3.4 OPEN SPACE

INTRODUCTION

As described below, the proposed East 125th Street Development project would not result in significant adverse open space impacts. 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 is one that would physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value. An indirect effect may occur when a new 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 proposed East 125th Street Development calls for the creation of new publicly accessible open space, expected to be located in the central portion of the northerly two project blocks. No direct impact on an existing open space is proposed. A detailed open space analysis has been conducted because while the project itself would not result in the direct loss of public open space, it would introduce a large new residential and non-residential (worker) population to an area considered to have an existing deficiency of open space (*e.g.*, 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). This chapter assesses existing conditions and compares conditions in the future with and without the proposed project to determine potential impacts related to the proposed action, both positive and negative.

As described below, while the open space ratios for the non-residential and residential study areas are below the levels recommended by the New York City Department of City Planning (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. The qualitative assessments of the residential and non-residential open space study area presented herein conclude that even though the proposed project would result in a substantial increase in the number of residents and employees, and a decrease in the open space ratio, the existing and future open space resources in the study areas would be sufficient to address the needs of the user populations of the area. The proportional amount of open space and the ratio of acreage to population are also higher than in the majority of other Manhattan neighborhoods.

Most open space resources in the study areas were found to be in good condition, with high utilization rates, and they provide a wide range of amenities to the population living and working in the area. Other open spaces in close proximity to the residential study area such as Thomas Jefferson Park -- a 15-acre park located east of First Avenue between East 111th and East 114th Streets -- would also help to address the additional need for open space for the area's residential population. These factors add to the quality and accessibility of open spaces in the study area. Based on the analysis of quantitative factors listed in the *CEQR Technical Manual*, the proposed project is not expected to result in significant adverse impacts within the residential (½-mile) and non-residential (¼-mile) 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 - 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 in that ratio 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 non-residential populations, 0.15 acres of passive open space per 1,000 non-residents is typically considered adequate.
- For residential populations, City guidelines attempt 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 1.5 acres of open space per 1,000 residents, substantially below the City's guidelines. For this reason, the goals are often not feasible for many areas of the City, and thus are not used as an impact threshold. Rather, they act as a benchmark to represent how well an area is served by its open space.

The needs of these populations are considered together because it is assumed that both residents and non-residents would use the same passive open spaces. Therefore, a weighted average of the amount of open space necessary to meet the DCP guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 nonresidents is considered in this analysis.

3.4.1 EXISTING CONDITIONS

Study Areas and Populations

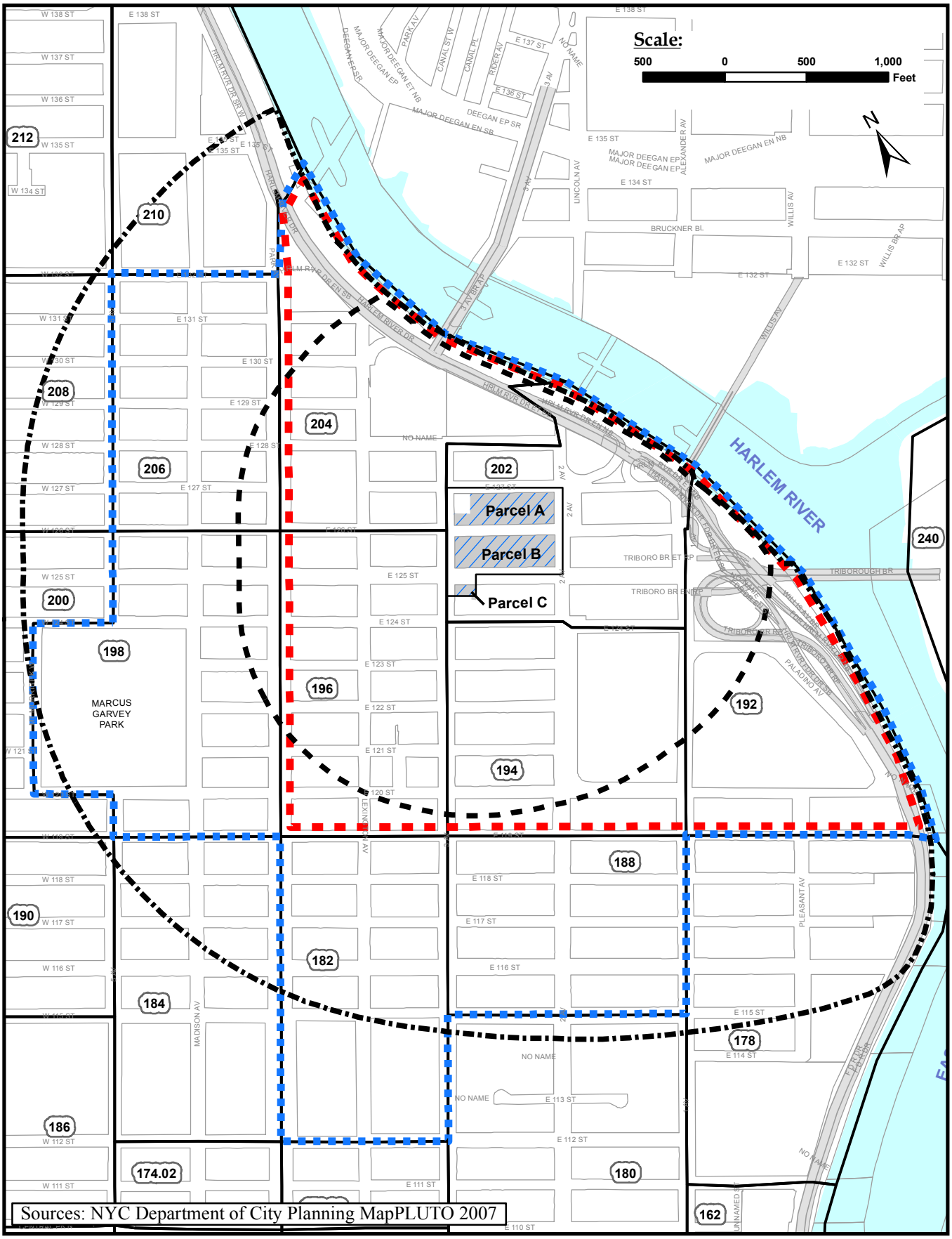
The proposed redevelopment area is located between approximately East 125th Street and East 127th Street, from Third Avenue to Second Avenue. In accordance with the guidelines established in the *CEQR Technical Manual*, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a ½-mile radius around residential projects and a ¼-mile radius around commercial projects. Figure 3.4-1 presents the open space study areas.

To determine the residential population served by existing open space resources, 2000 Census data were compiled for the census tracts comprising the study area (refer to Figure 3.4-1). Using an inventory of available open space resources and the projected number of potential users, open space ratios have been calculated and compared with existing citywide averages and planning goals set forth by DCP. Table 3.4-1 presents the population and age group distribution within the study area.

Table 3.4-1: Population and Age Group 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 182	6,859	2,128	31%	4,013	58.5%	718	10.5%	1,560
Tract 188	6,471	1,811	28%	4,138	63.9%	522	8.1%	1,005
Tract 192	3,818	1,159	30.4%	2,292	60.0%	367	9.6%	1,543
Tract 194	6,845	2,254	32.9%	4,080	59.6%	511	7.5%	1,519
Tract 196	3,751	1,802	28.8%	1,793	47.8%	876	23.4%	1,225
Tract 198	1,517	256	16.9%	1,040	68.6%	221	14.6%	1,624
Tract 202	512	138	27%	224	65.2%	40	7.8%	614
Tract 204	2,799	946	33.8%	1,637	58.5%	216	7.7%	710
Tract 206	2,310	542	23.5%	1,570	68.1%	198	8.6%	349
Manhattan	**1,537,195**	**257,916**	**16.8%**	**1,092,503**	**71.1%**	**186,776**	**12.1%**	**2,089,920**
Residential Study Area Total (2000)	**34,882**	**12,054**	**27.7%**	**23,424**	**61.5%**	**4085**	**10.8%**	**10,149**
Residential Study Area Total (2007)	**41,124**							

Source: US Census, Summary File 1, 2000; New York City Department of City Planning, 2007; STV Incorporated, 2007.



