

A. INTRODUCTION

The *New York City Environmental Quality Review (CEQR) Technical Manual* guidelines indicate the need for an open space analysis when an action would result in the physical loss of public open space or the introduction of 200 or more residents or 500 or more workers to an area. The proposed actions would result in the introduction of approximately 447 new residential units, and approximately 1,006 new residents to the study area. This increased population would result in a substantial increase in the number of people using local parks. A detailed open space analysis was conducted to determine whether the proposed project would result in any adverse open space impacts. This chapter assesses existing conditions (both users and resources), probable conditions in the 2011 future without the proposed project, and potential impacts that would result from the proposed project in its Build year of 2011.

PRINCIPAL CONCLUSIONS

The proposed project would not result in any significant adverse open space impacts. The proposed project would introduce new residents, but would also create approximately 0.7 acres of new waterfront open space along the canal. As a result, passive open space ratios would increase slightly in the future with the proposed project, and the total residential open space ratio would remain the same. The active open space ratio would decrease by 3 percent. However, because the study area has a low active open space ratio, other factors must be considered to demonstrate that even this small decrease in the active open space ratio does not result in a significant adverse impact.

In this instance, a number of factors demonstrate that although the study area has a low active open space ratio and this ratio would decrease with the proposed project, this decrease would not constitute a significant adverse impact. First, it is recognized that the DCP guidelines for active open spaces are not attainable in many areas of the city, and are not considered impact thresholds. Moreover, the quantitative effects of the proposed project on the active open space ratio would be very limited; the ratio would decrease by only 0.01 acres per 1,000 people with the proposed project.

Finally, the quantitative analysis does not account for the approximately 66.77 acres of mostly active open space in Red Hook Park and the Red Hook Recreation Area, which are located just outside of the study area. It is likely that residents of the proposed project would make use of this significant recreational space (which includes athletic facilities such as soccer and softball fields), thus allaying the shortage of active open space predicted by the quantitative analysis. In addition, the proposed 0.7-acre publicly-accessible open space along the canal was considered entirely passive in the quantitative portion of this analysis, but active recreation such as jogging or cycling would be allowed within the publicly accessible open space, and would be expected to occur, especially if similar amenities are built along other portions of the canal beyond the proposed project's 2011 Build year. The proposed project would also include private residential

amenity space such as an accessory gym and private open spaces in building courtyards for its residents. These private amenities would likely serve to reduce the impact of the project's residents on active open spaces in the study area. Therefore, the proposed project would not result in a significant adverse impact on active or passive open space in the study area.

B. METHODOLOGY

STUDY AREA

This analysis of potential open space impacts was conducted based on methodologies contained in the *CEQR Technical Manual*. According to CEQR guidelines, the first step in assessing potential open space impacts is to establish the study area appropriate for the new population to be added as a result of the proposed actions. The study area is based on the average distance a person might walk to reach a local open space. Residents are typically assumed to use both passive and active open spaces and walk approximately 20 minutes, or about a ½-mile distance, from their homes to reach a local open space resource. Therefore, a ½-mile radius from the project site is the basis for the open space study area for the proposed project.

As per the *CEQR Technical Manual*, the open space study area comprises all census tracts that have at least 50 percent of their area located within the ½ mile radius of the project site (see Figure 5-1.) Open spaces located within ½ mile of the project site, but within a census tract having less than 50 percent of its area within the study area were not included in the quantitative open space assessment, but were discussed qualitatively. While residents may also visit certain regional parks (e.g., Prospect Park), such open spaces are not included in the quantitative analysis, but are discussed qualitatively.

