

A. INTRODUCTION

The FGEIS analysis found that the illustrative development programs evaluated under the 12 FAR Rezoning Scenario would reduce some open space ratios in an area that is already underserved by open space according to the city's planning guidelines. The significance of the impacts could not be fully determined in the FGEIS because the program elements of the Rezoning Scenario's open space were undefined. The East River Realty Company, LLC (ERRC), the owner of the four parcels, is now advancing a specific development program which contains the open space programming details necessary to quantitatively and qualitatively evaluate open space conditions in the future with the Proposed Actions. Therefore, following *CEQR Technical Manual* guidelines, this chapter analyzes the potential for significant adverse impacts to open space conditions resulting from the Proposed Actions for ¼-mile and ½-mile study areas. Because of the large-scale nature of the proposed development program, a detailed analysis of open space resources was conducted. The analysis considers both the proposed development program and the Affordable Housing Scenario, and evaluates future conditions both without and with the United Nations Development Corporation (UNDC) project on the site currently occupied by Robert Moses Playground.

This analysis finds that the Proposed Actions would not result in any significant adverse impacts to open space resources. The proposed development program would improve open space conditions within the ¼-mile and ½-mile study areas by introducing substantial new publicly accessible open space. As shown in Table 5-1, by 2014 the proposed development program would introduce approximately 4.84 acres of new publicly accessible open space.

Table 5-1
Proposed Development Program Populations and On-Site Publicly Accessible Open Space

Development Parcels	Total New Residents	Total New Workers	Open Space (acres)		
			Total	Passive	Active
616 First Avenue	1,299	524	0.79	0.71	0.08
685 First Avenue	1,663	61	0.17	0.17	0.00
700 & 708 First Avenue	3,537	6,400	3.87	3.07	0.80
TOTAL	6,499	6,985	4.84	3.95	0.88
Note: The amounts of open space in this table include acreage provided in the form of publicly accessible, bonusable public plazas and publicly accessible, non-bonusable open space. This table does not include the 33,910 square feet (0.78 acres) of private open space.					
Sources: AKRF, Inc; East River Realty Company, LLC.					

The 616 First Avenue parcel would contain 34,507 square feet (0.80 acres) of publicly accessible open space, the 685 First Avenue parcel would contain 7,605 square feet (0.17 acres) of publicly accessible open space, and the 700 (Waterside) and 708 First Avenue parcels would contain 168,659 square feet (3.87 acres) of publicly accessible open space. In addition to the

4.84 acres of publicly accessible open space, the proposed development program also would include approximately 33,910 square feet (0.78 acres) of private open space. Quantitatively, the 4.84 acres of new publicly accessible open space generated by the Proposed Actions would improve all worker and residential open space ratios compared to conditions in the future without the Proposed Actions. The new open space would not only serve the needs of the population introduced by the project, but also would improve overall open space conditions for existing residents and workers in the ¼-mile and ½-mile study areas.

The proposed development program includes several buildings and open spaces, all of which would not be developed at the same time. Under the construction phasing plan described in Chapter 20, “Construction Impacts,” the Proposed Actions would improve open space conditions over No Build conditions in each of the interim years of operation prior to 2014. Therefore, the Proposed Actions would not result in any temporary significant adverse open space impacts.

B. SUMMARY OF FGEIS FINDINGS

At the time the FGEIS was published, no specific development plans for the parcels had been formulated. Accordingly, the FGEIS identified and evaluated certain illustrative programs that were reasonably expected to occur. These development programs were “reasonable worst-case programs,” which consisted of maximum development envelopes for a variety of potential uses under a 12 FAR Rezoning Scenario. The FGEIS analyzed the potential for open space impacts under these illustrative development programs and an As-of-Right Program for the ¼-mile and ½-mile study areas. The FGEIS assumed that the illustrative programs under the 12 FAR Rezoning Scenario would provide 3.31 acres of publicly accessible open space. Given that the programming for the open space in the FGEIS was undefined, for purposes of the FGEIS analysis the 3.31 acres was allocated between active and passive space based on the study areas’ existing ratio of passive-to-active open space (which is approximately 80 percent passive and 20 percent active), as well as consideration of the programming needs of the new populations.¹ The year for existing conditions in the FGEIS was 2002 and the future analysis years were 2007 and 2011. The FGEIS addressed two future years because at the time it appeared that the Waterside parcel (700 First Avenue) would not be available for development until after the other three parcels were developed. With the passage of time and the demolition of the Waterside generating facility, however, that distinction no longer exists, and ERRC intends to develop its four sites on a schedule for earliest full completion in 2014.

