A. INTRODUCTION

This analysis of potential open space impacts was conducted based on methodologies contained in the *City Environmental Quality Review (CEQR) Technical Manual*. According to CEQR, the first step is to take an inventory of all publicly accessible recreational facilities within a defined study area. The study area is based on the distance a person is assumed to walk to reach a neighborhood open space. Workers or other daytime populations are assumed to walk approximately 10 minutes (about a ¼-mile distance) and residents are assumed to walk about 20 minutes (about a ½-mile distance) to reach neighborhood open spaces. Because the proposed project would increase the residential population on the project site by more than 200 residents (the *CEQR Manual* threshold for an analysis of residential open space ratios), a detailed residential open space analysis with a ½-mile study area has been undertaken. An assessment of combined open space ratios (residents and day time population) is provided within the ½-mile study area as part of the residential open space analysis. In addition, because the reasonable worst-case development scenario would increase the daytime population by more than 500 workers and students (the *CEQR Manual* threshold for a commercial open space analysis), a detailed analysis of commercial open space ratios within a ¼-mile was undertaken.

According to the *CEQR Technical Manual* methodology, the open space study areas comprise all census tracts that have 50 percent of their area located within either ¼-mile or ½-mile of the project site. Within the open space study areas, all publicly accessible open spaces are inventoried to determine their character, condition, and acreage. Open spaces located within a ¼ or ½-mile of the project site, but within a census tract having less than 50 percent of its area located within a ¼- or ½-mile of the project site are generally not included quantitatively in the open space assessment but are discussed qualitatively. However, the southwest corner of Central Park is located within a ½-mile radius of the project site. Central Park comprises its own census tract and only an extremely large project would include any of this acreage within the open space inventory according to the *CEQR Manual* methodology. As Central Park is an extremely attractive open space and would be used by many residents within the open space study area, the portion of the park that falls within the ½-mile boundary is included in the open space study area to provide an accurate portrayal of open space resources used by the study area population. To be conservative in this analysis, a portion of the population of Census Tract 137 (approximately 44 percent) is included in the study area population to represent the persons that fall within the ½-mile boundary that would also likely be using the study area's open space resources. Open spaces within the study area are differentiated between acreage dedicated to active and passive recreation. Active open spaces have facilities for organized games, children's equipment, basketball, handball, fields, and playgrounds. Passive open spaces are characterized by gardens, walkways, and benches, perhaps with tables and board games (e.g., chess tables).

The number of potential users of these open spaces is determined based on the most recent (2000) census data. With an inventory of available resources and potential users, the adequacy of open

space is then assessed both quantitatively and qualitatively. The quantitative analysis computes the ratio of open space acreage to the population and compares this ratio with CEQR guidelines. CEQR suggests a comparison with the median community district open space ratio in New York City, which is 1.5 acres per 1,000 residents. In areas which are underserved in terms of open space, even a decrease of 1 percent may be considered a significant adverse impact. In addition, as an optimal planning goal, the City seeks to achieve a ratio of 2.5 acres per 1,000 residents of which 80 percent (2.0 acres) is active space and 20 percent (0.5 acres) is passive space. For nonresidential populations, the City considers 0.15 acres of open space per 1,000 workers to represent a reasonable amount of open space resources for that population. An additional open space measure that is used is a 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. This measure varies depending upon the number of residents and workers in the study area, and is 0.29 acres per 1,000 workers and residents in the existing condition. It is recognized that these goals are not feasible for many areas of the City, and they are not considered impact thresholds. Rather, these are benchmarks indicating how well an area is served by open space.

B. DETAILED ASSESSMENT

EXISTING CONDITIONS

OPEN SPACE USER POPULATION

Population data for the study area is presented in Table 5-1. As shown below, under existing conditions, there are approximately 15,032 residents and 28,972 workers and students in the ¼-mile study area, and 61,541 residents and 89,516 workers and students in the ½-mile open space study area.

Table 5-1
Existing Resident and Daytime Populations

Tract	Resident Population	Worker Population
129	4,457	8,155
133	5,805	4,490
135	3,505	8,835
139	9,795	5,380
145	4,411	10,205
147	2,231	1,500
149	5,956	9,840
151	7,091	4,035
153	9,040	7,915
155	6,256	1,940
317.02	3	1,635
137 (44%)	2,991	16,086
Other Daytime Population[1]	NA	9,500
Total Population (¼-mile study area)	**15,032**	**28,972**
Total Population (½-mile study area)	**61,541**	**89,516**

Notes: [1] This is the approximate combined daytime enrollment at John Jay College of Criminal Justice, Fordham University's Manhattan campus, New York Institute of Technology, and Juilliard School of Music

[2] The ¼-mile study area population includes Census Tracts 135, 147, 151, and one half of 145. The "Other Daytime Population," is also included

Source: U.S Census of Population and Housing, 2000; 1990 Reverse Journey to Work Data, NYCDPR