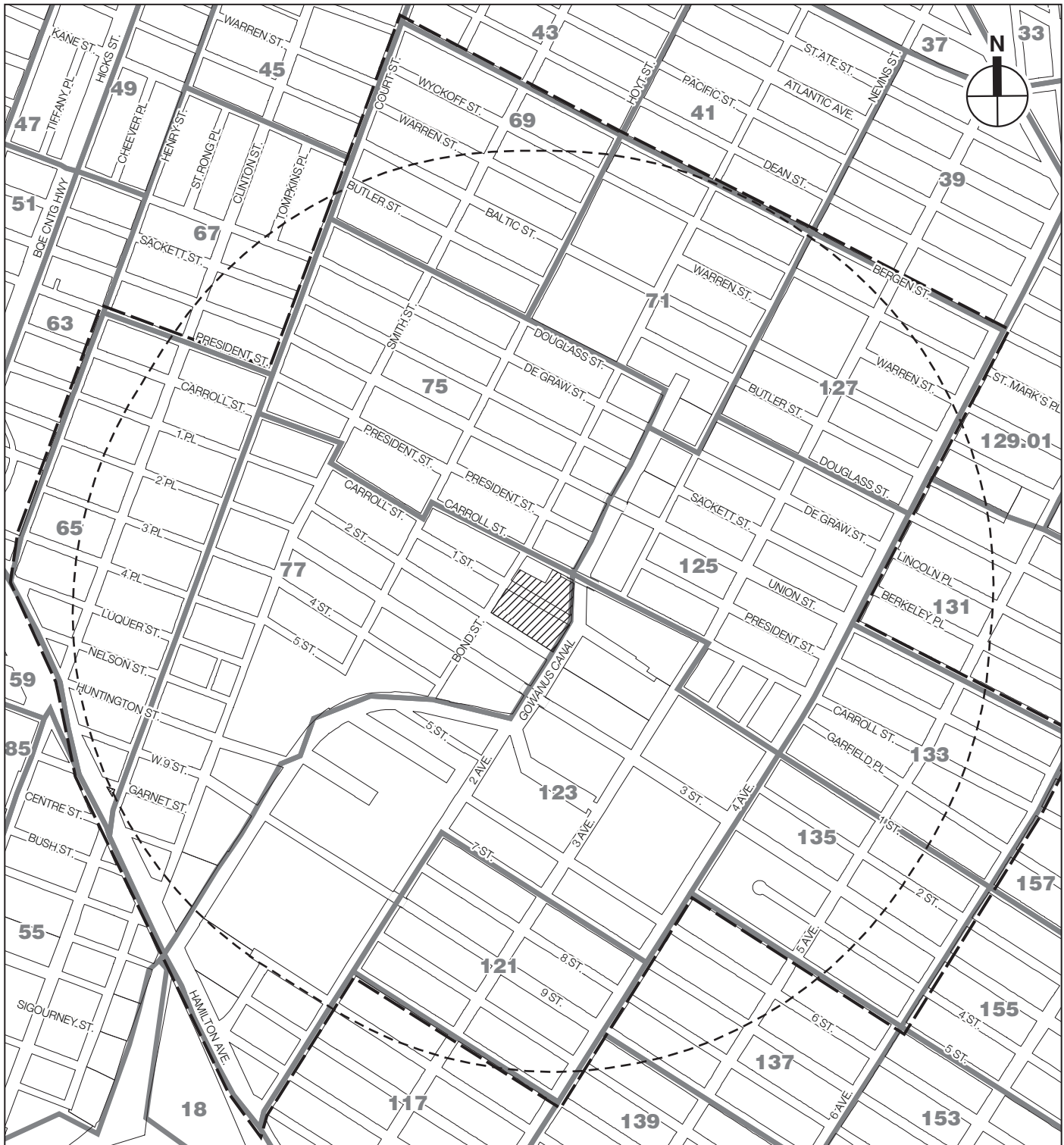
OPEN SPACE USER POPULATIONS





Demographic data are used to identify potential open space users within the study area. Because it is assumed that residents and workers within an area will use the same open spaces, both of these populations were considered. To determine the residential population, data were compiled from the 2000 Census for the census tracts in the study area. The number of workers in the study area was determined based on 2000 reverse journey-to-work data compiled by the New York City Department of City Planning (DCP).

INVENTORY OF OPEN SPACE RESOURCES

Publicly accessible open spaces and recreational facilities within the study area were inventoried to determine their size, character, and condition. Public spaces that do not offer useable recreational areas were excluded from the survey, as were open spaces that are not accessible to the general public. The information used for this analysis was gathered through field surveys conducted in May 2006 and data from the New York City Department of Parks and Recreation (DPR) and other City agencies responsible for public open spaces.

At each open space, active and passive recreational spaces were noted. Active open space facilities are characterized by activities such as jogging, field sports, and children's active play. Such open space features might include basketball courts, baseball fields, or play equipment. Passive open space facilities are characterized by activities such as strolling, reading, sunbathing, and people-watching. Some spaces, such as lawns and public esplanades, can be both active and passive recreation areas.



-  Project Site Boundary
-  1/2-Mile Perimeter from Project Site
-  Study Area Boundary
-  Census Tract
- 18** Census Tract Number



In addition to the open spaces located within the study area, some major, destination open spaces outside of the study area are considered qualitatively in this analysis. These spaces provide additional open space resources to the residential population but are located beyond the ½-mile radius of the project site.

