PARK AVENUE BROOKLYN REZONING
CHAPTER 4: OPEN SPACE

A. INTRODUCTION

This chapter assesses the potential impacts of the Proposed Actions on open space resources. Open space is defined in the 2025 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly, or privately owned land that is available for leisure, play, or sport or serves to protect or enhance the natural environment. The *CEQR Technical Manual* indicates that an open space analysis should be conducted if a project would result in a direct effect on open space, such as the physical loss or alteration of public open space, or an indirect effect on open space, such as when a substantial new population could place added demand on an area's open spaces.

As detailed in **Chapter 1, "Project Description,"** the Proposed Actions would facilitate the redevelopment of nine Applicant-controlled Projected Development Sites within the Project Area, and three additional non-Applicant Projected Development Sites are assumed to be developed for the total reasonable worst-case development scenario (total RWCDS) purposes, for a total of 12 Projected Development Sites. The total RWCDS for the Proposed Actions would result in an incremental (net) increase of approximately 481 dwelling units (DUs), including 124 affordable units, 201,838 gross square feet (gsf) of school space, 28,505 gsf of local retail space, and a net decrease of approximately 40,250 gsf of medical office space, 17,969 gsf of office space, 11,400 gsf of warehouse space, 5,000 gsf of house of worship space, and a net decrease of 100 parking spaces. The total RWCDS for the Proposed Actions is estimated to result in a net increase of approximately 1,231 residents, approximately 51 workers, and approximately 2,220 students within the Project Area, as compared to the No-Action conditions.

The non-residential population introduced by the Proposed Actions exceeds the CEQR threshold of 500 or more daytime users, however the majority of these non-residents (2,220 of 2,271, or 98 percent) are students, that would be provided open space through the proposed construction of two schools and the expansion of an existing school. Because of this, the anticipated number of daytime users (51 workers) falls below the CEQR threshold, and a detailed analysis is not required[1]. The Proposed Actions would generate 481 incremental DUs, which exceeds the CEQR threshold of 250 incremental DUs in an existing M district, and therefore, requiring a preliminary assessment of open space. Accordingly, this analysis of open space will focus exclusively on the open space needs of the study area's residential population. A quantitative assessment was conducted to determine whether the Proposed Actions would significantly reduce the amount of open space available for the area's residential population, and is presented below.

B. PRINCIPAL CONCLUSIONS

A detailed analysis was conducted based on the methodology set forth in the *CEQR Technical Manual* and determined that the Proposed Actions would result in a significant adverse impact related to open space resources. According to the *CEQR Technical Manual,* a project may result in a significant adverse impact on open space resources if (a) there would be direct

[1] Refer to Attachment B of the EAS, "Supplemental Screening," Section 4.

displacement/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 in the surrounding area.

The Proposed Actions would not result in the direct displacement or alteration of existing public open space resources and would not result in any significant adverse operational air quality, noise, or other environmental impacts that would affect the usefulness of any study area open space. Therefore, there is no significant adverse direct impact to open space.

However, within the residential study area, the total, active, and passive open space ratios in the future with the Proposed Actions would remain below the City's planning goal ratios of 2.5 acres, which includes 2.0 acres of active and 0.5 acres of passive space per 1,000 residents, respectively. The residential study area total open space ratio would decrease by 1.52 percent to 0.269 acres per 1,000 residents; the residential study area active open space ratio would decrease by 1.52 percent to 0.202 acres per 1,000 residents; and the residential study area passive open space ratio would decrease by 1.52 percent to 0.067 acres per 1,000 residents. As these decreases would exceed the 2025 *CEQR Technical Manual* thresholds indicating the potential for an impact and the residential study area would continue to exhibit low open space ratios and heavy playground utilization rate, the Proposed Actions would result in a significant adverse indirect impact on total, active, and passive open space in the residential study area. Potential mitigation measures are discussed in **Chapter 16, "Mitigation."**

C. METHODOLOGY

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

Study Area

In accordance with *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 0.5-mile radius for residential projects and a 0.25-mile radius for commercial projects with a nonresidential (e.g., worker) population. As discussed in **Chapter 1, "Project Description,"** the ~~Proposed Project~~total RWCDS for the Proposed Actions would introduce approximately 1,231 residents, 2,220 students, and 51 workers to the Project Area compared to the 2031 No-Action scenario. Because the Proposed Actions have the potential to significantly increase the local residential population, but would provide private open space for 2,220 daytime users (students), an open space assessment for only the residential population is warranted.

Pursuant to *CEQR Technical Manual* guidance, the study area includes all census tracts that have at least 50 percent of their area located within a 0.5-mile radius of the Project Area. 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.[2] As shown in **Figure 4-1**, the residential open space study area is roughly bounded by Division Avenue to the north; Throop Avenue to the east, Lafayette Avenue to the south, and Taaffe Place and Clinton Avenue to the west. The open space study area includes the following census tracts in their entirety: census tracts 191, 235, 241, 253, 255, 257, 259.01, 259.02, 261, 507, 509, 531.01, 531.02, 533, 537, 539, and 1237.

Analysis Framework

Direct Effects Analysis

According to the *CEQR Technical Manual*, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As no open space resources would be physically altered or displaced as a result of the Proposed Actions, this chapter uses information from **Attachment B of the EAS, "Supplemental Screening,"**[3] **Chapter 9, "Air Quality," Chapter 11, "Noise,"** and **Chapter ~~13~~14, "Construction ~~Impacts~~,"** to determine whether the Proposed Actions have the potential to directly affect any open space resources in close proximity to 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 air quality, noise, shadows, or construction impacts on area open space resources, the Proposed Actions would not have any direct effects on open space resources and no further analysis is warranted.