Legend

- Project Site
- Rezoning Area
- Approximate 1/4-mile Radius
- Approximate 1/2-mile Radius
- 182 2000 Census Tract
- Commercial Study Area
- Residential Study Area

Figure 3.4-1 - Open Space Study Area

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Residential (½-Mile) Study Area

As noted above, the residential study area was determined by identifying a ½-mile radius around the proposed East 125th Street Development project parcels, 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 ½-mile radius were included in the calculation of population and open space; those with less than 50 percent of their area in the ½-mile radius were excluded. Thus, the residential study area includes the following census tracts in their entirety: 194, 196, 202, 204 and 206. In addition, census tracts 182, 188, 192 and 198 have more than 50 percent within a ½-mile radius of the project sites, and were included in the calculation of open space ratios. The residential study area is generally bounded by East 132nd Street to the northwest, the Madison Avenue bridge to the northeast, East 119th Street and the Harlem River Drive to the southeast, East 112th Street to the southwest, and the western border of Marcus Garvey Park to the west.

The residential population within the residential study area boundary was 34,882 persons in 2000. Based on DCP's estimate of a 5.64 percent increase in the total population for the residential study area between 2000 and 2005, the 2005 population of the residential study area would be estimated at 36,850 persons. The total population projection for 2007, using this same rate of increase, would be approximately 41,124 persons.

For total population within the residential study area, place of work data for workers age 16 and over were collected from the Census. The residential study area's worker population is 10,149 workers. Therefore, the total combined open-space user population within the residential study area boundary would be approximately 51,273 persons in 2007. 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.

Non-Residential (¼-Mile) Study Area

The non-residential study area is defined as the ¼-mile radius around the boundaries of the project parcels, adjusted to include whole census tracts. The only census tract that is included in its entirety in the non-residential study area is tract 202. Census tracts 192, 194, 196 and 204 have more than 50 percent of their area within the ¼-mile non-residential study area, and are therefore included in the non-residential study area. The non-residential study area extends generally to the Willis Avenue Bridge to the northwest, the Madison Avenue Bridge to the northeast, 119th Street and the Harlem River Drive to the southwest, and First Avenue and 119th Street to the southeast.

Although there is no quantitative analysis addressing only the non-residential population within the residential study area, the *CEQR Technical Manual* calls for a quantitative analysis of the total worker population within the residential study area, which includes the non-residential and the residential populations. Based on place of work for workers age 16 and over data collected from the Census, the population of workers within the non-residential study area is 5,625. Drawing on the Census, the residential population within the non-residential study area boundary

was 17,725 persons in 2000. Based on DCP's estimate of a 5.64 percent increase in total population for the combined residential and non-residential study areas between 2000 and 2005, the 2005 population of the non-residential study area would be estimated at 18,725 persons. The total population projection for 2007, using this same rate of increase, would be approximately 20,897 persons. Therefore, the estimated total combined open-space user population within the non-residential study area boundary is 26,522 persons.

Methodology

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 U.S. Census Bureau's Transportation Planning Package (CTPP). The total residential and non-residential (worker) populations were then used to determine the ratio of population to total open space for residential, worker and combined residential and worker populations in both the ¼-mile and ½-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.[1] Public spaces that do not offer useable recreational areas, such as spaces where seating is unavailable, were excluded from the survey, as were open spaces that are not easily accessible to the general public. However, some of these open spaces are noted in the qualitative analysis. The information used for this analysis was gathered through field studies conducted in June 2007 on weekdays; and acquired from the New York City Department of Parks and Recreation (NYCDPR). 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 childrens' 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 (½-Mile) Study Area Demographics

Census data from 2000 were collected for all census tracts within the residential study area in order to calculate the total population of residents. As shown in Table 3.4-2 below, the residential study area would have a population of approximately 41,124 persons in 2007.

U.S. Census Bureau's Transportation Planning Package (CTTP) data for total workers 16 years and over were also compiled for each census tract in order to calculate the total population of workers within the residential study area. The total worker population within the residential study area is approximately 10,149 for a total estimated user population (residential and non-residential) of 51,273 workers and residents in 2007.

[1] New York City Department of Parks and Recreation website 2007 (see the following website address: http://www.nycgovparks.org/sub_newsroom/press_releases/press_releases.php?id=15902).

The residential study area includes nine census tracts, five within the non-residential study area boundary and the remaining four, which are located outside the non-residential boundary. For the residential study area, approximately 61.5 percent of the population falls between the ages of 18 and 64. As indicated in Table 3.4-1, 27.7 percent are age 17 or younger and 10.8 percent are 65 years of age or older. The age distribution of the study area population differs from Manhattan as a whole. The 17 and under population is a much smaller percentage of the total than for Manhattan as a whole, where the age group represents only 16.8 percent. The 65 and over population in the study area, however, is more consistent with the average for Manhattan, which is 12.1 percent. With these demographic characteristics, the study area has need for a range of active and passive recreation facilities, including those geared toward both children and adults.

Non-Residential (¼-Mile) Study Area Demographics

Table 3.4-2 below presents a non-residential study area population, which totaled approximately 20,897 persons in 2007. 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 worker population within the non-residential study area is approximately 5,611, for a total user population (residential and non-residential) of 23,350 persons in 2000 and an estimated total of approximately 26,508 workers and residents in 2007. Age characteristics and age distribution of the residential and worker population for the ¼-mile non-residential study area are presented in the following table.

Table 3.4-2: Population and Age Group 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 192	3,818	1,159	30.4%	2,292	60.0%	367	9.6%	1,550
Tract 194	6,845	2,254	32.9%	4,080	59.6%	511	7.5%	1,530
Tract 196	3,751	1,802	28.8%	1,793	47.8%	876	23.4%	1,230
Tract 202	512	138	27%	224	65.2%	40	7.8%	610
Tract 204	2,799	946	33.8%	1,637	58.5%	216	7.7%	705
Manhattan	**1,537,195**	**257,916**	**16.8%**	**1,092,503**	**71.1%**	**186,776**	**12.1%**	**2,089,920**
Non Residential Study Area Total (2000)	**17,725**	**6,299**	**30.6%**	**10,026**	**58.2%**	**2010**	**11.2%**	**5,611**
Non Residential Study Area Total (2007)	**20,897**							

Source: US Census Bureau, Summary File 1, 2000; New York City Department of City Planning, 2007; STV Incorporated, 2007.

The ¼-mile non-residential study area is similar to the residential study area in that the percentage of people under the age of 18 is very high in comparison to Manhattan. As a result, the percentage of the population between the ages of 18 and 64 in the non-residential study area is much lower than the percentage for Manhattan. However, the percentage of the population age 64 and over in the non-residential study area is close to the percentage of the population for Manhattan as a whole, at 11.2 and 12.1 percent, respectively. The difference in the under 18 population between Manhattan and the non-residential study area is substantial, at 16.8 versus 30.6 percent, respectively. The age characteristics for the ¼-mile non-residential study area are fairly similar to those of the residential study area. The largest disparity from the residential to non-residential study area is found in the population between the ages of 18 to 65, which was 3.7 percent higher within the residential study area.

