RIVER RING
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 2020 *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.

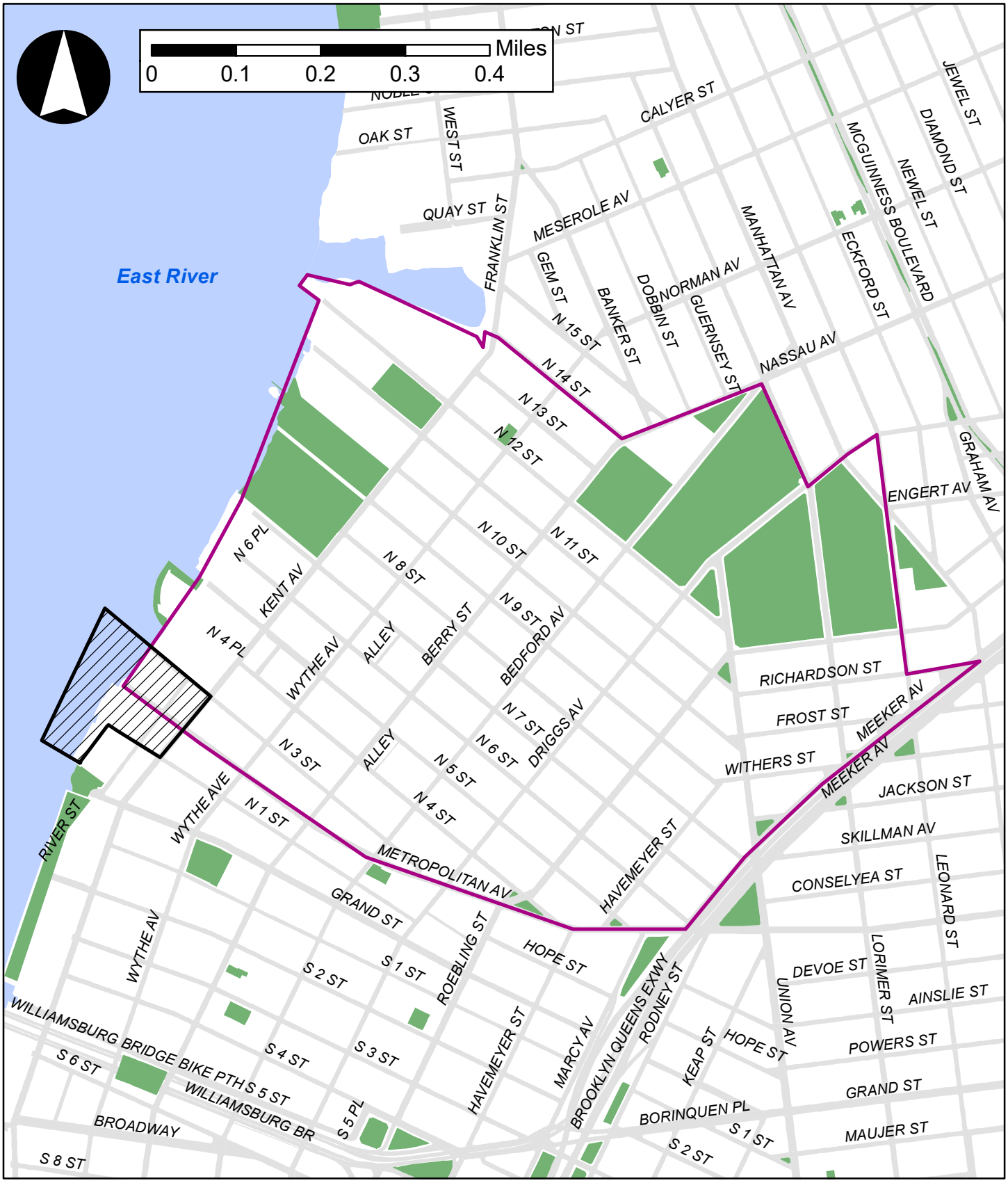
As shown in **Figure 5-1**, the portion of the Project Area north of the centerline of Metropolitan Avenue is located in an area well-served by open space as defined by the *CEQR Technical Manual*. The remainder of the Project Area is located in an area that is neither well-served nor under-served by open space as defined by the *CEQR Technical Manual*.[1] According to *CEQR Technical Manual* guidance, a project that is located in a well-served area that would add more than 350 residents or 750 employees, or a similar number of users to an area, is typically assessed for any potential indirect effects on open space. A project that is located in an area defined as neither well-served nor under-served by open space is assessed for indirect effects on open space if it would add more than 200 residents or 500 workers, or a similar number of users to an area.

As detailed in Chapter 1, "Project Description," the Proposed Actions would facilitate the construction of 1,250 new residential dwelling units (DUs), 83,000 gross square feet (gsf) of commercial space, 50,000 gsf of community facility space, and 2.9 acres of new waterfront public space (plus 2.32 acres of secondary contact accessible in-river space and 0.86 acres of intertidal area) on the Applicant's Proposed Development Site.[2] In addition, as part of the reasonable worst-case development scenario (RWCDS), a non-Applicant owned Projected Development Site at 230 Kent Avenue (Block 2362, Lot 1) is expected to be improved with a three-story, approximately 20,223 gsf mixed-use light industrial, commercial and community facility building as a result of the proposed zoning change. The RWCDS associated with the Proposed Actions would result in a net increase of approximately 2,888 residents and a net decrease of approximately 199 workers in the Project Area as compared to the as-of-right No-Action condition.[3] The

[1] As detailed in Chapter 7 of the 2020 *CEQR Technical Manual*, underserved areas are areas of high population density in the City that are generally the greatest distance from parkland where the amount of open space per 1,000 residents is currently less than 2.5 acres. Conversely, well-served areas have an open space ratio above 2.5 acres per 1,000 residents accounting for existing parks that contain developed recreational resources, or are located within a ¼-mile (approximately a 10-minute walk) from developed and publicly accessible portions of regional parks. Refer to the *CEQR Technical Manual* for further discussion.

[2] As discussed in **Chapter 1, "Project Description,"** the 2.9 acres of public open space is composed of 85,475 sf of WPAA and 40,833 sf of PAA. This area includes all upland park area, seaward breakwater trails, and Ring boardwalk.

[3] Based on 2014-2018 American Community Survey (ACS) data, the Williamsburg North Side – South Side Neighborhood Tabulation Area (NTA) has an average of 2.31 persons per household. Estimates of workers are based on standard rates and are as follows: one worker per 25 DUs; three workers per 1,000 sf of retail space; three workers per 1,000 sf of community facility/medical office space; one worker per 250 sf of office space; one worker per 1,000 sf of last-mile delivery center/warehouse/maker space; and one worker per 50 attended parking spaces. Refer to Chapter 1, "Project Description," for further discussion.



