3.4 OPEN SPACE

INTRODUCTION

The proposed Lower Concourse Rezoning and Related Actions project would not result in significant adverse impacts to open space. For the proposed action, a detailed open space analysis has been conducted because even though the project itself would not result in the direct loss of public open space, it would introduce a new residential and non-residential (worker) population to an area considered to have an existing deficiency of open space (i.e., below 1.5 acres of open space per 1,000 residents or below 0.15 acres of passive open space per 1,000 non-residents). The open space ratios in the residential study areas would continue to be less than the DCP recommended weighted average for both existing conditions and for conditions in the future without and with the proposed action. The open space ratio in the non-residential study area does and would continue to exceed the recommended level of open space for this non-residential population in both the future without and with the proposed action. Although the proposed action would result in a quantitative decrease in the residential open space ratio, for qualitative reasons as detailed below it would not constitute a significant adverse open space impact.

Open space conditions in the residential study area without and with the proposed action are represented quantitatively by open space ratios of 0.64 and 0.61, respectively; which represents a 4.6 percent decrease in the open space ratio from the future without the proposed action as compared to the future with the proposed action. For the non-residential population, the open space ratio would be 0.22 under the future without the proposed action and 0.31 for the future with the proposed action, which exceeds the recommended level of 0.15 acres of passive open space per 1,000 non-residents. Although the non-residential population is adequately served for open space and would continue to be so under the proposed action, the residential population within the study would experience a shortfall of open space. The CEQR Technical Manual suggests that a significant quantitative impact may result if the proposed action would reduce the open space ratio, compared to the No Action condition, or would further exacerbate a deficiency in open space. Although the open space ratios for the residential study areas would remain below the recommended levels, it is recognized that these are goals that are not feasible for many areas of the city and are therefore not considered impact thresholds.

Qualitative analysis indicates that these calculated open space shortfalls would not constitute significant adverse impacts, however, as these ratios only partially represent expected improvements to open space resources in the study area. The open space resources developed as part of the proposed action would realize the inherent suitability of the area for public waterfront access and ensure that an appropriate array of active and passive recreational amenities is made available to the future residential and worker populations. Moreover, the attractive open spaces developed as part of the proposed action would contribute to a network of important future parks developed within and immediately surrounding the study area. The proposed waterfront esplanade, in particular, would enhance the quality of resources in the study area and the broader

network; it would also increase the quantity of open space in the study area beyond what has been analyzed in this DEIS, as the greater part of its associated acreage has been conservatively excluded from the calculation of open space ratios. When the full extent of future open space resources is considered, the proposed action is shown to advance DCP efforts in reaching its open space goals. Future residential and worker populations in the study area and South Bronx overall would be provided a greater opportunity to enjoy a network of open space and recreational resources that would not be fully realized in the future without the proposed action.

The 2001 *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. An open space assessment may also be necessary if a proposed action could potentially have a direct or indirect effect on open space resources in the project area. A direct effect would physically change, diminish, or eliminate an open space; or reduce its utilization or aesthetic value. An indirect effect may occur when the population generated by a proposed project would be substantial enough to diminish the ability of an area's open space to serve the existing or future population.

The *CEQR Technical Manual* suggests that a significant quantitative impact may result if the proposed action would reduce the open space ratio, compared to the No-Action condition, or would further exacerbate a deficiency in open space. Quantitative impacts are typically further assessed qualitatively to determine overall level of significance. The qualitative approach examines factors that could affect conclusions about indirect impacts on an area's open spaces, including consideration of the type and quality of open spaces available to meet the needs of study area population and the ease of access to private open spaces and to significant open spaces that are in close proximity to the study area.

The Lower Concourse Rezoning and Related Actions project includes zoning amendments, which would create the Harlem River Waterfront Access Plan (WAP), providing for a coordinated network of waterfront open spaces. Ultimately, the new WAP would establish a 2.26-acre park located between the Harlem River and Exterior Street, south of the extension of East 146th Street, and north of the extension of East 144th Street, with a change in the City Map required to map the parkland. In addition, the WAP would identify specific locations to create public esplanades along the Harlem River shoreline, upland connections, supplemental public access areas, and a visual corridor through requirements for future waterfront developments. Additional open spaces established under future conditions through the WAP would total 1.17 acres, bringing the total additional open space mapped as parkland or created under future conditions with the proposed action to 3.43 acres. With the WAP, the proposed action would encourage the development of the underutilized Harlem River waterfront, by establishing waterfront access areas along the shoreline between the Gateway Center area, to the north of the rezoning area, and the Port Morris community located to the south of the rezoning area.

For the Lower Concourse Rezoning and Related Actions project, a detailed open space analysis has been conducted because although the proposed project would result in a net increase of public open space, it would introduce a large new residential population to an area considered to have an existing deficiency of open space. A deficiency of open space has been defined by the New York City Department of City Planning (DCP) as less than 1.5 acres of open space per 1,000 residents or less than 0.15 acres of passive open space per 1,000 non-residents. This chapter assesses existing conditions and compares conditions in the future without and with the proposed project to determine potential impacts related to the proposed action, both positive and negative.

Although the majority of the open space ratios for the residential and non-residential study areas are below the guidelines recommended by DCP, it is recognized that these goals are not feasible for many areas of the City and are therefore not considered impact thresholds. The qualitative assessments of the residential and non-residential study areas presented herein conclude that while the proposed project would result in a substantial increase in the number of residents, the existing and future open space resources in and around the study areas would be sufficient to address the needs of the user populations of the area. A majority of existing open space resources was found to be in good condition with moderate utilization rates, providing a wide range of amenities for the population that lives and works in and around the study area. Other open spaces in close proximity to the open space study area, such as the existing St. Mary's Park and the future Yankee Stadium related open spaces, would ameliorate the residents' demand for quality open space in the community. Even though these open spaces are not located within the open space study area of the proposed action, they may be used by residents who live in the Lower Concourse community. These factors add to the quality of open spaces in the study area so that they ultimately meet the demand of the population that lives and works in and around the project study area.

According to the *CEQR Technical Manual*, a decrease in the open space ratio in the future condition may result in a direct impact on the open space study area depending on the balance of open space available; the *CEQR Technical Manual* recommends further assessment of quality, type and quality of open space. The proposed action would not eliminate or reduce the aesthetic value of any open space resources in the open space study area, but would instead create a multitude of new open space resources that would be attractive and accessible to residents and workers. The variety of amenities of many existing and future open space resources located in close proximity to the open space study area would provide broader open space options within the study area. Based on the analysis of quantitative and qualitative factors listed in the *CEQR Technical Manual*, the proposed project is not expected to result in significant adverse impacts within the residential and non-residential study areas.

Department of City Planning Guidelines

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, which is known as the open space ratio. The determination of the need for a quantified analysis is based on both the adequacy of the quantity of open space and how a proposed project or action would

change the open space ratios in the study area compared with the ratios in the future without the proposed project. If a potential decrease in an adequate open space ratio exceeds five percent, it is generally considered to be a substantial change warranting further analysis. Furthermore, if a study area exhibits a low open space ratio (e.g., below the guidelines set forth in the *CEQR Technical Manual*, indicating a shortfall of open space), even a decrease of less than one percent may be considered an adverse effect and would warrant detailed analysis.

To assess the adequacy of the quantity of open space resources, open space ratios are compared against goals set by DCP. Although these open space ratios are not meant to determine whether a proposed action might have a significant adverse impact on open space resources, they are helpful guidelines in understanding the extent to which user populations are served by open space resources. The following guidelines are used for this analysis:

- For residential populations, the City attempts to achieve a ratio of 2.5 acres per 1,000 residents for large-scale proposals. Ideally, this would comprise 0.50 acres of passive space and 2.0 acres of active open space per 1,000 residents. A citywide survey and review of all community districts have indicated that half of the City's community districts have an open space ratio of 2.5 acres of open space or less per 1,000 residents, substantially below the City's goal. For this reason, this goal is often not feasible for many areas of the City, and thus is not used as an impact threshold. Rather, they act as a benchmark to represent how well an area is served by its open space;
- For non-residential populations, 0.15 acres of passive open space per 1,000 non-residents is typically considered adequate; and,
- For combined residential and non-residential populations, a target is established by creating a weighted average of the amount of open space necessary to meet the DCP's guideline of 0.50 acres of passive open space for 1,000 residents and 0.15 acres of passive open space for 1,000 non-residents. This serves to analyze the open space adequacy for both employees and residents.

In the future with the proposed action, the residential study area weighted average is 0.41 and the non-residential weighted average is 0.36 acres per 1,000 persons. The ratio of residents to open space is below the open space ratio target of 0.50 acres of passive open space per 1,000 residents and below the target 2.0 acres of active open space per 1,000 residents. The ratio of non-residents to open space is above the open space ratio target of 0.15 acres of passive open space per 1,000 non-residents, but below the target of 0.5 acres of passive open space per 1,000 residents. Although not all ratios meet the levels recommended by DCP, it is recognized that these are goals that are not feasible for many areas of the City and are therefore not considered impact thresholds. In addition, the majority of the open space ratios in the With-Action condition would be greater than the ratios for the existing and No-Action conditions. The qualitative assessment further concludes that the open space elements, level of amenities, and availability of other large open spaces would help alleviate the burden on the study area's open spaces. Thus, the proposed project would not result in a significant adverse impact to open space.

3.4.1 EXISTING CONDITIONS

Study Areas and Populations

The proposed rezoning area is generally bounded by East 149th Street and East 144th Street to the north, the Major Deegan Expressway and Park Avenue to the south, Morris and Lincoln Avenues to the east, and the Harlem River to the west. In accordance with the guidelines established in the *CEQR Technical Manual*, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius around residential projects and a quarter-mile radius around commercial projects; for this proposed action, both study areas are evaluated. Figure 3.4-1 presents the open space study areas.

Residential Study Area

The residential study area was determined by identifying a half-mile radius around the proposed rezoning area, adjusted to include whole census tracts, as shown on Figure 3.4-1. Per *CEQR Technical Manual* guidelines, census tracts with an area of 50 percent or greater located within the half-mile radius were included in the calculation of population and open space; those with less than 50 percent of their area in the half-mile radius were excluded. Thus, the residential study area includes the following census tracts in their entirety: 17, 23, 47, 49, 53.01, 57, and 65. In addition, census tracts 25, 39, 41, 43, 59.01, 59.02, 61, 67, and 69 have more than 50 percent of their area within a half-mile radius of the project sites, and were also included in the residential study area. The residential study area is generally bounded by East 161st Street to the north, East 132nd Street to the south, St. Ann's and Third Avenues to the east, and the Harlem River to the west.

Non-Residential Study Area

The non-residential study area was established by identifying the quarter-mile radius around the proposed rezoning area, adjusted to include whole census tracts, as shown on Figure 3.4-1. The only census tracts that are included in their entirety in the non-residential study area are census tracts 23 and 47. Census tracts 49, 53.01, 57, and 65 have more than 50 percent of their area within the quarter-mile non-residential study area, and are therefore included in the non-residential study area. The non-residential study area is generally bounded by East 151st and 157th Streets to the north, East 132nd Street and the Third Avenue Bridge to the south, Willis, Third, and Morris Avenues to the east, and the Harlem River to the west.

Methodology

The total residential population was calculated using 2000 Census data and the number of employees was determined by collecting reverse journey-to-work data from the Census Transportation Planning Package (CTPP). The total residential and non-residential (worker) populations were then used to determine the ratio of population per total open

space acreage for residential, worker, and combined residential and worker populations in both the quarter-mile and half-mile study areas. These ratios were then compared with existing citywide averages and planning goals set forth by DCP.