ADEQUACY OF OPEN SPACE RESOURCES

The adequacy of open space in the study area was assessed both quantitatively and qualitatively. In the quantitative analysis, the ratio of useable open space acreage to the study area population—referred to as the open space ratio—is compared with guidelines established by DCP. To determine the quantitative adequacy of open space resources for the study area, two sets of guidelines are used. The first guideline is a City-wide median open space ratio of 1.5 acres per 1,000 residents. The second is the optimal planning goal established by DCP in the *CEQR Technical Manual* of 2.5 acres per 1,000 residents, with 2.0 acres of active and 0.5 acres of passive open space per 1,000 residents. Because it is assumed that both residents and workers will use the same passive open spaces, the needs of these populations are also considered together. For workers, DCP has established that 0.15 acres of passive open space per 1,000 workers represents a reasonable amount of open space. Therefore, a weighted average of the amount of open space necessary to meet the DCP guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers is considered in this analysis.

Impacts are based on how the proposed project would change the open space ratios in the study area. It is recognized that these goals are not feasible for many areas of the City, and they are not considered impact thresholds. Rather, they are benchmarks indicating how well an area is served by open space.

C. INITIAL QUANTITATIVE ASSESSMENT

The *CEQR Technical Manual* suggests that an initial quantitative assessment may be useful in determining if a full, detailed open space analysis is necessary or whether the open space assessment can be targeted to a specific user group. The initial quantitative assessment compares existing open space ratios in the study area to ratios in the future with the proposed action. The initial quantitative assessment does not consider changes to population and open space acreage that would occur in the future without the proposed action.

In the study area, the existing total open space ratio for residents is below the DCP guideline of 2.5 acres per 1,000 residents, as are its component active and passive open space ratios (see Table 5-1). Furthermore, the passive open space ratio for the combined resident and worker population is below the DCP guideline of 0.41 acres per 1,000 residents and workers.

**Table 5-1
Initial Quantitative Assessment of Adequacy of Open Space Resources**

Ratio	DCP Guideline	Existing Ratio	Future With the Proposed Action Ratio	Percent Change
Total/residents	2.50	0.50	0.51	2.0
Passive/residents	0.50	0.17	0.18	5.9
Active/residents	2.00	0.33	0.32	-3.0
Passive/total population	0.41	0.13	0.14	7.7
Notes:	The initial quantitative assessment does not consider changes to population and open space acreage in the future without the proposed action.			
Sources:	U.S. Census of Population and Housing, 2000; Central Transportation Planning Package (CTPP) 2000—Part 2; NYC Department of Parks & Recreation; AKRF, Inc. field surveys.			

According to the *CEQR Technical Manual*, a detailed assessment is warranted if a proposed project is expected to decrease the open space ratio under the Build conditions by 5 percent or more, as this is considered a substantial change. In addition, if a study area exhibits a low open space ratio (i.e., below the community district median of 1.5 acres per 1,000 residents), even a decrease of 1 percent in the ratio may have an adverse impact. In this case, the 2011 residential active open space ratio with the proposed action would decline by approximately 3 percent. Although this decline is less than 5 percent, the existing total open space ratio of 0.50 acres per 1,000 residents and residential active ratio of 0.33 acres per 1,000 residents are considered low, a detailed open space assessment is warranted.

D. EXISTING CONDITIONS

STUDY AREA POPULATION






Based on the methodology described above, the study area generally extends to Bergen Street to the north, 4th and 6th Avenues to the east, Hamilton Avenue (Gowanus Expressway) to the south, and Court and Henry Streets to the west (see Figure 5-2.) It includes 11 Brooklyn Census Tracts: 65, 69, 71, 75, 77, 121, 123, 125, 127, 133, and 135.

Based on 2000 Census data, the residential population in the study area is estimated to be 34,697 (see Table 5-2). Although there is no quantitative analysis dedicated exclusively to the commercial population within a residential study area, the *CEQR Technical Manual* calls for a quantitative analysis of the total population within the residential study area, which includes the commercial as well as the residential populations. Based on 2000 Census reverse-journey-to-work data, the worker population in the study area is estimated to be 11,205. Thus, the combined residential and worker population in the study area is estimated to be 45,902. Though this analysis conservatively assumes that residents and employees are discrete populations, it is possible that some residents both live and work within the study area. As a result, there is likely to be some double-counting of the daily user population in which residential and non-residential populations overlap, resulting in a more conservative analysis.

**Table 5-2
Existing Population in Commercial and Residential Study Areas**

Census Tract	Estimated Residential Population	Estimated Worker Population	Total User Population
65	5,136	695	5,831
69	3,340	935	4,275
71	4,609	480	5,089
75	4,454	1,245	5,699
77	3,905	1,675	5,580
121	1,796	730	2,526
123	315	2,150	2,465
125	1,240	1,235	2,475
127	3,405	775	4,180
133	3,667	670	4,337
135	2,830	615	3,445
Study Area Total:	34,697	11,205	45,902
Sources: U.S. Census of Population and Housing, 2000; Central Transportation Planning Package (CTPP) 2000 – Part 2.			