Legend

Project Area | CEQR-Defined Well-Served Open Space Boundary | Open Space

population introduced by the Proposed Actions falls well below the CEQR threshold of 500 or more employees, though the anticipated number of new residents exceeds the CEQR threshold of 200 residents, requiring a detailed open space analysis. 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 not 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 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 directly displace or alter existing open space in the study area. Additionally, the Proposed Actions would not result in a reduction of total or passive open space ratios in the study area that would consequently overburden existing facilitates or further exacerbate a deficiency in open space. Conversely, the new waterfront open space introduced by the Applicant's Proposed Development would increase total and passive residential open space ratios in the study area as compared to No-Action conditions. In the future with the Proposed Actions, the residential total open space ratio in the study area would increase by 0.9 percent, the residential active open space ratio would decrease by 1.9 percent, and the residential passive open space ratio would increase by 2.7 percent as compared to the No-Action scenario. The reduction in the active open space would be ameliorated by several factors, including the additional secondary contact in-river space and intertidal area planned for the Proposed Development Site that were conservatively excluded from the quantitative analysis, the availability of additional active open space resources just outside the study area boundary, as well as the planned expansion and renovation of two existing open space resources in the study area. Therefore, no significant adverse impacts to open space would occur as a result of the Proposed Actions, but rather, the Proposed Actions would improve residential open space ratios in the study area with the introduction of 2.9 acres of publicly accessible open space (plus 2.32 acres of secondary contact accessible in-river space and 0.86 acres of intertidal area) in the Project Area under With-Action conditions.

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 without and with the Proposed Actions. In addition, qualitative factors are considered in making an assessment of the Proposed Actions' effects on open space resources.

Study Area

The first step in assessing potential open space impacts is to establish the appropriate study area for the new population to be added as a result of a project. According to *CEQR Technical Manual* methodologies, the open space study area is based on the distance a person is assumed to walk to reach a neighborhood open space, which differs by user. Workers typically use passive open spaces within a short walking distance of their workplaces, and are assumed to walk up to about a ¼-mile distance to reach neighborhood open spaces. Residents are more likely to travel farther to reach parks and recreational facilities (assumed to walk up to about a ½-mile distance), and they use both passive and active open spaces. Although residents may travel farther than a ½-mile to visit certain regional parks (such as Brooklyn's McCarren Park), such open spaces were not included in the study area's quantitative analysis but are described qualitatively.

As the worker population resulting from the Proposed Actions would not exceed the CEQR threshold for analysis, a non-residential (worker) analysis is not warranted. However, as indicated above, the new residential population resulting from the Proposed Actions would require a residential analysis. The *CEQR Technical Manual* recommends that the residential open space study area be comprised of all census tracts that have at least 50 percent of their area located within a ½-mile of a project area. As shown in **Figure 5-2**, the residential open space study area is roughly bounded by North 14th and North 8th Street to the north; Berry Street and Driggs Avenue to the east, South 8th Street to the south, and the East River to the west. The open space study area includes the following census tracts in their entirety: census tracts 549, 551, 553, 555, and 557.

Analysis Framework

Direct Effect Analysis

According to the 2020 *CEQR Technical Manual*, a project would directly affect open space conditions if it causes the loss of public open space, changes the use of an open space so that it no longer serves the same user population, limits public access to an open space, or results in increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As no open space resources would be physically displaced as a result of the Proposed Actions, this chapter uses information from Chapter 6, "Shadows," Chapter 13, "Air Quality," and Chapter 15, "Noise," to determine whether the Proposed Actions would directly affect any open spaces within, or in close proximity to, the Project Area.

Indirect Effect 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 residential or non-residential, to noticeably diminish the capacity of open space in the area to serve the existing or future population. Typically, an assessment of indirect effects is conducted when a project would introduce more than 200 residents or 500 workers to an area; however, the thresholds for assessment are slightly different for areas of the City that have been identified as either underserved or well-served by open space. For areas underserved by open space, the threshold for assessment is more than 50 residents or 125 workers, and for areas well-served by open space, the threshold for assessment is more than 350 residents or 750 workers. **Figure 5-2** shows the open space study area for the Proposed Actions. As discussed above, the Project Area is partially located in an area defined by the *CEQR Technical Manual* as well-served by open space, and partially located in an area that is defined as neither well-served nor under-served by open space (refer to **Figure 5-1**). Similarly, as

Figure 5-2
Open Space Study Area



Legend

Project Area | Open Space Study Area | 1/2-Mile Radius | 555 Census Tracts

shown in **Figure 5-3**, the open space study area is split between an area that is defined as well-served by open space and an area that is defined as neither well-served nor under-served by open space.

Per *CEQR Technical Manual* guidance, the open space analysis and impact assessment is based on the anticipated development that would be facilitated by an action. As discussed in Chapter 1, "Project Description," the Proposed Actions would facilitate the development of approximately 1,250 DUs in the Project Area, which would introduce an incremental 2,925 residents to the site as compared to No-Action conditions. In addition, the RWCDS associated with the Proposed Actions would result in a decrease of approximately 204 workers in the Project Area as compared to the No-Action scenario. As such, an open space assessment is only warranted for the residential population generated by the Proposed Actions.