Inventory of Publicly Accessible Open Space

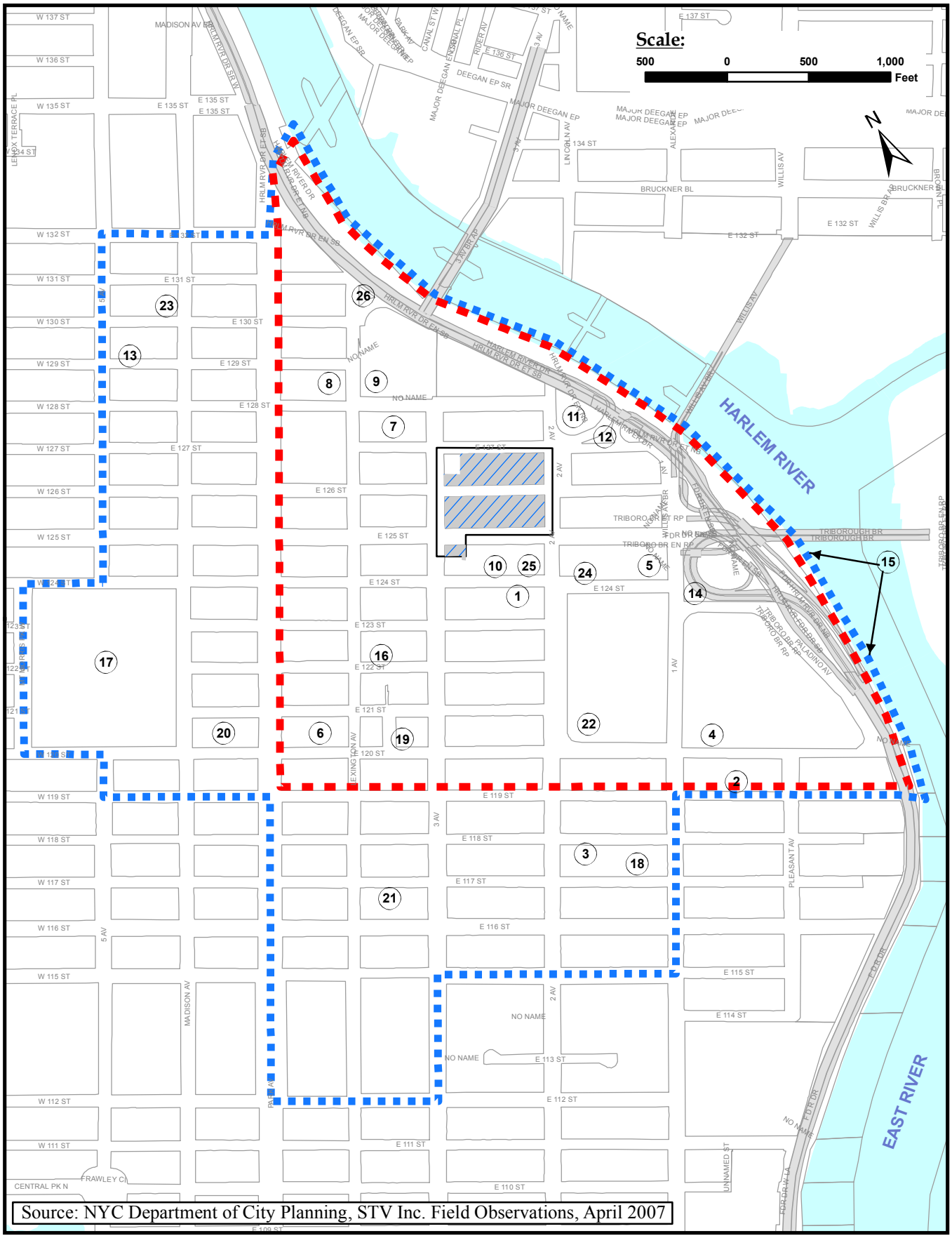
Open space may be publicly or privately owned and may be used for active or passive recreational purposes. According to the *CEQR Technical Manual*, public open space is defined as facilities open to the public at designated hours on a regular basis. Private open space that is not accessible to the general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

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

All publicly accessible open space facilities within the study area were inventoried in June 2007 and were identified by their location, size, owner, type, utilization, equipment, hours, and condition of available open space. Conditions during the days of survey were sunny and warm. 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, Existing Open Space Resources, 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 maps their location within the entire open space study area and shows them in context with the ½-mile residential and ¼-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 in Table 3.4-3 and on Figure 3.4-2.

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, e.g., the majority of benches or equipment was in use, then utilization was considered heavy. If the facility or equipment was in use, but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light.

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; however, some of these open spaces are noted in the qualitative analysis. 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.



Legend

- (1) Existing Open Space Resource
- Project Site
- Rezoning Area
- Commercial Study Area
- Residential Study Area

Figure 3.4-2 - Existing Open Space Resources

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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	Carver Community Garden 124th Street, Second to Third Avenue	NYCDPR	Garden: Planting Boxes, tall iron fence, landscaping	8AM to Dusk	0.5	0	0.5	2 / 2
2	Holy Rosary Playground Pleasant Avenue, 119th to 120th Street	NYCDPR	Playground: basketball courts, chain link fence	8AM to Dusk	0.42	0.42	0	1 / 2
3	Diamante Garden 118th Street, First to Second Avenue	NYCDPR	Garden: Landscaped area enclosed by fencing	8AM to Dusk	0.5	0	0.05	2 / 2
4	Wagner Houses Community Center Garden 120th Street, First to Pleasant Avenue	NYCHA	Garden: Playground, benches, with iron and chain link fence	8AM to Dusk	0.5	0.2	0.3	1 / 1
5	Othmar Ammann Playground 124th Street, First to Second Avenue	NYCDPR	Playground: 2 basketball courts, 1 jungle gym, iron fence	8AM to Dusk	0.8	0.72	0.08	3 / 2
6	UPACA Houses 121st Street, Lexington to Park Avenue	NYCHA	Sitting area for residents	24 hrs/day	0.2	0	0.2	2 / 1
7	PS 30 Playground 128th Street, Third to Lexington Avenue	NYCDPR	Playground: 1 jungle gym, chain link fence	8AM to Dusk	0.5	0.4	0.1	2 / 2
8	Jackie Robinson Houses Playground 128th to 129th, Lexington to Park Avenue	NYCHA	Playground: jungle gym	24 hrs/day	0.5	0.4	0.1	2 / 2
9	Alice Kornegay Triangle Lexington Avenue, 128th to 129th Street	NYCDPR	Playground: jungle gym	8AM to Dusk	0.883	0.883	0	3 / 3
10	Dream Street Park 124th Street, Second to Third Avenue	NYCHPD	Park: Landscaped	Sunrise to 1AM	0.025	0	0.025	1 / 1
11	Crack is Wack Playground (Harlem River Dr. Park) Second Avenue, 127th to 128th Street	NYCDPR	Playground: jungle gyms, 4 basketball courts	8AM to Dusk	1.37	1.37	0	2 / 2
12	Harlem River Park East 127th Street, Second Avenue to Harlem River Drive	NYCDPR	Park: Landscaped area with benches	Sunrise to 1AM	0.35	0	0.35	2 / 2
13	Harlem Rose Garden 129th Street, Fifth to Madison Avenue	NYCDPR	Garden: landscaped area, chain link fence	Sat-Sun 12-5PM	0.75	0	0.75	3 / 2
14	Louis Cuvillier Park 124th Street to Triborough Bridge, Harlem River Drive to First Avenue	NYCDPR	Park: Landscaped area with benches	Sunrise to 1AM	2.75	0	2.75	2 / 2

Key: *Condition:* 1 = Fair, 2 = Good, 3 = Excellent, *Utilization:* 1 = Light, 2 = Medium, 3 = Heavy.

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

Map Key #	Name/Address	Owner*	Description	Hours of Access	Acreage			Condition & Utilization
					Total	Active	Passive	
15	East River Esplanade / Bobby Wagner Walk Harlem River Drive, 90th to 124th Street	NYCDPR	Park/Public Thoroughfare: pedestrian and bike path	Sunrise to 1AM	3.3	3.0	0.3	3 / 3
16	McNair Playground Lexington Avenue, 122nd to 123rd Street	NYCDPR	Playground: jungle gym, benches, landscaping	8AM to Dusk	0.624	0.468	0.156	3 / 2
17	Marcus Garvey Memorial Park Madison Avenue, 120th to 124th Street	NYCDPR	Park: main and upper level (Mt. Morris), baseball field, basketball courts, jungle gyms, amphitheater, office, pool	Main level: 1AM Upper Level:10PM	20.17	16.14	4.03	3 / 3
18	PS 155 Playground (William Paca School) 117th to 118th Street, First to Second Avenue	NYCDPR	Playground: sandpit, sprinkler, roller-skating rink, baseball and basketball field, shuffleboard	8AM to Dusk	0.834	0.834	0	3 / 3
19	East Harlem Art Park 120th Street and Sylvan Place	NYCDPR	Park: Tall iron fence, benches, cobblestone, sculpture, lamps	8AM to Dusk	0.346	0	0.346	3 / 2
20	Eugene McCabe Field (PS 79) Park Avenue, 120th and 121st Street	NYCDPR	Playground: multi-purpose field tall fencing, some seating	Closes at 9PM	0.789	0.789	0	3 / 3
21	117th Street Community Garden 117th Street, Lexington to Third Avenue	NYCHPD	Garden: Planting boxes, tall chain link fence, picnic tables	4-6PM Mon to Sat	0.2	0	0.2	1 / 2
22	Wagner Playground / Recreation Area (JHS 45) East 120th Street, First to Second Avenue	NYCDPR	Athletic / Recreation Facility: Soccer and baseball field	8AM to Dusk	1.59	1.59	0	3 / 3
23	Moore Playground (PS 133) Madison Avenue, 130th to 131st Street	NYCDPR	Playground: 3 separated playgrounds, basketball and tennis courts, benches	8AM to Dusk	0.766	0.766	0	3 / 3
24	Wagner Houses Pool East 124th Street, First to Second Avenue	NYCDPR	Athletic / Recreation Facility: Pool, iron fence	8AM to Dusk	0.808	0.808	0	2 / 2
25	Harry's Playground 124th Street, Second to Third Avenue	NYCHPD	Playground: separated from Dream Street by indoor garden, basketball court with bleachers	8AM to Dusk	0.3	0.024	0.06	2 / 2
26	Harlem River Ballfields East 130th to 131st Street Lexington Avenue to Harlem River Drive	NYCDPR	Park: Baseball, football, soccer fields, restrooms, spectator viewing	Sunrise to 1AM	3.80	3.80	0	3 / 3
	Total Acres				**43.58**	**32.83**	**10.75**	

* Acronyms: New York City Department of Parks and Recreation; New York City Department of Transportation; New York City Housing Authority.