Indirect Effects Analysis

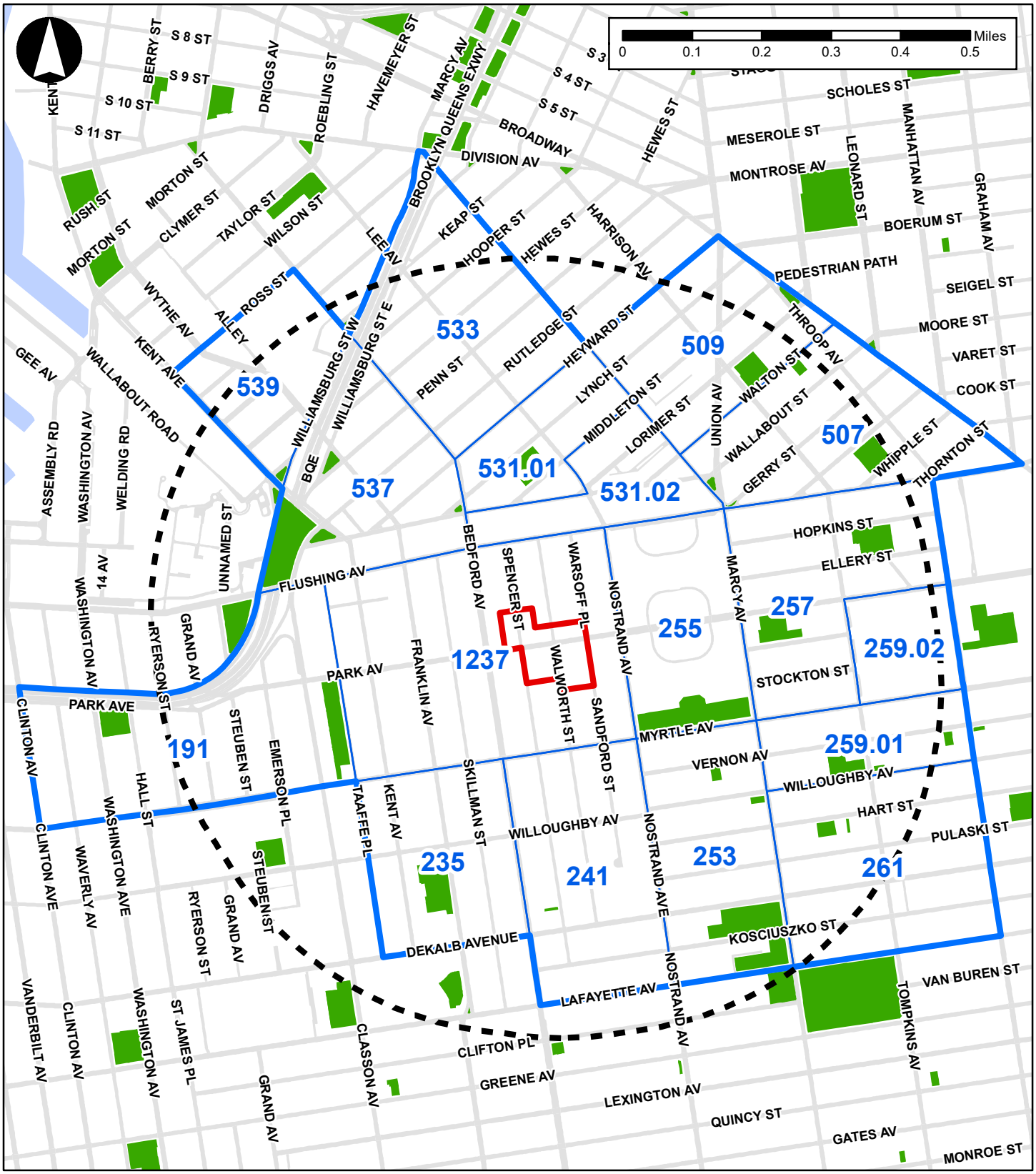
As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add enough population, either residents or nonresidents (e.g., workers), to noticeably diminish the ability of an area's open space to serve the existing or future populations. 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 located 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 *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 2031. Existing areas located within a WtPSA are within walking distance of a park (i.e., 0.5-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 4-2**, the Project Area is located partially within an area that has been identified as a Walk to a Park Service Area that is within walking distance of a park (i.e., not located within a walk gap area).

[2] Pursuant to the *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.

[3] As discussed in Attachment B of the EAS, "Supplemental Screening," Section 5, there would be no significant adverse shadows impacts to the surrounding open space resources as there are no sunlight-sensitive resources within the Tier I Area and further analysis is not warranted.

Open Space Study Area

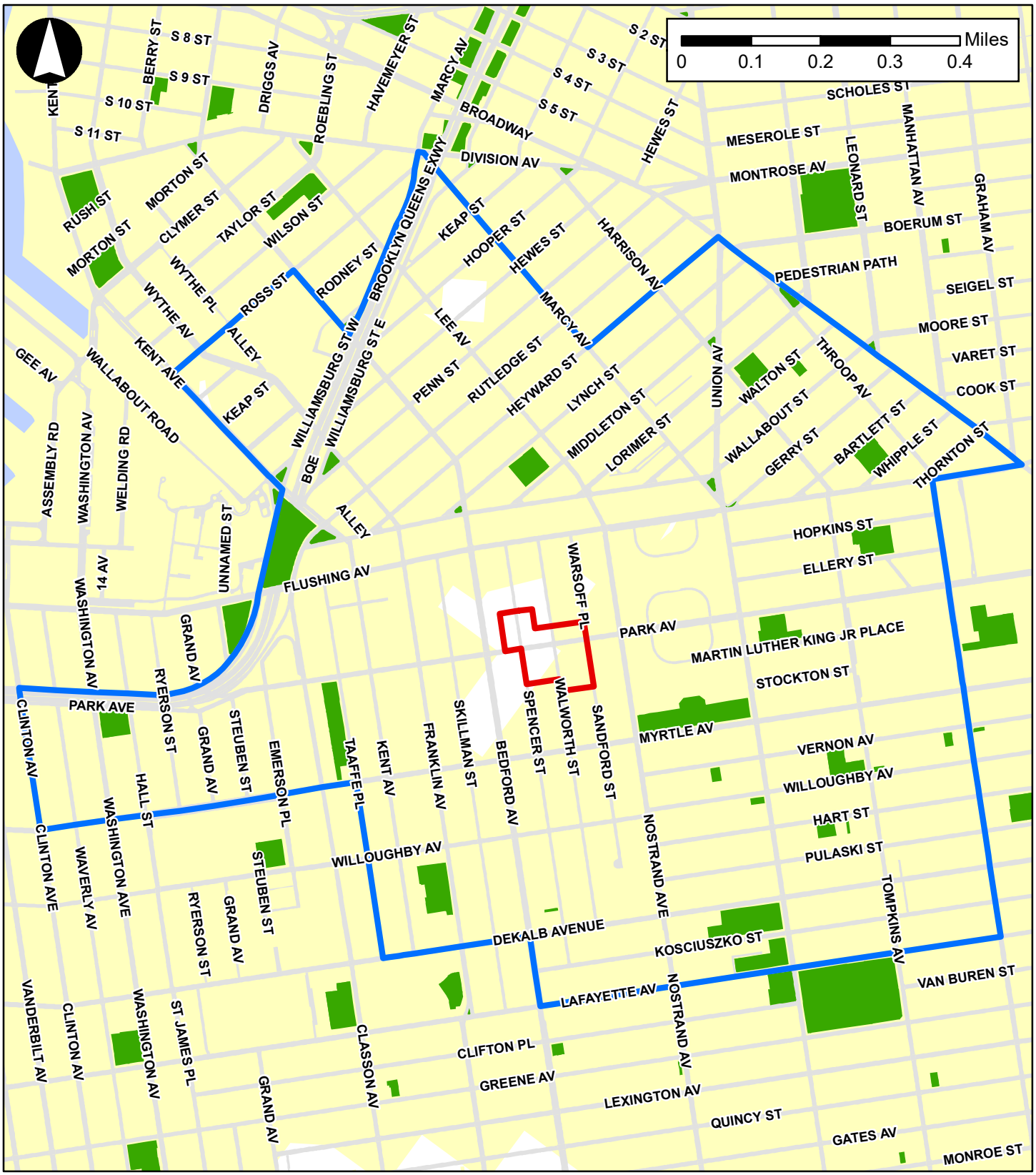


Source: NYCDCPPLUTO 2023v3.1, DoITT (2022).