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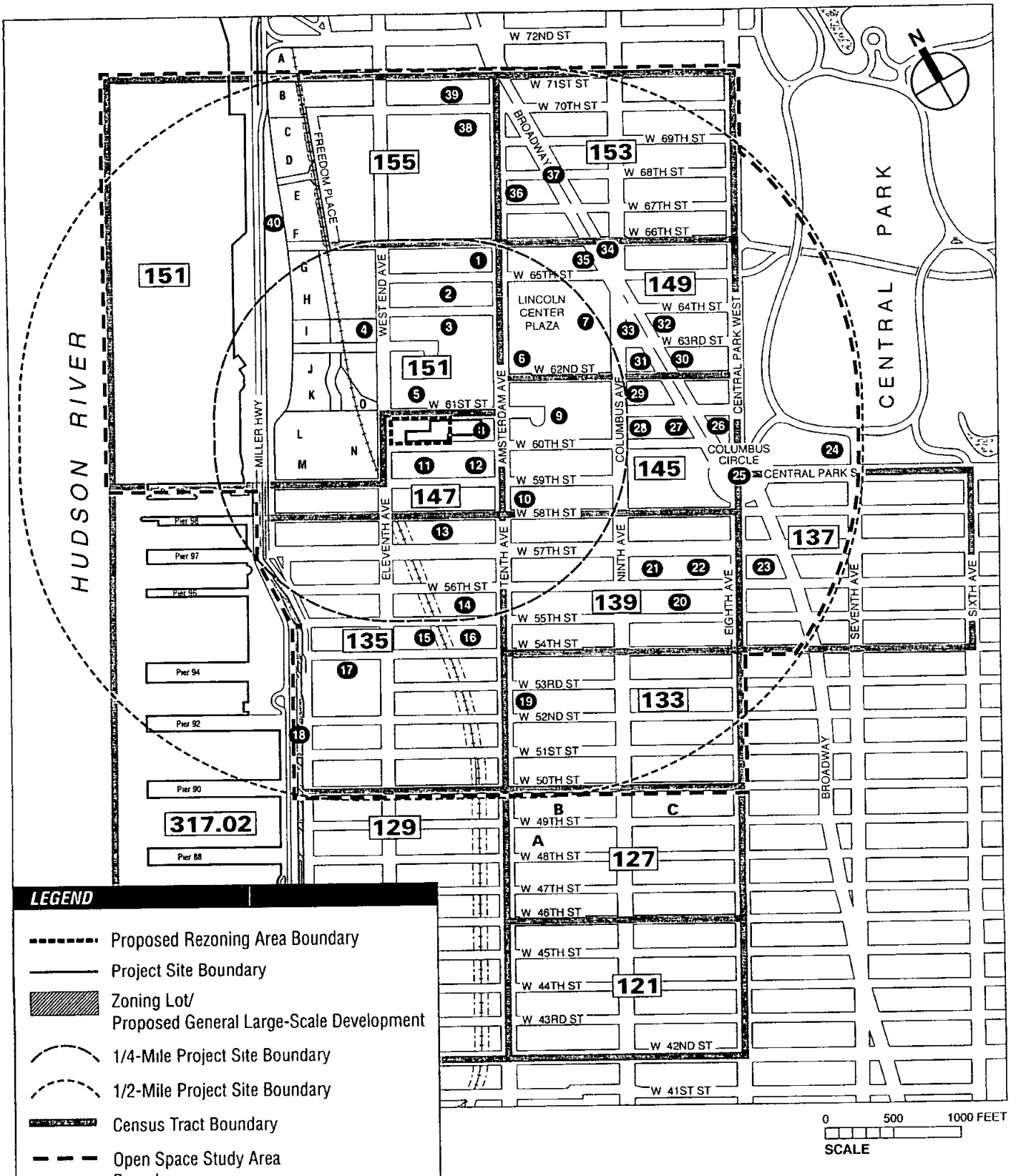

LEGEND

- Proposed Rezoning Area Boundary
- Project Site Boundary
- Zoning Lot/ Proposed General Large-Scale Development
- 1/4-Mile Project Site Boundary
- 1/2-Mile Project Site Boundary
- Census Tract Boundary
- Open Space Study Area Boundary
- 129 Census Tract Number
- 1 Open Space Resource
- A Open Space Resource Outside Study Area

Open Space Resources
Figure 5-1

Age of Open Space User Population

At approximately 75 percent, people between the ages of 20 and 64 make up the vast majority of the residential population in the study area (see Table 5-2). Children and teenagers (0-19 years old) account for approximately 12 percent of the entire residential population. Persons who are 65 and older account for the remaining 13 percent of the study area population. The two populations expected to utilize the open spaces the most (children and the elderly) make up the smallest percentages of the residential population; therefore, the residential population would not impose a disproportionately heavy burden on open spaces in the study area.

Table 5-2
Residential Population by Age—½-Mile Study Area

Age Category	Persons	Percent of Total Population
4 and Younger	2,221	3.59
5-9	1,538	2.50
10-14	1,372	2.23
15-19	1,808	2.94
20-64	46,350	75.32
65 and Older	8,261	13.42
Total Population (½-mile study area)	**61,541**	**100.00**
Source: U.S. Census of Population and Housing, 2000.		

OPEN SPACE INVENTORY

The open space study area, which extends roughly ½ mile from the project block, contains a total of 40 open spaces, with approximately 71 acres of open space. Of this total, 19.11 acres are active and 52.19 acres are passive space (see Table 5-3 and Figure 5-1). The open spaces consist of a mix of small plazas with landscaping and seating, city playgrounds, community gardens, larger city parks with a mix of passive and active recreational facilities, and bikeways/walkways. Some of the larger open spaces are described below.

De Witt Clinton Park

This 5.8-acre park occupies two blocks between 52nd and 54th Streets from Eleventh Avenue to Twelfth Avenue in a largely industrial/auto-related area of West Clinton. Although it has benches and plantings that make it suitable for passive recreation, most of the park is occupied by facilities for active recreation, including ball fields, basketball courts, handball courts, and a playground. The ball fields, which have lights and bleachers, are the most heavily used facilities. The Erie Canal playground has been renovated with climbing rocks and colorful play equipment, including a jungle gym and swings. Maria Clinton's perennial garden is located at the southern end of the park.