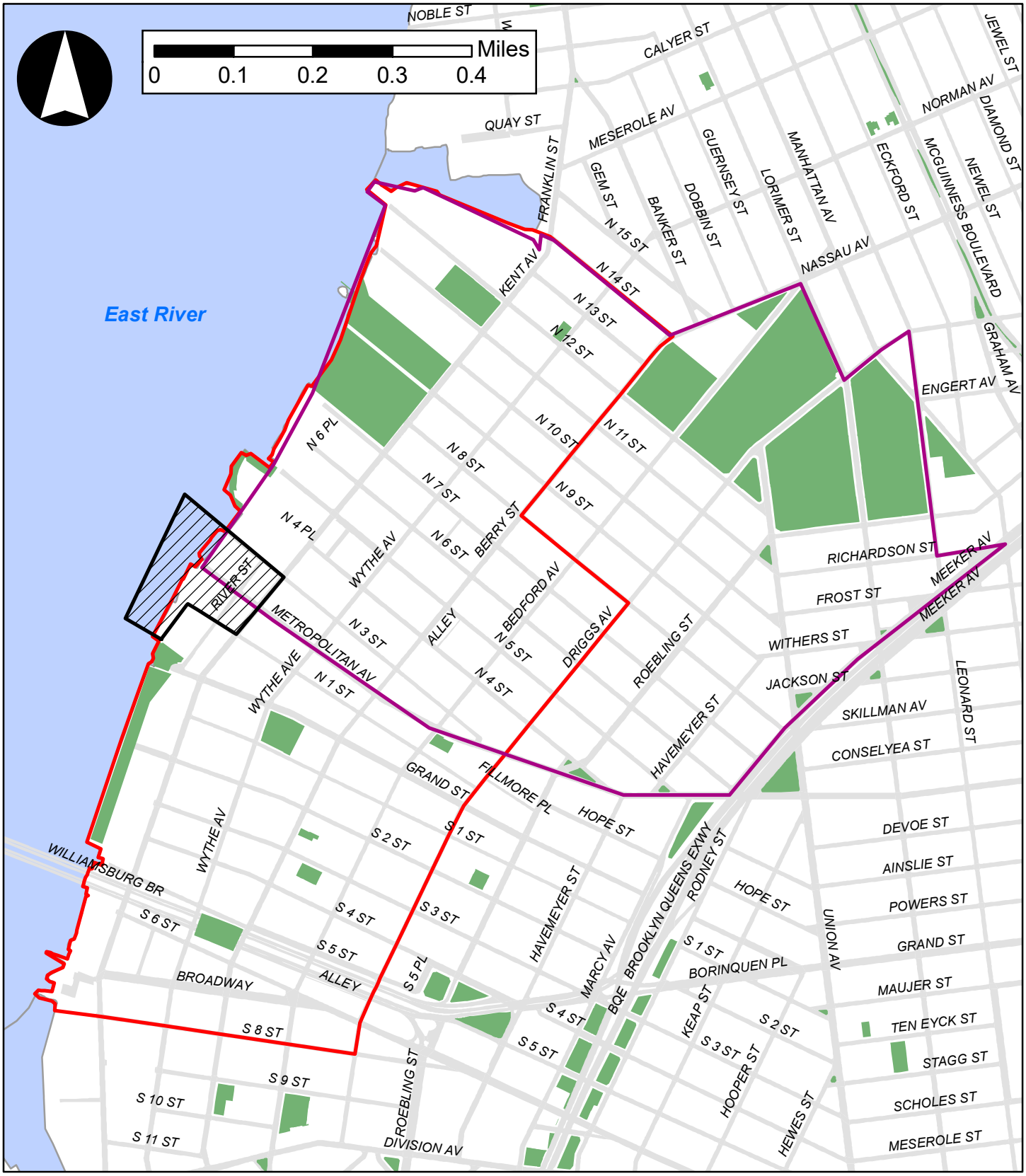
With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that may affect conclusions about adequacy, including proximity to additional resources beyond the boundaries of 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, 2014-2018 American Community Survey (ACS) census data have been compiled for census tracts comprising the open space study area.
- An inventory of all publicly accessible active and passive recreational facilities in the residential open space study area.
- An assessment of the quantitative ratio of open space in the residential 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, there are generally two guidelines that are used to evaluate residential open space ratios. The *CEQR Technical Manual* generally recommends a comparison to the median ratio for Community Districts in New York City, which is 1.5 acres of open space per 1,000 residents. However, the *CEQR Technical Manual* planning guidance is 2.5 acres of open space per 1,000 residents, 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 final determination of the adequacy of open space in the residential open space study area.
- An assessment of expected changes in future levels of open space supply and demand in the 2025 analysis year, based on other planned No-Action development projects and anticipated background growth within the open space study area. To estimate the residential population expected in the study area in the future without the Proposed Actions, both background growth and study area No-Action developments are accounted for. Any new open space or recreational facilities that are anticipated to be operational by the analysis year are also accounted for. Open space ratios are calculated for the future No-Action condition and compared with existing ratios to determine changes in future levels of open space adequacy.

PRELIMINARY ASSESSMENT

According to the *CEQR Technical Manual*, an initial quantitative open space assessment may be useful to determine if a detailed open space analysis is necessary, or whether the open space assessment can be

Figure 5-3
Open Space Study Area & Well-Served Boundary



Legend

- CEQR-Defined Well-Served Open Space Boundary
- Open Space Study Area (see Figure 5-2)
- Project Area
- Open Space

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 five percent, or if the study area exhibits a low open space ratio from the onset (indicating a shortfall of open spaces), 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.

Pursuant to these guidelines, a preliminary open space assessment was conducted for the Proposed Actions. As the study area exhibits a low open space ratio (i.e., below the Citywide Community District median of 1.5 acres per 1,000 residents and the City's optimal planning goal of 2.5 acres per 1,000 residents) under existing conditions, a detailed open space analysis is warranted and is provided below.

Impact Assessment

Impacts are based in part on how a project would change the open space ratios in a study area. According to the *CEQR Technical Manual*, for areas that are currently below the Citywide Community District open space median ratio of 1.5 acres per 1,000 residents, an open space ratio decrease of more than five percent is generally considered to be a significant adverse impact. If a study area exhibits a low open space ratio (e.g., below 1.5 acres per 1,000 residents or 0.15 acres of passive space per 1,000 non-residential users), indicating a shortfall of open space, smaller decreases in that ratio as a result of a project may constitute significant adverse impacts. Conversely, in areas that are well-served by open space (such as the northern portion of the Project Area), a greater percentage of change (more than five percent) may be tolerated and would not necessarily constitute an impact.

In addition to the quantitative factors cited above, the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. These include the availability of nearby regional parks, the beneficial effects of new open space resources provided by a project, and the comparison of projected open space ratios with established City guidelines. It is recognized that the open space ratios of the City guidelines described above are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks that indicate how well an area is served by open space.

D. EXISTING CONDITIONS

Demographic Characteristics of the Study Area

To determine the residential population served by existing open space resources, estimates from the U.S. Census Bureau's ACS data were compiled for the census tracts comprising the open space study area. As mentioned above and shown in **Figure 5-2**, the open space study area is comprised of five census tracts. As shown in **Table 5-1**, the open space study area has a residential population of approximately 21,949 persons.

As shown in **Table 5-1**, people between the ages of 20 and 64 make up the majority (approximately 77.1 percent) of the residential population in the open space study area. Children and teenagers (0 to 19 years old) account for approximately 16.6 percent of the entire study area population, and persons 65 years and over account for approximately 6.4 percent of the study area population. As also presented in **Table**

5-1, compared to Brooklyn and New York City as a whole, the open space study area includes a smaller percentage of children/teenagers and a larger percentage of adults (20 to 64 years). Additionally, the percentage of the study area population that is over the age of 65 is significantly lower than that of Brooklyn and New York City as a whole (6.4 percent in the open space study area as compared to 13.6 percent in Brooklyn and 14.5 percent in New York City).

The open space study area's median age of 33.5 is approximately 1.7 years younger than the median age for Brooklyn (35.2 years) and approximately 3 years younger than the median age for New York City as a whole (36.5 years). It should also be noted that the median age varies by census tract, with census tract 549 exhibiting the lowest median age (30.1) and census tract 551 exhibiting the highest median age (34.9).

