, seating options (i.e., bench seating with and without backs, movable tables/chairs, and wall seating), and PAA signage.

On Projected Development Site 1D, the proposed PAA space would measure approximately 3,689 sf and consist of pocket spaces along Herkimer Street as the street curves towards the junction of Fulton Street and East New York Avenue. The PAA space would line the curvature of Herkimer Street with amenities including planters, trees, various seating options (i.e., bench seating with and without backs, movable tables/chairs, and wall seating), and PAA signage.

On Projected Development Site 1E, the proposed PAA space would measure approximately 7,297 sf and consist of sidewalk widenings on Williams Place and East New York Avenue, a triangular meeting and gathering area at the corner of Williams Place and East New York Avenue, and a larger meeting and gathering space along the south side of Herkimer Street. The PAA space would contain amenities including planters, trees, various seating options (i.e., linear seating, bench seating with and without backs, movable tables/chairs, and wall seating), and PAA signage.

Assessment of Open Space Adequacy

Non-Residential (Quarter-Mile) Study Area

Quantitative Assessment

As shown in **Table 5-12**, in the future with the Proposed Actions, the passive open space ratio per 1,000 non-residents would decrease to approximately 0.242 (from approximately 0.285 acres in the No-Action condition) and would continue to be above the City's planning guideline ratio of 0.15 acres, as under existing and No-Action conditions.

TABLE 5-12
Adequacy of Open Space Resources – With-Action Condition

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Optimal Planning Guideline		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Non-Residential (Quarter-Mile) Study Area										
Non-Residents	6,806	4.41	1.65	2.76	N/A	0.242	N/A		0.15	
Residential (Half-Mile) Study Area										
Residents	45,259	152.90	135.44	17.45	3.378	2.993	0.386	2.50	0.50	2.00

Qualitative Assessment

In the future with the Proposed Actions, the non-residential study area's passive open space ratio would remain above the City's planning guideline of 0.15 acres per 1,000 non-residents. Although the Proposed Actions are expected to increase the demand for passive open space for the non-residential population in the non-residential study area, the incremental demand for passive open space generated under the Proposed Actions could be partially absorbed by the approximately 0.46 acres of passive PAA space introduced under the Proposed Actions.

Residential (Half-Mile) Study Area

Quantitative Assessment

In the With-Action condition, the total, active, and passive open space ratios within the residential study area would all decrease from the No-Action condition. The total open space ratio (approximately 3.378 acres per 1,000 residents) would remain above the City's guideline of 2.5 acres of total open space per 1,000 residents and the passive open space ratio (approximately 2.993 acres per 1,000 residents) would remain above the City's guideline of 0.5 acres of passive open space per 1,000 residents. However, the active open space ratio (approximately 0.386 acres per 1,000 residents) would remain below the City's guideline of 2.0 acres of active open space per 1,000 residents.

Qualitative Assessment

In the With-Action condition, the total open space ratio (approximately 3.378 acres per 1,000 residents) would be above the City's guideline of 2.5 acres of total open space per 1,000 residents and the passive open space ratio (approximately 2.993 acres per 1,000 residents) would be above the City's guideline of 0.5 acres of passive open space per 1,000 residents. However, the active open space ratio of approximately 0.386 acres per 1,000 residents would be below the City's planning guideline of 2.0 acres of active open space per 1,000 residents. As such, in the With-Action condition, as under existing and No-Action conditions, a shortfall of active open space is projected in the residential study area.

The deficiency of active open space resources within the residential study area would be partially ameliorated by several factors. As shown in **Table 5-5**, the residential study area open spaces include a variety of actively programmed open spaces appropriate for the residential user groups of the residential study area, including numerous playgrounds for children and teenagers, and several neighborhood parks for adults and senior citizens. As shown in **Figure 5-3**, the approximately 141.28-acre Highland Park, which is not included in the quantitative analysis but is located immediately adjacent to the boundary of the residential study area[6], is a large public park located directly adjacent to the residential study area (although the approximately 5.6-acre Upper Highland Playground is located within the residential study area and is therefore included in the quantitative analysis) and is programmed with a diverse mix of recreational activities, including athletic courts and fields, fitness equipment, playgrounds, trails for hiking, walking, and biking, and spray showers. If the approximately 47.49 acres of active open space located within the immediately-adjacent Highland Park were included in the quantitative inventory of open space resources, the active open space ratio in the With-Action condition would increase to approximately 1.435 acres per 1,000 residents in the residential study area, which approaches the City's planning guideline of 2.0 acres of active open space per 1,000 residents. In addition, and as noted in **Table 5-5**, most open space resources included in the quantitative analysis are in good or excellent condition and feature light or moderate utilization levels (i.e., typically appearing to have capacity to accommodate additional users).