Legend

Project Area | 1/2-mile Radius | Open Space Study Area | Open Space | 1237 Census Tracts

Walk to a Park Service Area



Source: NYCDCPPLUTO 2023v3.1, DoITT (2022).

Legend

- Project Area
- Open Space Study Area
- Open Space
- Walk to a Park Service 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 chapter 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 defined open space 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 the City's planning goals. In New York City, the optimal open space ratio for residential populations is 2.5 acres of open space per 1,000 residents. Ideally, this would be comprised of a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents).
- An evaluation of qualitative factors affecting open space use.
- A determination of the adequacy of open space in the open space study area for existing, No-Action, and With-Action conditions.

Preliminary Assessment

According to the *CEQR Technical Manual*, a preliminary assessment may be useful to determine if a detailed open space analysis is necessary, or whether the open space assessment can be targeted to a particular user group. This initial assessment calculates an open space ratio by relating the existing residential and nonresidential populations to the total open space in the study area. It then compares that ratio with the open space ratio in the future with the Proposed Actions. If there is a decrease in the open space ratio that would approach or exceed 1 percent in areas exhibiting low open space ratios (e.g., below 0.50 acres per 1,000 residents), a detailed analysis is warranted. The detailed analysis examines passive and active open space resources available to residents within the open space study area delineated in accordance with the *CEQR Technical Manual*, as outlined above. As the Proposed Actions would introduce a residential population in an area with a limited amount of available open space, which exhibits a low open space ratio under existing conditions, a detailed open space analysis is warranted and is provided herein.

Impact Assessment

As described in the *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 scenario. 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 scenario, 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 *CEQR Technical Manual*, a project that would reduce the open space ratio by more than the general guidelines for the open space percentage change shown in **Table 4-1** may be considered significant, as these reductions may result in overburdening existing facilities or further exacerbating an existing deficiency in open space. As shown in **Table 4-1**, the guidance for a tolerated percent change in the open space ratio is determined based on the open space ratio ranges outlined in the *CEQR Technical Manual*. In areas that are within a WtPSA, a greater percentage of change (more than five percent) may be tolerated.

TABLE 4-1
Guidance for Percentage Change in Open Space Ratio

Open Space Ratio Range	Percent Change in Open Space Ratio
2.01 to 2.50 or Greater	5%
1.51 to 2.0	4%
1.01 to 1.5	3%
0.51 to 1.0	2%
0.50 or Less	1%

Source: Table 7-1 in Chapter 7, "Open Space," of the 2025 *CEQR Technical Manual.*
*2.5 open space ratio is the planning goal in New York City.

It should be noted that the City's optimal open space ratios and percentage reductions shown in **Table 4-1** do not constitute an absolute impact threshold. The *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for significant adverse impacts. Furthermore, as discussed in Section 321 of Chapter 7, "Open Space" of the *CEQR Technical Manual*, projects located outside of the WtPSA should be further assessed for qualitative impacts. As such, projects that may result in significant quantitative impacts on open space are typically further assessed in a qualitative assessment to determine the overall significance of the impact.

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

D. EXISTING CONDITIONS

Study Area Population

To determine the population served by existing open space resources, 2020 Census data were compiled for the census tracts comprising the residential (0.5-mile) study area. As shown in **Table 4-2**, the study area has a residential population of approximately 76,245 people.

The residential population of the study area was also broken down by age group. As shown in **Table 4-2**, people between the ages of 20 and 64 make up over half (approximately 51.6 percent) of the residential population in the 0.5-mile study area. Children and teenagers (0 to 19 years old) account for approximately 42.1 percent of the residential study area population, and persons 65 years and over account for approximately 6.4 percent of the residential study area population. As also presented in **Table 4-2**, the age breakdown of the study area includes a much higher percentage of children and teenagers compared to Brooklyn (approximately 21.8 percent), which

itself has a higher percentage of children compared to New York City as a whole (approximately 19.8 percent). Conversely, the study area includes a lower percentage of adults aged 20 to 64 and persons 65 years and older at approximately 51.6 percent compared to Brooklyn (approximately 64.6 percent) and the City (approximately 65.3 percent). The study area's average median age is 24.5, compared to 35.2 in Brooklyn and 36.8 in New York City as a whole.

TABLE 4-2
Residential Population and Age Distribution in the Study Area

Census Tract	Total Residential Population	Age Distribution												Median Age
		Under 5		5 to 9		10 to 14		15 to 19		20 to 64		65+		
		#	%	#	%	#	%	#	%	#	%	#	%	
Study Area	76,245	9,546	12.5	8,659	11.4	7,592	10.0	6,288	8.2	39,308	51.6	4,852	6.4	24.5
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	372,612	13.6	35.2
NYC	8,804,190	475,637	5.4	479,017	5.4	491,325	5.6	505,700	5.7	5,542,287	62.9	1,310,224	14.9	36.8

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

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 ages ten through 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 study area suggests a demand for facilities geared toward the recreational needs of a wide range of children, as the study area exhibits a high percentage of residents in the 0-19-year age bracket.

Inventory of Publicly Accessible Open Space

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, publicly accessible open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts using both a quantitative and a qualitative analysis, whereas private open space is not accessible to the general public on a regular basis and is considered only qualitatively. Pursuant to the *CEQR Technical Manual*, private open space is considered only after an assessment of the proposed project's effects on public open space has been completed. If the proposed project is likely to have indirect effects on public open space (such as greater utilization demands), the ability of private open space to influence or alter those effects may be considered.

An open space resource is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play, such as sports or exercise, and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, and multi-purpose play areas (open lawns and paved areas for active recreation such as running, games, informal ball-playing, skipping rope, etc.). Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas. However, some passive spaces can be used for both passive and active

recreation, such as a lawn or riverfront walkway, which can also be used for ball playing, jogging, or rollerblading.

Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area. The information used for this analysis was gathered through field inventories conducted in April 2023; the New York City Department of Parks and Recreation's ("NYC Parks") website; and other secondary sources of information.