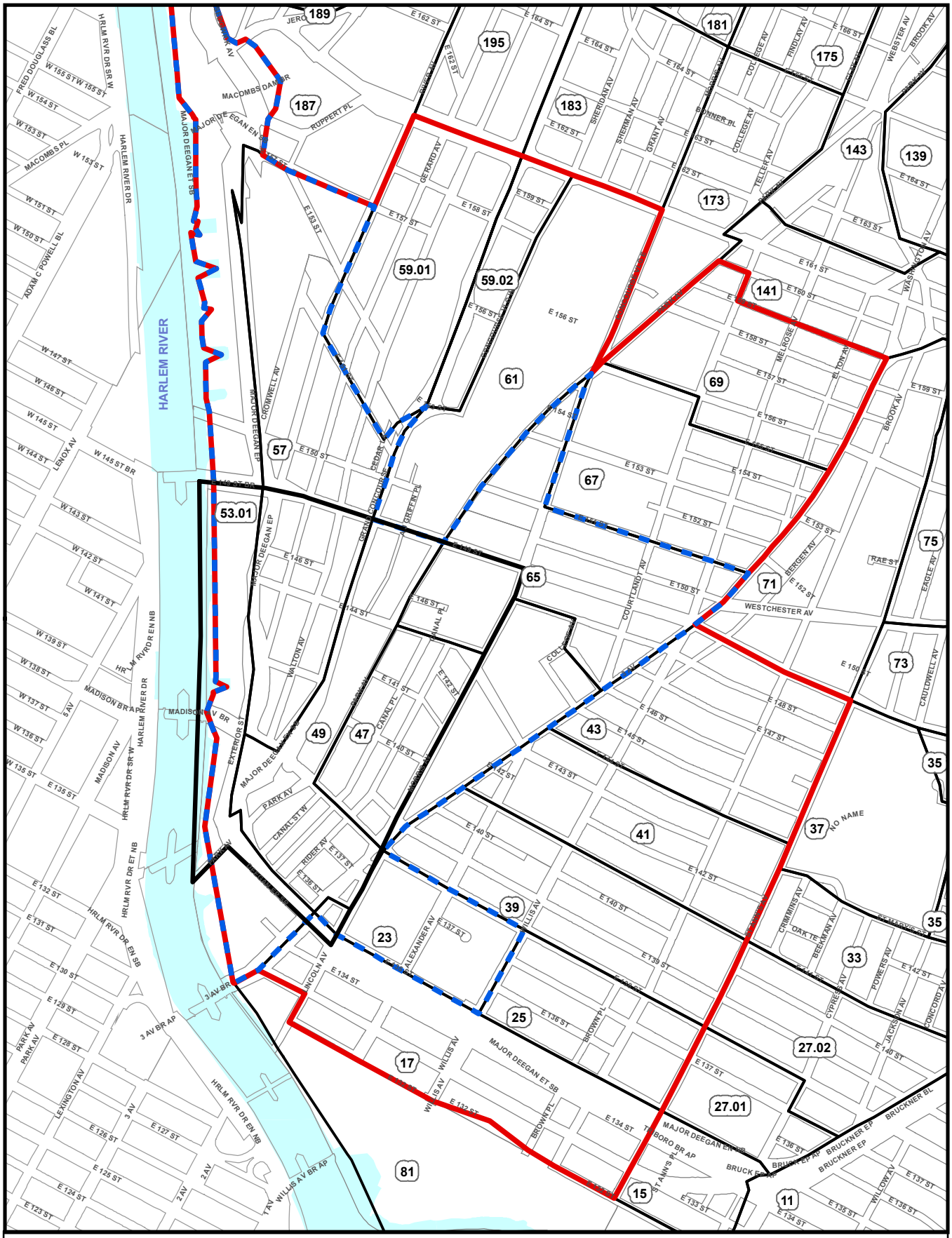
All publicly accessible open spaces and recreational facilities within the residential and non-residential study areas were inventoried to determine their size, character, and condition. Public spaces that do not offer useable recreational areas, such as spaces not suited to any active use but where seating is unavailable (e.g., certain green streets and street triangles), as well as open spaces that are not available to the public on a regular basis, are included in the inventory to facilitate qualitative assessment, but their acreages are not included in quantitative analyses of open space resources in the study areas. The information used for this analysis was gathered through field studies conducted in January and July 2008 on weekdays, and obtained from the New York City Department of Parks and Recreation (DPR)[1] and other agencies. During the field surveys, active and passive recreational spaces were noted for each open space. 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 have both active and passive recreation uses.

Residential Study Area Demographics

Census data from 2000 were collected for all census tracts within the half-mile residential study area in order to calculate the total populations of residents. The total population of residents was calculated for 2000 and then estimated for 2008. The 2000-2008 increase in residential population was estimated by multiplying the average household size in each census tract by the total estimated number of new households for each tract. The residential population in the residential open space study area was 60,191 in 2000 and estimated to be 64,957[2] persons in 2008, as shown in Table 3.4-1 below.

In addition, the number of people employed in the residential study area, based on place of work data for workers 16 and over, was obtained from the Census. The residential study area's worker population was approximately 26,548[3] workers in 2000. The projected worker population for 2008 was also estimated for the residential study area by calculating the yearly rate of change for each census tract from 1990 and 2000 data and applying it to the projected worker population in 2008. The yearly rate of change through 2008 was then calculated and added to the 2000 data. The majority of census tracts experienced a decline in the worker population from 2000 to 2008. The total number of non-residents or workers within the census tracts included in the residential study area provides a means of establishing a basis for sufficiency of open spaces among

[1] "Parks & Recreation Commissioner Adrian Benepe Announces Almost $7 Million in Federal Grants to City Parks," DPR Press Release No. 7, Tuesday, January 14, 2003; accessed online at http://www.nycgovparks.org/sub_newsroom/press_releases/press_releases.php?id=15902.
[2] DCP, 2008.
[3] Census Transportation Planning Package (CTPP), 2000.



Legend

- Proposed Rezoning Area
- 190 — 2002 Census Tract
- Non-Residential Study Area
- Residential Study Area

Source: U.S. Census Bureau; STV Incorporated

Figure 3.4-1: Open Space Study Area

Lower Concourse Rezoning and Related Actions EIS

NYC Department of City Planning

workers. The total worker population in the residential study area in 2008 was 23,078[4], or 3,470 fewer workers than in 2000. The total open space population within the residential study area boundary was 64,957 residents and 23,078 workers in 2008, for a total combined population of 88,035 persons. Although this analysis conservatively assumes that residents and non-residents are separate populations, it is possible that some residents live near their workplaces. Thus, there is likely to be some double counting of the daily user population where residential and non-residential populations overlap.

The residential study area includes 16 census tracts, six within the non-residential study area boundary, and ten outside the non-residential study area boundary. The age distribution of the residential study area population is generally consistent with the averages for the Bronx as a whole. As shown in Table 3.4-1, approximately 58.1 percent of the residential population fell between the ages of 18 and 64 in 2000, an only slightly lower percentage for this segment of the population in the study area than for the same segment in the Bronx overall. Approximately 32.6 percent were age 17 or younger (those typically requiring active recreation), a slightly higher percentage than in the Bronx. Approximately 9.3 percent were 65 years of age or older in 2000 (persons generally preferring passive recreation) in the residential study area, slightly lower than in Bronx County overall. These demographic characteristics indicate that the study area needs a range of active and passive recreation facilities, geared toward both children and adults.

Non-Residential Study Area Demographics

Using the same method as above to estimate the residential population in the residential study area in 2008, the residential population in the non-residential study area was estimated to be 15,503[5] persons in 2008, as shown in Table 3.4-2. CTPP data for total workers 16 years and over at their place of work, regardless of residence, were also compiled for each census tract within the non-residential study area. The total number of non-residents or workers within the census tracts included in the non-residential study area provides a means of establishing a basis for sufficiency of open spaces among workers within the non-residential study area. The total worker population within the non-residential study area is approximately 13,310, for a total estimated combined (worker and residential) population of 28,813 persons in 2008. Age characteristics and age distribution of the residential and worker population for the quarter-mile non-residential study area are presented in Table 3.4-2.

[4] Ibid.
[5] Ibid.

Table 3.4-1 presents the population and age group distribution within the study area.

Table 3.4-1:
Population and Age Distribution (Residential Study Area)

Census Tract	Residential Population	Under 18 yrs	% Under 18 yrs	18 – 64 yrs	% 18 – 64 yrs	65+ yrs	% 65+ yrs	Worker Population
Tract 17	1,006	359	35.7%	600	59.6%	47	4.7%	1,189
Tract 23	4,338	1,462	33.7%	2,330	53.7%	546	12.6%	344
Tract 25	5,109	1,753	34.3%	2,969	58.1%	387	7.6%	320
Tract 39	6,022	1,908	31.7%	3,546	58.9%	568	9.4%	1,215
Tract 41	5,240	1,776	33.9%	3,042	58.1%	422	8.1%	658
Tract 43	4,789	1,570	32.8%	2,886	60.3%	333	7.0%	1,409
Tract 47	5,387	2,046	38.0%	2,855	53.0%	486	9.0%	1,298
Tract 49	246	75	30.5%	141	57.3%	30	12.2%	1,460
Tract 53.01	34	0	0.0%	33	97.1%	1	2.9%	761
Tract 57	858	104	12.1%	682	79.5%	72	8.4%	2,483
Tract 59.01	4,972	1,522	30.6%	3,099	62.3%	351	7.1%	2,368
Tract 59.02	2,682	736	27.4%	1,696	63.2%	250	9.3%	865
Tract 61	4,039	753	18.6%	2,299	56.9%	987	24.4%	2,091
Tract 65	4,655	1,523	32.7%	2,853	61.3%	279	6.0%	8,623
Tract 67	6,491	2,358	36.3%	3,620	55.8%	513	7.9%	893
Tract 69	4,323	1,686	39.0%	2,308	53.4%	329	7.6%	449
Bronx (2000)	**1,332,650**	**397,372**	**29.8%**	**801,330**	**60.1%**	**133,948**	**10.1%**	**280,940**
Residential Study Area Total (2000)	**60,191***	**19,631**	**32.6%**	**34,959**	**58.1%**	**5,601**	**9.3%**	**26,548****
Residential Study Area Total (2008)	**64,957*****							**23,078*****

Source: *U.S. Census, Summary File 1, 2000; ** Census Transportation Planning Package (CTPP) 2000; ***DCP, 2008; STV Incorporated, 2008.

Table 3.4-2:
Population and Age Distribution (Non-Residential Study Area)

Census Tract	Residential Population	Under 18 yrs	% Under 18 yrs	18 – 64 yrs	% 18 – 64 yrs	65+ yrs	% 65+ yrs	Worker Population
Tract 23	4,338	1,462	33.7%	2,330	53.7%	546	12.6%	344
Tract 47	5,387	2,046	38.0%	2,855	53.0%	486	9.0%	1,298
Tract 49	246	75	30.5%	141	57.3%	30	12.2%	1,460
Tract 53.01	34	0	0.0%	33	97.1%	1	2.9%	761
Tract 57	858	104	12.1%	682	79.5%	72	8.4%	2,483
Tract 65	4,655	1,523	32.7%	2,853	61.3%	279	6.0%	8,623
Bronx	**1,332,650**	**397,372**	**29.8%**	**801,330**	**60.1%**	**133,948**	**10.1%**	**280,940**
Non – Residential Study Area Total (2000)	**15,518***	**5,210**	**33.6%**	**8,894**	**57.3%**	**1,414**	**9.1%**	**14,969****
Non – Residential Study Area Total (2008)	**15,503*****							**13,310*****

Source: *U.S. Census, Summary File 1, 2000; ** Census Transportation Planning Package (CTPP) 2000; ***DCP, 2008; STV Incorporated, 2008.

The quarter-mile non-residential study area has a very similar population age distribution as the half-mile residential study area and the Bronx as a whole. The percentage of the population under age 18 in the non-residential study area, at 33.6 percent, is only slightly higher than the same population in the residential study area and the Bronx. The percentage of the population from age 18 to 64 in the non-residential study area, at 57.3 percent, is only slightly less than the same population in the residential study area and the Bronx. Similarly, the proportion of the population 65 and over in the non-residential study area, at 9.1 percent, is also slightly less than the same population in the residential study area and the Bronx.

Inventory of Publicly Accessible Open Space

Open space may be publicly or privately owned and may be used for active or passive recreational purposes. According to the *CEQR Technical Manual,* public open space is defined as facilities open to the public at designated hours on a regular basis. Open space that is not accessible to the general public on a regular basis can only be considered qualitatively.