Table 5-3
Open Space Inventory

Map Ref.	Name/Address	Owner/ Agency	Features	Acres of Active Open Space	Acres of Passive Open Space	Utilization
Open Spaces Within ¼-Mile Boundary						
1	Martin Luther King Jr. High School	NYCBOE	Seating, planters, sculpture		1.0	High
2	James Felt Plaza	NYCHA	Seating, plantings, children's playground reserved for tenants		0.1	Low
3	Amsterdam Houses Playground/Samuel N. Bennerson Playground	NYCDPR	Playground, basketball courts, plantings, seating	0.5	0.3	High
4	West End Towers Park	West End Tower	Animal art, lighting, lawns, playgrounds, benches, trees and plantings	1.2	0.5	High
5	Amsterdam Houses Open Space	NYCHA	Seating, plantings, playground	1 2	1 3	High
6	Damrosch Park	NYCDPR	Bandshell, plantings, seating		2.4	Heavy
7	Lincoln Center Plaza	NYCDPR	Seating, fountain, sculpture		3.8	Heavy
8	P.S. 191 Amsterdam School	NYCBOE	Plantings, seating, paved courts, playgrounds	0.6		Low
9	Fordham University Plaza	Fordham University	Benches, trees, flowers, lawn, sculptures		3.0	Low
10	St. Luke's-Roosevelt Hospital Entrance Plaza	St. Luke's/ Roosevelt Hospital	Trees, planters, benches, flowers		0.08	Moderate
11	W. 59th Street Recreation Center	NYCDPR	Indoor and outdoor pools, multi-use gym, paved outdoor area	0.9		Low
12	Public Plaza 59th between Amsterdam and West End Avenues	Columbus/ Amsterdam Associates	Benches, trees, play equipment, spray shower.		0.05	Moderate
13	555 W. 57th Street	555 W. 57th Street Associates	Seating, plantings		0.5	Moderate
14	Amsterdam Plaza at Harborview Terrace	NYCHA	Planting, seating, playgrounds, paved sports courts	0.8	1.3	Moderate
			Total (Within ¼-Mile Boundary)	**5.2**	**14.33**	

Table 5-3 (cont'd)
Open Space Inventory

Map Ref.	Name/Address	Owner/ Agency	Features	Acres of Active Open Space	Acres of Passive Open Space	Utilization
Open Spaces Within ½-Mile Boundary						
15	Clinton Towers Plaza/790 Eleventh Avenue	P&L Management & Consulting	Trees, benches, plantings, children's basketball court, slides	0.1	0 3	Low
16	Harborview Terrace Plaza/530 West 55th Street	NYCHPD	Seating, plantings, flowers		0.1	Moderate
17	De Witt Clinton Park	NYCDPR	Lighted ball fields; basketball courts, benches; plantings and trees	4.7	1.2	Heavy
18	Route 9A		Bikeway, walkway	0.4	0.3	
19	P.S. 111 Playground	NYCBOE	Playground, basketball courts, paved ball field	0 7	0.1	Low
20	330 W. 56th Street	Berkley Associates	Concrete seating, trees, planters		0.06	Low
21	Balsey Park	Rose 29 LLC	Gardens, lawn, toddler play area, food kiosk, seating	0.1	0.2	High
22	Parc Vendome/ Sheffield Plazas (322/350 W. 57th St.)	Southcroft Company	Seating, plantings		0.5	Moderate
23	Symphony Plaza 1755 Broadway	Broadway and 56th Street Associates	Seating, plantings, café space		0 1	Heavy
24	Central Park (portion within ½-mile of project site)	NYCDPR	Trees, lawns, walking paths, benches, ball field, jogging and bicycling routes	2.65	23.85	High
25	Columbus Circle	NYCDPR	Statue, benches		0.2	High
26	Dale F. Frey Plaza	Trump International Hotel & Tower	Sculpture, benches, trees		0.2	Moderate
27	The Beaumont 30 W. 61st Street	Carlos E. Diaz Flores	Seating, plantings		0.2	Moderate
28	The Regent 28 Columbus Avenue 345 W. 60th Street	Glenwood Management Company	Seating, plantings		0.2	Moderate
29	15. 44 W. 62nd Street	Lincoln Plaza Greenfield Organization	Plantings		0.2	Low

Table 5-3 (cont'd)
Open Space Inventory

Map Ref.	Name/Address	Owner/ Agency	Features	Acres of Active Open Space	Acres of Passive Open Space	Utilization
Open Spaces Within ½-Mile Boundary						
30	30 West 63rd Street Plaza	S&P Associates	Trees, grass, seating, planters		0.4	Moderate
31	Harmony Atrium	61 West 62nd Owners Corp	Climbing wall, indoor seating	0.9	0.2	Moderate
32	One Lincoln Plaza	John Amodeo	Garden, seating; appears as part of restaurant		0.1	Low
33	Dante Park	NYCDPR	Seating, plantings, statue		0.2	Heavy
34	Richard Tucker Park	NYCDPR	Seatings, plantings		0.1	High
35	Alice Tully Hall/Julliard	NA	Trees, statue, concrete seating		0.1	Low
36	145 W. 67th Street (Tower 67)	Amsterco	Plantings, seating, seasonable fountain, trees		0.4	Moderate
37	Broadway Malls	NYCDPR	Benches in Broadway Median, planters		0.1	Low
38	P.S. 199	NYCDPR		1.12	0.28	Heavy
39	Septuagesimo Umo	NYCDPR	Garden, seating		0.04	Moderate
40	Riverside Park South	Trump International Hotel & Tower	Soccer, handball courts, basketball courts, fishing pier, esplanade, bikeway	4.0	8.2	Heavy
			Total (Within ½-Mile Boundary)	**19.11**	**52.18**	
Additional Open Spaces Outside Half-Mile Study Area Boundary:						
A	Hell's Kitchen Park Tenth Avenue between 47th and 48th Streets	NYCDPR	Play equipment, trees, plants, basketball and handball courts, benches, tables	0.3	0.3	Heavy
B	High School of Graphic Communication/ Gutenberg Playground	NYCDPR	Bleachers, handball and basketball courts	0.6		Moderate
C	Worldwide Plaza	ZCWK Plaza Associates	Fountain, planters, paved paths, trees, seating		0.84	Moderate

Sources: New York City Department of Parks and Recreation open space data base; New York City Housing Preservation and Development; New York City Housing Authority; New York City Board of Education, AKRF, Inc. field surveys, December 1999, October and November 2002.