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

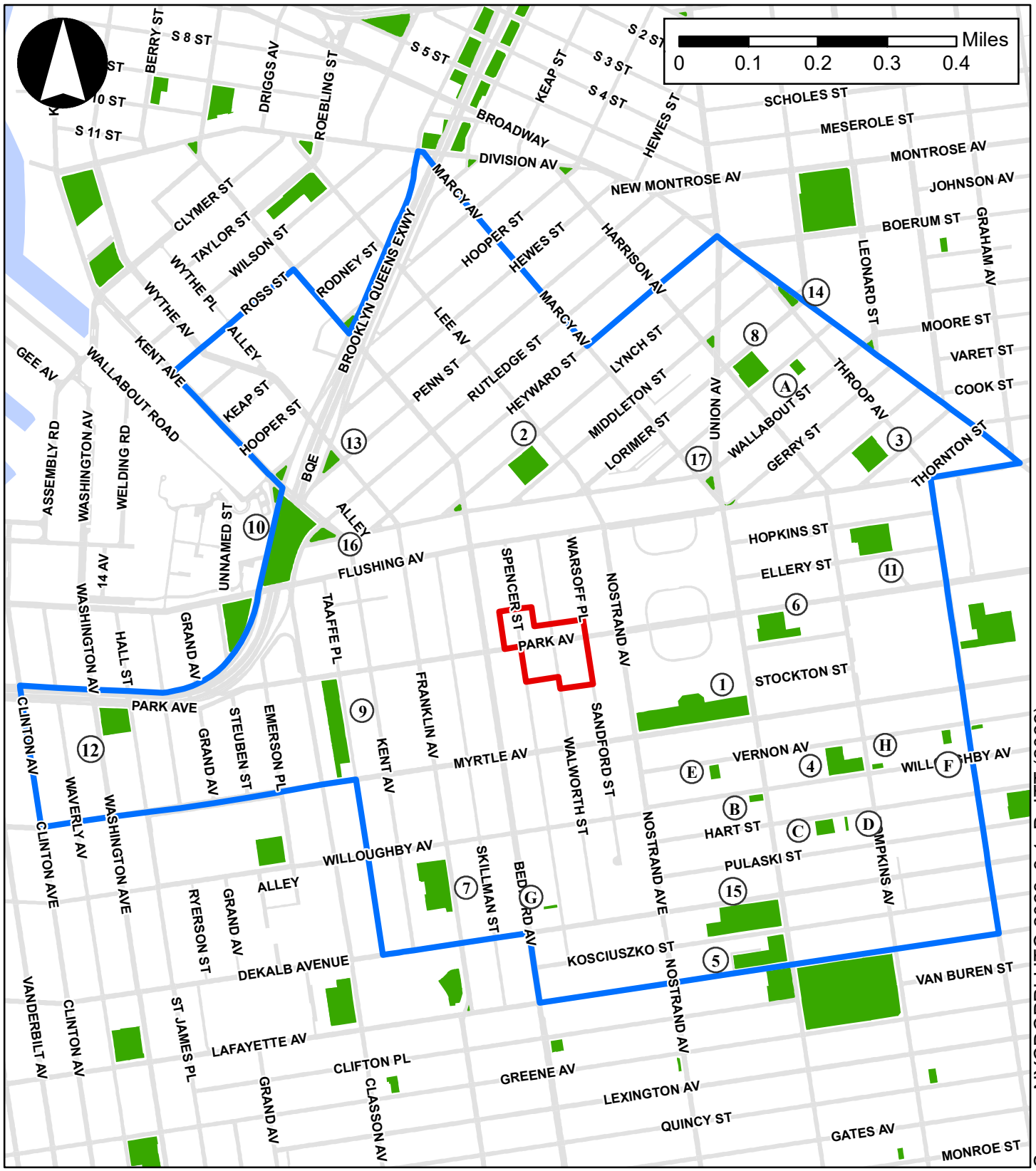
Likewise, judgments as to the intensity of use of the resources were qualitative, based on an observed degree of activity or utilization on a weekday afternoon. If a resource seemed to be at or near capacity (i.e., the majority of benches or equipment was in use), then utilization was considered high. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered low. **Table 4-3** identifies the address, ownership, features, and acreage of active and passive open space resources in the study area, as well as their condition and utilization. **Figure 4-3** maps their location within the study area.

As shown in **Figure 4-3** and **Table 4-3**, there are 17 publicly accessible open space resources located within the study area that were included in the quantitative analysis. The study area contains a total of approximately 21.75 acres of publicly accessible open space, including approximately 16.34 acres (approximately 75.13 percent) of active open space and approximately 5.41 acres (approximately 24.87 percent) of passive open space (refer to **Table 4-3**).

The study area's largest open space resource is the approximately 3.2-acre Marcy Playground (Map No. 1), which is located within the eastern portion of the study area, approximately four blocks to the southeast of the Project Area. Marcy Playground is located on the Marcy Houses NYCHA campus and is jointly operated by NYC Parks and NYCHA. The nearest entrance to Marcy Playground from the Project Area is a secondary entrance located at Nostrand and Myrtle Avenues approximately 0.05 miles from the easternmost part of the Project Area. Marcy Playground is open to the public from dawn to dusk and contains handball courts, playgrounds, volleyball courts, basketball courts, and spray showers.

The study area's second largest open space resource is the approximately 2.39-acre Kosciuszko Pool (Map No. 15), which is located within the southeastern portion of the study area. Kosciuszko Pool, which is owned and operated by NYC Parks, contains one Olympic-sized pool, one wading pool, and elevated seating. Kosciusko Pool is open from 11 am through 7 pm, from June to early September.

The area's third largest open space is the Taaffe Playground (Map No. 9). This 1.82-acre park is located directly west of the Project Area and includes basketball courts, handball courts, playgrounds, and spray showers. The remaining 14 open space resources total to approximately 13 acres and are located throughout the study area. They are comprised mostly of playgrounds, as well as four triangles/seating areas.



Source: NYCDCPPLUTO 2023v3.1, DoITT (2022).

Legend

Project Area | Open Space Study Area | Open Space Resources (refer to Table 4-3)

A majority of the publicly accessible open space resources included in the quantitative indirect open space impact assessment are in good to excellent condition. In terms of utilization, most of the study area open space resources exhibit low to moderate utilization, except for three resources that exhibit high utilization.

Additional open spaces not meeting the *CEQR* criteria for inclusion in the quantitative analysis are discussed qualitatively; they are also listed in **Table 4-3**.