-  Project Site Boundary
-  1/2-Mile Perimeter from Project Site
-  Study Area Boundary
-  Open Space
-  Census Tract
- 18** Census Tract Number



As shown in Table 5-3, the vast majority of the population—69 percent—is between the ages of 20 and 64. Children and teenagers (age 0-19) make up 21 percent of the total population and the elderly (age 65 and older) account for the remaining 10 percent of the study area population.

Table 5-3
Age Distribution of 2000 Population
in Residential Study Area

Age Category	Number	Percent
4 and Younger	1,900	5.5%
5 – 9	1,900	5.5%
10 – 14	1,762	5.1%
15 – 19	1,657	4.8%
20 – 64	24,015	69.2%
65 and Older	3,463	10.0%
Total	34,697	100.0%
Notes: Totals may not add due to rounding.		
Sources: U.S. Census of Population and Housing, 2000		

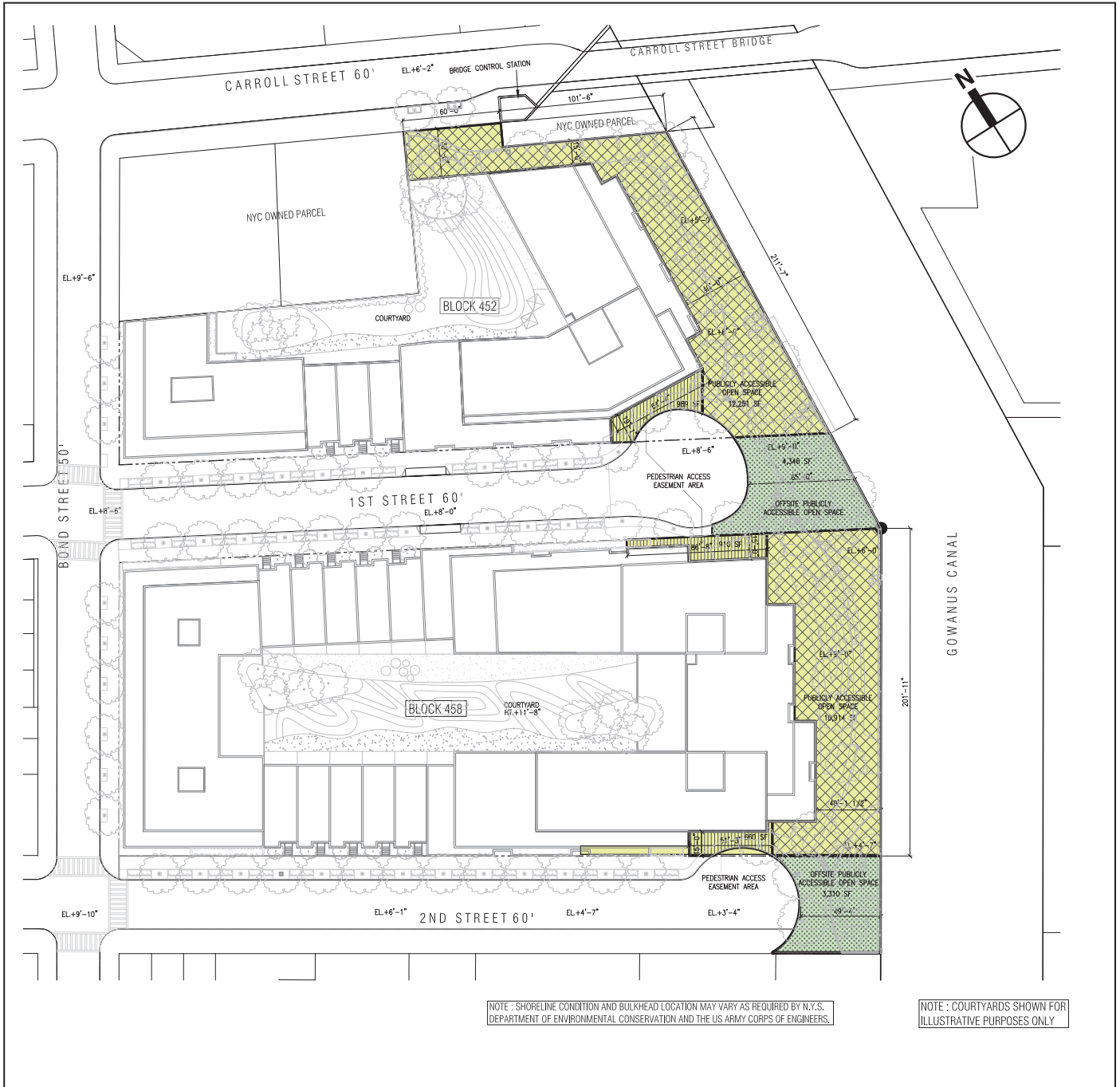
Given the range of age groups present in the population, there is a need for various kinds of active and passive recreation facilities, including those with amenities that can be used by children and adults, in the residential study area. Within a given area, the age distribution of a population affects the way open spaces are used and the need for various types of recreational facilities. Typically, children 4 years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages 5 through 9 typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for such activities as ball playing, running, and skipping rope. Children ages 10 through 14 use playground equipment, court spaces, little league fields, and ball fields. Teenagers’ and young adults’ needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, ad hoc active sports such as Frisbee, and recreational activities in which all ages can participate. Senior citizens engage in active recreation such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