Amsterdam Plaza at Harborview Terrace

This 2.1-acre plaza is located in the Harborview Terrace housing complex between West 55th and West 56th Streets and Tenth and Eleventh Avenues. The plaza contains a large paved court

for basketball, with tables and benches also located on the paved court. Other facilities include a children's playground with play equipment. More benches and planters are located closer to the entrance of the building.

West 59th Street Recreation Center

This facility, in a largely industrial area on 59th Street between Amsterdam and West End Avenues, is entirely an active recreation space with a multi-use gymnasium, indoor sports courts, an indoor pool, an outdoor pool, and an outdoor water fountain for children. The outdoor facilities, particularly the pool, is in poor condition and not useable; therefore, the pool acreage is not considered in this analysis.

P.S. 191

This approximately 0.6-acre facility is the playground for P.S. 191, a New York City public elementary school located at Amsterdam Avenue between West 60th and West 61st Streets. This open space includes a large paved area with amenities for different activities, including baseball, basketball, and tennis. In addition, there are two smaller, well-maintained playgrounds with colorful equipment, including jungle gyms. While use is restricted to students during school hours, the facilities are open to the public at other times.

P.S. 199 Playground

This 1.4-acre New York City Park and school playground on 70th Street between Amsterdam and West End Avenues was recently renovated. The renovation included the creation of a playground for children, a reconstructed comfort station, benches, picnic tables, play equipment, swings, a spray shower, adjustable basketball hoops, reconstructed handball courts, a garden, and trees.

Amsterdam Houses

Amsterdam Houses has facilities that are open to the public and those that are dedicated to tenant use only. The 0.8-acre Amsterdam Houses playground contains a variety of active and passive spaces operated by the New York City Department of Parks and Recreation (DPR). Amsterdam Houses has an additional 2.5 acres of open space (operated by the New York City Housing Authority [NYCHA]), including attractively landscaped walkways and a separate young children's playground.

Riverside South Park

Twelve acres of open space affiliated with Phases I, II, III, and V of the Riverside South Development between 65th and 72nd Streets on the west side of West End Avenue have been completed. This mapped parkland contains soccer fields, baseball fields, handball courts, play equipment, lawn area, a pier and esplanade. The pier extends into the Hudson River at approximately 70th Street and can be used for fishing, sunbathing or other pedestrian-oriented activities. The approximately 20-foot-wide esplanade runs along the entire length of the development and connects to the existing esplanade at Riverside Park to the north and will connect to the Hudson River Park esplanade to the south once completed. The facilities completed within Riverside South are all located between ¼- and ½-mile of the project site.

West End Tower Open Space

This open space is located on West End Avenue between West 63rd and West 64th Streets near the West End Towers residential buildings. The space overlooks the large expanse of Penn Yards, and in the future will overlook the Riverside South Waterfront Park. Oriented toward active use, with children's play equipment and courts, this open space also includes attractive landscaping and topography, walking paths, lawns, trees, sculptures, and playgrounds.

Lincoln Center Plaza

The 3.8-acre plaza between the theaters at Lincoln Center is a major open space and gathering place. It has a fountain, a reflecting pool with sculptures, and ledges for sitting. In the summer, outdoor music performances are held. The part of the plaza between Avery Fisher Hall and the Vivian Beaumont and Mitzi Newhouse theaters is hidden from the street and is not as heavily used as the main part of the plaza. It is nicely landscaped and occupied by benches and modern sculpture.

Damrosch Park

Damrosch Park, south of Lincoln Center Plaza and the Metropolitan Opera House, is a 2.4-acre passive space that has trees, plantings, benches, and a bandshell, but no lawns. It is a popular area for recreation and in the summer is heavily programmed with outdoor music and dance performances.

Fordham University Plaza

This 3.0-acre public plaza is located on the campus of Fordham University. This inviting passive space is well-maintained with lawns, trees, flowers, sculptures, and benches. While it functions as a campus green for Fordham students, it is open to and used by the public.

Central Park

The southwestern corner of the 843-acre park is located within ½-mile of the project site. This portion of the park contains several statues, a paved bikeway/running loop, as well as the Tavern on the Green restaurant. Also located in this area of the park are the Heckscher Ballfields, the Heckscher Playground, and Umpire Rock.

ANALYSIS OF THE ADEQUACY OF OPEN SPACE

Quantitative Analysis

¼-Mile Study Area

Within the ¼-mile study area there are approximately 19.53 acres of open space, of which 5.2 acres are active and 14.3 acres are passive space. The passive open space ratio for daytime users is 0.49 acres[1], well above the 0.15 acres per 1,000 persons guideline established by the *CEQR Technical Manual.*

½-Mile Study Area

Within the ½-mile residential study area there are approximately 71 acres of total open space, of which 19.11 acres are active and 52.19 acres are passive space. Based on a 2000 residential population of 61,541 the total open space ratio for the study area is 1.16 acres per 1,000

[1] Only passive open space ratios for daytime users were calculated.

residents. The active open space ratio is 0.31 acres per 1,000 residents, and the passive open space ratio is 0.85 acres per 1,000 residents. These ratios indicate that the area is not well-served in total open space and does not meet the goal of 2.0 acres of active space per 1,000 residents. The area is well served, however, in passive open space and exceeds the goal of 0.5 acres of passive open space per 1,000 residents. The daytime population of 89,516 results in a passive open space ratio of 0.58 within the ½-mile study area, well above the guideline of 0.15 for daytime populations. The open space ratio for the combined resident and worker populations in the study area is 0.35 acres per 1,000 residents and workers, and is above the combined measure of 0.29 acres per 1,000 residents and workers.