TABLE 4-3
Inventory of Existing Open Space and Recreational Resources in the Study Area

Map No.[1]	Name	Location	Owner/ Agency[2]	Amenities	Hours of Operation	Acreage	Active		Passive		Condition/ Utilization
							Acres	%	Acres	%	
Open Space Resources Included in Quantitative Analysis											
1	Marcy Playground	Myrtle Ave. between Nostrand and Marcy Ave.	NYC Parks	Handball Courts, Playgrounds, Spray Showers, Volleyball Courts	6 am to 9 pm	3.20	2.08	65%	1.12	35%	Good/High
2	Sarah J.S. Tompkins Garnet Playground	Middleton St. between Lee and Bedford Ave.	NYC Parks	Basketball Courts, Handball Courts, Playgrounds, Spray Showers	6 am to 9 pm	1.1	0.88	80%	0.22	20%	Good/Low
3	Bartlett Playground	Bartlett St. between Throop and Flushing Ave.	NYC Parks	Basketball Courts, Fitness Equipment, Handball Courts, Playgrounds, Spray Showers	6 am to 9 pm	1.03	0.62	60%	0.41	40%	Excellent /Moderate
4	Willoughby Playground	Tompkins Ave and Willoughby Ave.	NYC Parks/ NYC DOE	Basketball Courts, Handball Courts, Playground, Spray Showers	6 am to 9 pm	0.90	0.77	85%	0.14	15%	Good/ Moderate
5	Banneker Playground	Marcy Ave. and Lafayette Ave.	NYC Parks/ NYC DOE	Basketball Courts, Handball Courts, Playground	6 am to 9 pm	1.67	1.34	80%	0.33	20%	Good/High
6	Stockton Playground	Park Ave. and Marcy Ave.	NYC Parks/ NYC DOE	Basketball Courts, Fitness Equipment, Handball Courts, Playgrounds, Spray Showers	6 am to 9 pm	1.09	0.87	80%	0.22	20%	Excellent/ High
7	Star Spangled Playground	Franklin Ave. and Willoughby Ave.	NYC Parks / NYC DOE	Basketball Courts, Football Fields, Handball Courts, Playgrounds, Spray Showers	6 am to 9 pm	1.69	1.35	80%	0.34	20%	Good/Low
8	De Hostos Playground	Harrison Ave. between Walton and Lorimer St.	NYC Parks/ NYC DOE	Basketball Courts, Handball Courts, Playgrounds, Spray Showers	6 am to 9 pm	1.10	0.83	75%	0.28	25%	Good/Low
9	Taaffe Playground	Taaffe Pl. between Park and Myrtle Ave.	NYC Parks	Basketball Courts, Handball Courts, Playgrounds, Spray Showers	6 am to 9 pm	1.82	1.27	70%	0.55	30%	Fair/ Moderate
10	Classon Playground[3]	Flushing Ave., Kent Ave., Classon Ave., and Williamsburg Pl.	NYC Parks	Basketball Courts, Handball Courts, Playgrounds, Spray Showers	6 am to 9 pm	2.98	2.53	85%	0.45	15%	Fair/Low
11	Charlie's Place	Ellery St. at Delmonico Pl.	NYC Parks	Handball Courts, Playgrounds	6 am to 9 pm	1.26	0.88	70%	0.38	30%	Excellent/ Moderate
12	Washington Hall Park	Park Ave. between Washington Ave. and Hall St.	NYC Parks	Handball Courts, Playgrounds, Spray Showers	Dawn to Dusk	0.90	0.68	75%	0.23	25%	Good/Low
13	Penn Triangle	Wythe Ave. and Penn St.	NYC Parks	Playgrounds	24 Hours	0.18	0.09	50%	0.09	50%	Excellent/ Moderate
14	Lindsay Triangle	Throop Ave and Broadway	NYC Parks	Seating Areas, Citi Bike	24 Hours	0.04	0.00	0%	0.04	100%	Good/Low
15	Kosciuszko Pool	Marcy Ave. between DeKalb Ave. and Kosciuszko St.	NYC Parks	Outdoor Pool	11 am – 7 pm (seasonal)	2.39	2.15	90%	0.24	10%	Good/High

Map No.[1]	Name	Location	Owner/ Agency[2]	Amenities	Hours of Operation	Acreage	Active		Passive		Condition/ Utilization
							Acres	%	Acres	%	
Open Space Resources Included in Quantitative Analysis (continued)											
16	Classon Triangle	Kent Ave., Classon Ave., Wallabout St.	NYC Parks	Seating Areas	24 Hours	0.21	0.00	0%	0.21	100%	Good/Low
17	Union and Marcy Triangle	Union Ave. and Marcy Ave.	NYC DOT	Seating Areas, Citi Bike	24 Hours	0.18	0.00	0%	0.18	100%	Good/Low
					0.5-Mile Study Area Total	**21.75**	**16.34**	**75.13%**	**5.41**	**24.87%**	
Map No.[1]	**Name**	**Location**	**Owner/ Agency**	**Amenities**	**Hours of Operation**	**Acreage**	**Active**		**Passive**		**Condition/ Utilization**
							#	**%**	**#**	**%**	
Open Space Resources Not Included in Quantitative Analysis											
A	Project Roots	106 Walton St.	NYC Parks	Community Garden	20 Hours/Week (April 1 - October 31)	0.18	0.00	0%	0.18	100%	Good/Low
B	Red Gate Garden	606 Marcy Ave.	NYC Parks	Community Garden	20 Hours/Week (April 1 - October 31)	0.12	0.00	0%	0.12	100%	Excellent/ Low
C	Hart to Hart	108 Hart St.	NYC Parks	Community Garden	20 Hours/Week (April 1 - October 31)	0.34	0.00	0%	0.34	100%	Good/Low
D	American Heart	122 Hart St.	NYC Parks	Community Garden	20 Hours/Week (April 1 - October 31)	0.05	0.00	0%	0.05	100%	Good/Low
E	New Harvest	123 Vernon Ave.	NYC HPD	Community Garden	20 Hours/Week (April 1 - October 31)	0.17	0.00	0%	0.17	100%	Good/Low
F	Vernon Tandt Block Association	200 Vernon Ave.	NYC Parks	Community Garden	20 Hours/Week (April 1 - October 31)	0.15	0.00	0%	0.15	100%	Good/Low
G	Spencer St. Block Association	230A Spencer St.	NYC Parks	Community Garden	20 Hours/Week (April 1 - October 31)	0.05	0.00	0%	0.05	100%	Good/Low
H	All People's Garden	147 Tompkins Ave.	NYC Parks	Community Garden	20 Hours/Week (April 1 - October 31)	0.07	0.00	0%	0.07	100%	Good/Low
					0.5-Mile Study Area Total	**1.13**	**0.00**	**0%**	**1.13**	**100%**	

Sources: NYC Parks, 2023 Primary Land Use Tax Lot Output ("PLUTO") Data (Version 2), site visits conducted in April 2023.
Notes:
[1] Refer to **Figure 4-3**
[2] NYC Parks = NYC Parks and Recreation; NYC DOE = NYC Department of Education; NYC DOT = NYC Department of Transportation; NYC HPD = NYC Housing Preservation and Department
[3] Classon Playground is located within the study area between Flushing, Classon, and Kent Avenues and Williamsburg Place, however, there is another Classon Playground (once called Dekalb Playground) located outside of the study area but within the 0.5-mile radius to the west, which is mentioned and considered qualitatively. The Classon Playground located outside of the study area is located along Classon Avenue between Dekalb and Lafayette Avenues.