STUDY AREA OPEN SPACES

QUANTITATIVE ANALYSIS

There are 15 publicly accessible open space and recreational resources located within the study area, of which 14 are publicly owned, and one is privately owned. Three of the publicly owned spaces are school playgrounds under the control of the New York City Department of Education (DOE), and are not available to the general public during the school day. The privately owned, publicly-accessible open space is a waterfront esplanade along the Gowanus Canal owned by Lowe’s Home Improvement. It is open to the public only during the store’s business hours.

The open space resources in the study area total approximately 17.40 acres (see Figure 5-3 and Table 5-4). These open spaces include several small parks and playgrounds, the open spaces



- On-Site Publicly Accessible Open Space
- Off-Site Publicly Accessible Open Space

363-365 Bond Street FEIS

associated with the New York City Housing Authority (NYCHA) Wyckoff Gardens and Gowanus Houses developments, a Greenthumb garden owned by DPR, and the DOE and Lowe’s spaces described above. Approximately two-thirds (11.55 acres) of this open space is active in nature, while the remaining third (5.85 acres) is passive.

**Table 5-4
Open Space Inventory**

Map Ref.*	Name	Owner/ Agency	Features	Acres of Active Open Space	Acres of Passive Open Space	Condition/ Utilization
1	Thomas Greene Playground	DPR	Basketball courts, handball courts, jungle gyms, outdoor swimming pool, benches, trees	2.15	0.38	good/ light
2	Boerum Park	DPR	Basketball court, tennis court, swings, slides, jungle gym, play fountain, trees, benches	0.83	0.09	excellent/ moderate
3	St. Mary’s Playground	DPR	Basketball courts, exercise stations, slides, jungle gym, benches	0.31 ¹	0.06 ¹	CLOSED
4	Carroll Park	DPR	Basketball courts, paved baseball/ softball field, bocce court, swings, slides, jungle gyms, play fountain, trees, benches, bathroom, war monument	1.12	0.75	good/ moderate
5	Gowanus Playground	DPR	Basketball courts, handball courts, swings, slides, jungle gyms, play fountain, trees, benches, bathroom	0.73	0.31	fair/ light
6	Gowanus Houses Open Space	NYCHA	Trees, benches, paved walkways	0.00	2.29	good/ moderate
7	Wyckoff Gardens Open Space	NYCHA	Basketball courts, slides, jungle gyms, trees, benches, paved walkways, chess/ checkers tables	1.30	0.56	good/ light
8	School for Global Studies Playground	DOE	Basketball courts, handball courts, paved baseball/ softball field	0.92	0.00	fair/ heavy
9	Carroll School Playground	DOE	Basketball courts, paved baseball/ softball fields	0.47	0.00	good/ moderate
10	Lowe’s Waterfront Esplanade	Lowe’s	Trees, benches, walkways	0.00	0.26	good/ light
11	Gardens of Union	DPR	trees, benches, decorative pond	0.00	0.20	good/ unknown
12	J.J. Byrne Park	DPR	Handball courts, paved baseball/ softball fields, swings, slides, jungle gyms, play fountain, trees, benches, bathrooms, historic structure, dog run	2.42	0.61	good/ heavy
13	Terrapin Playground	DPR/ DOE	Basketball courts, paved baseball/ softball fields, benches	1.50	0.00	good/ heavy
14	Admiral Triangle	DPR	Slides, jungle gym, trees, benches, planters	0.11	0.32	good/ light
15	Cough Triangle	DPR	Trees, benches	0.00	0.03	poor/ light
16	2nd Street Greenstreet	DPR	Planters	0.00	0.05	good/light
17	Under the Tracks Playground	DPR	NA	1.70 ¹	0.00 ¹	CLOSED
Study Area Total:				11.55	5.85	
Notes: * See Figure 5-3 for map reference locations.						
¹ This park is closed and its acreage is not included in the study area total.						
Sources: DPR open space data base; AKRF, Inc. field surveys, May 2006.						