Within the ¼-mile study area, the FGEIS found that there was potential for a temporary significant adverse quantitative open space impact in the 2007 interim analysis year. In addition, the As-of-Right Program and the illustrative programs reduced some open space ratios that were already below DCP guidelines, and could therefore have adverse impacts on open space resources in the ¼- and ½-mile study areas. By 2011, the FGEIS analysis found that almost all

¹ Given that residential populations place greater demands on active open space resources compared with worker populations, for the FGEIS, the proportion of active open space was assumed to be greater for those illustrative programs with a relatively higher proportion of residents compared with workers. The FGEIS Residential Development Program assumed 30 percent of the 3.31 acres would be active open space and 70 percent would be passive open space; the FGEIS Mixed-Use Development Program assumed 20 percent of the 3.31 acres would be active open space and 80 percent would be passive open space; and the FGEIS Mixed-Use Development Program with Office on 708 First Avenue assumed 15 percent of the 3.31 acres would be active open space and 85 percent would be passive open space.

worker and residential open space ratios would improve over No Action conditions, with the exception of a slight reduction in the combined worker/residential passive open space ratio in the ¼-mile area under two illustrative programs, and a reduction in the residential passive and total open space ratios in the ½-mile study area under one illustrative program. These reductions were found to have potential adverse impacts on open space given that the ratios would continue to be below DCP guidelines. Furthermore, the FGEIS could not rule out the potential for significant adverse impacts in the ¼- and ½-mile study areas because there were no specific program elements available to qualitatively assess the open space resources provided under the illustrative programs.

In addition to the analysis summarized above, the FGEIS also studied additional open space conditions that accounted for the possibility of construction for UNDC and the Second Avenue Subway. The FGEIS found that a new UNDC office building, if built as proposed, would displace a majority of the open space associated with Robert Moses Playground. The Second Avenue subway project has identified approximately 0.6 acres of the western portion of St. Vartan Park as a potential staging area for station construction and spoils removal. If adequate open space replacement(s) were not provided for these projects, the open space conditions in the future without the Proposed Actions would worsen. Absent mitigation by UNDC or New York City Transit to provide replacement open space, the overall lack of open space resources in the future without the Proposed Actions would be even more pronounced. Under such circumstances, the new open space provided by the illustrative development programs would represent a greater percentage of the total active and passive open space in the study area, and a larger percentage improvement in open space ratios.

The SEIS does not require consideration of any potential overlap between the Proposed Actions and Second Avenue Subway construction, because construction of the subway within the project study areas will not occur until after the proposed project's 2014 Build year. Because the likely timing of the UNDC project remains undefined, this analysis considers an alternative baseline future condition that includes the UNDC project by 2014.

The proposed development program differs in many respects from the Rezoning Scenario analyzed in the FGEIS. Factors that could alter conclusions with respect to open space conditions include: differences in the residential and worker populations introduced by the proposed development program; the amount and quality of new publicly accessible open space that would be provided; and the time at which the new open space would become available. These differences could result in new or different impacts from those identified in the FGEIS, and therefore, a complete open space assessment is required for the proposed development program.

C. METHODOLOGY

STUDY AREAS

The SEIS analysis follows *CEQR Technical Manual* methodology in analyzing the potential for significant adverse impacts, and compares the findings to those in the FGEIS analysis. The first step in assessing potential open space impacts is to establish study areas appropriate for the new populations to be added by the Proposed Actions. As described below, study areas differ for worker populations and residential populations.

Worker and residential populations use different open space study areas. Workers typically use passive open spaces within walking distance of their workplaces; this area is roughly ¼ mile. The ¼-mile area surrounding the development parcels is roughly bounded by East 46th Street to the north, East 30th Street to the south, Third Avenue to the west and the East River to the east. All open spaces within that ¼-mile boundary, as well as all residents and employees within census tracts that fall at least 50 percent within the ¼-mile radius, were included in the ¼-mile study area for workers (see Figure 5-1).

Residents are more likely to travel farther to reach parks and recreational facilities, and they use both passive and active open spaces. Residents will typically walk up to ½ mile for recreational spaces. While they may also visit certain regional parks outside of a ½-mile area, like Central Park, such open spaces are not included in the quantitative analysis. Therefore, in addition to the ¼-mile study area, the open space analysis considers a ½-mile study area for the proposed development program. As with the ¼-mile study area, all open spaces within that radius, and the residents and employees of all census tracts falling at least 50 percent within that radius, were included in the study area. The ½-mile of the development parcels is roughly bounded by East 51st Street to the north, East 25th Street to the south, Madison Avenue to the west and the East River to the east (see Figure 5-1).