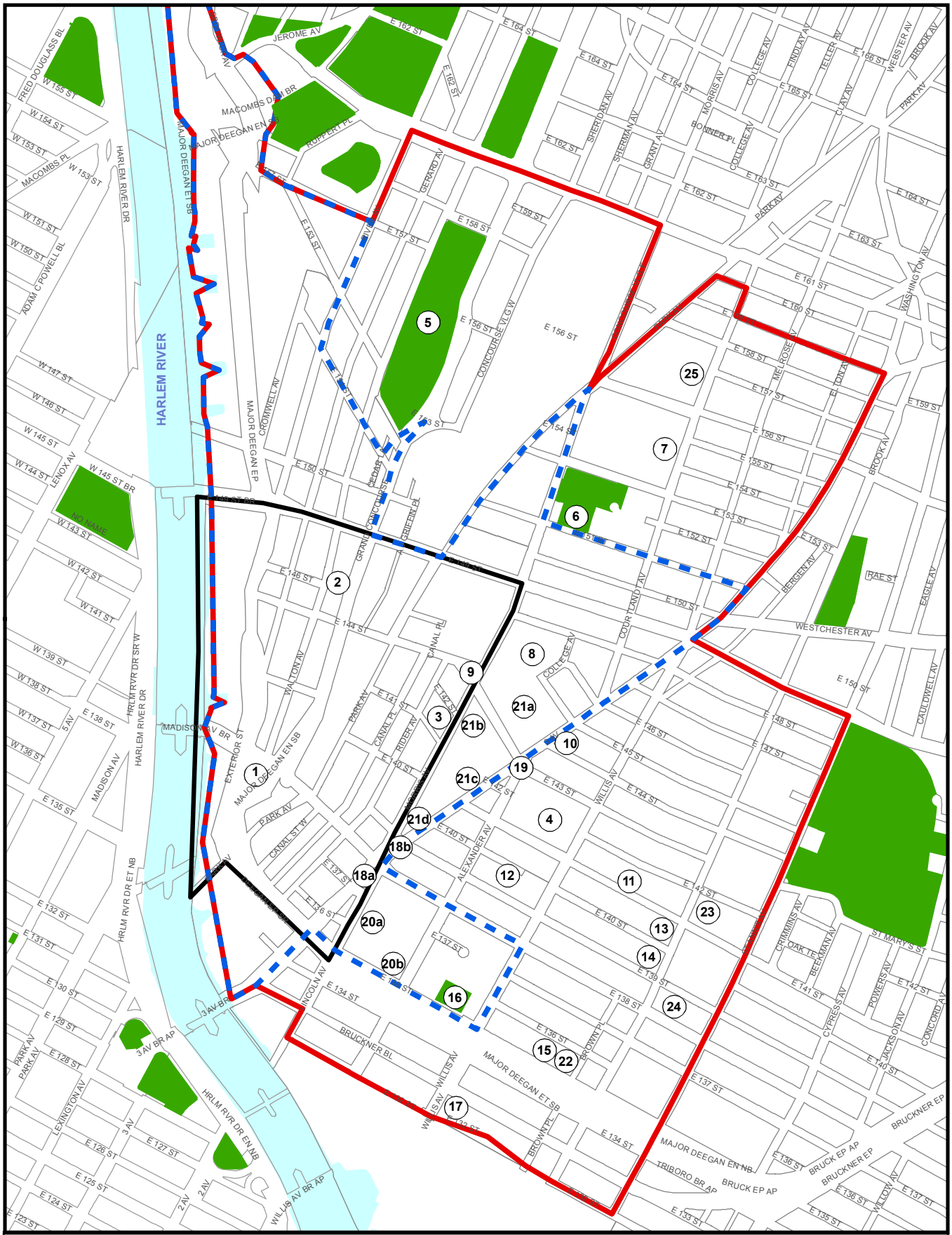
An open space is determined to be active or passive according to the uses that the design of the space allows. Active open space is the part of a facility used for active play, such as sports or exercise, and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns, and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation with benches, walkways, and picnicking areas.

All publicly accessible open space facilities within the study area were inventoried in January and July 2008 and were identified by their location, size, owner, type, utilization, equipment, hours, and condition of available open space. Weather conditions during the days of survey were sunny in January and both sunny and warm in July 2008. The condition of each open space facility was categorized as "Excellent," "Good," or "Fair." A facility was considered to be in excellent condition if the area was clean, attractive, and all equipment was present and in good repair. A "good" facility had minor problems such as litter, or older but operative equipment. A "fair" facility was one that was poorly maintained, had broken or missing equipment, lack of security, or other factors that would diminish the facility's attractiveness. Determinations were made subjectively, based on a visual assessment of the facilities. Table 3.4-3 identifies the address, ownership, hours, and acreage of active and passive open spaces in the study area, and their condition and utilization. Figure 3.4-2 shows their location within the entire open space study area and shows them in context with the half-mile residential and quarter-mile non-residential study area boundaries. When initially referenced in the text, study area open space is listed by the number used to identify them on Figure 3.4-2 and in Table 3.4-3.

Judgments as to the intensity of use and conditions of the facilities were qualitative, based on an observed degree of activity or utilization. If a facility seemed to be at or near capacity, utilization was considered heavy. An example of heavy usage would be when the majority of benches or equipment was in use, or a significant number of people were using dedicated pathways and other amenities. If the facility or equipment was in use, but could accommodate additional users, utilization was considered "medium." If a playground or sitting area had few people, usage was considered light.

Public spaces without useable recreational areas (such as spaces where seating is unavailable) were excluded from the quantitative analysis, as were open spaces that are not open to the general public. In addition to the publicly accessible open spaces within the study area, regional "destination" open spaces located outside the study area were considered qualitatively. These spaces could provide additional open space resources to the study area population.

This Page Intentionally Left Blank



Legend

1 Existing Open Space Resource

Proposed Rezoning Area

Non-Residential Study Area

Residential Study Area

500 0 500 1,000 Feet

N

Source: NYC Department of City Planning MapPluto 2006; STV Incorporated

Figure 3.4-2: Existing Open Space Resources

Lower Concourse Rezoning and Related Actions EIS

NYC Department of City Planning

Table 3.4-3: Existing Open Space Resources (Residential and Non-Residential Study Area)

Map Key #	Name / Address	Owner*	Description	Hours of Access	Acreage			Condition & Utilization
					Total	Active	Passive	
1	Deegan Rock E 138th Street, Grand Concourse, Major Deegan Expressway	DPR	Triangle: landscaped area, boulder monument and large trees buffering the highway, benches	8AM to Dusk	0.26	0.00	0.26	2 / 1
2	Garrison Playground E 146th Street and the Grand Concourse	DPR	Playground: swings, two slides, bars, benches, basketball hoops	8AM to Dusk	0.70	0.53	0.17	1 / 1
3	Paul Robeson School Playground, AKA MS 203 Playground E 141st St. to E. 142nd St., Rider Ave. to Morris Ave.	SCA	Multi-purpose field for school: soccer and baseball fields	8AM to Dusk	0.30	0.30	0.00	3 / 3
4	Mott Haven Playgrounds E 141st Street to E. 143rd Street, Alexander Avenue to Willis Avenue	NYCHA	Playgrounds: water play, two jungle gyms, sitting area, basketball courts	8AM to Dusk	1.00	0.90	0.10	3 / 3
5	Franz Sigel Park E 158th Street, NYCRR, Walton Avenue, Grand Concourse	DPR	Park: walkways, overlook with benches, two dirt baseball fields with lights, restrooms	Sunrise to 1AM	15.99	2.40	13.59	3 / 3
6	Governor Smith Playground (PS 1 / Alfred E Smith HS Playground) E 151st Street to E. 153rd Street, Courtlandt Avenue to Morris Avenue	DPR	Playground with jungle gym, baseball fields, football field, tennis courts, and track**	**	3.56**	3.56**	0.00	3 / 3
7	Melrose Playground E 154th Street to E. 155th Street, Courtlandt Avenue	DPR	Playground: (under construction) basketball courts and handball courts	8AM to Dusk	1.00	1.00	0.00	1 / N/A
8	Patterson Playground Morris Avenue and College Avenue	DPR	Playground: basketball courts, swings, benches, junior swings	8AM to Dusk	2.78	2.78	0.00	3 / 3
9	Ryan Triangle E 143rd Street to E. 144th Street, Morris Avenue	DPR	Triangle: landscaped area, shrubs, flag pole, boulder monument; no seating***	24 hrs/day	0.22***	0.00	0.22***	2 / 2
10	Clark Playground (JHS 149) E 144th Street and Third Avenue	DPR	Playground: will have two basketball courts, spray shower, swings, benches, game tables	8AM to Dusk	0.72	0.65	0.07	3 / N/A
11	JHS 139 Playground North side of E 141st Street to E. 142nd Street, Brook Avenue to Willis Avenue	SCA	School play yard: open space for catch, baseball and handball walls	School Hours	2.50	2.50	0.00	2 / 3
12	Willis Playground E 140th Street, Willis Avenue	DPR	Playground: three basketball courts, seating area, jungle gym	8AM to Dusk	1.81	1.63	0.18	2 / 3
13	Brook Park E 140th Street to E. 141st Street and Brook Avenue	DPR	Garden: planting boxes, area to barbeque, shrubs, sitting area	8AM to Dusk	0.76	0.00	0.76	2 / 2

Key: *Condition:* 1 = Fair, 2 = Good, 3 = Excellent, *Utilization:* 1 = Light, 2 = Medium, 3 = Heavy; Source: STV Inc. Field Survey, January and July, 2008.
* Acronyms: New York City Department of Parks and Recreation (DPR); New York City Housing Authority (NYCHA); New York City School Construction Authority (SCA).
**According to DPR, public use of this open space is not available on a regular basis and as such is included here to facilitate qualitative assessment of open space; its acreage is not included in the sum of total acreage nor in quantitative analyses.
***Open spaces that contain no seating are included in this inventory to facilitate qualitative assessment of open space conditions in the study area; however, their acreages are not included in quantitative open space calculations.

Source: STV Inc. Field Survey, January and July, 2008.

Table 3.4-3: Existing Open Space Resources (continued)

Map Key #	Name/Address	Owner*	Description	Hours of Access	Acreage			Condition & Utilization
					Total	Active	Passive	
14	Saw Mill Playground E 139th Street to E. 140th Street and Brook Avenue	DPR	Playground: baseball and basketball, swings, jungle gym	8AM to Dusk	0.92	0.92	0.00	2 / 2
15	Ranaqua Park E 135th St. to E. 136th St., Willis Ave. to Brown Place	DPR	Playground: basketball court, swings (which were missing), jungle gym	8AM to Dusk	1.04	1.04	0.00	2 / 2
16	Lozada Playground E 135th Street to E. 136th Street, Willis Avenue	DPR	Playground: baseball hoops, handball court, benches, swings, jungle gym	8AM to Dusk	1.05	1.05	0.00	2 / 3
17	Pulaski Park E 132nd Street to Bruckner Boulevard, Willis Avenue to Willis Avenue Bridge	DPR	Playground: two basketball courts, benches, three handball walls, jungle gym, bars	8AM to Dusk	1.43	1.29	0.14	2 / 1
18a & b	Graham Triangle E 137th Street to E. 138th Street, Third Avenue to Lincoln Avenue	DPR	Triangle: landscaped area, column statue with eagle, column with ball on top; benches	24 hrs/day	0.10	0.00	0.10	3 / 2 3 / 2
19	Greenstreet E 143rd Street, Third Avenue to Alexander Avenue	DPR	Triangle: landscaped center median; no seating***	24 hrs/day	0.04***	0.00	0.04***	2 / 2
20a & b	Mitchell Houses Playground E 135th St. to E. 138th St., Alexander Ave. to Lincoln Ave.	NYCHA	Playground: Three jungle gyms and water play	8AM to Dusk	0.30	0.30	0.00	3 / 2 3 / 3
21a, b, c & d	Patterson Houses Open Space E 138th Street to E. 144th Street, Morris Avenue to Third Avenue	NYCHA	Playgrounds, basketball courts and passive open space	8AM to Dusk	1.50	1.00	0.50	1 / 1 3 / 3 2 / 2 2 / 1
22	Wanaqua Garden E 135th Street to E. 136th Street, Willis Avenue to Brown Place	DPR	Garden: planting boxes and landscaping, no seating***	8AM to Dusk	0.20***	0.00	0.20***	1 / 1
23	People's Park E 141st St. to E. 142nd St., Brook Ave. to St. Ann's Ave	DPR	Playground: handball and basketball courts, benches	8AM to Dusk	1.39	1.11	0.28	2 / 2
24	Success Garden E 141st St., to E. 142nd St., Brook Ave. to St. Ann's Ave.	DPR	Garden: planting boxes, benches, landscaping	8AM to Dusk	0.37	0.00	0.37	2 / 2
25	Jackson Houses Playground E 157th Street and Courtlandt Ave	NYCHA	Playground: Basketball courts, benches	8AM to Dusk	1.15	0.87	0.28	1 / 3
	Total Acres				**37.07**	**20.27**	**16.8**	

Key: *Condition:* 1 = Fair, 2 = Good, 3 = Excellent. *Utilization:* 1 = Light, 2 = Medium, 3 = Heavy
*Acronyms: New York City Department of Parks and Recreation (DPR); New York City Housing Authority (NYCHA); New York City School Construction Authority (SCA).
**According to DPR, public use of this open space is not available on a regular basis and as such is included here to facilitate qualitative assessment of open space; its acreage is not included in the sum of total acreage nor in quantitative analyses.
***Open spaces that contain no seating are included in this inventory to facilitate qualitative assessment of open space conditions in the study area; however, their acreages are not included in quantitative open space calculations.
Source: STV Inc. Field Survey, January and July, 2008.

The open space study area (e.g., the residential open space study area, which includes the smaller non-residential open space study area) has a multitude of publicly accessible open spaces (see Table 3.4-3). In total, there are 25 open spaces that contain a total of 37.07 acres. The open space in the study area includes 20.27 acres of active recreation open space and 16.8 acres of passive open space. Of these 25 open space resources, 14 are playgrounds, four are traffic islands, three are gardens, three are school play areas, and one is a park. All the playgrounds, play yards, and the park contain at least some portion of active open space. Neither the gardens nor the traffic islands contain active open space. In total, 18 of the 25 resources in the open space study area have some active open space and seven have only passive open space.