In addition, there are two publicly owned open spaces that are currently closed: St. Mary’s Playground and Under the Tracks Playground. These are listed in Table 5-4 for informational purposes, but are not included in the quantitative analysis. St. Mary’s Playground provided

active recreation facilities, but has been closed due to Metropolitan Transportation Agency (MTA) work above. Under the Tracks Playground also provided active recreation facilities, but is currently closed due to hazardous conditions from crumbling infrastructure above. It is assumed that these open spaces will not reopen before 2011.

QUALITATIVE DISCUSSION

There is one open space located within the ½-mile radius of the project site that was not included in the quantitative analysis because it is not within one of the census tracts included in the study area. This open space, Ennis Park, is located east of 2nd Avenue between 11th and 12th Streets and provides approximately half an acre of mostly active recreation space, including a full basketball court and a jungle gym.

In addition to Ennis Park, two large parks intended to serve an area wider than their immediate surroundings are located just beyond the study area boundary. The first, Red Hook Park (Coffey Park) lies about 1 mile from the project site, four blocks west of the study area. This 8.27-acre park contains a wide variety of active and passive facilities, including basketball courts, handball courts, a paved baseball/softball field, swings, play equipment, a play fountain, benches, picnic tables, and chess/checkers tables. The second, the Red Hook Recreation Area, lies about two blocks southwest of the study area. This 58.5-acre park is composed primarily of active facilities, including basketball courts, a soccer pitch (donated by the Norwegian Soccer Federation in honor of the United States’ hosting of the 1994 World Cup), a track, a football field, handball courts, baseball/softball fields, exercise equipment, a pool, a recreation center (with gym, fitness room, and game room), benches, picnic tables, paved walking paths, and bathrooms.

ADEQUACY OF OPEN SPACES

QUANTITATIVE ANALYSIS

The following analysis of the adequacy of 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 well as the ratio of passive open space per 1,000 combined residents and workers.

The study area contains a total of 17.40 acres of open space, of which approximately 11.55 acres are principally dedicated to active use, and 5.85 acres are suited for passive use. As Table 5-5 shows, the study area has a residential population of 34,697, resulting in an overall open space ratio of 0.50 acres per 1,000 residents. This is far below the City’s planning guideline of 2.5 acres of combined active and passive open space per 1,000 residents.

**Table 5-5
Existing Conditions: Adequacy of Open Space Resources**

	Total Population	Open Space Acreage			Open Space Ratios per 1,000 People			DCP Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	34,697	17.40	11.55	5.85	0.50	0.33	0.17	2.5	2.0	0.5
Combined residents and workers	45,902				N/A	N/A	0.13	N/A	N/A	0.41*

Notes: * Weighted average combining 0.15 acres per 1,000 workers and 0.50 acres per 1,000 residents.

The study area's residential passive open space ratio is 0.17 acres of passive open space per 1,000 residents, which is below the City's planning goal of 0.5 acres per 1,000 residents. The area's residential active open space ratio is 0.33 acres per 1,000 residents, which is also below the City's planning guideline of 2.0 acres per 1,000 residents.

When study area employment is added to the residential population, the passive open space ratio is lowered. With a worker and residential population of 45,902, the combined passive open space ratio in the residential study area is 0.13, much lower than the recommended weighted average guideline ratio of 0.41 acres per 1,000 residents and workers.

QUALITATIVE DISCUSSION

In addition to the open spaces described above, there are two non-quantified destination open space resources located just outside of the study area boundary. As described above, these are Red Hook Park, located 1 mile to the west, and the Red Hook Recreation Area to the southwest. The open spaces provide substantial active and passive recreation facilities including soccer and softball fields, and it is likely that these facilities serve the area's existing residential and worker population.

E. THE FUTURE WITHOUT THE PROPOSED PROJECT

STUDY AREA POPULATION

Several new residential and commercial developments are currently planned and expected to be completed within the open space study area by 2011. These developments, as discussed in Chapter 2, "Land Use, Zoning, and Public Policy," would increase both the residential and worker populations within the open space study area. An analysis of open space conditions in the future without the proposed project follows.

PROJECT SITE

Absent the proposed project, the project site is expected to remain as one- and two-story buildings serving light-industrial and warehousing uses, and vacant land serving primarily as space for vehicle storage. No new residential or commercial population would be added to the project site.

STUDY AREA

Ten development projects are anticipated to have been completed in the open space study area by 2011. These projects are listed in Table 2-2 of Chapter 2, "Land Use, Zoning, and Public Policy," and are expected to add new population to the study area; four will predominantly add new residents, and three will add new workers. In total, these projects are expected to result in 452 new residents¹ and 382 new workers² in the open space study area. These additions would

¹ Number of new residents estimated by multiplying residential units planned in each anticipated development by the average household size in the open space study area (2.26) based on data from the 2000 U.S. Census.