Key: *Condition:* 1 = Fair, 2 = Good, 3 = Excellent. *Utilization:* 1 = Light, 2 = Medium, 3 = Heavy.

STUDY AREA OPEN SPACES

The project site currently contains no existing open space resources. The study area has a multitude of publicly accessible open spaces (see Table 3.4-3). In total, there are 26 open spaces that contain a total of 39.89 acres. The open space in the study area includes 29.14 acres of active recreation open space and 10.75 acres of passive space.

Of the 26 open space resources, ten are playgrounds, five are parks, five are gardens, one is a traffic island, one is an outdoor pool, two are multi-purpose fields, one is a housing complex sitting area, and another is an esplanade along the East River. Out of the five parks, four do not contain any sort of active space; however, all of the 10 playgrounds contain at least one jungle gym. Only one out of five gardens has some active space and the traffic island is an active open space. Of the five remaining spaces listed above, the outdoor pool, esplanade and both multi-purpose fields are all over 90 percent active. Seventeen of the 26 spaces in the entire study area have some active open space and nine have none at all.

The largest open space resource in the study area is Marcus Garvey Park (See Figure 3.4-2, #17). Marcus Garvey Park accounts for just under 50 percent of the total park acreage within the study area, containing approximately 16.14 acres of active recreational space and 4.03 acres for passive uses, for a total of 20.17 acres. It is located between Madison Avenue and Mt. Morris Park West, from 120th to 124th Street, at the westernmost boundary of the open space study area where the westerly edge of the study area is coterminous with the park's westerly side. Marcus Garvey Park has two areas comprising distinctly different elevations; the lower level, which contains many active spaces, and an upper level on bedrock outcropping, which is known as the Acropolis. The Acropolis features the landmark Fire Watchtower, a lookout tower listed in the National Register of Historic Places. The Acropolis closes earlier than the main level of the park (at 10 PM) whereas the main park closes at 1AM. The lower, flatter level of the park is landscaped and features a swimming pool, boathouse and two playgrounds on the north side, amphitheater and recreation center on the west side, baseball fields at the southwest corner, and a large fenced-in playground and basketball courts at the southeast corner. On this at-grade level, the park also has passive spaces such as benches and pathways leading from one active space to the next. Like many of Harlem's other large parks, Marcus Garvey Park incorporates the topography of the land into the shape and landscaping of the park. It is in very good condition and is heavily used by those who live and work in the neighborhood that surrounds it.

The second largest open space in the study area, a significant addition to the active open space resources in the study area, is the $4 million Harlem Ballfields project. (See Figure 3.4-1, #26.) The Harlem River Ballfields are completely active, with a total of 3.8 acres. The ballfields are located in both the non-residential and residential study area, from East 130th Street to East 131st Street at Lexington Avenue near the Harlem waterfront. Construction on the park was completed in the summer of 2007. The Harlem River Ballfields is a multi-purpose field with lights, so multiple sports can be played both during the day and at night. This open space provides sufficient amenities for baseball, football, soccer and other recreational activities as well as areas for multiple activities to occur at the same time. In addition to the field itself, amenities include new fencing and gates, as well as new bleacher seating.

The third largest open space in the study area is Bobby Wagner Walk (#15), which is also known as the East River Esplanade. Bobby Wagner Walk comprises 3.3 acres, and includes a pedestrian and bike path, views of the river and manicured landscaping. In the existing condition, the Esplanade runs along the East River to 125th Street.

There are also three larger open space resources that have a total area of between one and three acres. These areas, from largest to smallest, are as follows: Louis Cuvillier Park, Wagner Playground and the Crack is Wack Playground. Louis Cuvillier Park (#14) is completely passive, with 2.75 acres. The park is in good condition and has a moderate level of use. Wagner Playground (#22), located at Junior High School 45, is completely active, with a total of 1.59 acres. It is in excellent condition and is heavily used. The Crack is Wack Playground (#11), named after a Keith Hering mural painted on a handball court wall, has a total of 1.37 active acres of open space, and is in good condition with moderate utilization.

The remaining 20 open spaces in the study area are less than one acre in size, and comprise five gardens, nine playgrounds, three parks, one triangle and three other open spaces. The five gardens are more passive than active open space, as are three of the parks. The nine playgrounds are more active than passive in nature. Alice Kornegay Triangle is an active open space. Of the passive open spaces, there is wide variation in terms of attractiveness and amenities. Some open spaces offer a pond, planting containers and benches, while others are landscaped spaces.

The remaining three open spaces include a housing complex sitting area (UPACA Houses), which contains 0.2 acres, a multi-purpose field (Eugene McCabe Field), which contains 0.789 acres, and a recreation facility (Wagner Houses Pool), which contains 0.808 acres. The UPACA Houses sitting area (#6) is a fenced-in sitting area adjacent to the UPACA Houses, with benches, a pathway and some grass and shrubs. It is in good condition and utilization is light. Eugene McCabe Field (#20), which is located on Park Avenue between East 120th Street and East 121st Street, is a multi-purpose soccer and football field with bleachers and tall fencing, which is used by the adjacent Public School 79. The field is an active open space resource that is open from sunrise until 9PM, and is in excellent condition. It is heavily used. The Wagner Houses Pool (#24) consists of an outdoor pool enclosed by an iron fence. The facility, located near the Triborough Bridge on 124th Street, between First and Second Avenues, is in good condition and has moderate utilization, based on the time of observation.

The closest open space to the project site, a tot lot on the southwest corner of East 127th Street and Third Avenue, provides a fenced open space with playground equipment for the users of the adjacent East End Job Center. It is located across Third Avenue from the project site. The tot lot contains approximately 0.11 acres of active open space that can only be accessed from inside the East End Job Center's grounds. It is not available to the public at large and the tot lot acreage is not included in the open space ratio calculations. Across the street to the north is the PS 30 playground, which is an asphalt play area with a jungle gym.

Quantitative Analysis of Open Space Adequacy

Residential (½-Mile) Open Space Study Area

As shown in Table 3.4-1, the open space study area contains 43.58 acres of public open space, which consists of 32.83 acres for active use and 10.75 acres for passive use. As stated above, the total residential population projection for 2007 is approximately 41,124, based on projecting to 2007 DCP's estimate of a 5.64 percent increase in the total population of the residential study area between 2000 and 2005. Therefore, the study area contains approximately 1.06 acres of open space per 1,000 residents. There are 0.8 acres of active open space per 1,000 residents, and 0.26 acres of passive open space per 1,000 residents.

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. With a combined worker and residential population of 51,273, the combined passive open space ratio in the residential study area is 0.21 acres per 1,000 persons, which is lower than the City's recommended weighted average ratio of 0.431 acres per 1,000 residents and workers. Data for worker, residential and combined worker and residential population are shown in Table 3.4-4.

New York City Department of City Planning's quantitative goals and measures for determining the adequacy of open and recreational spaces within a neighborhood include a citywide median ratio of 1.5 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 1.06 acres per 1,000 residents, is inadequately served by open space resources. However, it is recognized that DCP's citywide median ratio of 1.5 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. The proportional amount of open space and the ratio of acreage to population is also higher than in the majority of other Manhattan neighborhoods.

Non-Residential (¼-Mile) Open Space Study Area

The non-residential study area analysis focuses on passive open spaces that may be used by workers in the area. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive and total park space ratios are calculated. To assess the adequacy of the open spaces in the 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. In addition, the passive open space ratio for both workers and residents in the area is compared to the recommended weighted average ratio.

New York City Department of City Planning's open space guidelines call for 0.5 acres of passive open space per residents, or a combined weighted average ratio of open space per non-residents and residents of 0.416 acres for the residential open space study area. The weighted average combines the 0.15 acres per 1,000 non-residents 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 non-residents and a recommended weighted average ratio of 0.416 acres.

The non-residential open space study area contains 19.79 acres of public open space, or 14.52 acres dedicated to active use and 5.27 acres dedicated to passive use. A total of 20,897 residents live in this area, and 5,611 employees work within the non-residential study area. Therefore, the combined residential and worker population within this study area is 26,508 persons. Based on the data presented above, the non-residential study area has a ratio of 0.94 acres of passive open space per 1,000 workers, which is higher than the City's guideline of 0.15 acres (see Table 3.4-4). Therefore, compared to the City's guideline there is a sufficient proportion of passive open space within the non-residential study area to serve the worker population within the non-residential study area.