TABLE 5-1
Residential Population and Age Distribution in the Open Space Study Area

Census Tract[1]	Total Residential Population	Age Distribution												Median Age[2]
		Under 5		5 to 9		10 to 14		15 to 19		20 to 64		65 and Over		
		#	%	#	%	#	%	#	%	#	%	#	%	
549	4,171	421	10.1	238	5.7	236	5.7	136	3.3	3,090	74.1	50	1.2	30.1
551	5,361	385	7.2	104	1.9	134	2.5	305	5.7	3,831	71.4	602	9.4	34.9
553	2,740	77	2.8	79	2.9	78	2.8	54	2.0	2,096	76.5	356	13.0	32.8
555	7,696	675	8.8	187	2.4	230	3.0	67	0.9	6,348	82.5	189	2.5	34.6
557	1,981	150	7.6	6	0.3	31	1.6	41	2.1	1,553	78.4	200	10.1	33.3
Study Area	***21,949***	***1,708***	***7.8***	***614***	***2.8***	***709***	***3.2***	***603***	***2.8***	***16,918***	***77.1***	***1,397***	***6.4***	***33.5***
Brooklyn	*2,589,974*	*190,959*	*7.4*	*159,422*	*6.2*	*155,921*	*6.0*	*138,939*	*5.4*	*1,592,439*	*61.5*	*352,294*	*13.6*	*35.2*
New York City	*8,419,316*	*544,971*	*6.5*	*468,577*	*5.6*	*469,890*	*5.6*	*450,091*	*5.4*	*5,263,520*	*62.5*	*1,222,267*	*14.5*	*36.5*

Source: U.S. Census Bureau, 2014-2018 American Community Survey.
Notes:
[1] Refer to **Figure 5-2**.
[2]
Calculated median age for study area represents weighted average for all census tracts.

Within a given area, the age distribution of a population affects the way open space resources are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool-aged children. Children ages five through nine typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for activities such as ball playing, running, and skipping rope. Children ages 10 through 14 typically use playground equipment, court spaces, Little League fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities, such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized forms of recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, ad hoc active sports, such as Frisbee, and recreational activities in which all ages can participate. Senior citizens engage in active recreation, such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

Inventory of Publicly-Accessible Open Space

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, a publicly accessible open space is defined as a recreational facility open to the public at designated hours on a regular basis and can be assessed for impacts using both a quantitative and a qualitative analysis, whereas a private open space facility is not accessible to the general public on a regular basis and may be considered only qualitatively.

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

Within the open space study area, all publicly accessible open space resources were inventoried and identified by their name, location, owner, amenities/equipment, user groups, hours of operation, and the amount of total, active, and passive acreage, as well as the condition and utilization of each resource. The information used for this analysis was gathered through field inventories conducted in July 2018 and May 2020; the New York City Department of Parks and Recreation's (NYC Parks) website; and the New York City Open Accessible Space Information System (OASIS) database and other secondary sources of information.

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

Likewise, judgments with regard to the intensity of use of the resources were qualitative, based on an observed degree of activity or utilization during the peak hour. Per the *CEQR Technical Manual*, peak hours vary for different users and open space facilities. Commercial areas tend to have a peak hour at lunch time (noon to 2PM), while residential neighborhoods typically have peak hours on weekends and after school. If a resource seemed to be at or near capacity (i.e., the majority of benches or equipment were in use), then utilization was considered high. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. **Table 5-2** identifies the address, ownership, features, and acreage of total, active, and passive open space resources in the open space study area, as well as their condition and utilization. **Figure 5-4** maps their location within the study area.

Open Space Resources

As shown in **Figure 5-4** and **Table 5-2**, there are 10 publicly accessible open space resources located in the open space study area. The majority of these open space resources are located in the northern and western sections of the study area. In addition, there is one community garden located within the open space study area that is not included in the quantitative analysis because it does not provide consistent public access hours and does not include seating or other amenities.

Figure 5-4
Open Space Resources



Legend

Project Area | Open Space Study Area | Open Space | 1 Open Space Resources (refer to Table 5-2)

TABLE 5-2
Inventory of Existing Open Space and Recreational Resources in the Open Space Study Area

Map No.	Name	Address	Owner/ Agency	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition/ Utilization
								%	Acres	%	Acres	
1	Berry Playground	South 3rd St. between Berry St. and Bedford Ave.	NYC Parks	Basketball Courts, Playgrounds, Spray Showers, Benches	Children, Teenagers, Adults	6AM to 9PM	0.33	94	0.31	6	0.02	Fair / Low
2	Bushwick Inlet Park	Kent Ave., North 9th and 10th Sts.	NYC Parks	Comfort Station, Playgrounds, Soccer/Ball Fields, Lawn, Spray Showers, Benches	Children, Teenagers, Adults, Senior Citizens	9AM to 10PM	4.15	50	2.075	50	2.075	Good / High
3	Bushwick Inlet Pop-Up Park	Kent Ave., North 11th and 12th Sts.	NYC Parks	Field, Lawn, Picnic Tables	Children, Teenagers, Adults	Thurs. – Sun. 10am – 6pm	1.80	25	0.45	75	1.35	Fair / Low
4	Domino Park	River St.	Two Trees Mgmt	Playground, Volleyball, Bocce, Fields, Elevated Walkway, Benches, Spray Showers, Dog Run, Lawns, Taco Stand, Picnic Tables	Children, Teenagers, Adults, Senior Citizens	6AM to 1AM	6.00	50	3.00	50	3.00	Excellent / High
5	Marsha P. Johnson Sate Park	90 Kent Ave.	NYS OPRHP	Dog Run, Playgrounds, Lawns, Picnic Tables, Benches, WiFi Access	Children, Teenagers, Adults, Senior Citizens	9AM – 9PM	7.00	35	2.45	65	4.55	Good / Moderate
6	Grand Ferry Park	River St.	NYC Parks	Walkways, Lawns, Dog-Friendly Areas, Benches	Teenagers, Adults, Senior Citizens	6AM to 1AM	1.70	0	0.00	100	1.70	Poor / Low
7	Metropolitan Recreation Center	261 Bedford Ave.	NYC Parks	Indoor Pool, Recreation Centers, WiFi Access	Teenagers, Adults, Senior Citizens	7AM – 9:30PM (Mon. – Fri.) 7AM – 5:30PM (Saturday) 10AM–5:30PM (Sunday)	0.18	100	0.18	0	0.00	Good / Moderate
8	North 5th Street Pier and Park	Kent Ave., North 4th and 6th Sts.	NYC Parks	Benches, Walkway, Lawns, Picnic Areas	Children, Teenagers, Adults, Senior Citizens	6AM to 1AM	0.85	15	0.13	85	0.72	Fair / High
9	William Sheridan Playground	Wythe Ave., Grand and South 1st Sts.	NYC Parks/DOE	Spray Showers, Playgrounds, Basketball & Handball Courts	Children, Teenagers, Adults, Senior Citizens	6am – 9pm	0.79	95	0.75	5	0.04	Fair / High
10	25 Kent POPS	25 Kent Ave.	19 Kent Acquisition	Benches, Tables, Landscaping	Adults, Senior Citizens	6am – 12am	0.22	0	0.00	100	0.22	Excellent / Low
Open Space Resources included in Quantitative Analysis:							**23.02**	**40%**	**9.35**	**60%**	**13.68**	
A	Berry Street Garden	301 Berry Street	NYC Parks	Community Garden	Adults, Senior Citizens	20hrs/week Apr 1 – Oct 31	0.14	0	0.00	100	0.14	Poor / Low
Open Space Resources not included in Quantitative Analysis:							**0.14**	**0%**	**0.00**	**100%**	**0.14**	