The proposed rezoning area currently contains five existing open space resources. These resources include Deegan Rock (#1), Garrison Playground (#2), Paul Robeson School Playground (AKA M.S. 203 Playground, #3), Ryan Triangle (#9), and Graham Triangle (#18a), as shown on Figure 3.4-2. These five open space resources contribute 1.36 acres to the rezoning area; which accounts for approximately 3.7 percent of the total open space acreage in the study area. (Ryan Triangle, though an attractive visual open space, does not provide seating, and therefore does not contribute to the useable open space acreage of the proposed rezoning area.)

The only large open space resource in the open space study area is Franz Sigel Park (#5), with approximately 15.99 acres. Franz Sigel Park accounts for approximately 43 percent of the total park acreage within the study area, containing 2.4 acres of active recreational space and 13.59 acres for passive uses, for a total of approximately 15.99 acres. It is located between East 158th Street and the Metro North Railroad tracks, the Grand Concourse and Walton Avenue. The park is mainly comprised of walkways traversing the park on two levels with landscaped sections and attractive antique street lights. There is also a section at the highest part of the park with benches, lamps, and landscaping, for visitors to look out over the park. The 2.4 acres of active recreational space include two baseball fields located at the southern portion of the park. These fields are in good condition and are heavily used. Like many of the other large parks in this area of the Bronx, Franz Sigel Park incorporates the topography of the land into the design and landscaping of the park. The park is open from sunrise until 1 AM. It is in very good condition and is heavily used by those who live and work in the neighborhood.

There are three open space resources in the study area with sizes ranging from two to four acres. All three playgrounds provide fully active recreational space. Governor Smith Playground (#6), Patterson Playground (#8), and JHS 139 Playground (#11) are 3.56, 2.78, and 2.50 acres, respectively. Governor Smith Playground contains a football field, tennis courts, and a jungle gym, and is located between Alfred E. Smith High School and Courtlandt School. (According to DPR, Governor Smith Playground is not available for public use on a regular basis, and as such it is included here to facilitate qualitative assessment of open space resources; its acreage is not included in quantitative analyses.) Patterson Playground has basketball courts, swings, and two handball walls. JHS 139 Playground consists of a large open space located behind the existing school building. It is open to the public during non-school hours. All three

open spaces are heavily used, with Governor Smith Playground and Patterson Playground in excellent condition, and the JHS 139 Playground in good condition.

There are also nine large open space resources that are one to two acres in size. These open space resources, listed from largest to smallest, are as follows: Willis Playground (#12), Patterson Houses (#21 a-d), Pulaski Park (#17), People's Park (#23), Jackson Houses Playground (#25), Lozada Playground (#16), Ranaqua Park (#15), Melrose Playground (#7), and Mott Haven Playground (#4). All of these open space resources only contain passive open space. Willis Playground, Pulaski Park, and the Patterson Houses open spaces are the only resources between one and four acres with both active recreation and passive open space.

The remaining 12 open spaces in the study area are less than one acre each in size, and comprise the Paul Robeson School Playground, four traffic islands, four playgrounds, and three community gardens. Two of the three gardens provide fully passive open space, though the third (Wanaqua), which lacks seating, is excluded from quantitative analyses. The playgrounds contain both passive and active open spaces. Paul Robeson School Playground (#3) is a new multipurpose field adjacent to an existing school. It is a fully active open space in excellent condition, which contains soccer and baseball fields and bleachers for spectators.

The four traffic islands differ in terms of attractiveness, cleanliness, and amenities. Some of the traffic islands offer planting boxes and benches, while others are landscaped traffic islands used for both functional and aesthetic purposes. Graham Triangle (#18a & b), at the southern portion of the rezoning area, contains benches and is in excellent condition. Ryan Triangle (#9), at the northeast section of the rezoning area is a landscaped triangle in good condition, though lacking seating. Deegan Rock (#1) contains benches, a boulder monument, and is in good condition. A Greenstreet (#19), which serves as a landscaped traffic median along Third Avenue, is also in good condition, but contains no benches or places to sit.

There are four playgrounds, each less than one-acre in size, located within the open space study area. Some of the playgrounds offer both passive and active open space, and others only contain active open spaces. These open space resources vary in terms of condition and utilization. Garrison Playground (#2) is in the poorest condition of all the playgrounds in the study area. This playground has low utilization, and the play equipment located within the playground, such as swings, basketball hoops and slides, are in poor condition. In contrast, Clark Playground (#10), which is located at the corner of Third Avenue and East 144th Street, is in excellent condition, with new play equipment including a spray shower, swings, and two basketball courts. Clark Playground opened in the spring of 2008. Saw Mill Playground (#14) is in good condition and contains basketball and baseball fields, swings, and a jungle gym. The Mitchel Houses Playground (#20a & b) is in excellent condition and contains three jungle gyms and sprinklers for children's water play.

There are three community gardens within the open space study area, Brook Park, Wanaqua Garden, and Success Garden. Two of the gardens are in good condition and the third is in poor condition. Brook Park (#13), which is in good condition and moderately used, is a garden with landscaped areas, planting boxes, and seating areas. It is enclosed by a chain-link fence and has an attractive mural on the wall behind it. Wanaqua Garden (#22), in contrast, is ill-maintained, small, and without amenities; because there is no seating available to facilitate passive use, the acreage is not included in quantitative analyses of open space. Success Garden (#24) offers a rustic bridge that spans a small pond, a gazebo, pergola covered with grapevines, and several small gardens.

Quantitative Analysis of Open Space Adequacy

Residential Study Area

The residential half-mile open space study area contains 37.07 acres of public open space, which consists of 20.27 acres for active use and 16.8 acres for passive use, as shown in Table 3.4-4. The total residential population projection for 2008 is approximately 64,957 persons. Therefore, the study area contains a combined (active and passive) open space ratio of 0.57 acres of total open space per 1,000 residents, which does not meet DCP's planning guideline of 2.5 acres of total active and passive open space per 1,000 residents for large-scale projects, which as a benchmark would indicate an area "well-served" by open space. Both the active open space ratio, which is 0.31 acres of active open space per 1,000 residents, and the passive open space ratio, which is 0.26 acres of passive open space per 1,000 residents, are below DCP's guidelines of 2.0 acres of active space and 0.5 acres of passive space per 1,000 residents.

An additional open space measure that is used is a combined weighted average of DCP's two passive open space guidelines—0.5 acres of passive open space for 1,000 residents and 0.15 acres of passive open space for 1,000 workers. When the employees who work within the residential study area are added to the population of those who live in this area, the passive open space ratio decreases. For the residential study area, the recommended weighted average is 0.41 acres per 1,000 workers and residents in the existing condition. With a combined worker and residential population of 88,035, the combined passive open space ratio in the residential study area is 0.2 acres per 1,000 persons, which is lower than the recommended weighted average ratio as identified above. Data for worker, residential and combined worker and residential populations are shown in Table 3.4-4.

Table 3.4-4 summarizes the population, open space acreage, and open space ratios for the existing residential, worker and combined populations for the residential study area.

DCP's quantitative goals and measures for determining the adequacy of open and recreational spaces within a neighborhood rely on a goal of 2.5 acres of open space per 1,000 persons. This functions as a guideline for assessing open space adequacy. According to this measure, this study area, with its ratio of 0.57 acres per 1,000 residents, is inadequately served by open space resources. However, it is recognized that DCP's

citywide median ratio of 2.5 acres of open space per 1,000 persons is a goal that is not feasible for many areas of the City and is therefore not considered to be an impact threshold.

Table 3.4-4:
Existing Residential Study Area Population, Acreage, and Open Space Ratios

Indicator	Type	Existing Residents	Existing Workers	Existing Combined Total
Population (2008)	-	64,957	23,078	88,035
Open Space Acreage	Active	20.27	20.27	20.27
	Passive	16.8	16.8	16.8
	Total	37.07	37.07	37.07
Open Space Ratio (acres per 1,000 persons)	Active	0.31	0.88	0.23
	Passive	0.26	0.73	0.20
	Total	0.57	1.61	0.42
DCP Open Space Guidelines (acres per 1,000 persons)	Active	2.0	N/A	N/A
	Passive	0.5	N/A	0.41*
	Total	2.5	N/A	N/A

*Ratios are the weighted average for the combined passive open space within the residential and non-residential study areas. The ratios were calculated by combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents.
Source: US Census Bureau, Summary File 1, 2000; DCP, 2008.

Non-Residential Study Area

The non-residential quarter-mile open space study area analysis focuses on passive open spaces that may be used by workers (e.g., non-residents) in the area. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are evaluated. To assess the adequacy of the open spaces in the non-residential study area, the ratio of workers to acres of open space is compared with DCP's planning guideline of 0.15 acres of passive space per 1,000 workers. Based on the data presented below, the non-residential study area has a ratio of 0.08 acres of passive open space per 1,000 workers, below the City's planning guideline of 0.15 acres (see Table 3.4-5).

In addition, the passive open space ratio for both workers and residents in the area is compared to the recommended weighted average ratio of 0.34. The weighted average combines the 0.15 acres per 1,000 workers and 0.50 acres per 1,000 residents. The non-residential study area contains 6.99 acres of public open space, or 5.96 acres dedicated to active use and 1.03 acres dedicated to passive use. A total of 15,503 residents live in this area, and 13,310 employees work within the non-residential study area. Therefore, the combined residential and worker populations within this study area total 28,813 persons. When the residential and non-residential populations are combined, the

passive open space ratio is 0.04 acres per 1,000 residents and workers, which is lower than the recommended weighted average ratio of 0.34 acres.

Table 3.4-5 summarizes the population, open space acreage and open space ratios for the existing residential, worker and combined populations for the non-residential study area.

Table 3.4-5:
Existing Non-Residential Study Area Population, Acreage, and Open Space Ratios

Indicator	Type	Existing Residents	Existing Workers	Existing Combined Total
Population (2008)	-	15,503	13,310	28,813
Open Space Acreage	Active	5.96	5.96	5.96
	Passive	1.03	1.03	1.03
	Total	6.99	6.99	6.99
Open Space Ratio (acres per 1,000 persons)	Active	0.38	0.45	0.21
	Passive	0.07	0.08	0.04
	Total	0.45	0.53	0.24
DCP Open Space Guidelines	Active	N/A	N/A	N/A
	Passive	0.15	N/A	0.34*
	Total	N/A	N/A	N/A

*Ratios are the weighted average for the combined passive open space within the residential and non-residential study areas.
The ratios were calculated by combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents.
Source: US Census Bureau, Summary File 1, 2000; DCP, 2008.

The non-residential study area currently has a ratio of 0.08 acres of passive open space per 1,000 non-residents, which is lower than the City's guideline of 0.15 acres. When the residential and non-residential populations are combined, the passive open space ratio is 0.04 acres per 1,000 residents and workers, which is lower than the recommended weighted average ratio of 0.34 acres. Therefore, according to DCP guidelines, there is an existing quantitative deficiency in passive open space to serve the combined non-residential and residential populations.

Qualitative Assessment of Open Space Adequacy

Residential Study Area

Although the existing open space ratio within the residential study area of 0.57 acres per 1,000 residents is less than half the desired guideline of 1.5 acres per 1,000 residents, the deficiency of open space resources within the defined study area is ameliorated by several factors. A total of 21 out of the 25 open space resources in the study area were found to be in either good or excellent condition. In addition, 14 of the 25 open space resources, or more than 50 percent, have only light or medium utilization levels and would be able to absorb additional users. A wide variety of options for residents and

workers are available, ranging from sitting areas and walking paths to jungle gyms, basketball and handball courts, ball fields, and areas to picnic and barbeque.

Although not considered as part of this detailed analysis, it is important to note that in the broader context of the South Bronx, as there are several open spaces located just outside the Lower Concourse open space study area. These open space resources include St. Mary's Park, located east of the residential study area, and Macombs Dam Park, John Mullaly Park, and Joyce Kilmer Park, located just to the north of the residential study area. St. Mary's Park is bounded by East 149th Street to the north, St. Mary's Street to the south, Jackson Avenue to the east, and St. Ann's Avenue to the west. St. Mary's Park, which includes a recreation center, is in excellent condition and is heavily used. It contains over 35 acres and has amenities such as baseball and football fields, basketball courts, spaces to barbeque and other attractive passive open spaces. Joyce Kilmer Park is bounded by East 164th Street to the north, East 161st Street to the south, the Grand Concourse to the east, and Walton Avenue to the west. It contains approximately seven acres and is in good condition. Macombs Dam Park and John Mullaly Park are temporarily unavailable open space resources, due to the construction of Yankee Stadium. Macombs Dam Park and John Mullaly Park will be replaced and improved following the construction of parking garages associated with the new Yankee Stadium construction and will contain amenities such as benches, playgrounds, and a variety of other active open space resources. Renovations of the northern portion of John Mullaly Park, which has is open to the public, were funded through the Yankee Stadium Redevelopment Project and as part of a $200 million investment in the Bronx parks, financed by mitigation funds from the construction of Croton Water Filtration Plant through the New York City Department of Environmental Protection and the Municipal Water Finance Authority.