² Number of new workers estimated by applying standard employment ratios to the square footages planned in each anticipated development: 1 employee per 333 square feet of hotel/restaurant space; 1

bring the study area’s residential population to 35,149, its commercial population to 11,587, and its combined residential and worker population to 46,736.

Based on existing demographics, it is expected that within the study area in the future without the proposed project, adults between the ages of 20 and 64 will account for 69 percent of the residential population, or approximately 24,253 persons. Children and teens will make up 21 percent of the population, or approximately 7,381 persons, and about 10 percent, or 3,515 persons, will be age 65 or older.

STUDY AREA OPEN SPACES

No changes in the total amount of open space in the study area are expected to occur by the year 2011 in the future without the proposed project. Therefore, the total amount of public open space in the study area would remain unchanged at 11.55 acres of active space and 5.85 acres of passive space.

ADEQUACY OF OPEN SPACES

QUANTITATIVE ANALYSIS

Absent the proposed project, the number of residents in the study area is expected to increase to 35,149 by 2011, with the area’s total amount of open space remaining 17.40 acres. As shown in Table 5-6, this would result in a total residential open space ratio of 0.50 acres per 1,000 residents, which is below the City’s guideline of 2.5 acres. The residential active open space ratio would be 0.33, which would remain below the City’s guideline of 2.0 acres. For the combined population, the passive open space ratio would be 0.13 acres per 1,000 residents and workers, which is lower than the recommended weighted average ratio of 0.41.

Table 5-6
The Future Without the Proposed Project: Adequacy of Open Space Resources

	Total Population	Open Space Acreage			Open Space Ratios per 1,000 People			DCP Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	35,149	17.40	11.55	5.85	0.50	0.33	0.17	2.5	2.0	0.5
Combined residents and workers	46,736				N/A	N/A	0.13	N/A	N/A	0.41*
Notes: * Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents.										

QUALITATIVE DISCUSSION

As stated above, Red Hook Park and the Red Hook Recreation Area, which are both located just outside of the study area boundary, will be used by residents and will substantially relieve active and passive open space shortages in the area.

employee per 400 square feet of retail space; and 1 employee per 250 square feet of office space. (See Chapter 2, “Land Use, Zoning, and Public Policy” for a complete list of anticipated developments.)

F. PROBABLE IMPACTS OF THE PROPOSED PROJECT

STUDY AREA POPULATION

As described in Chapter 1, “Project Description,” the proposed action would result in the redevelopment of the project site with 447 dwelling units (up to 130 affordable), community facility space, commercial space (providing commercial goods and services demands), accessory parking spaces, and 0.7 acres of publicly-accessible waterfront open space on the Gowanus Canal. This development would increase both the residential and worker populations within the open space study area.

PROJECT SITE

The proposed project would add approximately 1,006 new residents to the open space study area, bringing the total residential population to 36,155. The project would also add approximately 43 workers to the area.¹ However, because the approximately 35 workers on the project site in the future without the proposed action would be displaced, the increment of new employees added to the project site in the future with the proposed action would be eight, bringing the total worker population in the study area to 11,595. The combined residential and worker population would rise to 47,750.

The proposed rezoning area also includes two City-owned outparcels on Block 452 (the north block). The outparcels contain a City Emergency Medical Systems (EMS) facility and infrastructure (the Operator’s House) associated with the Carroll Street Bridge. At this time there are no anticipated development plans for the two city-owned parcels and they are expected to remain in use as a City EMS facility and infrastructure associated with the Carroll Street Bridge. Therefore, they would not be affected by the proposed action, and would not introduce a new population to the study area.

It is expected that the proposed project would introduce a population with an age distribution similar to that of the existing population. In the future with the proposed project, approximately 69 percent of the population, or 24,947 persons, would be between the ages of 20 and 64. Children and teens would make up 21 percent of the population, or approximately 7,593 persons, and about 10 percent, or 3,615 persons, would be age 65 or older. As described above, this type of age distribution requires a wide range of open space facilities to meet the needs of the population. Young children typically use playground equipment, while older children and teenagers tend toward court game facilities such as basketball and field sports. Adults continue to use court game facilities, but also seek out individualized recreation facilities and family-type recreation. Senior citizens engage in active recreation such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

STUDY AREA OPEN SPACES

The proposed project would create an approximately 0.7-acre publicly-accessible passive open space along the Gowanus Canal Waterfront (see Figure 5-3). This open space would feature a