Determining Impact Significance

A significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than the general guidance for the open space ratio percentage changes discussed above

[6] Please note that the Heath Place entrance to Highland Park (i.e., the closest park entrance that also provides connections to the remaining areas of Highland Park located outside of the residential study area) is an approximate 17-minute walk from the Project Area.

and shown in **Table 5-1**. These reductions may result in the overburdening of existing facilities or further exacerbating a deficiency in open space. **Table 5-13** displays the percentage changes from the No-Action condition to the With-Action condition for the non-residential and residential study areas.

According to the 2021 *CEQR Technical Manual*, proposed actions that would reduce the open space ratio for a non-residential population should consider the project's effect on passive open space in the non-residential study area. The more the passive open space ratio falls below the optimal ratio outlined for passive open space in the 2021 *CEQR Technical Manual* (i.e., 0.15 acres), the more likely the decrease would lead to a significant impact.

Non-Residential (Quarter-Mile) Study Area

In the future with the Proposed Actions, the non-residential study area's passive open space ratio would decrease by approximately 14.90 percent from the No-Action condition, although the passive open space ratio would remain above the City's guideline of 0.15 acres per 1,000 non-residents, at approximately 0.242 acres per 1,000 non-residents (refer to **Table 5-13**). Although the Proposed Actions are expected to increase the demand for passive open space for the non-residential population in the non-residential study area, the incremental demand for passive open space generated under the Proposed Actions could be partially absorbed by the approximately 0.46 acres of passive PAA space introduced under the Proposed Actions. As such, workers in the non-residential study area would continue to have access to passive open space resources above the City's planning guideline, and the Proposed Actions would not result in a significant adverse indirect impact on passive open space resources in the defined non-residential study area.

TABLE 5-13
Study Area Open Space Ratios Summary

Non-Residential and Residential Open Space Ratios Summary					
		Open Space Ratios Per 1,000 People			Percent Change
Ratio	DCP Open Space Guideline	Existing Condition	No-Action Condition	With-Action Condition	No-Action Condition to With-Action Condition
Non-Residential (Quarter-Mile) Study Area					
Passive - Non-Residents	0.15	0.221	0.285	0.242	-14.90%
Residential (Half-Mile) Study Area					
Total - Residents	2.5	4.198	3.627	3.378	-6.845%
Passive - Residents	0.5	3.715	3.211	2.993	-6.809%
Active - Residents	2.0	0.482	0.415	0.386	-7.126%

Residential (Half-Mile) Study Area

In the future with the Proposed Actions, the total, active, and passive open space ratios within the residential study area would each decrease by more than five percent from the No-Action condition. Although the total and passive open space ratios would decrease by approximately 6.845 and 6.809 percent, respectively, the total open space ratio (approximately 3.378 acres per 1,000 residents) would remain above the City's guideline of 2.5 acres of total open space per 1,000 residents and the passive open space ratio (approximately 2.993 acres per 1,000 residents) would remain above the City's guideline of 0.5 acres of passive open space per 1,000 residents. Furthermore, the decrease in the total and passive open space ratios would be ameliorated by the approximately 0.46 acres of passive PAA space introduced under the Proposed Actions. As such, residents in the residential study area would continue to have access to total and passive open space resources above the City's planning guidelines, and the Proposed Actions

would not result in significant adverse indirect impacts on total and passive open space resources in the defined residential study area.

The active open space ratio, at approximately 0.386 acres per 1,000 residents, would remain below the City's guideline of 2.0 acres of active open space per 1,000 residents. The active open space ratio within the residential study area would decrease by approximately 7.126 percent from the No-Action condition, above the City's percentage change guideline of one percent. While a proposed action that would reduce the active open space ratio by more than the general guidelines for the open space percentage changes shown in **Table 5-1** may be considered significant, there are certain qualitative factors that substantially reduce the Proposed Actions' potential impact on the residential study area's active open space ratio. Foremost among these qualitative factors is the approximately 47.49 acres of active open space within Highland Park that are located immediately adjacent to, but outside, the residential study area. While the 2021 *CEQR Technical Manual* outlines that the quantitative analysis only include open space resources located within the residential study area, it would not be reasonable to assume residents of the Proposed Development would only utilize the 5.6-acre Upper Highland Playground portion of Highland Park that is located within the residential study area, and not the approximately 47.49 acres of active open space located immediately beyond the boundary of the residential study area. If the quantitative analysis were to include the entirety of the immediately-adjacent Highland Park and its approximately 47.49 acres of active open space within the residential study area, there would be approximately 1.435 acres of active open space per 1,000 residents in the With-Action condition, which approaches the City's planning guideline for active open space (2.0 acres of active open space per 1,000 residents). Therefore, given the ameliorative effects of these qualitative factors, the Proposed Actions would not result in a significant adverse indirect impact on active open space resources in the defined residential study area.