Sources: OASIS, NYC Parks, 2020 PLUTO data, PHA site visits conducted November 2020, and Two Trees surveys conducted in May 2020 (refer to **Figure 5-4**).

The study area contains a total of approximately 23.02 acres of publicly accessible open space, of which approximately 9.35 acres (40 percent) comprise active open space uses and approximately 13.68 acres (60 percent) comprise passive open space uses (refer to **Table 5-2**).

The open space resource located closest to the Project Area is the 1.70-acre **Grand Ferry Park** (Map #6), located immediately south of the Project Area and bounded by Grand Street to the south, River Street to the east, and the East River to the west (refer to **Figure 5-4**). The park is operated NYC Parks. As shown in **Table 5-2**, the entire park is considered passive open space and includes walkways, lawns, benches, and dog-friendly areas. Grand Ferry Park is in poor condition and has low utilization.

Directly south of Grand Ferry Park is **Domino Park** (Map #4). This six-acre park was constructed as part of Two Trees Management's ongoing development of the Domino Sugar Refinery Site. The waterfront open space includes playgrounds, volleyball, bocce, fields, elevated walkways, benches, spray showers, a dog run, lawns, a taco stand, and picnic tables. The park is evenly split between active and passive open space, and is in excellent condition with high utilization.

North of the Project Area is the **North 5th Street Pier and Park** (Map #8) which is located on the East River waterfront between North 4th and North 6th Streets. The North 5th Street Pier and Park is a 0.85-acre, largely passive open space resource (approximately 85 percent), which includes benches, walkways, lawns, and picnic areas. The North 5th Street Pier and Park is operated by NYC Parks, is in fair condition, and is highly utilized.

As shown in **Figure 5-4**, further north in the open space study area are Bushwick Inlet Park, Bushwick Inlet Pop-Up Park, and East River State Park. **Bushwick Inlet Park** (Map #2) is a 4.15-acre park located on Kent Avenue between North 9th and North 10th Streets and the East River waterfront. It is operated by NYC Parks, and contains many active recreational uses, including a synthetic turf multipurpose field for field hockey, football, lacrosse, rugby, soccer, and ultimate Frisbee, as well as playgrounds. Additionally, Bushwick Inlet Park contains a comfort station, a viewing platform, and a lawn surrounded by benches for passive recreation. It is in good condition with high utilization. The park represents the initial phase of the larger 35.53-acre Bushwick Inlet Park which will, once completed, span 5.5 blocks along the East River waterfront between North 9th Street and Quay Street (refer to the "Future Without the Proposed Actions" section below for further discussion).

The **Bushwick Inlet Pop-Up Park** (Map #3) is located at 50 Kent Avenue between North 11th and North 12th Streets. The 1.8-acre open space resource is also part of the larger 35.53-acre Bushwick Inlet Park to be completed in the No-Action condition. The Pop-Up Park contains an open field which includes active spaces for mini Frisbee golf and badminton, as well as lawns and picnic tables for passive recreation. Bushwick Inlet Pop-Up Park is operated by NYC Parks, is in fair condition with low utilization.

The **Marsha P. Johnson State Park** (Map #5) is a seven-acre park operated by the New York State Office of Parks Recreation & Historic Preservation (NYS OPRHP) on Kent Avenue between North 7th and North 9th Streets and the East River waterfront. The park features both active and passive recreational uses, including a dog run, playgrounds, lawns, picnic tables, benches, and WiFi access. Marsha P. Johnson State Park is also home to Smorgasburg, an outdoor food market which operates in the park on Saturdays from April through October. The Marsha P. Johnson State Park (formerly East River State Park) is in good condition with moderate utilization.

Approximately 800 feet southeast of the Project Area is **William Sheridan Playground** (Map #9), a 0.79-acre playground jointly operated by NYC Parks and the New York City Department of Education (DOE). The playground is located along Wythe Avenue between Grand and South 1st Streets. The William

Sheridan Playground is mostly devoted to active open space uses (approximately 95 percent), including basketball courts, handball courts, playgrounds, and spray showers. It is in fair condition and is highly utilized. As detailed in the "Future Without the Proposed Actions" section below, the playground is slated for renovation.

Berry Playground (Map #1) is a 0.33-acre playground located approximately 0.3 miles southeast of the Project Area, operated by NYC Parks. The playground is located on South 3rd Street between Berry Street and Bedford Avenue. Berry Playground is mostly dedicated to active open space uses (approximately 94 percent), including basketball courts, playgrounds, and spray showers. It is in fair condition with low utilization.

The **Metropolitan Recreation Center** (Map #7) is located at 261 Bedford Avenue, approximately ¼-mile east of the Project Area. The 0.18-acre facility is operated by NYC Parks, and includes a variety of active recreational spaces, including an indoor pool, weight rooms, a cardio room, and multipurpose activity rooms. The Metropolitan Recreation Center is in good condition and is moderately utilized.

The final open space resource in the open space study area is the **Privately Owned Public Space (POPS) at 25 Kent Avenue** (Map #10), which was constructed as part of 19 Kent Acquisition's recent development of the mixed-use building at 25 Kent Avenue. The 0.22-acre passive open space resource includes two plazas which include benches, tables, and landscaping. The 25 Kent Avenue POPS is in excellent condition with low utilization.