The non-residential open space study area currently has a ratio of 0.25 acres of passive open space per 1,000 residents, which is also higher than the City's guideline of 0.15 acres. When the residential and non-residential populations are combined, the passive open space ratio for residents and workers is 0.2 acres per 1,000 residents and workers, which is lower than the recommended weighted average ratio of 0.416 acres. As stated above, while there is a quantitative deficiency in passive open space to serve the combined non-residential and residential populations, according to DCP's guidelines, it is recognized that these are goals that are not feasible for many areas of the city and are therefore not considered impact thresholds.

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

Table 3.4-4: Existing Study Area Open Space Ratios Compared to DCP Open Space Guidelines

Indicator	Type	Existing Residents	Existing Workers	Existing Combined Total
½-Mile Study Area (Residential)				
Population		41,124	10,149	51,273
Open Space Acreage	Active	32.83	32.83	32.83
	Passive	10.75	10.75	10.75
	Total	43.58	43.58	43.58
Open Space Ratio (acres per 1,000 persons)	Active	0.8	4.3	0.64
	Passive	0.26	3.2	0.21
	Total	1.06	1.1	0.85
DCP Open Space Guidelines	Active	2.0	N/A	N/A
	Passive	0.5	N/A	0.431*
	Total	2.5	N/A	N/A

Table 3.4-4 Continued: Existing Study Area Open Space Ratios Compared to DCP Open Space Guidelines

Indicator	Type	Existing Residents	Existing Workers	Existing Combined Total
¼-Mile Study Area (Non-Residential)				
Population		20,897	5,611	26,508
Open Space Acreage	Active	14.52	14.52	14.52
	Passive	5.27	5.27	5.27
	Total	19.79	19.79	19.79
Open Space Ratio (acres per 1,000 persons)	Active	0.69	2.58	0.55
	Passive	0.25	0.94	0.20
	Total	0.95	3.52	0.75
DCP Open Space Guidelines	Active	N/A	N/A	N/A
	Passive	0.15	N/A	0.416*
	Total	N/A	N/A	N/A

Source: US Census Bureau, Summary File 1, 2000; New York City Department of City Planning, 2007.
*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.

Qualitative Assessment of Open Space Adequacy

Even though the existing open space ratio within the residential study area of 1.06 persons per 1,000 residents is below the 1.5 acres per 1,000 residents guideline, the deficiency of open space resources within the defined study area is ameliorated by several factors. A total of 22 out of the 26 open space resources in the study area were found to be in either good or excellent condition. Only seven of the 26 open space resources, or about a quarter of them, are heavily used. A wide variety of options for the open space user are also available, from sitting areas and walking paths to jungle gyms, basketball and handball courts, ball fields, indoor and outdoor swimming pools, areas to picnic and barbeque, and linear parks with regional connections.

The study area also has an expansive esplanade along the Harlem River Drive, the East River Esplanade, located at the eastern border of the study area. The East River Esplanade, also known as Bobby Wagner Walk, currently extends from 119th Street to 125th Street within the open space study area. The esplanade extends well beyond the study area to the south, along the Harlem and East Rivers, and contains pedestrian and bike paths, sitting areas and space for an array of other activities. There are currently plans to extend the esplanade north of East 125th Street in the near future. The expansion of the East River Esplanade to the north is explained in further detail in section 3.5.2 below, Future Without the Proposed Action.

3.4.2 FUTURE WITHOUT THE PROPOSED ACTION

Under the Future Without the Proposed Action condition, a considerable amount of new development is expected in both the non-residential and residential open space study areas. The new projects would increase the residential and worker populations and ultimately affect the open space ratios within each study area. The new development projects that are expected to be built under no-action conditions include: 1) construction of nine projected development sites resulting from DCP's 125th Street Rezoning and Related Actions project; 2) New York City Department of Housing Preservation and Development (HPD) projects; 3) community facility conversions on existing vacant land, which were identified in studies conducted for DCP's 125th Street Rezoning and Related Actions project, 4) two residential projects within the study area, known as The Kalahari and Fifth on the Park, and (5) a new big box retail project known as East River Plaza.

There are also two other known developments, where existing buildings would be converted to community facilities, one within the non-residential study area and the second within the residential study area. The first, which is located within the non-residential study area, is located at 220 East 125th Street (Block 1789, Lot 39) and is expected to be converted from a currently vacant fire house to a 27,776-square foot, education-related community facility. (See Chapter 3.1, "Land Use, Zoning and Public Policy," on Figure 3.1-3.) The conversion of a vacant building to a community facility is also expected to be constructed by 2012 in the residential study area and would occur independently of the proposed action. At 120 East 125th Street (Block 1773, Lot 62), this known development is expected to convert a currently vacant building to an 8,550-square foot community facility. These developments are described in Chapter 3.1, "Land Use, Zoning, and Public Policy."

One new open space project is expected to be completed by the build year of 2012, which is the extension of Harlem River Park. Harlem River Park currently ends at East 125th Street and is expected to be extended north to East 145th Street. The following section presents a discussion of open space resources in the year 2012, and residential and worker population changes that are expected to increase the demand for open space in the future under conditions without the proposed action.

Demographic Characteristics of the Open Space Study Area

With the anticipated no-action growth in the study area, and planned future developments, the population of the residential study area is projected to increase by 5,940 by 2012, growing from 41,124 residents under existing conditions to 47,064 residents under Future Without the Action conditions. As presented in Table 3.4-5, the non-residential population would ultimately increase from 20,897 workers in 2007 to 23,850 workers in 2012.

Table 3.4-5: Open Space Study Area Population Trends 2007 to 2012

	Existing Population (2007)	New Dwelling Units	Population Increase	Future Without the Action Condition Population (2012)
Residential Study Area Population	41,124	2,194	5,940	**47,064**
Non-Residential Study Area Population	20,897	1,149	2,953	**23,850**

Source: US Census Bureau, Summary File 1, 2000[2]

Residential (½-Mile) Study Area Demographics

Residential population increases have been projected based on four categories of anticipated development. HPD-assisted projects would result in approximately 1,186 new units of housing in the residential study area, resulting in an addition to the population of the residential study area of approximately 3,048 persons. Of these units, 631 would also fall within the non-residential study area, while the remaining 555 fall only within the residential study area. Development of projected development on Reasonable Worst Case Development Scenario (RWCDS) sites resulting from DCP's 125th Street Rezoning and Related Actions project would result in development of an additional 518 dwelling units in the non-residential study area, and an additional 117 units within the residential study area, for a total of 635 dwelling units from that rezoning action, equating to approximately 1,632 new residents. Two known residential developments, the Kalahari and Fifth on the Park, would add a total of 490 dwelling units, housing an estimated 1,260 persons. Combined, the known developments, HPD developments, and RWCDS developments anticipated by 2012 would be expected to increase population in the non-residential study area by 2,953 persons, or a 16 percent increase in population, bringing total non-residential study area population to 23,850 persons in the Future Without the Proposed Action.

With the anticipated growth in the study area described above, the population of the residential study area is projected to increase by 5,940 by 2012. As a result, the population of the residential study area is projected to increase from 41,124 residents under existing conditions to 47,064 residents under 2012 conditions. The worker population would increase to 14,691 persons. By 2012, the total population of the residential study area, including workers and residents, is estimated to be 61,150 persons.

[2] Population projections are calculated by using a multiplier, which is Community District 11's average household size of 2.57 persons per household, based on data from the New York City Department of City Planning, 2007.

Table 3.4-6 summarizes the sources of anticipated residential population increase under Future Conditions Without the Action for the non-residential and residential study areas.

Table 3.4-6: Future Without the Action Condition
Population Estimates by Development Type

Population Source	Non-Residential Study Area	Residential Study Area
Existing Condition (2007) Population	20,897	41,124
HPD Projects	1,622	3,048
RWCDS Projects	1,331	1,632
Other Known Projects	---	1,260
Total	23,850	47,064

Source: New York City Department of Housing, Preservation and Development, 2007; New York City Department of City Planning, 2007; Census Bureau Summary File SF1, 2000; STV, Inc., 2007.

Non-Residential (¼-Mile) Study Area Demographics

The non-residential study area population is expected to increase by 2,953 persons with combined HPD, known developments, and projects expected from DCP's 125th Street rezoning. There would be a 16 percent increase, bringing total non-residential study area population to 23,850 persons in the Future Without the Proposed Action. With an increase of 2,362 workers, the combined residential and worker population would be approximately 31,823 persons in the Future Without the Proposed Action.