It should also be noted that there is a significant amount of construction in the area, related to the construction of the new Yankee Stadium, just to the north of the existing stadium above East 161st Street. This construction will alter somewhat the amount and location of open space located both within the open space study area and beyond its boundaries. These changes are discussed in further detail below in Section 3.4.2, the Future Without the Proposed Action.

Non-Residential Study Area

Nine of the 25 open space resources within the open space study area are located within the non-residential study area. This accounts for 6.99 acres, or 19 percent of the total 37.07 acres located within the open space study area. The non-residential study area has a passive open space ratio of 0.08 acres per 1,000 non-residents, which is lower than the City's guideline of 0.15 acres. As noted above, the existing passive open space ratio of 0.04 acres per 1,000 residents and workers combined within the non-residential study area is below the desired 0.34 weighted average. This deficiency of passive open space resources within the defined study area is ameliorated by several factors. A significant portion of the open space resources in the non-residential study area were found to be in good condition and many of the facilities only have light or moderate utilization. In addition, many open spaces located within the residential study area are in close

proximity to the non-residential study area as well. The 15.99 acre Franz Sigel Park is located north of and adjacent to the non-residential study area boundary at East 153rd Street, and features large open spaces with a variety of amenities such as places to stroll or sit, and fields to play baseball, and other active sports.

Within the non-residential study area, it is noted that residents and non-residents are likely to use passive open spaces at different times of the day, so that activity within the passive open spaces is not concentrated within a single time period. For example, office and retail workers are more likely to use passive open spaces during a work week midday break for lunch or shopping, while residents are more likely to use open space on weekends, and spread their trips to open spaces across the day to take advantage of preferred sun and shade conditions, meetings with friends, or an additional stop on an errand within the study area. With these factors, the qualitative experience of open space within the non-residential study area is reasonable.

3.4.2 FUTURE WITHOUT THE PROPOSED ACTION

In the Future Without the Proposed Action, under the Reasonable Worst Case Development Scenario (RWCDS) developed by DCP, as-of-right development on 14 of the 31 projected developments sites within the rezoning area is expected in the future No-Action condition by 2018. No new residential development is expected to occur as a result of the RWCDS in the Future Without the Proposed Action. As discussed in Chapter 3.1, "Land Use, Zoning, and Public Policy," several future No-Build projects are expected to occur by the 2018 analysis year within a half-mile radius of the proposed rezoning area. Following is a discussion of the open space projects that are expected to be developed in the residential and non-residential study areas and the expected population in the future without the proposed Lower Concourse Rezoning and Related Actions project.

Residential Study Area Population Estimates

The residential population is estimated to increase between 2008 and 2018 by 5,073 persons as a result of naturally occurring growth in the study area (see Chapter 3.2, "Socioeconomic Conditions"). As discussed above, no new residential development is expected to occur as a result of the RWCDS in the Future Without the Proposed Action. However, six projects are expected to be developed in the Future Without the Proposed Action: The Brook Willis Apartments, El Jardin de Seline, Melrose Commons Site 5, and the Morris Avenue Apartments are expected to add approximately 1,641 residents to the open space study area (see Chapter 3.2, "Socioeconomic Conditions"). The projected population increase of 5,073 residents plus the 1,641 additional residents would add 6,714 new residents to the residential study area for a total population of 71,671 residents in 2018, as shown in Tables 3.4-7 and 3.4-8.

There are currently 23,078 workers within the residential half-mile study area. Assuming current rates of decline in worker population continue, the number of existing workers is expected to decrease by 1,666 within the residential study area in the Future Without the Proposed Action. A total of 2,622 additional workers are expected,

however, as a result of the RWCDS development. A breakdown of the expected development and No-Action employees on each of the 14 projected development sites is shown in detail in Table 3.4-6 below. Two of the No-Build projects that would add worker population include the Mott Haven School Campus and the Gateway Center at Bronx Terminal Market. Additionally, a total of 4,267 workers are also expected as a result of the No-Build development. (These numbers were calculated by using a threshold for employees per a specific amount of square footage depending on the type of space that is being built. Employment numbers were based on the following: one employee per 300 square feet of retail, office, and community facility space, one employee per 500 square feet of manufacturing space, and one employee per 1,000 square feet of warehouse space.) The projected worker population decrease of 1,666 workers plus the 6,889 additional workers would add 5,223 net new workers to the residential study area for a total worker population in the residential study area of 28,301 workers in 2018, as shown in Tables 3.4-7 and 3.4-8.

Combining the 71,671 No-Action residential population with the 28,301 No-Action worker population would yield approximately 99,972 combined residents and workers within the residential study area.

Table 3.4-6:
Study Area Populations Generated by Expected Future No-Action Projects

Projected Site #	Block / Lot	DUs	Retail FA	Office FA	Warehouse/ Manu. FA	Community Facility FA	Total Number of Employees
4	2349 / 15	0	0	0	109,086	0	218
5	2351 / 22	0	0	0	16,182	0	16
7	2350 / 11, 16	0	0	29,640	0	78,065	359
8	2349 / 90	0	0	395,000	0	0	1317
10	2344 / 110	0	0	0	14,400	0	29
11	2344 / 75	0	0	19,000	0	0	63
13	2345 / 5	0	0	0	20,106	0	40
18	2322 / 28	0	0	0	33,640	0	34
20	2333 / 1	0	2,195	0	0	0	7
21	2320 / 66	0	0	23,000	0	0	77
24	2320 / 5, 6, 7, 8, 9, 10, 11	0	0	0	23,239	0	23
25	2318 / 5	0	0	17,907	0	0	60
27	2335 / 57	0	0	9,804	0	0	33
29	2340 / 186	0	0	104,000	0	0	347
Total	**-**	**0**	**2,195 sf**	**598,351 sf**	**216,653 sf**	**78,065 sf**	**2,622**

Source: US Census Bureau, Summary File 1, 2000; DCP, 2008.

Table 3.4-7:
Residential Study Area Population Change, 2008 to 2018

Study Area Population	Population Change	No-Action Population Increase	No-Build Projects Population Increase	Total Population Increase
Residential Population	5,073	0	1,641	**6,714**
Worker Population	-1,666	2,622	4,267	**5,223**

Source: US Census Bureau, Summary File 1, 2000; DCP, 2008.

Table 3.4-8:
Residential Study Area Projected Population, 2008 to 2018

Study Area Population	Existing Population (2008)	Total Population Increase	Future No-Action Population (2018)
Residential Population	64,957	6,714	**71,671**
Worker Population	23,078	5,223	**28,301**

Source: US Census Bureau, Summary File 1, 2000; DCP, 2008.

Non-Residential Study Area Population Estimates

The residential population would increase by 869 residents as a result of additional households added to the non-residential study area from 2008 to 2018. As discussed above, no new residential development is expected to occur as a result of the RWCDS in the Future Without the Proposed Action. An increase of 583 residents would also be added to the non-residential study area as a result of future No-Build projects. The Morris Avenue Apartments, located within the non-residential study area, would have a total of 209 dwelling units adding approximately 583 residents to the open space study area. The projected population increase of 869 residents expected in 2018, plus the 583 additional residents, would add 1,452 new residents to the non-residential study area for a total population of 16,955 residents in 2018, as shown in Tables 3.4-9 and 3.4-10.

There are currently 13,310 workers within the non-residential quarter-mile study area. The number of workers is expected to decrease by 734 within the non-residential study area in the Future Without the Proposed Action. A total of 2,622 additional workers are expected as a result of the RWCDS development. A breakdown of the expected development and No-Action employees on each of the 14 projected development sites is shown in detail in Table 3.4-6 above. A total of 3,333 additional workers are expected as a result of the No-Build development, including the Gateway Center at Bronx Terminal Market. These numbers were calculated by using a threshold for employees per a specific amount of square footage depending on the type of space that is being built. Employment numbers were based on the following: one employee per 300 square feet of retail, office, and community facility space, one employee per 500 square feet of manufacturing space, and one employee per 1,000 square feet of warehouse space. The projected population decrease of 734 workers plus the 5,955 additional workers would add 5,221 new workers to the residential study area for a total population of 18,531 workers in 2018, as shown in Tables 3.4-9 and 3.4-10.

Combining the 16,955 No-Action residential population with the 18,531 No-Action worker population would yield approximately 35,486 combined residents and workers within the non-residential study area.

Table 3.4-9:
Non-Residential Study Area Population Change, 2008 to 2018

Study Area Population	Population Change	No-Action Population Increase	No-Build Projects Population Increase	Total Population Increase (Projects and Population Change)
Residential Population	869	0	583	1,452
Worker Population	-734	2,622	3,333	5,221

Source: US Census Bureau, Summary File 1, 2000; DCP, 2008.

Table 3.4-10:
Non-Residential Study Area Projected Population, 2008 to 2018

Study Area Population	Existing Population (2008)	Total Population Increase (Projects and Population Change)	Future No-Action Population (2018)*
Residential Population	15,503	1,452	**16,955**
Worker Population	13,310	5,221	**18,531**

Source: US Census Bureau, Summary File 1, 2000; DCP, 2008.

Inventory of Future No-Action Open Space

Under future conditions without the proposed action, seven open space resources would be added to the existing inventory of publicly accessible open space within the residential study area; three of the seven open spaces would be developed within the non-residential study area. Four of the seven open spaces would be associated with the new Yankee Stadium development project, one as a part of the Gateway Center project (to be developed by DPR), one as a part of the new Melrose Commons Site 5 residential project, and one as part of the Mott Haven School Campus. All of the proposed parkland associated with the new Yankee Stadium development project would be completed prior to 2018. The new Yankee Stadium open spaces consist of the River Avenue pocket parks (#26 and #27), waterfront esplanade (#28), and the Harlem River waterfront public open space (#29). Both pocket parks are located outside of the non-residential study area. The Yankee Stadium development project also includes the development of two open spaces just outside the study area; a primarily active (though with some passive space) open spaces resource on the south side of 161st Street, the site of the existing stadium, and a portion of Macomb's Dam Park (existing) will be improved with active open space atop a parking garage.

The Gateway Center project would include a new waterfront open space resource (#30), to be constructed on Piers 4 and 5, just to the south of the Yankee Stadium open spaces at the northwest portion of the non-residential and residential study areas along the waterfront.

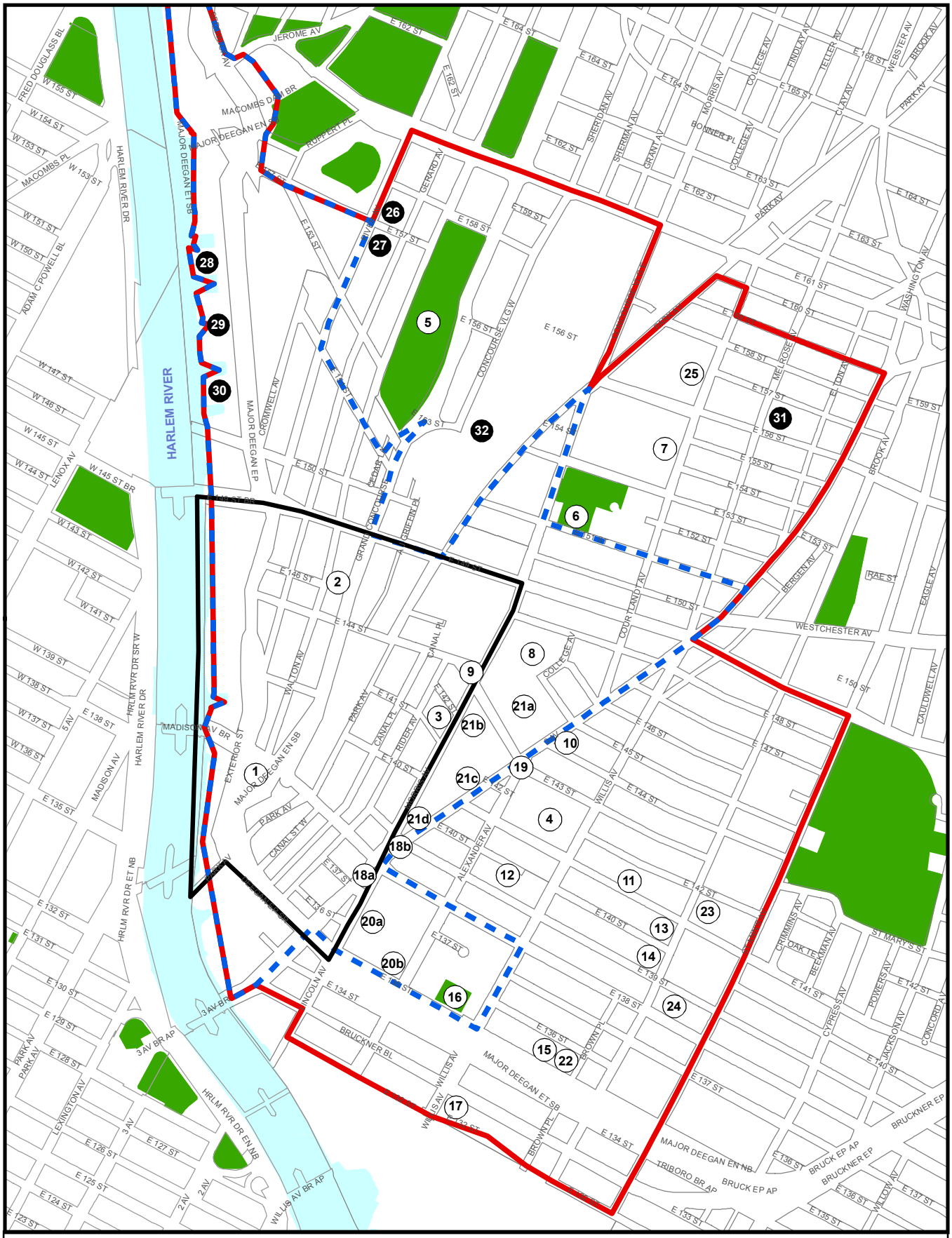
Melrose Commons Site 5 (#31) would be developed as part of the Melrose Commons Urban Renewal Area, which is expected to include 63 new dwelling units at the northeast portion of the residential study area; although neither would be open to the public on a regular basis, they are included here to facilitate a qualitative discussion of open space and are not included in the quantitative analysis of open space resources. The proposed Mott Haven School Campus (#32) would include an outdoor plaza and athletic fields on the east side of the campus. Both of these open space resources would be located outside the non-residential study area. The inventory of open space resources in the Future Without the Proposed Action is presented in Table 3.4-11 and the locations of these resources are shown on Figure 3.4-3.