Assessment of Open Space Adequacy

Residential Open Space Study Area

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

QUANTITATIVE ASSESSMENT

As previously stated, there are 23.02 acres of publicly accessible open space in the study area, including approximately 9.35 acres (40 percent) of active open space and approximately 13.68 acres (60 percent) of passive open space. With a residential population of 21,949 the total open space ratio for residents is 1.05 acres per 1,000 residents, which is less than the Citywide Community District median of 1.5 acres and the City's planning guideline of 2.5 acres of parkland per 1,000 residents (see **Table 5-3**). The study area's active open space ratio of 0.43 acres per 1,000 residents is less than the City's planning guideline of 2.0 acres of active open space per 1,000 residents. The area's passive open space ratio (0.62 acres per 1,000 residents) is higher than the City's planning guideline of 0.5 acres of passive open space per 1,000 residents.

TABLE 5-3
Adequacy of Study Area Open Space Resources: Existing Conditions

Existing Population	Open Space Acreage			Open Space Ratio per 1,000 Residents			City's Open Space Ratio Planning Goals per 1,000 Residents		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
21,949	23.02	9.35	13.68	1.05	0.43	0.62	2.50	2.00	0.50

QUALITATIVE ASSESSMENT

The residential open space study area contains a mixture of recreational facilities, with approximately 40 percent dedicated to active uses and approximately 60 percent dedicated to passive uses. As detailed above, under existing conditions, the total open space ratio and active open space ratio are lower than the City's planning guidelines, and the passive open space ratio is higher than the City's planning guidelines (refer to **Table 5-3**).

As shown in **Table 5-2**, the residential study area open spaces include a wide variety of actively programmed open spaces appropriate for the residential user groups. As noted above, the study area includes a high percentage of adults, as compared to the borough of Brooklyn and the City of New York as a whole (refer to **Table 5-1**). As indicated in the *CEQR Technical Manual*, adults tend to use court facilities for sports, as well as spaces for more individualized forms of recreation, such as rollerblading, biking, and jogging, which require bike paths, esplanades, and vehicle-free roadways. Adults also gather with families for picnicking or ad hoc active sports such as Frisbee, and also use passive open space resources such as benches and lawns such as those on the East River waterfront overlooking the Manhattan skyline.

Additionally, as noted in **Table 5-2**, there is one community garden located in the residential open space study area. The Berry Street Garden (Map Letter A) is located approximately ¼-mile southeast of the Project Area at 301 Berry Street. The 0.14-acre open space resource includes seating and vegetation, and is operated by NYC Parks. It is in excellent condition with low utilization. Although the Berry Street Garden is publicly owned, it does not provide consistent public access hours and does not include amenities other than seating and gardens. As such, Berry Street Garden is conservatively not included in the quantitative analysis above, but is likely utilized by the surrounding study area population for passive recreation.

Furthermore, McCarren Park is located immediately east of the open space study area, as illustrated in **Figure 5-4**. McCarren Park is a 36.49-acre regional park, likely utilized by residents of the open space study area for both active and passive recreation. As detailed in the *CEQR Technical Manual*, residents may travel farther than a ½-mile to frequent regional parks; McCarren Park is located approximately 0.6-miles to the northeast of the Project Area. The park includes a plethora of recreational options, including barbequing areas, baseball fields, basketball courts, bocce courts, dog-friendly areas, fitness equipment, football fields, handball courts, media labs, outdoor pools, playgrounds, recreation centers, a running track, skate park, soccer fields, spray showers, and tennis courts. Nevertheless, as McCarren Park is not located within the open space study area, it is not included in the quantitative analysis pursuant to CEQR guidance.

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

Study Area Population

Project Area

As detailed in Chapter 1, "Project Description," no residents would be introduced to the Project Area in the future without the Proposed Actions.

Residential Open Space Study Area

There are approximately 26known and anticipated No-Action developments that would introduce new residents within the open space study area. In total, these nine combined No-Action developments are expected to introduce approximately 2,983residents to the open space study area by the 2027 analysis year for the Proposed Actions.[4] As indicated in **Table 5-4**, the anticipated No-Action developments are expected to increase the open space study area population to 24,932 residents.

Open Space Resources

Project Area

As detailed in Chapter 1, "Project Description," absent the Proposed Actions, the Applicant would proceed with the construction of a two-building, as-of-right development on the Proposed Development Site, consisting of office space, destination and local retail uses, light manufacturing makers pace, warehouse uses, and a last-mile delivery center. In addition, the Projected Development Site is assumed to be developed with local retail and warehouse uses. The No-Action development on the Proposed Development Site would be exempt from waterfront public access area and visual corridor requirements, and no open space would be constructed in the Project Area in the future without the Proposed Actions.

Residential Open Space Study Area

Under No-Action conditions, NYC Parks plans to expand Bushwick Inlet Park (Map #2) in the open space study area. As noted above, Bushwick Inlet Park and the Bushwick Inlet Pop-Up Park are the initial phases of Bushwick Inlet Park which will, once completed, span 5.5 blocks along the East River waterfront between North 9th Street and Quay Street. The City of New York has recently completed the land acquisition phase for the proposed expansion, which will add an additional 23.4 acres of publicly accessible open space to the study area when the Bushwick Inlet Park expansion is completed and operational, for a total park acreage of 27.3. The City, in conjunction with NYC Parks, is currently in the process of remediating several of the former industrial properties that will become part of Bushwick Inlet Park in the future. However, at this time, no project timeline or completion date for the overall expansion project has been finalized. Therefore, for conservative analysis purposes, the additional 23.4 acres of open space in the completed Bushwick Inlet Park are not included in the quantitative analysis below. Nevertheless, when completed, the expansion of Bushwick Inlet Park will provide a significant amount of new active and passive open spaces to the study area surrounding the Project Area and significantly improve the conditions and usability of open space in the study.

Additionally, under No-Action conditions, the William Sheridan Playground (Map #9) is expected to be reconstructed. The renovated open space will contain a multi-use synthetic turf field, walking track, play area, spray shower, handball and basketball courts, sitting area, adult fitness equipment, and a seating plaza. The project is currently in procurement, which is anticipated to be completed in the August 2021, at which point construction of the new playground will commence. As no timeline or completion date for the reconstruction project have been finalized, the renovation of the playground is not included in the qualitative analysis below. Nevertheless, when completed, the reconstruction of the William Sheridan Playground is expected to significantly improve the conditions of the open space resource.

[4] Refer to Table 3-6 in Chapter 3, "Socioeconomic Conditions".

Assessment of Open Space Adequacy

In the 2027 No-Action condition, the additional population introduced to the open space study area would increase the demand on the area's open space resources (i.e., would reduce the residential open space ratios). As indicated in **Table 5-4**, the No-Action total, active, and passive open space ratios are expected to decrease to 0.93, 0.38, and 0.55 acres per 1,000 residents, respectively. Similar to existing conditions, the total open space ratio would remain below the Citywide Community District median and the City's optimal planning guideline, and the active open space ratio would remain below the City's optimal planning guideline. In the future without the Proposed Actions, the passive open space ratio would remain above the City's optimal planning guideline of 0.50 acres per 1,000 residents.