Inventory of Publicly Accessible Open Space

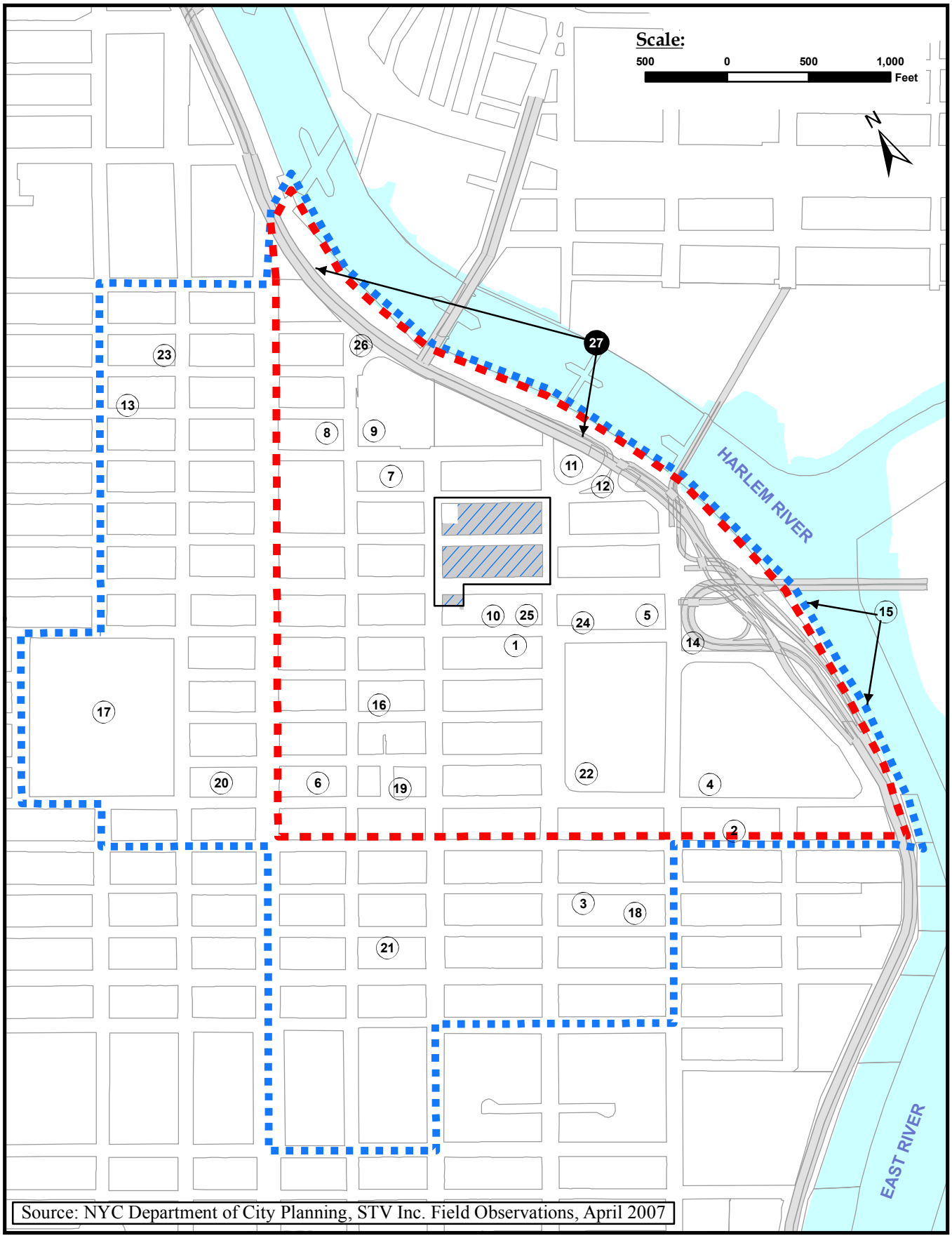
Under future conditions without the proposed action, one large open space resource is expected to be added to the existing inventory of publicly accessible open space within the non-residential and residential open space study areas. This addition is the expansion of Harlem River Park, which will include approximately 3.1 acres, comprising 2.3 acres of passive open space and 0.8 acres of passive open space. Therefore, in the Future Without the Proposed Action conditions, there would be an increase of approximately 3.1 acres of total open space within the open space study area.

In addition, one existing open space, Harry's Playground, would be removed as a result of a planned no-action project by HPD on a ten-lot site that contains the playground. Harry's Playground is located at East 124th Street between Second and Third Avenue and is a 0.3-acre open space resource containing 0.24 acres of active open space and 0.06 acres of passive open space.

The loss of 0.3 acres with the development of Harry's Playground, plus the addition of approximately 3.1 acres of open space would result in a total net addition of approximately 2.8 acres in the open space study area. The inventory of Future Without the Proposed Action publicly accessible open spaces are presented in Table 3.4-7 and the locations of these resources are shown on Figure 3.4-3.

Table 3.4-7: Open Space Changes Under Future Conditions Without the Proposed Action

Map Key #	Name / Address	Owner	Description	Hours of Access	Acreage		
					Total	Active	Passive
27	Harlem River Park Extension Harlem River Drive, East 138th to 145th Street (Phase 2)	NYC DPR	Bike and Pedestrian Paths, benches, landscaping	Sunrise to 1AM	3.10	2.30	0.80
25	Harry's Playground East 124th Street, Second to Third Avenue	NYC HPD	Playground: separated from Dream Street Park by greenhouse; basketball court with bleachers	8AM to Dusk	-0.3	-0.24	-0.06
Total Future Acreage Increase:					**3.10**	**2.30**	**0.80**
Total Future Acreage Decrease:					**0.30**	**0.24**	**0.06**
Total Future Acreage Net Increase:					**2.80**	**2.06**	**0.74**
Total 2007 Existing Open Space Acreage:					**43.58**	**32.83**	**10.75**
Total 2017 Future Without the Action Condition Open Space Acreage:					**46.38**	**34.89**	**11.49**



Legend

- (1) Existing Open Space Resource
- (27) Future Open Space Resource
- Project Site
- Rezoning Area
- Commercial Study Area
- Residential Study Area

Figure 3.4-3 - Open Space Resources in the Future Without the Action

East 125th Street Development EIS

NYC Economic Development Corporation

STUDY AREA OPEN SPACES

The New York City Department of Parks and Recreation and the New York City Economic Development Corporation plan to extend Bobby Wagner Walk (#27), otherwise known as Harlem River Park, north from East 125th Street, where it currently ends, to an existing waterfront greenway at East 135th Street, and then from East 138th Street where the waterfront greenway ends to the 145th Street Bridge at the tip of the residential study area boundary. The extension of Harlem River Park would bridge the gap of the existing open space esplanade along the East River from East 125th Street north to the edge of the residential study area boundary at the 145th Street Bridge. Harlem River Park is expected to be mostly active, with bicycle and pedestrian paths, but would also have benches for sitting and landscaped areas. When completed, the park is expected to provide an attractive area for recreation, relaxation and exercise, while furthering New York City's goal of a continuous greenway around Manhattan.

The Harlem River Park extension consists of three phases, which are:

1) Phase 1, the recently completed construction of a waterfront park. It is located from East 135th Street to East 139th Street. The new waterfront park is in good condition, but is not connected to Bobby Wagner Walk to the south at East 125th Street. For this reason, it is not easily accessible to pedestrians in the area.

2) Phase 2 and 2a - Phase 2 is currently under construction and is expected to span from East 139th Street to East 143rd Street. Construction on Phase 2a is expected to begin by the end of 2007 and will be located from East 143rd Street to East 145th Street. Phase 2 is under the jurisdiction of NYCDPR. Phase 2a is under the jurisdiction of the New York City Economic Development Corporation (NYCEDC).[3] Construction on Phase 2 is expected to take approximately 18 months and be completed by the end of 2008. Landscaping and bikeway implementation for Phase 2a is expected to be complete within the year, with final construction to be completed by 2012.

3) Phase 3 includes the development of the waterfront from East 125th Street to East 135th Street. This land is being used by NYCDOS, and NYCDOT for the reconstruction of the Willis Avenue, Third Avenue and Madison Avenue Bridges. Upon completion of the bridge reconstruction work in 2016, both NYCDOT and NYCDOS plan to cede their land to the NYCDPR, which will then turn the space into a waterfront park and greenway. The New York City Department of Parks and Recreation expects the entire East River Esplanade system to be complete by 2018.[4]

The portion of this waterfront greenway that is expected to be completed by 2012 and included in the open space inventory under the Future Without the Action comprises Phases 1, 2 and 2a,

[3] Dan Zarilli, New York City Economic Development Corporation, August 10, 2007.