Table 3.4-11:
Open Space in the Future Without the Proposed Action

Map Key #	Name	Owner	Description	Hours of Access	Acreage		
					Total	Active	Passive
26	River Avenue North Pocket Park	DPR	Playground associated with the Yankee Stadium project	Sunrise to 1AM	0.24	0.24	0.00
27	River Avenue South Pocket Park	DPR	A skate park associated with the Yankee Stadium project	Sunrise to 1AM	0.44	0.44	0.00
28	Waterfront Esplanade	DPR	Esplanade to connect the new waterfront parks on Piers 1-5	24 hrs/ day	0.71	0.00	0.71
29	Harlem River Waterfront Open Space	DPR	18 Tennis Courts, landscaped areas, and associated walkways	Sunrise to 1AM	5.11	3.83	1.28
30	Gateway Center Open Space	EDC	Open Space containing landscaping, and pedestrian and bicycle paths	Sunrise to 1AM	2.00	1.00	1.00
31	Melrose Commons Site 5	DPR	Open Space proposed at the rear of the new Melrose Commons Building	**	0.20*	0.00	0.20**
32	Mott Haven School Campus	SCA	Open Space proposed as a part of the new Mott Haven School Campus	**	3.33**	1.67**	1.66**
Total Future Acreage Increase:					**8.5**	**5.51**	**2.99**
Total 2008 Existing Open Space Acreage:					**37.07**	**20.27**	**16.8**
Total 2018 Future Without the Action Condition Open Space Acreage:					**45.57**	**25.78**	**19.79**

Source: DPR website 2008 (http://www.nycgovparks.org); Final Impact Statement (FEIS) for the Yankee Stadium Project, February 10, 2006; FEIS for the Gateway Center at Bronx Terminal Market, December 7, 2005.
* Acronyms: New York City Department of Parks and Recreation (DPR); New York City Housing Authority (NYCHA); New York City School Construction Authority (SCA); New York City Economic Development Corporation (EDC)
**According to DPR, public use of this open space is not available on a regular basis; as such Melrose Commons Site5 and Mott Haven School Campus are included here to facilitate qualitative assessment of open space but are not included in quantitative analyses.

This Page Intentionally Left Blank



Legend

1 Existing Open Space Resource

26 No-Build Open Space Resource

Proposed Rezoning Area

Non-Residential Study Area

Residential Study Area

500 0 500 1,000 Feet

N

Source: NYC Department of City Planning MapPluto 2006; STV Incorporated

Figure 3.4-3: Open Space Resources in the Future without the Proposed Action

Lower Concourse Rezoning and Related Actions EIS

NYC Department of City Planning

Following is a discussion of the proposed open space resources to be developed in the Future Without the Proposed Action. They consist of the Yankee Stadium open spaces, Gateway Center at Bronx Terminal Market project waterfront open space (to be developed by DPR), open space associated with Melrose Commons Site 5, and the open spaces included as part of the Mott Haven School Campus.

Yankee Stadium Development Project and Associated Open Space

The Yankee Stadium Development Project includes a variety of future open space resources that serve a wide range of objectives. Macombs Dam Park and John Mullaly Park will be replaced and improved following the construction of parking garages associated with the new Yankee Stadium construction and will contain amenities such as benches, playgrounds, and a variety of other active open space resources. Other proposed open space would be new acreage added within and in the vicinity of the open space study area. New acreage located just outside of the study area would be both new and in-kind open space. The Yankee Stadium project includes new park facilities including the River Avenue Pocket Parks, Heritage Field, within Macombs Dam Park. These three open space resources would be built in the Future Without the Proposed Action; however, Heritage Field and Macombs Dam Park would both be located outside the Lower Concourse open space study area.

Four proposed open spaces to be located in the Lower Concourse open space study area as a part of the Yankee Stadium Development Project would be developed in the Future Without the Proposed Action. The majority of these open spaces would be located along the Harlem River waterfront with the exception of two small pocket parks to be located along River Avenue near the existing Yankee Stadium (to become Heritage Field). Open spaces to be developed in the Future Without the Proposed Action consist of two River Avenue Pocket Parks, Harlem River waterfront open space, and a public esplanade.[6] These four resources are explained in further detail below:

River Avenue Pocket Parks

These two parks (#26 and #27) at the northeast and southeast corners of River Avenue and East 157th Street are part of the redevelopment of Yankee Stadium. Both would be developed as active recreational open space. The northern park (#26) would contain approximately 0.24 acres to be developed as a playground, and the southern park (#27) would contain approximately 0.44 acres of open space to be developed as a skate park.

Waterfront Esplanade

The future buildout of RWCDS sites on the waterfront as a result of the proposed project would also create an esplanade (#28) that would extend from the northern end of the waterfront park, wrap around the waterfront to the existing ferry landing, and extend east to the pedestrian connection at Exterior Street beneath the Major Deegan Expressway. The esplanade would contain 0.71 acres of passive open space and would provide a continuous path along the waterfront. The esplanade would connect the

[6] FEIS for the Yankee Stadium Project, February 10, 2006.

Gateway Center at Bronx Terminal Market open space with the Yankee Stadium associated open spaces.

Harlem River Waterfront Open Space

The park associated with the Yankee Stadium development (#29) includes the conversion of Piers 1 through 3 into parkland, from Exterior Street to the Harlem River waterfront. Within the open space study area, the new park will contain approximately 5.11 acres of new open space, which would include approximately 3.83 acres of active open space, and 1.28 acres of passive open space. Amenities would include tennis courts, restrooms, benches, and landscaping. This open space would be located along the waterfront, approximately one half-mile from the existing Yankee Stadium.

Gateway Center at Bronx Terminal Market and Waterfront Park

Approximately two acres of new public open space (#30) would be developed on Pier 4 and 5 to the west of Exterior Street along the Harlem River waterfront as a part of the new Gateway Center development project. Phase 1 includes the conversion of Piers 4 to a waterfront park, which will include a waterfront esplanade, event space, a beach, a picnic area, and an outdoor classroom. By 2018, Pier 5 will also be redeveloped as part of the park.[7] This new open space would be built just to the south of the open space associated with the new Yankee Stadium Development Project, and would provide continuous waterfront open space, connected to the new Yankee Stadium waterfront parks.

Melrose Commons Site 5

This five-story building, located in the Melrose Commons Urban Renewal Area on a block bounded by Melrose Avenue, East 156th Street, East 157th Street and Elton Avenue, will have 63 residential units for low- and moderate income families[8]. An approximately 0.2-acre landscaped open space area (#31) would also be provided in the rear of the building. This open space would serve as an attractive open space for residents.

Mott Haven School Campus

The proposed Mott Haven School Campus project would entail the development of a large, new school campus, which would contain four school buildings at the western portion of the site and open space (#32) located below street level on the eastern portion of the site. The open space would contain approximately 3.33 acres, and would be jointly used by the four proposed school buildings on the site. The new open space would include an outdoor plaza and athletic fields, which would include a new state-of-the-art football field.

Overall, the proposed open spaces associated with the new Yankee Stadium Development Project and Gateway Center at Bronx Terminal Market would create a net increase of approximately 8.5 acres of open space, including 5.51 acres of active

[7] FEIS for the Gateway Center at Bronx Terminal Market, December 7, 2005.
[8] New York City Planning Commission Report, April 11, 2007/Calendar No. 11, C 070280 HAX, accessed online at http://www.nyc.gov/html/dcp/pdf/cpc/070280.pdf

recreation space and 2.99 acres of passive open space under 2018 Future Without the Action conditions.

The above-described open space changes are expected to increase the amount of open space in the residential study area to approximately 45.57 acres of publicly accessible open space, including 25.78 acres of active space and 19.79 acres of passive space. In the non-residential study area, there would be a total of 14.81 acres of open space, or 10.79 acres of active open space and 4.02 acres of passive open space. Approximately 57 percent of the open space resources in the Future Without the Proposed Action are expected to be dedicated to active recreation, with 43 percent dedicated to passive recreation. Refer to Table 3.4-11 for a summary of the Future Without the Proposed Action open space acreage.

Quantitative Analysis of Open Space Adequacy

Residential Study Area

The increase in the available acreage of open space resources would result in improved open space ratios under 2018 Future Without the Proposed Action conditions. For the projected population of 71,671 residents under 2018 No-Action conditions, the available open space ratio would be 0.64 acres per 1,000 residents, an increase of 0.07 acres per 1,000 residents over existing conditions. The available active open space ratio would be 0.36 acres per 1,000 residents, an increase of 0.05 acres from existing conditions. The passive open space ratio would be 0.28 acres per 1,000 residents, or an increase of 0.02 acres over existing conditions.

The recommended weighted average ratio would also increase to 0.40 acres per 1,000 combined resident and worker populations. Despite the increase in the open space ratio in the Future Without the Proposed Action, a shortfall of passive open space would remain in 2018. Considering only the worker population, the passive open space ratio would decrease by 0.02 acres per 1,000 workers, at 0.70 acres per 1,000 workers, although this ratio remains higher than the 0.15 acres per 1,000 workers guideline recommended by DCP.

Non-Residential Study Area

The total additional acreage in the quarter-mile non-residential study area would include the majority of the Gateway Center at Bronx Terminal Market waterfront park and the Yankee Stadium related open spaces, as described above. The non-residential study area would have a net gain of 7.82 acres of additional open space, with 4.83 acres of active and 2.99 acres of passive open space. The increase of open space acreage in the non-residential study area in the Future Without the Proposed Action would be more than twice the existing open space acreage. As a result, the non-residential study area's active and passive open space ratios are expected to increase almost two-fold in 2018.

DCP's open space guidelines call for a combined weighted average ratio of open space per non-residents and residents of 0.32 acres for the non-residential study area. The

weighted average combines the 0.15 acres per 1,000 workers and 0.50 acres per 1,000 residents. For the non-residential study area, DCP guidelines call for 0.15 acres of passive open space per 1,000 workers and a recommended weighted average ratio of 0.32 acres.

A total of 16,955 residents live in this area, and 18,531 employees work within the non-residential study area. Therefore, the combined residential and worker populations within this study area total 35,486 persons. Based on the data presented above, the non-residential study area has a ratio of 0.22 acres of passive open space per 1,000 workers, above DCP's guideline of 0.15 acres (see Table 3.4-12).

Summary

Table 3.4-12 summarizes the population, open space acreage, and open space ratios for the existing and Future Without the Proposed Action residential, worker and combined residential and worker populations and compares these to DCP's Open Space Guidelines.

Table 3.4-12 indicates that the total open space ratio for residents in the Future Without the Proposed Action is 0.64 acres per 1,000 residents in the residential study area and 0.87 acres per 1,000 residents in the non-residential study area. The recommended open space ratio is 0.5 acres of passive open space per 1,000 residents and 2.0 acres of active open space per 1,000 residents or 2.5 total acres per 1,000 residents. The total open space acreage is less than the recommended ratio in both the residential and non-residential study areas. For the open space ratio for the combined population under conditions in the Future Without the Proposed Action, the ratio of 0.20 passive acres per 1,000 residents and workers is below the 0.40 recommended weighted average in the residential study area. For the non-residential study area, the ratio of 0.11 passive acres per 1,000 residents and workers is also below the 0.32 recommended weighted average ratio.