Qualitative Analysis

Several parks are located outside of the open space study area boundary, some within ½-mile of the project site. As a result, they are not included in the quantitative analysis, but these open spaces serve as a valuable resource to the area's population. These include the 0.6-acre Hell's Kitchen Park on the east side of Tenth Avenue between West 47th and West 48th Streets. The park is a hub of community activity and contains recreational facilities such as basketball courts, handball courts, play equipment, benches, tables with painted chess/checker boards, trees, and plantings. As described above, the southwest corner of Central Park is located within ½-mile of the project site. The balance of the Central Park's 843 acres of active and passive recreational facilities is just outside the ½-mile study are and is likely used by the population of the study area. Symphony Plaza is also located outside of the study area boundary. The plaza provides seating in a landscaped environment. Worldwide Plaza is also located just outside the study area at its southeast edge. Another park located just outside the study area is the High School of Graphic Communication/Guttenberg Playground, which provides active recreational facilities such as basketball and handball courts. Finally, Clinton Cove Park, which is part of the larger Hudson River Park, is located within a ½-mile of the project site between Pier 94 and Pier 98. This 2-acre park is a passive space characterized by a lawn, shade trees, and concessions, as well as a boathouse on Pier 96.

THE FUTURE WITHOUT THE PROPOSED ACTION

OPEN SPACE USER POPULATION

As described in Chapter 2, "Land Use, Zoning, and Public Policy," new real estate development projects are expected to be completed in the No Build condition that will introduce new residential and daytime populations in the study area. The projects proposed will add approximately 9,451 residents and 7,255 employees to the study area by 2008.

Age of Open Space User Population

In the future without the proposed project, it is expected that the demographics would remain similar to those under existing conditions. People between the ages of 20 and 64 would make up approximately 75 percent of the residential population in the study area increasing from 46,350 to 53,471. (see Table 5-4). Children and the elderly are expected to make up approximately 1/4 of the residential population; therefore, it is not expected that the future residents would disproportionately burden open spaces in the study area.

Table 5-4
Residential Population by Age—½-Mile Study Area

Age Category	Persons	Percent of Total Population
4 and Younger	2,549	3.59
5-9	1,775	2.50
10-14	1,583	2.23
15-19	2,087	2.94
20-64	53,471	75.32
65 and Older	9,527	13.42
Total Population (½-mile study area)	**70, 992**	**100.00**
Source: U.S. Census of Population and Housing, 2000.		

OPEN SPACE INVENTORY

In the future without the proposed action, the Phase IV open space, transfer bridge, and southern open space of the Riverside South project is expected to be completed. This project, which will add about 3.12 acres of new passive open space, is described below. In addition, several other plans for the area's open spaces are discussed here.[1]

Riverside South

The proposed Riverside South open space plan calls for approximately 27.5 acres of publicly accessible open space and recreational facilities, with two major elements: a large-scale waterfront park and a system of landscaped pedestrian streets and open spaces, focused on Freedom Place and Freedom Place South, linking the parks to the city street grid.

Of these 27.5 acres, approximately 21.5 acres will be a mapped waterfront city park. With a variety of active and passive recreational facilities, the park will open access to more than a ½-mile of waterfront. The Riverside South project was designed with two alternative designs; in one, the elevated Route 9A will remain where it is, and in the other, the highway will be relocated inland. Relocation of the highway will open up views of the Hudson River and provide for a more cohesive park design, but will provide about 1 less acre of open space. If this relocation occurs, it will be in the long-term, well after 2008.

The approved Riverside South waterfront park will be accessible from the existing Riverside Park on the north, the Hudson River Park on the south, and most east-west cross streets between West 72nd and West 59th Streets. Pedestrian bridges and walkways will create park entrances from the Riverside Drive extension, linking the park to the City streets. Major features include: active open space in the northern part of the park, between West 70th and West 72nd Streets, with active open space for court and field games and additional basketball courts in the southern part of the park; two children's play areas, one in the north and one in the south, with facilities for toddlers, preschool children, and pre-teens; a 1-acre lawn sloping down from the Riverside

[1] As a result of Fordham University's renovation plans, open space on the campus would be reconfigured. In 2008 it is expected that less open space would be on the campus than currently exists. However, by completion of the project in 2015 there would be a net increase in the site's open space. For purposes of the analysis the existing inventory is carried through the No Action condition.

Drive extension to the Hudson River with plantings of native grasses, shrubs, and perennials; an amphitheater to host special events and concerts; a rehabilitated pier at West 70th Street; and three new pedestrian piers at West 67th, West 60th, and West 59th Streets that could be used for strolling and fishing; a community garden and nursery; and DPR support space.

The waterfront park will be linked to the City streets through special treatments along project streets, particularly Freedom Place and Freedom Place South, but also Riverside Drive and the side streets. This includes trees, benches, and seating areas along both sides of Riverside Drive. Between 64th and 63rd Streets, a landscaped area on the west side of the street will connect with the West End Towers park. The Riverside South cross streets will be given special treatment to visually link the waterfront to the City street grid and provide street trees and special paving, pedestrian-oriented decorative paving, benches, and artwork. In addition, Riverside South will include private courtyards within many of its buildings for residents or workers in those buildings. Development of the park will occur in four steps: creation of a temporary park; construction of the waterfront park elements west of the current highway; construction of the balance of the waterfront park; and enhancements in other open spaces.