[4] Tom Lunke, Harlem Community Development Corporation, Testimony to the New York City Council Committee on Waterfronts, April 28, 2006 (see following website: http://www.eastharlempreservation.org/docs/CC_Waterfronts_Committee_Testimony.pdf).

which is located from East 135th Street to East 145th Street. These three elements are all included in the open space inventory.

Overall, with the expansion of the Harlem River Park and the removal of one of the existing open space resources under 2012 Future Without the Action conditions, the net additional open space is expected to result in a net increase of approximately 2.8 acres of open space, including 2.06 acres of active recreation space and 0.74 acres of passive open space.

The above-described open space changes are expected to increase the amount of open space in the residential open space study area to approximately 46.38 acres of publicly accessible open space, including 34.89 acres of active space and 11.49 acres of passive space. This compares to 43.58 total acres of open space under 2007 existing conditions, comprising 32.83 acres of active open space and 10.75 acres of passive open space. Approximately 75 percent of the open space resources in the future without the action are expected to be dedicated to active recreation, with 25 percent dedicated to passive recreation. Refer to Table 3.4-7 for a summary of the Future Without the Proposed Action open space acreage.

Quantitative Analysis of Open Space Adequacy

Residential (½-Mile) Open Space Study Area

Increases in both the study area population and available acreage of open space resources would ultimately affect the open space ratios under 2012 Future Without the Proposed Action conditions. For the projected population of 47,064 residents under 2012 conditions, the available open space ratio would be 0.99 acres per 1,000 residents, a decrease of 0.07 acres over existing conditions. The available active open space ratio would be 0.74 acres per 1,000 residents, a decrease of 0.06 acres from existing conditions. The passive open space ratio would be 0.24 acres per 1,000 residents, a decrease of 0.02 acres.

As described above, new developments in the study area are expected to introduce new residents to the area in the future without the proposed project, resulting in a decrease in the open space ratios. The ratios (measured in acres per 1,000 residents and workers) would decrease in the future without the proposed project from 0.21 acres under existing conditions to 0.19 acres in the future without the proposed project. The recommended weighted average ratio would decrease to 0.419 acres per 1,000 residents and workers. Therefore, the shortfall of passive open space would continue in the Future Without the Action condition in 2012. Considering only the worker population, the passive open space ratio would decrease from 1.1 acres per 1,000 workers to 0.82 acres and would remain higher than the 0.15 acres per 1,000 workers recommended by DCP.

Non-Residential (¼-Mile) Open Space Study Area

Major open space development projects expected to be developed in the future would be available within both the residential and non-residential study areas. Thus, the total additional acreage in the non-residential study area would also include the expansion of Harlem River Park, as described above, for a net total of 2.8 acres of additional open space. However, the population is also expected to increase, and as a result, study area active and passive open space ratios are expected to decrease under Future Without the Proposed Action conditions.

Summary

Table 3.4-8 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 3.4-8: 2012 Study Area Open Space Ratios and DCP Open Space Guideline Comparison

Indicator	Type	No-Build Residents	No-Build Workers	No-Build Combined Total	Existing Conditions Combined Total
½-Mile Study Area (Residential)					
Population		47,064	14,086	61,150	51,273
Open Space Acreage	Active	34.89	34.89	34.89	32.83
	Passive	11.49	11.49	11.49	10.75
	Total	46.38	46.38	46.38	43.58
Open Space Ratio (acres per 1,000 persons)	Active	0.74	2.48	0.57	0.57
	Passive	0.24	0.82	0.19	0.21
	Total	0.99	3.29	0.76	0.78
DCP Open Space Guidelines	Active	2.0	N/A	N/A	N/A
	Passive	0.5	N/A	0.419*	0.431*
	Total	2.5	N/A	N/A	N/A
¼-Mile Study Area (Non-Residential)					
Population		23,850	7,973	31,823	26,508
Open Space Acreage	Active	16.36	16.36	16.36	14.52
	Passive	6.01	6.01	6.01	5.27
	Total	22.37	22.37	22.37	19.79
Open Space Ratio (acres per 1,000 persons)	Active	0.69	2.05	0.51	0.55
	Passive	0.25	0.75	0.19	0.20
	Total	0.94	2.81	0.70	0.75
DCP Open Space Guidelines	Active	N/A	N/A	N/A	N/A
	Passive	0.15	N/A	0.412*	0.416*
	Total	N/A	N/A	N/A	N/A

Source: US Census Bureau, Summary File 1, 2000; New York City Department of City Planning, 2007.
*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.

The table shows that the total open space ratio for residents in the Future Without the Proposed Action is 0.99 acres per 1,000 residents in the residential study area and 0.94 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. Therefore, the total open space acreage is less than the recommended ratio in both the residential and non-residential study areas. For the total open space ratio for the combined population in the Future Without the Proposed Action conditions, the ratio of 0.70 acres per 1,000 residents and workers is below the threshold recommended by DCP.

Qualitative Analysis of Open Space Adequacy

The completion of new waterfront open spaces and new ballfields in the residential and non-residential study areas is expected to increase the amount of available open space, as well as broaden the types of available open space with new bicycle and pedestrian pathways, ballfields, waterfront esplanade, and seating areas. Harlem River Park would provide a new open space resource for neighborhood residents, workers, and visitors, while connecting the East Harlem community to other neighborhoods such as the Upper East Side and Spanish Harlem to the south and Washington Heights to the north via the waterfront. 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 Thomas Jefferson Park, a 15-acre park located east of First Avenue between East 111th and East 114th Streets, and Central Park, an 843-acre park located between 59th Street and 110th Street, Fifth Avenue, and Eighth Avenue. These parks would continue to be available to area residents and would continue to offset to some degree the shortfalls in open space resources that would exist in the immediate vicinity of the project site; however, they are not counted in the quantitative analysis.

3.4.3 FUTURE WITH THE PROPOSED ACTION

The proposed East 125th Street Development and its associated rezoning would introduce approximately 1,000 new dwelling units to the project site and ½-mile open space study area by 2012. Based on the Community District average household size of 2.57 persons per household, the 1,000 new dwelling units are expected to add approximately 2,570 new residents to the study area. In addition, the proposed office, retail and other commercial space would be expected to generate an additional approximately 2,775 workers to the area. This section evaluates the effects of the new residential and worker population on open space resources.

Proposed Open Space Resources

The proposed action includes new passive recreation open space in a midblock plaza that would extend from East 125th Street to East 126th Street on Parcel B, and a portion of Parcel A just north of East 127th Street. This plaza would include sitting areas and areas for events, or outdoor performances. Approximately 2,500 square feet of passive public open space is proposed on Parcel A, and approximately 10,000 square feet of passive public open space is proposed for Parcel B. The public open space on Parcel A would primarily be oriented to the residential use proposed on that block but would be open to the public. The open space on Parcel B would most directly serve the commercial and cultural uses that are proposed, but would also be publicly accessible.

The Parcel B open space would function as a small public square, offering a variety of places for workers, and residents and visitors of all ages to walk, sit, eat, or play. It is intended, in part, to support a variety of commercial and non-commercial activities both within and at the edges of the plaza, such as space for moveable food stands, local retail kiosks, and booths for local artists and artisans. The Parcel B open space would also serve residents and patrons of stores and commercial venues that could be open at night such as a cinema, a hotel and restaurants. This space would provide a center for night life that would increase pedestrian activity at night.

In addition to the publicly accessible open space at ground level, the project includes rooftop passive open space atop the retail base of the mixed-use buildings on Parcel A and Parcel B that would be accessible to those residing and working at the project site. Such private open space may include rooftop gardens with areas for seating and planting.

Under Future Conditions With the Action, the total amount of open space within the ½-mile study area would increase by 12,500 square feet of passive open space, or 0.29 acres. This would increase the total supply of open space within the ½-mile study area from approximately 46.38 acres of publicly accessible open space in the Future Without the Action condition (including 34.89 acres of active space and 11.49 acres of passive space) to 46.67 acres of publicly accessible open space, with 34.89 acres dedicated to active recreation and 11.78 acres dedicated to passive recreation. The 0.29 acres of proposed open space represents 0.7 percent of the 43.58 total existing acres in the open space study area.