Assessment of Open Space Adequacy

Quantitative Assessment

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

Table 4-4 shows that, with an existing study area residential population of approximately 76,245 people, the existing total open space ratio in the study area is approximately 0.285 acres per 1,000 residents; the study area has 0.214 acres of active open space per 1,000 residents and 0.071 acres of passive open space per 1,000 residents. As indicated in **Table 4-4**, the existing total, active, and passive residential open space ratios are below the City's open space planning goals of 2.5, 2.0, and 0.5 acres per 1,000 residents, respectively.

TABLE 4-4
Adequacy of Open Space Resources in the Study Area – Existing Conditions

		Open Space Acreage			Open Space Ratios per 1,000 People			2025 *CEQR Technical Manual* Open Space Optimal Planning Goal		
Population		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	76,245	21.75	16.34	5.41	0.285	0.214	0.071	2.50	2.00	0.50

Qualitative Assessment

The total, active, and passive open space resources that exist within the open space study area fall below the City's quantitative guidelines, as discussed above. However, this condition is ameliorated by several factors. The majority of the open space resources located in the study area were found to be in good condition. These open spaces contain a mix of recreational facilities that provide a variety of active and passive amenities that serve all age groups. As described above, recreation areas include play equipment, spray showers, volleyball courts, basketball and handball courts, open lawns, seating areas, and an outdoor pool, with roughly 74 percent dedicated to active use and 26 percent to passive recreation.

Further, the study area's largest open space, Marcy Playground, is connected to New York City Housing Authority's Marcy Houses, a 28-acre housing development with smaller open spaces situated throughout. These NYCHA open spaces are publicly accessible and include benches, picnic tables, and smaller playgrounds. For conservative analysis purposes these spaces are excluded from the quantitative analysis calculations.

Additionally, several open space resources fall within a 0.5-mile of the Project Area but are excluded from the residential open space study area due to *CEQR Technical Manual* methodology. These excluded open space resources include Pratt Playground, Lafayette Gardens Playground, Stueben Playground, and a portion of Classon Playground. Together, these open spaces add an additional 4.13 acres of open space within a 0.5-mile distance of the Project Area.

The largest of these spaces is Classon Playground, a 1.34-acre park that is approximately a 15-minute walk from the Project Area.[4] Classon Playground contains a mix of passive and active uses including a playground, benches, swings, public restrooms, and handball courts. Stueben Playground is also a 15-minute walk from the Project Area and includes handball courts, fitness equipment, and a playground. The other parks, Lafayette Gardens Playground and Pratt Playground, are both an approximately 12-minute walk from the Project Area. These playgrounds contain play equipment, sitting areas, basketball courts, and handball courts. The four playgrounds are in excellent condition according to NYC Parks inspections conducted in 2024.

Just outside the study area, there is a large neighborhood park, Herbert von King Park, containing 7.82 acres of open space with a wide variety of programming. Herbert von King Park is open from 6 am to 1 am and features a dog park, barbequing areas, picnic tables, benches, playgrounds, grass lawns, fitness equipment, baseball fields, handball courts, spray showers, and an amphitheater. There is also a recreation center which requires a paid membership for adults (membership fees for seniors, veterans, people with disabilities are discounted and membership is free for youths and young adults under the age of 24). The park is 0.8 miles southeast of the Project Area (approximately a 16-minute walk). It is expected that open space users in the study area would frequent all of the open spaces mentioned above given their proximity, size, and range of amenities.

Additionally, there are eight community gardens in the study area that provide approximately 1.13 acres of passive recreation space (refer to **Figure 4-3**). These gardens are mainly clustered in the southern and eastern parts of the study area and provide up to 20 hours a week of programming for local residents from April 1 to October 31.

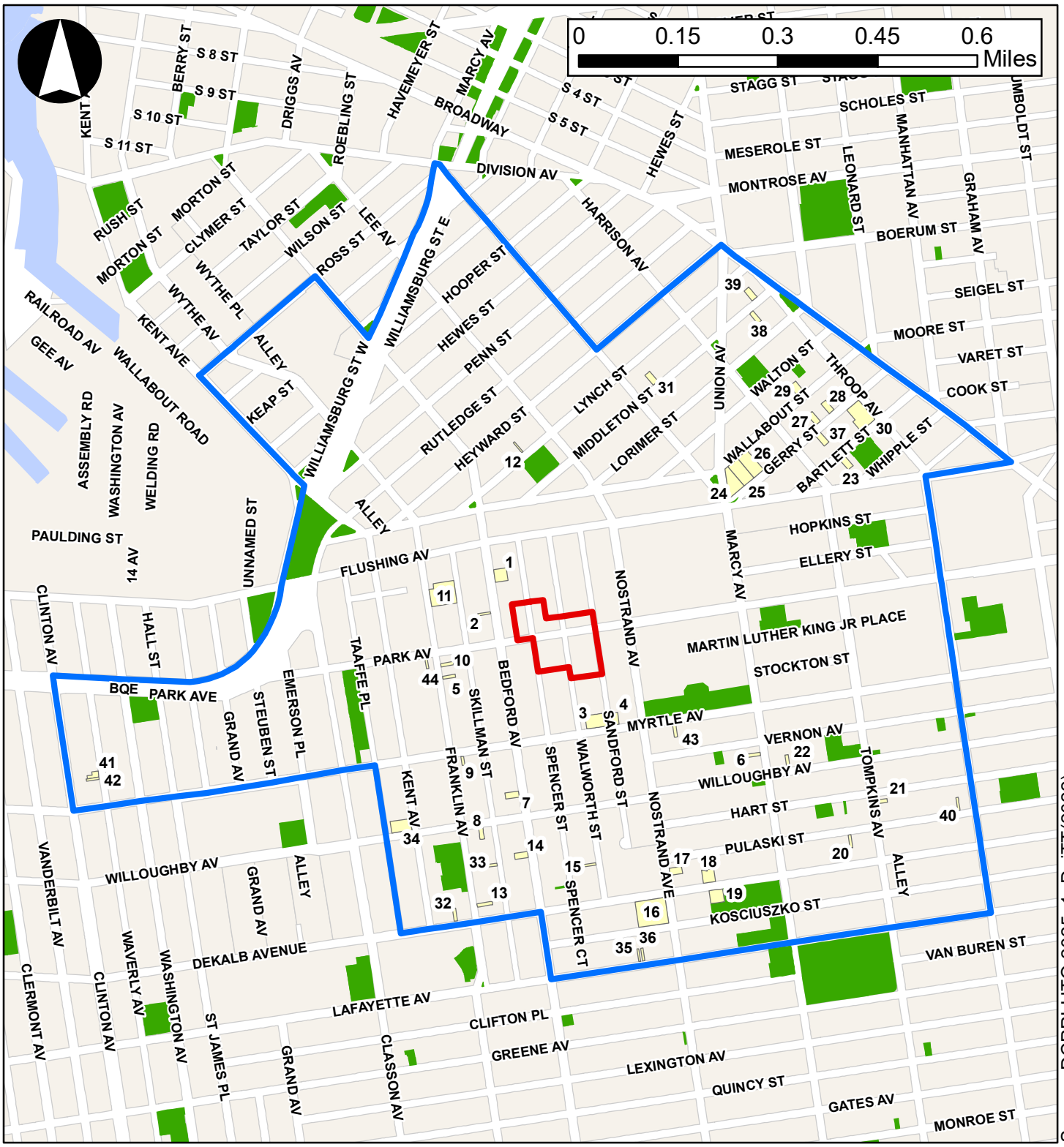
E. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Study Area Population