Table 3.4-12:
2018 Study Area Open Space Ratios and DCP Open Space Guideline Comparison

Indicator	Type	No-Action Residents	No-Action Workers	No-Action Combined Total	Existing Conditions Combined Total
½-Mile Study Area (Residential)					
Population		71,671	28,301	99,972	88,035
Open Space Acreage	Active	25.78	25.78	25.78	20.27
	Passive	19.79	19.79	19.79	16.8
	Total	45.57	45.57	45.57	37.07
Open Space Ratio (acres per 1,000 persons)	Active	0.36	0.91	0.26	0.23
	Passive	0.28	0.70	0.20	0.20
	Total	0.64	1.61	0.46	0.42
DCP Open Space Guidelines	Active	2.0	N/A	N/A	N/A
	Passive	0.5	N/A	0.40*	0.41*
	Total	2.5	N/A	N/A	N/A
¼-Mile Study Area (Non-Residential)					
Population		16,955	18,531	35,486	28,813
Open Space Acreage	Active	10.79	10.79	10.79	5.96
	Passive	4.02	4.02	4.02	1.03
	Total	14.81	14.81	14.81	6.99
Open Space Ratio (acres per 1,000 persons)	Active	0.64	0.58	0.30	0.21
	Passive	0.24	0.22	0.11	0.04
	Total	0.87	0.80	0.42	0.24
DCP Open Space Guidelines	Active	N/A	N/A	N/A	N/A
	Passive	0.15	N/A	0.32*	0.34*
	Total	N/A	N/A	N/A	N/A

*Ratios are the weighted average for the combined passive open space within the residential and non-residential study areas. The ratios were calculated by combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents.
Source: US Census Bureau, Summary File 1, 2000; DCP, 2008.

Qualitative Analysis of Open Space Adequacy

The completion of new waterfront open spaces in the residential and non-residential study areas is expected to increase the amount of available open space on the waterfront, as well as create new replacement open space including bicycle and pedestrian pathways, waterfront esplanade, and seating areas. However, the 0.20 acre Melrose Commons Site 5 and the much larger 3.32 acre Mott Haven School Campus would be developed at Melrose Avenue and East 156th Street and at Concourse village Way and East 153rd Street, respectively. Both would be located within the residential study area,

and while these resources will not be available to the public on a regular basis, it is anticipated that these resources may be available for public use by special permission.

In addition, other open spaces in close proximity to the open space study area would help address the additional need for open space for the residential and worker populations. Two such significant open spaces include Heritage Field and Macombs Dam Park. Heritage Field would be a new park with three baseball fields created on the site of the existing Yankee Stadium. One would be a regulation-size field; the two others would be Little League fields. Macombs Dam Park would be constructed on top of a garage in order to replace, in part, the parkland displaced by the construction of the new Yankee Stadium. It will contain passive and active recreation, including basketball and handball courts, a 400-meter athletic track with field events, and an artificial turf multi-purpose field. These parks would continue to be available to all area residents and would offset, to some degree, the shortfalls in open space resources that would exist in the immediate vicinity of the proposed action; however, they are not included in the quantitative analysis.

The residential and combined open space ratios would increase for active and passive acreage in the No-Action condition; however, the worker open space ratios for active and combined open space would decline in the No-Action condition. This decline in the open space ratio would be ameliorated by various open space resources located just outside the open space study area including the existing St. Mary's Park, Joyce Kilmer Park, and the proposed active open spaces associated with the Yankee Stadium development project. Ballfields proposed as a part of the Yankee Stadium development project would provide a new source of active open space, and pedestrian paths and bikeways would connect to open space resources from beyond the study area. New passive open spaces within the residential study area would be located in areas where passive opportunities do not currently exist. The passive open spaces would allow strolling and observation opportunities along the Harlem River, with new paths and benches situated within the newly created spaces.

For the non-residential study area, the expected increase in the non-residential population is somewhat countered by the availability of new open spaces that would allow greater choice to the residential component of this group. As with existing conditions, it likely that the different user groups will use the passive open spaces at different times of the day and week, with office workers concentrated at the workweek midday, while residents favor weekends and open space usage that favors evenings. The addition of new waterfront open spaces would provide high quality options for the non-residential user group, and improve the quality and availability of open spaces.

3.4.3 FUTURE WITH THE PROPOSED ACTION

As described in detail in Chapter 2.0, "Project Description," the proposed rezoning is expected to result in a net (incremental) development on 31 projected development sites under the future Build scenario when compared to the future No-Action scenario. In the Future With the Proposed Action, additional commercial and residential development is expected to occur throughout the rezoning area. The projected incremental

development anticipated to occur on the 31 development sites in the future Build scenario is 3,414 residential dwelling units; 571,162 sf of retail use; 164,285 sf of hotel use; and 63,700 sf of community facility use. A decrease of 598,351 sf of office floor area and 308,872 sf of warehouse/manufacturing floor area is also anticipated.

The proposed action is expected to result in the development of 3,414 dwelling units on 31 projected development sites (including 591 affordable dwelling units). The 3,414 dwelling units in the future With-Action scenario are expected to generate a residential population of approximately 8,262 new residents (see Chapter 3.2, "Socioeconomic Conditions").

The incremental employment within the open space study area under the Future With the Proposed Action scenario was calculated using the same formulas as used for the Future Without the Proposed Action condition. For the RWCDS development sites, employees generated by new development on the 31 projected development sites are based on the following ratios: one employee per 300 square feet of retail, office, and community facility space; one employee per 500 square feet of manufacturing space; and one employee per 1,000 square feet of warehouse space. The 31 projected development sites are expected to generate a net addition of approximately 105 new employees; therefore a detailed employee analysis was not performed under the With-Action condition.

As part of the proposed action, several new open spaces would be created, resulting from the Harlem River Waterfront Access Plan (WAP) and the Special Harlem River Waterfront District. These new open spaces include a waterfront park, supplemental public access areas, and a public walkway along the waterfront. The proposed waterfront park would contain 2.26-acres and would be located between East 144th and East 146th Streets, west of Exterior Street. This new open space would contain active and passive uses. The WAP provides for the development of a continuous waterfront esplanade as the projected and potential development sites are constructed; however, the open space analysis conservatively assumes the development of esplanade only along projected development sites. As such, it is assumed that a public walkway of approximately 0.79 acres in area would be developed per the WAP along the waterfronts of projected development sites, linking the Gateway Center waterfront esplanade (to the north) and the Port Morris Area (to the south). The WAP would also create supplemental public access areas that would add 0.38 acres of passive open space along the waterfront.

The proposed waterfront park would be built only after there is a significant residential population in the area, the Major Deegan expansion is completed in 2013, and the construction waste transfer station to the north of the park has been relocated. These primary steps have been identified as prerequisites to provision of a waterfront park that is both accessible to the public and an attractive new amenity for the Lower Concourse community.

Residential Study Area Population Estimates

The population is expected to increase by approximately 6,377 new residents as a result of new projects in the Future With the Proposed Action. Therefore, the residential study area would increase from 71,671 residents to 79,933 residents in the Future With the Proposed Action. The increase of 105 workers in the Future With the Proposed Action would be less than the *CEQR Technical Manual* threshold of 500 or more workers, and is therefore not analyzed under the Build scenario for the proposed project. Table 3.4-13 below outlines the increase of the residential population in the residential study area.

Table 3.4-13:
Future Action (2018) Residential Study Area Projected Population

	Residential Population		
	Future No-Action Residential Population	**Future Action Residential Population Increase**	**Future Action Total Population**
Study Area Population	71,671	8,262	**79,933**

Source: DCP, 2008.

Non-Residential Study Area Population Estimates

Approximately 8,262 new residents would be generated by the proposed action within the non-residential study area. Therefore, the total residential population would increase from 16,955 residents under future No-Action conditions to 25,217 residents under future With-Action conditions. Proposed workers under the Build condition are not analyzed in the Future With the Proposed Action because the net increase in worker population would not exceed the CEQR threshold of 500 workers for requiring an open space analysis of the worker population. Table 3.4-14 below outlines the increase in population from the future No-Action to the Build scenario within the non-residential study area.

Table 3.4-14:
Future Action (2018) Non-Residential Study Area Projected Population

	Residential Population		
	Future No-Action Residential Population	**Future Action Residential Population Increase**	**Future Action Total Population**
Study Area Population	16,955	8,262	**25,217**

Source: DCP, 2008.

Proposed Open Space Resources

The proposed action includes the development of additional open spaces, which include three supplemental public access areas (#33a-c), a new large open space on the Harlem River (#34), and segments of a public walkway along the Harlem River shoreline (#35), to be constructed on projected development sites located between East 149th Street to the north and East 138th Street and the Madison Avenue Bridge to the south. Open space resources in the Future With the Proposed Action are shown on Figure 3.4-4. The proposed walkway would provide for increased connectivity between the Gateway Center retail development public esplanade and park to the north and the Lower Concourse proposed open space along the Harlem River.

The proposed action includes amendments to the City Map to establish a park between the Harlem River and Exterior Street, south of a visual extension of East 146th Street, and north of a visual extension of East 144th Street. It is DPR policy to consult with the community before beginning the design for a park. At this time and for the purposes of the analysis, it is anticipated that the new waterfront park would be primarily active with a breakdown roughly 80 percent active and 20 percent passive open space. When developed in the future, the new waterfront park (#33) would contain approximately 2.26 acres of open space, which is expected to contain approximately 1.70 acres of active and 0.56 acres of passive open space. Additional open space proposed in the Future With the Proposed Action would include three small supplemental public access areas, which would all be passive in nature, and shore public walkways, which would also be passive open spaces. The supplemental public access areas (#32a-c) would provide access to both the large waterfront park and shore public walkway. The supplemental public access areas would be approximately 0.26, 0.06, and 0.06 acres in area, respectively, for a total of 0.38 acres of additional open space. The shore public walkway (#34) would be approximately forty feet wide, and would add 0.79 acres of passive open space to the area. The WAP delineates the public walkway to follow the existing shoreline for its length along the Harlem River; no in-water fill or new over-water structures are contemplated. It would be finished with decorative, high quality paving, and would provide several amenities including a planted buffer with trees and lawn areas, and regular seating adjacent to the lawn areas and along the waterfront. Visual corridors would be extended between projected development sites, as an extension of East 140th Street, and East 146th Street; a third visual corridor would be provided from Exterior Street to the waterfront between projected development site 4 and potential development site 32. It is expected that the esplanade and park would be raised above the adjacent Oak Point Link freight rail line to provide improved views to the Harlem River and Manhattan.

The total added open space would total 3.43 acres; of this, 1.70 acres would be active and 1.73 acres would be passive. The inventory of Future With the Proposed Action open spaces are presented in Table 3.4-15 below, and the locations of these resources are shown on Figure 3.4-4.

Table 3.4-15:
Open Space Changes Under Future Conditions With the Proposed Action

Map Key #	Name	Owner	Description	Hours of Access	Acreage		
					Total	Active	Passive
33a-c	Supplemental Public Access Areas	DPR	Green space to provide public access to the waterfront park and public walkway	24 hrs/ day	0.38	0.00	0.38
34	Waterfront Park	DPR	Large waterfront open space would contain both active and passive open space	Sunrise to 1AM	2.26	1.70	0.56
35	Public Walkway	DPR	decorative paving, planted buffer with trees and lawn areas, and seating	24 hrs/ day	0.79	0.00	0.79
Total Future Acreage Increase:					**3.43**	**1.70**	**1.73**
Total 2018 Future Without the Action Condition Open Space Acreage:					**45.57**	**25.78**	**19.79**
Total 2018 Future With the Action Condition Open Space Acreage:					**49.00**	**27.48**	**21.52**

Source: DPR website 2008 (see the following website address: http://www.nycgovparks.org); DCP, 2008.