Population Estimates

The proposed action is expected to result in a net increase in worker population that would exceed the CEQR threshold of 500 workers for requiring an open space analysis of the worker population. Therefore, an analysis of the future open space demand of the future worker population is warranted and the open space analysis addresses open space for study area residents and workers.

Residential Open Space Study Area Population Estimates

The proposed action is expected to result in an increase of approximately 2,570 new residents to the residential open space study area. By the analysis year 2012, the residential study area would increase from 47,064 residents under future no-action conditions to 49,634 under future action conditions. In addition, the proposed action would add a net increment approximately 2,775 new workers to the residential study area. The new workers generated by the proposed action would increase the worker population in the residential open space study area from 14,086 workers in the future no-action scenario to 16,861 workers in the future action scenario. Table 3.4-9 below outlines the increase in residential and worker populations in the residential open space study area.

Table 3.4-9: Future Action (2012) Residential Study Area Projected Population

	Residential Population			Worker (Non-Residential) Population		
	Projected Future No-Action Res. Pop.	**Projected Future Action Res. Pop. Increase**	**Projected Future No-Action Res. Pop.**	**Projected Future No-Action Worker. Pop.**	**Projected Future Action Worker. Increase**	**Projected Future Total Worker Pop.**
Study Area Population	47,064	2,570	**49,634**	14,086	2,775	**16,861**

Non-Residential Open Space Study Area Population Estimates

The increase in the residential population generated by the proposed action and included in the residential open space study area (approximately 2,570 new residents), would also fall within the non-residential open space study area. This increase would result in a total increase from 23,850 persons under future no-action conditions to 26,420 persons under future action conditions. Similarly, the 2,775 workers generated by the proposed action and discussed above in the residential open space study area would be included within the non-residential open space study area. The worker population in the non-residential open space study area is estimated to increase from 7,973 under future no-action conditions to 10,748 under future action conditions. The table below outlines the increase in population from both future No-action and With Action scenarios within the nonresidential study area.

Table 3.4-10: Future Action (2012) Non-Residential Study Area Projected Population

	Residential Population			Worker (Non-Residential) Population		
	Projected Future No-Action Res. Pop.	**Projected Future Action Res. Pop. Increase**	**Projected Future No-Action Res. Pop.**	**Projected Future No-Action Worker. Pop.**	**Projected Future Action Worker. Increase**	**Projected Future Total Worker Pop.**
Study Area Population	23,850	2,570	**26,420**	7,973	2,775	**10,748**

Quantitative Analysis of Open Space Adequacy

Table 3.4.-11 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 2012.

Table 3.4-11: Future Action (2012) 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
Non-Residential Study Area										
Non-residents	10,748	22.66	16.65	6.3	N/A	N/A	0.59	N/A	N/A	0.15
Combined non-residents and residents	37,168				N/A	N/A	0.17	N/A	N/A	0.413*
Residential Study Area										
Residents	49,634	46.67	34.89	11.78	0.94	0.70	0.24	2.5	2.0	0.5
Combined non-residents and residents	66,495				N/A	N/A	0.18	N/A	N/A	0.411*

*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.

Residential Open Space Study Area

With a population of 49,634 and 46.67 total acres of open space, the residential study area total (active and passive) open space ratio would be 0.94 acres per 1,000 residents under 2012 future With Action conditions. This would be a decrease of 0.05 acres per 1,000 residents compared to the Future No-Action total ratio and substantially below the DCP guideline of 2.5 acres per 1,000 residents. The active open space ratio would be 0.70 acres per 1,000 residents, a decrease of 0.04 acres per 1,000 residents compared to future no-action of 0.74 active open space ratio. The passive open space ratio would be 0.24 acres per 1,000 residents, similar to the future no-action passive open space ratio. The active open space ratio of 0.70 is lower than DCP's guideline of 2.0 active acres per 1,000 residents and the passive open space ratio of 0.24 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 would decrease from 0.19 acres per 1,000 combined workers and residents under future no-action conditions to 0.18 acres per 1,000 combined workers and exceeds the recommended weighted average ratio of 0.411 acres per 1,000 workers and residents.

Non-Residential Open Space Study Area

The non-residential study area passive open space ratio would be 0.59 acres per 1,000 nonresidents under future action conditions. This would be a decrease of 0.16 acres per 1,000 nonresidents compared to the future no-action ratio of 0.75 acres per 1,000 non-residents, but above 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 decrease from 0.19 acres per 1,000 combined workers and residents under future no-action conditions, to 0.17 acres per 1,000

combined workers and residents and is below the recommended weighted average ratio of 0.413 acres per 1,000 workers and residents.

As shown in Table 3.4-12, the percentage changes in open space ratios vary from a de minimus decrease for the passive open space ratio in the Residential Study Area to a decrease of over 21 percent for passive open space in the Non-Residential Study Area. However, the DCP guideline is still exceeded for the Non-Residential Study Area passive open space, so this decline is not significant. Similarly, the total population ratio in the non-residential study area would also decline, but would be ameliorated by the broader geographic availability and quality of new open spaces developed during the no-action condition to mitigate the potential for significant adverse impact. With respect to the reductions in open space within the residential study area all open space ratios remain below DCP guidelines under all conditions. The total decline in the residential study area would be 5.05 percent; the reduction in active open space would be 4.05 percent. However, the open space ratios would remain near the guideline of 0.411 (refer to Table 3.4-12).

Table 3.4-12: Future With the Proposed Action – Open Space Ratios Summary

Ratio	DCP Guideline	No-Action Ratio	With-Action Ratio	Percent Change
Residential Study Area				
Total/residential	2.5	0.99	0.94	- 5.05
Passive/residential	0.5	0.24	0.24	0
Active/residential	2.0	0.74	0.70	- 5.40
Non-Residential Study Area				
Passive/non-residential	0.15	0.75	0.59	- 21.33
Passive/total population		0.19	0.17	- 10.53

*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 are calculated.

Qualitative Analysis of Open Space Adequacy

The proposed action would not result in significant adverse impacts on open space. While the amount of total and active open space resources in the study area are and would continue to be deficient in comparison to DCP guidelines, the quality of park and recreational space in the study area, as well as the availability of high quality regional open space resources located just outside of the residential study area, would help offset this quantitative deficit. Projects such as the East River Esplanade expansion along the Harlem River, which will connect the 125th Street Corridor area to a vastly larger network of open space, would help improve the pedestrian, visual and nonmotorized vehicle connections to the Harlem River Waterfront and beyond. The development of waterfront open space open would help alleviate the effects of the action generated population on study area open resources.

As noted above, the proposed action would neither result in any direct displacement of existing open space resources in the study area, nor would the proposed action significantly exacerbate

the deficiency in open space. Proposed on-site passive open space would help to offset the increased residential population's additional demand on the study area's open space resources. As described in the Shadows chapter, the proposed action would result in significant adverse shadow impacts on open space resources in the Study Area, including the PS 30 Playground, located on the east side of Third Avenue at East 127th Street. Most of the shadow impact on the PS 30 Playground would result from the reasonable worst case development scenario pertaining to the off-site parcel (Block 1791, Lot 44, currently the United Moravian Church) that is to be rezoned only, with no actual development proposed at this time.

It is recognized that the shortage of active open space within the residential study area results in an active open space ratio (0.71) that is below DCP's guideline of 2.0 acres of active space per 1,000 residents. As described above in the demographic profile of the residential study area, 27.7 percent of all people within the residential study area are age 17 or younger, and are more likely to be users of active recreation amenities. Projects such as the Harlem River Ballfields would help to ameliorate the effects of the decreased active open space ratio in both the residential study area in the Future Action Scenario. The project site is in close proximity to major planned open space developments that are expected to be implemented by the build year of 2012. This would minimize the effect of the proposed action on other parks and open spaces in the study area, particularly the identified shortage of active open space in the residential study area. Other attractive open spaces for both passive and active uses are likely to attract residents who would be expected to take advantage of a greater portion of the park than just the space that lies within the study area boundary. Further, several large regional open space resources lie partially or completely outside the study area and have active open space amenities that are accessible to residents within the study area. The proximate location of these large regional open space resources would serve to moderate the shortfall of active open space resources identified in the residential study area. The large regional open space resources that are nearby with active open space resources available to residents of the residential study area include: Central Park, located to the southeast of the study area boundary, and Randall's Island Park, located to the east of the study area.

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 large open space resources in the vicinity of the open space study area all add to the open space conditions under existing, no-build and build scenarios. The open space study area has a significant amount of existing open space in comparison to many other areas in Manhattan and should continue to have sufficient open space resources in the future. Significant adverse impacts to open space would not result from the proposed action.