In the future without the Proposed Actions, Projected Development Sites 2 (Block 1716, Lot 3) and 12 (Block 1717, Lot 2) are expected to be developed on an as-of-right basis. Existing conditions are expected to remain for the other nine Projected Development Sites. Projected Development Site 2 is expected to be redeveloped with an 11-story, 69,000-gsf mixed-use building that will introduce approximately 231 workers. Projected Development Site 12 is expected to be redeveloped with a one-story, 6,216-gsf commercial building and required on-site parking spaces. The building will introduce 19 employees into the study area. As summarized in **Table 4-5**, there are 44 developments within the study area anticipated for completion by the 2031 build year. In sum, these 44 developments are expected to introduce approximately 1,313 DUs and 3,361 residents (refer to **Figure 4-4**).

[4] Classon Playground (Map No. 10) is located within the study area between Flushing, Classon, and Kent Avenues and Williamsburg Place, however, there is another Classon Playground (once called Dekalb Playground) located outside of the study area but within the 0.5-mile radius to the west, which is mentioned and considered qualitatively. The Classon Playground located outside of the study area is located along Classon Avenue between Dekalb and Lafayette Avenues.

Open Space Study Area No-Build Residential Developments



Source: DCPPLUTO 2025v1; DoiTT(2022)

Legend

- Project Area
- Open Space Study Area
- No-Build Residential Developments
- Open Space

TABLE 4-5
Study Area No-Action Development Projects

No.	Address	DUs	Residential Population[1]
1	747 Bedford Avenue	23	59
2	794 Bedford Avenue	1	3
3	122 Sandford Street	120	307
4	735 Myrtle Avenue	10	26
5	97 Franklin Avenue	1	3
6	592 Marcy Avenue	8	20
7	910 Bedford Avenue	8	20
8	344 Willoughby Avenue	5	13
9	656 Myrtle Avenue	2	5
10	89 Franklin Avenue	2	5
11	22 Skillman Street/51 Franklin Avenue	113	289
12	61 Lynch Street	4	10
13	245 Franklin Avenue	17	44
14	952 Bedford Avenue	14	36
15	222 Walworth Street	2	5
16	77 Kosciuszko Street	320	819
17	211 Nostrand Avenue	20	51
18	639 Dekalb Avenue	37	95
19	652 Dekalb Avenue	45	115
20	124 Pulaski Street	3	8
21	173 Tompkins Avenue	8	20
22	525 Willoughby Avenue	8	20
23	30 Bartlett Street	6	15
24	11 Gerry Street	120	307
25	322 Wallabout Street	60	154
26	330 Wallabout Street	84	215
27	77 Gerry Street	14	36
28	91 Gerry Street	5	13
29	297 Wallabout Street	5	13
30	88 Throop Avenue	140	358
31	125 Middleton Street	4	10
32	481 Dekalb Avenue	15	38
33	210 Skillman Street	2	5
34	291 Willoughby Avenue	8	20
35	551 Lafayette Avenue	6	15
36	553 Lafayette Avenue	6	15
37	66 Gerry Street	6	15
38	200 Middleton Street	5	13
39	221 Middleton Street	14	36
40	197 Pulaski Street	7	18
41	132 Waverly Avenue	14	36
42	134 Waverly Avenue	6	15
43	772 Myrtle Avenue	10	26
44	448 Park Avenue	5	13
Total		***1,313***	***3,361***

Notes:
[1] Estimates of the residential population have been calculated based on the average household size of 2.56 persons per household according to the 2020 Census.

As indicated in **Table 4-6**, in the No-Action condition, the study area population is expected to increase to approximately ~~80,837~~79,606 residents.

TABLE 4-6
No-Action Condition Study Area Population

	Existing Population	Additional Population from No-Action Developments	No-Action Condition Total Population
Residents	76,245	~~3,313~~3,361	79,606

Open Space Resources

While there are no planned changes to open space resources that would increase or decrease the overall acreage in the study area, NYC Parks has two capital projects planned in the study area. These projects are the Star Spangled Playground Synthetic Turf Field Reconstruction and Brooklyn Green Infrastructure construction at Classon Playground. Both projects are in the construction phase with anticipated completion dates in 2025. While these projects would not add any additional open space acreage to the study area, these projects would improve the condition and usability of over three acres of open space.

Assessment of Open Space Adequacy

In the No-Action condition, the additional population introduced to the study area would increase the demand on the study area's open space resources. As shown in **Table 4-7**, the No-Action condition total, active, and passive open space ratios per 1,000 residents are expected to decrease to 0.273, 0.203, and 0.071 respectively, representing a 4.18 percent decrease from existing conditions. The study area's total, active, and passive open space ratios would continue to fall below the city's optimal planning guidelines.

TABLE 4-7
Adequacy of Open Space Resources – No-Action Condition

Population		Open Space Acreage			Open Space Ratios per 1,000 People			2025 *CEQR Technical Manual* Open Space Optimal Planning Goal		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	79,606	21.75	16.34	5.41	0.273	0.205	0.068	2.50	2.00	0.50

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

This section describes the open space conditions that would result from the Proposed Actions' total RWCDS by the 2031 build year. It evaluates the potential for the Proposed Actions to result in significant adverse impacts to open space resources directly and indirectly based on a comparison of the No-Action condition (described above) to the With-Action condition.

Study Area Population

In the future with the Proposed Actions, it is estimated the total RWCDS established for the Proposed Actions would introduce approximately 1,231 incremental residents to the Project Area (the total for all 12 Projected Developments within the Project Area). Therefore, in the With-Action condition, the study area population is expected to increase to approximately 80,837 residents.

Study Area Open Space

In the future with the Proposed Actions, three of the proposed projects (Projected Development Sites 2, 6, and 8) include an approximate 20,000-square feet ("sf") of rooftop recreation space. Access to the open space would be restricted to students at the proposed private schools.