The total amount of open space to be developed in association with phases of the project that would be completed by 2008, the build year for the proposed project, is 3.12 acres of passive space. The space will consist largely of lawn areas and a walking path through wetland grasses. The remainder of the waterfront park will be completed after 2008. Other work to be completed by 2008 includes enhancements to Freedom Place South and rehabilitation of the West 69th Street Transfer Bridge by DPR as a pier and ferry/water taxi landing.

West 59th Street Recreation Center

DPR has preliminary plans to renovate outside portions of the West 59th Street Recreation Center that are currently closed to the public. Renovation could include repairing the outdoor pool or converting the outdoor space to a soccer field. It is conservatively assumed that renovations would not occur prior to 2008; therefore, any renovated space is not included in the No Build analysis.

Damrosch Bandshell

DPR plans to renovate the bandshell at Lincoln Center. No new open space would be provided by this renovation.

ANALYSIS OF THE ADEQUACY OF OPEN SPACE

Quantitative Analysis

¼-Mile Study Area

Within the ¼-mile study area there will be approximately 22.65 acres of open space, of which 5.2 will be active and 17.45 acres will be passive space. The open space ratio for daytime users in the future without the proposed action will be 0.48 acres[1], well above the 0.15 acres per 1,000 person guideline established by the *CEQR Technical Manual.*

[1] Only passive open space ratios for daytime users were calculated.

½-Mile Study Area

In the residential open space study area, population is expected to increase from 61,541 to 70,992 and the daytime population is expected to increase from 89,516 to 96,771. Open space acreage will increase to about 55.31 acres of passive space and will remain at 19.11 acres of active space for a total of 74.42 acres.

Based on the above, the total open space ratio for the study area is projected at 1.05 acres per 1,000 residents, which decreases by less than 10 percent from 1.16 acres per 1,000 residents in the existing condition. This is a decrease from existing conditions and the study area will still be slightly below the average City-wide community district median of 1.5 acres per 1,000 residents. In addition, the active open space ratio in the area is expected to decrease by approximately 13 percent, and continues to be well below the recommended guideline, with an active open space ratio of 0.27 acres per 1,000 residents. However, the study area will be well served by passive open space. With an inventory of 55.31 acres, the passive open space ratio will be 0.78 acres per 1,000 residents, well above the guideline of 0.50 acres per 1,000 residents. Likewise, with a worker/student population of 96,771, the passive open space ratio will be 0.57 acres per 1,000 daytime persons, well above the guideline of 0.15 for daytime populations. The combined passive open space ratio in the future without the proposed action will be 0.33, and will remain above the goal of 0.30 in the no action condition. While the passive open space ratios for residents, daytime population, and the combined population decreases in the future without the proposed project by approximately 8, 2, and 5 percent, respectively, the ratios remain above the goals set by DCP.

Qualitative Analysis

In the future without the proposed project, Central Park will continue to be a factor in relieving the active open space deficiency of the residential study area. Located within a half mile of the project site, but outside of the open space study area, is the Clinton segment of the Hudson River Park. This section of the Hudson River Park—between 47th and 59th Streets—will consist of a waterfront bikeway/walkway that will extend from West 41st Street on the south to West 59th Street on the north. It is expected to be completed by 2008. At 59th Street, the Hudson River Park will connect to the proposed Riverside South waterfront park. With this proposed open space project and the existing open spaces along the west side, there will be an extensive waterfront esplanade along Manhattan's west side in the proximity of the project site and rezoning area. This would provide additional relief to the active open space deficiency.

PROBABLE IMPACTS OF THE PROPOSED ACTION

OPEN SPACE USER POPULATION

The proposed project, including the reasonable worst-case development scenario for the rezoning area, would introduce approximately 812 new residential units into the study area. Based on an average of 1.72 persons per household in Census Tract 147, this would result in an increase in the residential population by 1,397 and an estimated total of 72,388 persons residing within the ½-mile study area.

The proposed action would also result in an increase of workers employed at the new residential development, in the medical office space, and in the ground-floor retail space to 37, 10, and 34 respectively. The addition of the school in the rezoning area would introduce approximately 56

staff and 375 students to the study area. This would result in a total daytime population of workers and students of 36,739 in the ¼-mile study area and 97,283 in the ½-mile study area.

Age of Open Space User Population

In the future without the proposed project, it is expected that population between the ages of 20 and 64 would increase from 53,471 to 54,523 and would continue to make up approximately 75 percent of the residential population in the study area (see Table 5-5). Children and the elderly are expected to utilize the open spaces the most and would continue to make up the smallest percentages of the residential population; therefore, it is not expected that new residents introduced to the area as a result of the proposed action would impose a disproportionately heavy burden on open spaces in the study area.

Table 5-5
Residential Population by Age—½-Mile Study Area

Age Category	Persons	Percent of Total Population
4 and Younger	2,599	3.59
5-9	1,810	2.50
10-14	1,614	2.23
15-19	2,128	2.94
20-64	54,523	75.32
65 and Older	9,714	13.42
Total Population (½-mile study area)	**72,388**	**100.00**
Source: U.S. Census of Population and Housing, 2000.		

OPEN SPACE INVENTORY

The reasonable worst-case development scenario does not include any publicly accessible open space. Therefore, the total open space acreage within the study area would be 74.42 acres, of which 19.11 will be active and 55.31 will be passive. As part of the proposed project, two outdoor open spaces would be provided on the project site for the development's residents. The first of these open spaces would include a tennis court and four garden rooms. The second would be for passive use (see Figure 1-12 in Chapter 1, "Project Description"). In addition, indoor recreation space would be provided in a portion of the building.