¹ Number of new workers estimated by applying standard employment ratios to each proposed use: 1 employee per 1,000 square feet of community facility space; 1 employee per 400 square feet of retail space; 1 employee per 22 residential dwelling units; and 1 employee per 50 parking spaces per 8-hour shift (for 24-hour parking).

walkway along the Gowanus Canal with trees, plantings, and seating areas, as well as a dog run and other architectural features yet to be designed. The walkway would provide connections with the historic Carroll Street Bridge at the northern end. At the southern end, the proposed project would incorporate and improve the Greenstreet at the end of 2nd Street, and as part of that design would incorporate the existing access point to the water that is currently used by the Gowanus Dredgers. The open space would support the residential communities to the west of the project site, and provide waterfront views of the Canal along the entire eastern boundary of the open space. Use of the publicly-accessible open space would not conflict with other uses (i.e., industrial or office uses) south of the project site.

With the addition of this passive open space, the total amount of publicly accessible open space in the study area would rise to 18.10 acres (see Table 5-7). The amount of passive open space would increase to 6.55 acres, while the amount of active open space would remain at 11.55 acres.

**Table 5-7
The Future With the Proposed Project: Adequacy of Open Space Resources**

	Total Population	Open Space Acreage			Open Space Ratios per 1,000 People			DCP Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	36,155	18.10	11.55	6.55	0.50	0.32	0.18	2.5	2.0	0.5
Combined residents and workers	47,750				N/A	N/A	0.14	N/A	N/A	0.42*

Notes: * Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents.

ADEQUACY OF OPEN SPACES

QUANTITATIVE ANALYSIS

In the future with the proposed project, the open space study area would remain underserved by open space, but several ratios would increase as a result of the new open space introduced by the proposed project. The number of residents in the study area is expected to increase to 36,155, and the total amount of open space is expected to rise to 18.10 acres. The total residential open space ratio would remain at 0.50 acres per 1,000 residents. The active open space ratio would fall to 0.32 acres per 1,000 residents from 0.33, a 3 percent decrease. The combined residential and worker passive open space ratio within the residential study area would rise to 0.14, but would still fall below the recommended weighted average of 0.41 acres per 1,000 residents and workers. The passive open space ratio per 1,000 residents would also increase, from 0.17 without the proposed project to 0.18 with the proposed project. As in the future without the proposed project, all open space ratios would fall short of DCP guideline ratios.

QUALITATIVE ANALYSIS

As in the future without the proposed project, residents would continue to have access to open spaces just outside the study area. For example, Red Hook Park and the Red Hook Recreation Area provide substantial active and passive open space resources and would likely be used by residents of the proposed project.

Further, by adding a new, high-quality waterfront open space, the proposed project would result in an improvement to the area’s open space condition that is not clearly reflected in the

quantitative analysis due to the new open space's design and waterfront location. Although this open space was considered entirely passive in the quantitative portion of this analysis, active recreation such as jogging or cycling would be allowed within the publicly accessible open space, and would be expected to occur, especially if similar amenities are built along other portions of the canal beyond the proposed project's 2011 Build year.

The proposed project would also include private residential amenity space such as an accessory gym and private open spaces in building courtyards for its residents. These private amenities, which would provide opportunities for passive and active recreation for building residents, were not considered quantitatively in this analysis, but would likely serve to reduce the effect of the project's residents on open spaces in the study area.

IMPACT SIGNIFICANCE

In the future with the proposed project, all of the open space ratios, except for the active ratio, would increase slightly or remain the same with the proposed project. The active open space ratio would decrease by 3 percent (see Table 5-7) and would also fall short of DCP guidelines. This decrease is below the 5 percent threshold that could be considered a substantial change. However, because the study area has a low active open space ratio, other factors must be considered to demonstrate that even this small decrease in the active open space ratio does not result in a significant adverse impact.

In this instance, a number of factors demonstrate that although the study area has a low active open space ratio and this ratio would decrease with the proposed project, this decrease would not constitute a significant adverse impact. First, it is recognized that the DCP guidelines are not feasible for many areas of the city, and they are not considered impact thresholds. Moreover, the quantitative effects of the proposed project on the active open space ratio would be very limited; the ratio would decrease by only 0.01 acres per 1,000 people with the proposed project. Further, as noted above in "Qualitative Analysis," Red Hook Park and Red Hook Recreation Area, two destination open spaces with a substantial amount of active recreation facilities, are located just outside the study area. These open spaces would help to alleviate any open space shortage, particularly an active open space shortage. The proposed project would also add a new, high-quality waterfront open space to the study area, and this open space would allow limited active recreation such as jogging or cycling. Therefore, even though the active space ratio falls below City guidelines and would decrease with the proposed project, the proposed project would not result in a significant adverse impact on open space resources. *