TABLE 5-4
Adequacy of Study Area Open Space Resources: 2027 No-Action Condition

No-Action Population	Open Space Acreage			Open Space Ratio per 1,000 Residents			City's Open Space Ratio Planning Goals per 1,000 Residents		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
24,932	23.02	9.35	13.68	0.93	0.38	0.55	2.50	2.00	0.50

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

Direct Effects

No open space resources would be physically displaced as a result of the Proposed Actions. Additionally, as discussed in Chapter 6, "Shadows," Chapter 13, "Air Quality," and Chapter 15, "Noise," the Proposed Actions would not cause increased noise or air pollutant emissions that would affect the usefulness of any study area open space, whether on a permanent or temporary basis. Furthermore, the Proposed Actions would not change the use of a publicly accessible open space so that it no longer serves the same user population, nor would it limit public access to any open spaces. Therefore, no significant adverse direct effects on open space would occur as a result of the Proposed Actions.

Indirect Effects

Study Area Population

In the future with the Proposed Actions, an estimated 2,888 new residents would be introduced to the Project Area. Based on this incremental residential population growth, the study area's population would increase to a total of 27,820 residents in the 2027 With-Action condition.

Open Space Resources

As detailed in Chapter 1, "Project Description," the Applicant's Proposed Development would include the development of approximately 2.9 acres (approximately 126,308 sf) of publicly accessible open space in the Project Area, plus 2.32 acres of accessible secondary contact in-river space and 0.86 acres of intertidal area. As shown in **Figure 5-5**, this new open space would be located along the East River waterfront, which would create a continuous link of waterfront areas running from Bushwick Inlet Park to the north to Grand Ferry Park and Domino Park to the south (see **Figure 5-4**). The With-Action open space in the Project Area would be accessible to the public and would offer secondary contact in-water experiences, educational



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Figure 5-5
Proposed Development - Illustrative Waterfront Open Space Plan

habitat preservation programming, and other opportunities for enjoyment of the waterfront by the community at large, adding a greater breadth of active and passive activities not currently available to study area residents

As shown in the illustrative waterfront open space plan presented in **Figure 5-5**, a variety of active and passive recreation facilities would be provided in the Proposed Development's open space. Although the waterfront open space design is still evolving, and specific features are subject to change, it is expected to include a public beach on the new cove, stepped seating area facing the beach with granite block seating, a ramped boat launch for non-motorized watercraft (i.e., kayaks and paddleboards), a nature play area and nature trails, a water play area, a picnic and hammock grove, a fishing pier, outdoor classroom space, a bird hide, and landscaped plantings. The beach is designed to provide secondary-contact recreation access, and per NYS Department of Health regulations, swimming will be prohibited. Man-made freshwater wetlands would also be created upland of the shoreline. In accordance with waterfront zoning requirements, an approximately 900-foot-long shore public walkway would be provided along the East River; a portion of the shore public walkway would extend over a portion of the new salt marsh and tide pools that would be created along the south end of the cove.

As the project-generated open space detailed above would be publicly accessible open space, it is included in the quantitative analysis presented below. For CEQR analysis purposes, only the 2.9 acres of upland open space is included in the quantitative analysis; the secondary contact accessible in-river space and intertidal area are discussed qualitatively. Although the design of the open space has not yet been finalized, based on preliminary plans, the 2.9 acres of upland open space are assumed to consist of 0.97 acres of active space and 1.9 acres of passive space. **Figure 5-6** shows the portions of the waterfront open space plan that are included in the quantitative assessment. The total project-generated open space included in the quantitative assessment is 2.9 acres. As described in **Chapter 1, "Project Description,"** these 2.9 acres include 85,475 sf of WPAA and 40,833 sf of PAA.

Assessment of Open Space Adequacy

QUANTITATIVE ASSESSMENT

In the 2027 With-Action condition, the additional population introduced to the open space study area by the Proposed Actions would further increase the demand on the area's open space resources. However, this new demand for open space by project-generated residents would be ameliorated through the introduction of 2.9 acres (plus 2.32 acres of secondary contact accessible in-river space and 0.86 acres of intertidal area) of publicly accessible open space in the Project Area as a result of the Proposed Actions (see **Figure 5-5**). As indicated in **Table 5-5**, the With-Action total and passive open space ratios per 1,000 residents in the study area are expected to increase to 0.93 and 0.56, respectively, from 0.92 and 0.55, respectively, under the No-Action condition, whereas the active open space ratio would decrease to 0.3688, compared to 0.375 in the No-Action. Similar to the No-Action condition, in the future with the Proposed Actions, the total open space ratio would remain below the Citywide Community District median and the City's optimal planning guideline, and the study area's active open space ratio would continue to remain below the City's optimal planning guidelines, while the passive open space ratio would continue to be above the City's optimal planning guidelines.