ANALYSIS OF THE ADEQUACY OF OPEN SPACE

Quantitative Analysis

¼-Mile Study Area

Table 5-6 provides a comparison of the passive open space ratio per 1,000 daytime populations in the existing, no build, and build conditions. With a daytime population of 36,739 and 17.45 acres of passive open space, the open space ratio for daytime users in the future with the

Table 5-6
Comparison of Study Area Open Space Ratios (1/4-Mile Study Area)

Existing Conditions		No Build Conditions	With the Proposed Action	Percent Change between No Build and the Proposed Action
Study Area Population				
Daytime	28,972	36,227	36,739	1.41
Open Space Acreage				
Passive	14.33	17.45	17.45	0
Open Space Ratios				
Passive (per 1,000 daytime population)	0.49	0.48	0.47	(2.08)
Note: Planning Goal Ratio: 0.15 acres/1,000 daytime.				

proposed action would decrease by approximately 2 percent to 0.47 acres,[1] remaining well above the 0.15 acres per 1,000 person guideline established by the *CEQR Technical Manual.* Therefore, the ¼-mile study area's daytime population would continue to be well-served by passive open and the proposed action would not result in any significant adverse passive open space impacts.

½-Mile Study Area

A comparison of open space ratios in the existing, no build, and build conditions is shown in Table 5-7. With the proposed action, the residential population in the study area would be approximately 72,388 residents. Open space acreages would remain at 55.31 acres of passive space and 19.11 acres of active space, for a total of 74.42 acres. The total open space ratio would be 1.03 acres per 1,000 residents, still below the Citywide median of 1.5 acres per 1,000 residents, but with only a slight decline (less than 2 percent) from 1.05 acres per 1,000 residents in the future without the proposed action. For active open space, the ratio would also decline as compared to the future without the proposed action (by less than 4 percent), and would be approximately 0.26 acres per 1,000 residents, still well below the guideline of 2.0 acres per 1,000 residents. Passive open space would be 0.76 acres per 1,000 residents in the future with the proposed action compared to 0.78 without the proposed action, a decrease of less than 3 percent. Even with this slight decline, the ratio would still meet the guideline of 0.50 acres per 1,000 residents. Although the ratio of passive open space for the daytime population would experience a decrease of approximately 2 percent, due to rounding, the ratio remains the same as in the future without the proposed action, 0.57 per 1,000 workers and students, and would still be well above the guideline of 0.15 for the daytime population. The combined passive open space ratio in the future with the proposed action would be 0.33, the same as in the future without the proposed action (as mentioned above, due to rounding, a decrease of less than 6 percent did not change the ratio). Therefore, the combined passive open space ratio remains above the goal of 0.30 acres per 1,000 residents and daytime population. Given that the passive open space ratios would remain above DCP recommendations, the proposed action would not result in any significant adverse impact to passive open space.

[1] Only the passive open space ratios for daytime users were calculated.

Table 5-7
Comparison of Study Area Open Space Ratios (1/2-Mile Study Area)

Existing Conditions		No Build Conditions	With the Proposed Action	Percent Change between No Build and the Proposed Action
Study Area Population				
Residents	61,541	70,992	72,388	1.97
Daytime	89,516	96,771	97,283	0 53
Open Space Acreage				
Total	71.3	74.42	74.42	0
Active	19.11	19.11	19.11	0
Passive	52.19	55.31	55.31	0
Open Space Ratios				
Total (per 1,000 residents)	1.16	1 05	1.03	(1.90)
Active (per 1,000 residents)	0.31	0.27	0.26	(3 7)
Passive (per 1,000 residents)	0.85	0 78	0.76	(2.56)
Passive (per 1,000 daytime)	0.58	0.57	0.57	0
Combined (per 1,000 residents and daytime)	0.35	0.33	0.33	0

Notes:
Citywide Median Community District Ratio: 1.5 acres/1,000 residents.
Planning Goal Ratios:
Total: 2.5 acres/1,000 residents.
Active. 2.0 acres/1,000 residents.
Passive: 0.5 acres/1,000 residents, 0.15 acres/1,000 daytime
Combined (Existing Conditions): 0.29 acres per residents and non-residents
Combined (No Action Conditions): 0.30 acres per residents and non-residents.
Combined (Action Conditions). 0.30 acres per residents and non-residents.

According to the *CEQR Technical Manual*, a decrease in the open space ratio as small as 1 percent can be considered a significant adverse impact when the open space ratio is below 1.5 acres per 1,000 residents. Even though that is the case here (the open space ratio is 1.05 and would be 1.03 in the future with the proposed action, representing a 1.9 percent decrease from the future without the proposed action), this decrease would not result in a significant adverse impact because of the reasons discussed below:

Qualitative Analysis

In the future with the proposed project, while there would be a decrease, the passive open space ratios in both study areas would remain above the levels recommended by DCP. Therefore, as mentioned above, the proposed project would not result in significant adverse impacts to passive open space.

While there would be a decrease in active space ratios per 1,000 residents, which would remain substantially lower than planning goals, the proposed action is not expected to result in significant adverse impacts on active open space.

Under the proposed action, the open space requirements of the text amendment would waive the existing open space zoning requirements in exchange for the provision of sufficient open areas with superior landscaping on site. The specific applicable text is as follows:

> *"(6) where the Commission permits the maximum #floor area ratio# allowed pursuant to Section 23-142 for the applicable district without regard for #height factor# or #open space ratio# requirements, open areas are provided within the #general large scale development# that are of sufficient size to serve the residents of new or #enlarged buildings#. Such open areas shall be accessible to and usable by all residents of such new or #enlarged buildings#, and have appropriate access, circulation, seating, lighting and paving. Furthermore, the site plan of such #general large scale development# shall include superior landscaping for open areas serving the needs of residents of the new or enlarged #buildings#; and"*

The proposed project would include two major open areas — the Interior Courtyard and the Recreational Open Area — that are of sufficient size to serve the residents of the new building. These open areas are described in greater detail as follows.