Direct Effects Analysis

The Proposed Actions would not have a direct effect on any study area open space resources. Construction and operation of the future buildings on the Projected Development Sites in the Project Area would not cause the physical loss of public open space because of encroachment or displacement of the space; would not change the use of an open space so that it no longer serves the same user population; and would not limit public access to an open space resource. In addition, as discussed in **Attachment B of the EAS, "Supplemental Screening," Chapter 9, "Air Quality," Chapter 11, "Noise," and Chapter ~~13~~14, "Construction ~~Impacts~~,"** the Proposed Actions would not result in significant adverse shadows, air quality, noise, or construction impacts on study area open space resources.

Indirect Effects Analysis

As noted above, the open space impact analysis consists of both a quantitative assessment and a qualitative assessment. The quantitative assessment considers how a proposed project would change the open space ratios in the study area. The qualitative assessment considers factors such as proximity to nearby destination open space resources, the connectivity of open space, the effects of new open space provided by the proposed project, and private open spaces created by the proposed project not available to the public. It is recognized that the city's planning goals are not feasible for many areas of the city, and they are not considered impact thresholds on their own. Rather, these are benchmarks indicating how well an area is served by open space.

Assessment of Open Space Adequacy

In the With-Action condition, the additional population introduced to the study area would increase the demand on the study area's open space resources. As shown in **Table 4-8**, the With-Action condition total, active, and passive open space ratios per 1,000 residents are expected to decrease to 0.269, 0.202, 0.067 under the No-Action condition.

Therefore, the study area total, passive, and active open space ratios would continue to fall below the city's optimal planning guidelines for total, active, and passive active open space ratios under the With-Action condition.

TABLE 4-8
Adequacy of Open Space Resources – With-Action Condition

Population		Open Space Acreage			Open Space Ratios per 1,000 People			2025 *CEQR Technical Manual* Open Space Optimal Planning Goal		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	80,837	21.75	16.34	5.41	0.269	0.202	0.067	2.50	2.00	0.50

Potential Effects of the Proposed Actions on Publicly Accessible Open Space

Quantitative Assessment

According to the *CEQR Technical Manual*, a significant adverse open space impact may occur if a proposed project would reduce the open space ratio by more than the general guidelines for the open space percentage change provided in **Table 4-9**.

TABLE 4-9
Detailed Assessment – Percentage Change Guidance to Determine Possible Open Space Impact

Total Open Space Ratio Range*	Active Open Space Ratio Range*	Passive Open Space Ratio Range*	Percentage Change in Open Space ratio Signifying a Possible Adverse Open Space Impact
2.01 to 2.50 or greater	1.61 to 2.0 or greater	0.41 to 0.50 or greater	5%
1.51 to 2.00	1.21 to 1.60	0.31 to 0.40	4%
1.01 to 1.50	0.81 to 1.20	0.21 to 0.30	3%
0.51 to 1.00	0.41 to 0.80	0.11 to 0.20	2%
0.50 or less	0.01 to 0.40	0.01 to 0.10	1%
*2.5 open space ratio is the planning goal in New York City, with the optimal distribution goal of 2.0 active open space ratio and 0.5 passive open space ratio.			

Source: Table 7-5 in Chapter 7, "Open Space," of the 2025 *CEQR Technical Manual*.

Table 4-10 displays the percentage changes from the No-Action condition to the With-Action condition for the study area. As noted previously, in the future with the Proposed Actions, the study area total, active, and passive open space ratios would continue to fall below the city's optimal planning guidelines.

TABLE 4-10
Study Area Open Space Ratios Summary

Ratio	2025 *CEQR Technical Manual* Open Space Optimal Planning Goal (acres per 1,000)	Open Space Ratios per 1,000 People			Percent Change (Future No-Action to Future With-Action)
		Existing	No-Action	With-Action	
Total – Residents	2.5	0.285	0.273	0.269	-1.52%
Active—Residents	2.0	0.214	0.205	0.202	-1.52%
Passive—Residents	0.5	0.071	0.068	0.067	-1.52%

In the future with the Proposed Actions, the residential total, passive, and active open space ratios would each decrease by approximately 1.52 percent from the No-Action condition. In the With-Action condition, as under the No-Action condition, the study area's total, active, and passive open space ratios per 1,000 residents (0.269, 0.202, and 0.067, respectively) would fall below the city's optimal planning guidelines for total, active, and passive open space ratios per 1,000 residents (2.5, 2.0, and 0.5 respectively). As shown in **Table 4-9**, the percentage change (-1.52 percent) in the total, active, and passive open space ratio in the With-Action condition would slightly exceed the percentage change (1 percent) in the total, active, and passive open space ratio that would signify a possible significant adverse impact. However, as noted in the *CEQR Technical Manual*, before making a determination as to whether significant adverse indirect open space impacts would occur, qualitative considerations also should be considered.

Qualitative Assessment

In the future with the Proposed Actions, the study area would continue to have a shortfall of total, active, and passive open space similar to the existing and No-Action conditions, as compared to DCP planning goals. However, this deficiency would be ameliorated by several factors.

The majority of the open space resources included in the quantitative analysis were found to be in good to excellent condition based on field observations and they include a variety of active and passive open space amenities, ranging from areas with passive uses, such as benches, sitting areas, and walking paths, to areas with active uses, including numerous playgrounds and spray showers, basketball, tennis, and handball courts, baseball and softball fields, running tracks, as well as fitness equipment. Utilization levels of open spaces within the study area varied from low to heavy, leaving some room for more residents to enjoy them in the future. Furthermore, the Project Area and residential study area is identified by NYC Parks as having critical low open space. Therefore, while large portions of the residential study area and portions of the Project Area are located within a WtPSA, there are other portions of the Project Area that are not located within a WtPSA, indicating satisfactory access to open space (refer to **Figure 4-2**).

Additionally, there are several open spaces within, and just outside of, the ~~½~~ 0.5-mile radius of the Project Area that were excluded from the quantitative analysis per *CEQR Technical Manual* methodology. These resources total 13.89 acres and include several community gardens, the 7.82-acre neighborhood park, Herbert von King Park, the 0.92-acre Pratt Playground, the 0.70-acre Lafayette Gardens Playground, the 1.17-acre Steuben Playground, and 1.34-acre Classon Playground. While these resources are conservatively excluded from the quantitative analysis, it is likely that they are used by populations in the residential study area. Importantly, the Proposed Developments are anticipated to contain 20,000-sf (0.46-acres) of rooftop recreational space located on top of Projected Development Sites 2, 6, and 8. While these spaces would be restricted to students at the proposed schools, it is expected that these spaces could alleviate the demand on the existing publicly accessible open space resources during after school hours.

Though the City's optimal open space ratios and percentage reductions, as shown in **Table 4-9**, do not constitute an absolute impact threshold, and there are various factors that could partially ameliorate the deficiency of open space resources, as the residential study area would continue to exhibit low open space ratios and heavy playground utilization rates in the future with the Proposed Actions, the Proposed Actions would result in a significant adverse indirect impact on total, active, and passive open space in the residential study area. Potential mitigation measures to address this significant adverse impact are discussed in **Chapter 16, "Mitigation."**