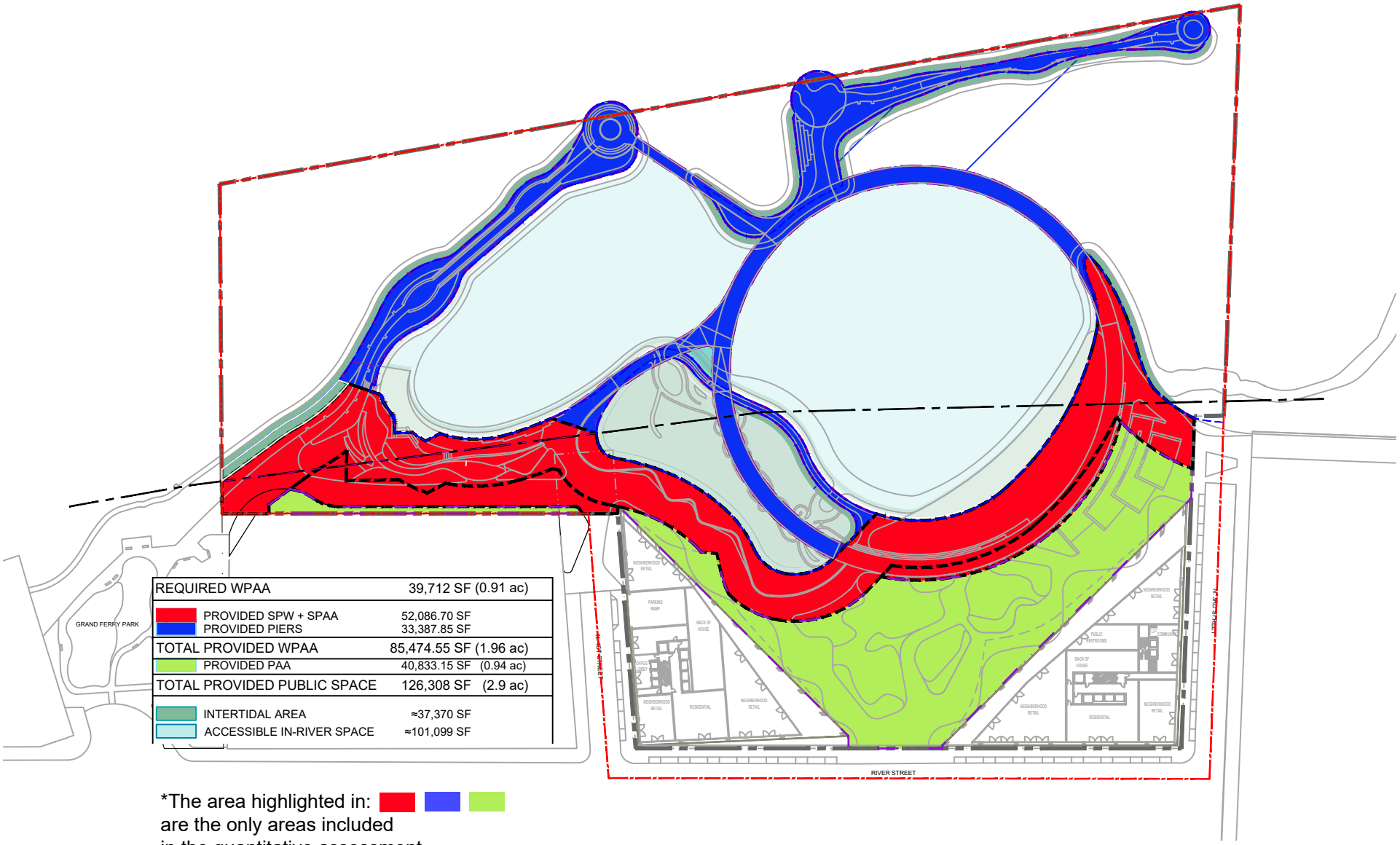

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Figure 5-6
Proposed Development - Open Space included in Quantitative Assessment

TABLE 5-5
Adequacy of Study Area Open Space Resources: 2027 With-Action Condition

With-Action Population	Open Space Acreage			Open Space Ratio per 1,000 Residents			City's Open Space Ratio Planning Goals per 1,000 Residents		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
27,820	25.92	10.23	15.69	0.93	0.37	0.56	2.50	2.00	0.50

QUALITATIVE ASSESSMENT

As the total and active open space ratios for the open space study area would remain below the City's planning guidelines of 2.5 acres of total open space and 2.0 acres of active open space per 1,000 residents (refer to **Table 5-5**), residents in the open space study area would continue to be under-served by total and active passive open space resources in the future with the Proposed Actions. However, Residents in the open space study area would continue to be well served by passive open space resources in the future with the Proposed Actions, given that the passive open ratio would be higher than the City's planning guideline of 0.5 acres per 1,000 residents.

It should be noted that, while the amount of total and active open space resources in the open space study area is, and would continue to be, deficient in comparison to the City's planning guidelines under With-Action conditions, this deficiency would be ameliorated by several factors. As noted above, the Proposed Development Site would add 2.32 acres of secondary contact accessible in-river space and 0.86 acres of intertidal area that were conservatively not included in the quantitative analysis. These in-river and intertidal areas would provide additional recreational secondary contact accessible in-river space that would be utilized by the study area's residents. The beach is designed to provide secondary-contact recreation access, and per NYS Department of Health regulations, swimming will be prohibited. In addition, residents of the open space study area are likely to utilize McCarren Park, a 36.49-acre regional park that is located immediately east of the open space study area, as well as the 0.14-acre Berry Street Garden at 301 Berry Street (see **Figure 5-1**). Although McCarren Park and the Berry Street Garden are not included in the quantitative analysis pursuant to CEQR guidance, it is likely that residents of the open space study area would utilize the nearby regional park and the local community garden for active and passive recreation.

Furthermore, as detailed above, two existing open space resources in the study area are expected to be expanded/renovated irrespective of the Proposed Actions. An additional 23.4 acres is anticipated to be added to Bushwick Inlet Park, and the William Sheridan Playground is slated for reconstruction. Although these two projects are not included in the quantitative analysis pursuant to CEQR guidance, the expansion/improvement of these two open spaces will provide a significant amount of state-of-the-art active and passive open spaces to the study area in the future without the Proposed Actions, expected to be utilized by study area residents.

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

Determining Impact Significance

A significant adverse open space impact may occur if a project would reduce the open space ratio by more than five percent in areas that are currently below the Citywide Community District median open space ratio of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction of as little as one percent may be considered significant, depending on the area of the City. These reductions may result in the overburdening of existing facilities or further exacerbating a deficiency in open space. Conversely, in areas that are well-served by open space, a greater percentage of change (more than five percent) may be tolerated. **Table 5-6** presents the percentage change from the No-Action condition to the With-Action condition for the open space study area.

TABLE 5-6
Residential Open Space Ratios Summary

Type of Open Space	City's Open Space Ratio Planning Goals per 1,000 Residents	Open Space Ratios per 1,000 Residents			% Change from No-Action to With-Action Condition
		Existing	No-Action	With-Action	
Total	2.50	1.05	0.923	0.932	+ 0.9 %
Active	2.00	0.43	0.375	0.368	- 1.9 %
Passive	0.50	0.62	0.549	0.564	+ 2.8 %

As detailed in **Table 5-6**, the Proposed Actions would not result in a decrease in residential open space ratios by five percent or more. In the future with the Proposed Actions, the residential total open space ratio in the study area would increase by 0.9 percent from the No-Action scenario, the residential active open space ratio would decrease by 1.9 percent over No-Action conditions, and the residential passive open space ratio would increase by 2.8 percent as compared to the No-Action scenario (see **Table 5-6**). As discussed above, the reduction in the active open space would be ameliorated by several factors, including the additional secondary contact in-river space and intertidal area planned for the Proposed Development Site that were conservatively excluded from the quantitative analysis, the availability of additional active open space resources just outside the study area boundary, as well as the planned expansion and renovation of two existing open space resources in the study area.

Therefore, the Proposed Actions would not result in a significant reduction of open space ratios in the study area that would consequently overburden existing facilitates or further exacerbate a deficiency in open space, and no significant adverse impacts to open space would occur as a result of the Proposed Actions. Rather, the Proposed Development would improve total and passive residential open space ratios in the study area with the introduction of 2.9 acres of publicly accessible open space in the Project Area under With-Action conditions, as well as an additional 2.32 acres of secondary contact accessible in-river space and 0.86 acres of intertidal area that were conservatively excluded from the quantitative analysis.