The Interior Courtyard open space is an 'L' shaped space, surrounded on two sides by the three new buildings of the development and on the third side by an existing brownstone type building which shares the zoning lot (See Figure I-12). This 7,664-sf space has been designed on two interconnected levels which relate to the adjacent levels of the contiguous building lobbies. This grade change was used to create two adjacent, similarly sized outdoor spaces which relate their form and usage to the form and design of the lobby and the interior spaces.

The upper space of the courtyard relates its design to the 'B and C' building design which has a skewed axis. The primary egress point from the lobby includes an extension of the lobby paving which ends at a vertical fountain feature which provides the primary focal feature. Pathways from this paved area cross the courtyard to feature areas which would include comfortable wood benches with backs, linear 'step' type seating, and a sculptural block seating arrangement which relates to other designed forms within the project limits. The large expanses of glass from the building interior to the courtyard would permit extensive viewing of the courtyard and its features, while providing a sense of safety and security for the garden users.

The lower space of the courtyard relates its design to the A building design, with linear references to the skewed geometry of the upper space. This space would be more passive in nature but includes similar enhancements (seating, planting, etc) as the upper space. The grade change between the two spaces is most apparent here, as the water from the fountain feature at the upper level would cascade into a pool at this level.

Both of the spaces within the Interior Courtyard would be directly connected to each other via stairs and a ramp, these are tucked behind a stepped stone wall which would accommodate the change in grade. This change in grade and the creation of two adjacent outdoor spaces would permit courtyard users to select from the variety of differing environments for their passive enjoyment.

Planting for the courtyard would include a wide mix of evergreen and deciduous plantings. These plantings have been designed to provide an interesting visual experience for the users. Two significant plantings are proposed for the courtyard. The overhead tree canopy (consisting of Honey Locust trees) would provide a dappled, light shade for the courtyard. The second significant plant form is the evergreen bamboo plantings which would be planted in a grove, this

would form the backdrop for the courtyard. This bamboo planting has an interesting leaf texture combined with an interesting bamboo trunk. A feature planting at the lower space would include a raised, boxed planting of Japanese Blood grass, planted within a field of large stepping stones.

Materials usage for the Interior Courtyard would include the use of high quality stone pavements which match the interior lobby building materials and stepping stones which would soften the courtyard design and provide access to the garden features.

The design of the Interior Courtyard is of superior quality as compared to most comparable developments. The prominent location of the courtyard as the 'center' of the project, with its variety of spaces and enhanced material usages, would provide a high quality amenity for the residents of this project.

The Recreational Open Area has been designed to be organized around a series of four 'English'-style gardens which comprise the movement system through the 15,422-sf open area (See Figures I-12 and I-13). These gardens have been designed as a series of different outdoor 'rooms' which share a common design thread, yet styled to provide a different experience within each "room". Placement of the garden rooms has been oriented to provide maximum viewing of the gardens from the 61st Street sidewalk. This visual access to the gardens would provide a heightened pedestrian experience for the passers-by while providing security for the users of the gardens. Passersby would be encouraged to enjoy the garden experience by the placement of continuous seating opportunities along the West 61st sidewalk, incorporated into the sidewalk fence/seatwall which runs the length of the garden (See Figures I-12 and I-13). The wall also provides the armature for the placement of supplemental sidewalk lighting.

The Recreational Open Area would include a full size tennis court tucked into the southeast corner of the site and screened with evergreen hedges along the perimeter of the court. Visual opportunities into the court are provided to provide increased security for the court users.

Planting for the garden 'rooms' within the Recreational Open Area would include a wide mix of evergreen and deciduous trees and a mix of shrubs, grasses and flowering plants. These plantings are designed to provide an interesting visual experience for the users and the passers-by via an orchestration of plant color, form, habit, texture and aroma which would constantly change as the seasons pass. One garden room in particular has been designated as the wildlife room which would attract butterflies and birds.

Materials usage for the Recreational Open Area was carefully considered in the garden design. Pavements change for each of the garden 'rooms', ranging from pavements which match the building materials to stepping stones which mimic a rustic garden area. Site furnishings would consist of comfortable wood benches with backs, garden focal features and an iron fence which is typical of similar urban gardens.

The Recreational Open Area would be lit from a variety of high and low light sources; these light sources have been designed to deliver functional light which provides for safe usage of the gardens, as well as accent lighting which would highlight special plantings and garden features.

The residents of the building would also benefit from the additional passive open space. Furthermore, the active open space would partially offset the additional demands on active open space resources in the study area expected from the population generated as a result of the proposed action.

In addition, the presence of nearby open spaces outside the study area, such as the remainder of Central Park, Riverside Park and other area buildings provide additional open space resources

for the study area population. One of the City's premier parks, Central Park provides both active and passive recreational areas with roads and tracks for runners, numerous ball fields, playgrounds, and opportunities for in-line skating and biking, each of which are important urban recreational pursuits. Riverside Park is a 267-acre park with a mix of active and passive recreational facilities. The park has grand tree-lined boulevards, natural enclosures, and open vistas along with tennis courts, soccer fields, basketball courts, baseball fields, bike paths, dog runs, refreshment areas, an esplanade, and the 79th Street Marina. Just north of the ½-mile study area, Riverside Park contains a ballfield at West 72nd Street, dog runs, the South Lawn, a running track at approximately West 74th Street, and a playground at West 75th Street. Because of the small decrease (less than 4 percent) in the active open space ratio, the private active open space amenity integrated into the proposed project's design, and the availability of the nearby open spaces, no significant adverse impacts to active open space are anticipated. ✷