Quantitative Analysis of Open Space Adequacy

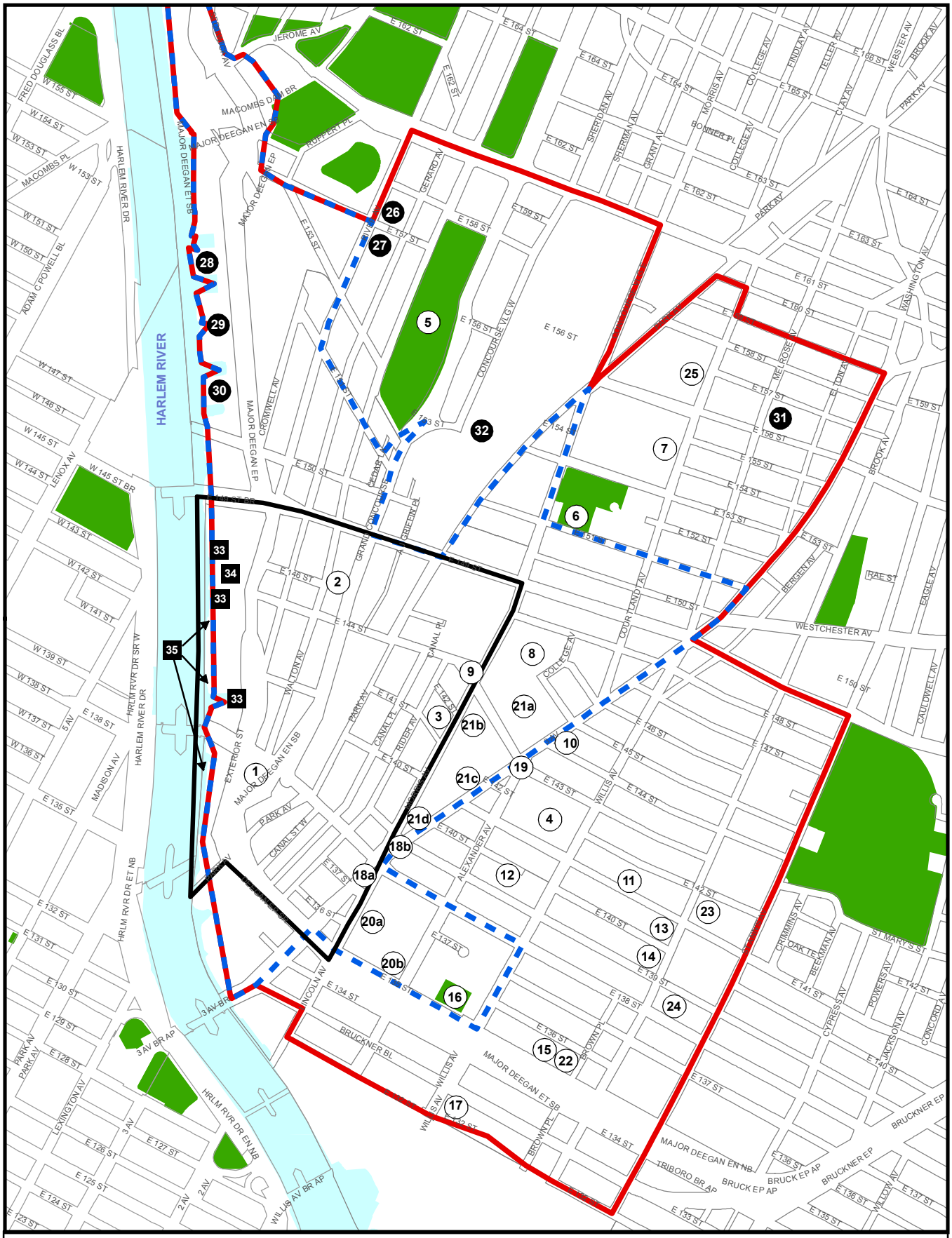
Table 3.4.-16 below outlines the population, open space acreage, and open space ratios for the future With-Action condition for the residential and non-residential study areas in the year 2018.

Table 3.4-16:
Future Action (2018) Projected Population, Acreage and Open Space Ratios

	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
Residential Study Area										
Residents	79,933	49.00	27.48	21.52	0.61	0.34	0.27	2.5	2.0	0.5
Combined workers and residents	108,234				N/A	N/A	0.20	N/A	N/A	0.41*
Non-Residential Study Area										
Workers	18,531	18.24	12.49	5.75	N/A	N/A	0.31	N/A	N/A	0.15
Combined workers and residents	43,748				N/A	N/A	0.13	N/A	N/A	0.36*

*These ratios are the weighted average for the combined passive open space within the residential and non-residential study areas. The ratios were calculated by combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents.
Source: DCP, 2008.

This Page Intentionally Left Blank



Legend

- 1 — Existing Open Space Resource
- 23 — No-Build Open Space Resource
- 33 — Build Open Space Resource
- Proposed Rezoning Area
- Non-Residential Study Area
- Residential Study Area

500 0 500 1,000 Feet

N

Source: NYC Department of City Planning MapPluto 2006; STV Incorporated

Figure 3.4-4: Open Space Resources in the Future with the Proposed Action

Lower Concourse Rezoning and Related Actions EIS

NYC Department of City Planning

Residential Study Area

With a residential population of 79,933 and 49.00 total acres of open space, the residential study area total (active and passive) open space ratio would be 0.61 acres per 1,000 residents under the 2018 Future With the Proposed Action condition. This would be 0.1 acres lower than under the Future Without the Proposed Action condition, but would remain substantially below the DCP guideline of 2.5 acres per 1,000 residents. The active open space ratio would be 0.34 acres per 1,000 residents, a slight decrease from the future No-Action ratio of 0.36 acres per 1,000 residents. The passive open space ratio would be 0.27 acres per 1,000 residents, or a slight decrease of 0.01 acres from the future No-Action condition. The active open space ratio of 0.34 is lower than DCP's guideline of 2.0 active acres per 1,000 residents and the passive open space ratio of 0.27 is lower than the guideline of 0.5 acres per 1,000 residents.

The passive open space ratio for the combined (residential and worker) population in the With-Action condition would remain virtually unchanged from 0.20 acres per 1,000 combined workers and residents under the future No-Action condition; however, it remains below the recommended weighted average ratio of 0.41 acres per 1,000 workers and residents.

Non-Residential Study Area

The non-residential study area passive open space ratio would be 0.31 acres per 1,000 workers under 2018 Future With the Proposed Action condition. This would be an increase of 0.09 acres per 1,000 workers compared to the future No-Action ratio of 0.22 acres per 1,000 workers, and exceeding the DCP guideline of 0.15 acres per 1,000 non-residents.

The passive open space ratio for the combined (residential and worker) population would increase from 0.11 acres per 1,000 combined workers and residents under future No-Action conditions, to 0.13 acres per 1,000 combined workers and residents and is below the recommended weighted average ratio of 0.36 acres per 1,000 workers and residents.

As shown in Table 3.4-17, with the proposed action, the percent changes in open space ratios vary from a slight percentage decrease in the residential study area to an approximate 40.91 percent increase of passive open space in the non-residential study area. DCP's guideline is still exceeded for the non-residential study area passive open space ratio, while the total population ratio in the non-residential study area would increase. Projected increases in population would be supported by the quantity and quality of new open spaces developed in the Future With the Proposed Action. Open space ratios would remain near the recommended weighted average ratio of 0.36 (refer to Table 3.4-16).

Table 3.4-17: Future With the Proposed Action – Open Space Ratios Summary

Ratio		DCP Guideline	No-Action Ratio	With-Action Ratio	Percent Change
Residential Study Area					
Residential	**Total**	2.5	0.64	0.61	-4.69%
	Passive	0.5	0.28	0.27	-3.57%
	Active	2.0	0.36	0.34	-5.56%
Non-Residential Study Area					
Worker	**Passive**	0.15	0.22	0.31	40.91%
Combined			0.11	0.13	18.18%

*The weighted average combining 0.15 per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive open space; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, passive, active and total open space ratios are calculated.
Note: Due to rounding, ratios and percentages may not be additive.
Source: DCP, 2008.

Open space conditions in the residential study area without and with the proposed action are represented quantitatively by open space ratios of 0.64 and 0.61, respectively; which represents a 4.6 percent decrease in the open space ratio from the future without the proposed action as compared to the future with the proposed action. For the non-residential population, the open space ratio would be 0.22 under the future without the proposed action and 0.31 for the future with the proposed action, which exceeds the recommended level of 0.15 acres of passive open space per 1,000 non-residents. Although the non-residential population is adequately served for open space and would continue to be so under the proposed action, the residential population within the study would experience a shortfall of open space. The CEQR Technical Manual suggests that a significant quantitative impact may result if the proposed action would reduce the open space ratio, compared to the No Action condition, or would further exacerbate a deficiency in open space. Although the open space ratios for the residential study areas would remain below the recommended levels, it is recognized that these are goals that are not feasible for many areas of the city and are therefore not considered impact thresholds.

The proposed action would result in a quantitative decrease in the residential open space ratio; however, for qualitative reasons as detailed below, it would not constitute a significant adverse open space impact.

Qualitative Analysis of Open Space Adequacy

The proposed action would not result in significant adverse impacts to open space. While open space resources in the study area are, and would continue to be, deficient in comparison to DCP guidelines, qualitative analysis of open space indicates that no significant adverse impacts would result from the proposed action. Rather, the quality and availability of regional open space resources within and near the residential study area would be improved by the proposed action and other development occurring nearby. The future residential and worker populations in the study area and South

Bronx overall would be provided a greater opportunity to enjoy a network of open space and recreational resources that would not be fully realized in the future without the proposed action.

The open space shortfall in the residential study area is represented quantitatively by active and passive open space ratios (0.34 and 0.27 respectively) that are below DCP's guidelines of 2.0 acres of active space and 0.5 acres of passive space per 1,000 users. The significance of these active and passive open space shortfalls, however, is curtailed when both the quality and extent of open space resources proposed with the action are considered together with other important new open spaces that would be developed within and near the study area. New open spaces in the future with the proposed action would take on regional importance, as the residential study area population would be served by a more expansive and interconnected open space network than would otherwise be available without the proposed action.

The completion of new waterfront open spaces in the residential and non-residential study areas would both increase the amount of available open space, as well as broaden the types of available open spaces directly within the study area. The proposed action would introduce new bicycle and pedestrian pathways, waterfront open spaces, and active open space uses in the new 2.26-acre parkland area that would be designated on the City Map. The waterfront park and waterfront esplanade resources developed alongside new construction would be especially well-suited types of open space, optimizing the inherent potential for waterfront accessibility in the study area overall, even providing such access where none is currently available.

The proposed park is in a strategic, centrally located site on the waterfront, making it easily accessible to the variety of users and new populations projected to develop in the rezoning area as well as the existing residents in the upland communities. The park has a number of locational attributes that will make it a superior open space and outweigh the impacts of the reduction in open space ratio created by the proposed action. The park is sited at the base of 144th on the waterfront. 144th Street runs the length of the rezoning area from Morris Avenue in the east to the waterfront where there is easy passage under the elevated Deegan Expressway to the waterfront. This location was selected to optimize access to the park from upland portions of the neighborhood, especially Patterson Houses (NYCHA) and Lincoln Hospital. The park and waterfront open spaces that will develop under the proposed action will also provide superior connections to larger regional parks to the north, which will further extend their value as open spaces. The waterfront open space will allow users to pass from the park at 144th Street to the existing regional parks north of 149th Street and avoid the busy intersection of 149th Street and Exterior Street. The waterfront location will also allow for superior open space by providing great visual interest to both passive and active users and ample light and air for park users and landscaping. The park mapping and WAP will create valuable waterfront open space where there is no access to the waterfront under existing conditions.

The quantitative analysis conservatively included only that esplanade acreage fronting projected development sites; esplanade acreage fronting potential development sites,

amounting to approximately 1.29 acres of passive open space, was not included in the determination of the open space ratios with the proposed action. It is the intent of the WAP to ensure the development of the esplanade alongside both projected and potential resources, however, and as such vastly enhance the quality and increase the quantity of open space to a degree beyond that which is represented by the open space ratios alone.

Relatively large future open space resources that would be developed within the study area under Future No Action conditions would include the 5.11-acre Harlem River Waterfront Open Space, the 3.33-acre Mott Haven School Campus, and the 2.0-acre Gateway Center Open Space. In combination with these large open space resources, the open spaces resulting from the proposed action would ensure a great variety of amenities within the study area to suit the population.

Additional open spaces in close proximity to the open space study area would help address the residential and worker populations' open space needs. Parks associated with the new Yankee Stadium development project just outside the study area would provide a new open space resource for neighborhood residents, workers, and visitors, while connecting the Lower Concourse community to other neighborhoods to the north via the waterfront. Two significant future open spaces would be Heritage Field and Macombs Dam Park; these would be constructed by 2018, but because they would lie just outside study area, they have not been included in the quantitative open space analysis. Heritage Field would be a new park with three baseball fields, which would be developed on the site of the existing Yankee Stadium, and similarly, Macombs Dam Park would also contain several amenities for active recreational uses.

The population generated by the proposed action is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place a heavy demand on facilities that cater to specific user groups. Given the extensiveness of the future open space network, the variety of resources, and the realization of high-quality open space that is not currently present throughout the study area, it is anticipated that new open space attributed to the proposed action would contribute significantly to meeting the open space needs of future residents and workers.

The open space study area already has a significant amount of existing open space in comparison to many other areas of the Bronx. The combination of the availability of a variety of open spaces, such as recreational areas, spaces for walking and biking, gardens and school playgrounds; the addition of new open spaces; the improvement of existing facilities; and the presence of large open space resources surrounding the study area ensures that this area of the Bronx would have sufficient open space resources in the future.

Although the decline in the open space ratio for the residential study area is sizable, the qualitative assessment concludes that the open space elements, level of amenities and availability of other large open spaces would help alleviate the burden on the study area's open spaces. Thus, the proposed action would not result in a significant adverse impact to open space.