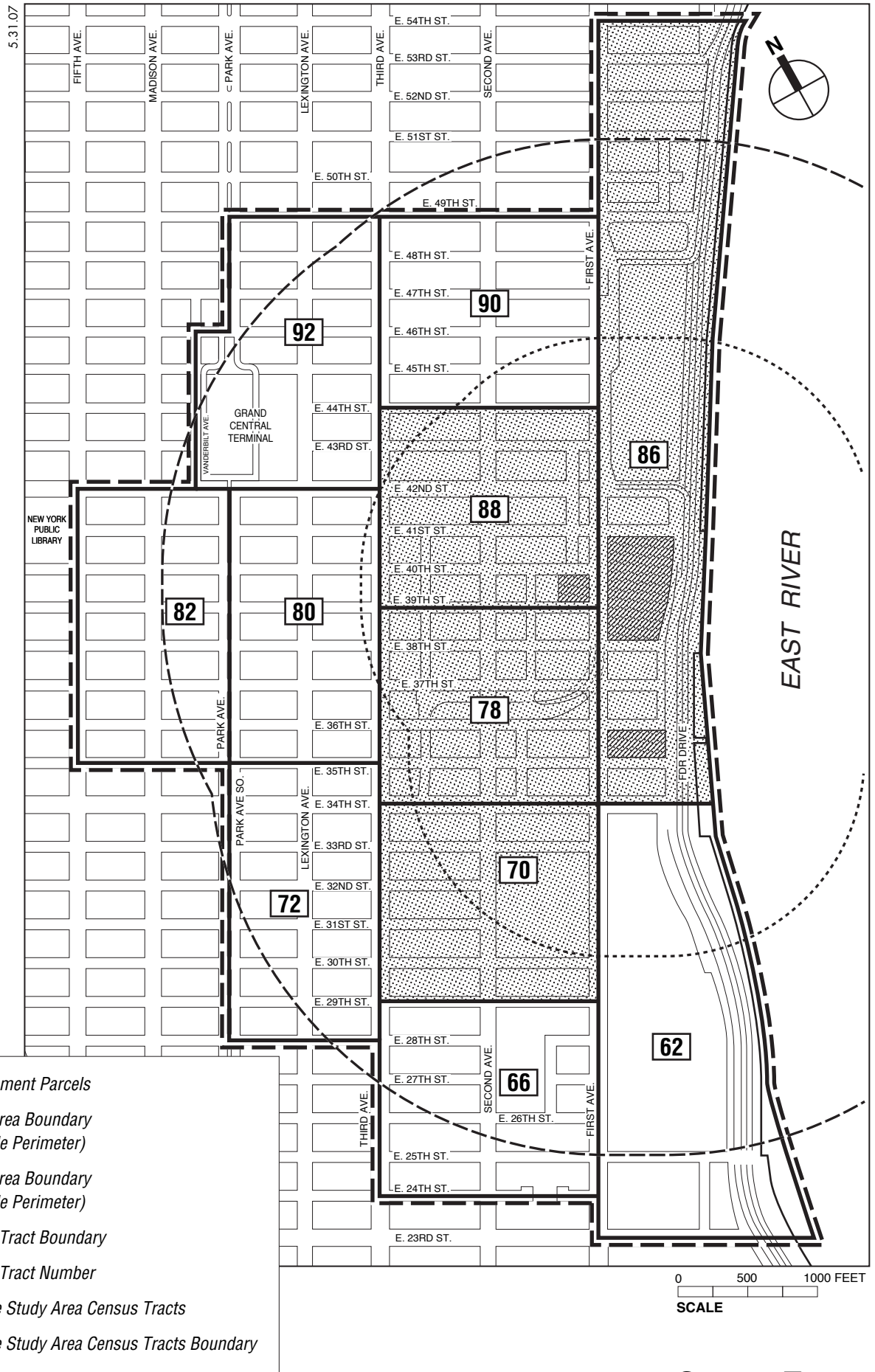
Both study areas are cut off on their eastern boundaries by the East River. The river is not included within any of the surveys, given the absence of any recreational boating facilities within the study areas.

OPEN SPACE USER POPULATIONS

Census data were used to identify potential open space users within the study areas. Open space user groups include area residents and employees. To determine the number of residents currently located within the study areas, data were compiled from the 2000 Census for the tracts in each study area. The age distribution of the residential population was noted, as children and elderly residents are typically more dependent on local open space resources. The number of employees in each of the study areas was also determined based on the 2000 Census data for worker populations. Population and employment estimates were projected for 2014, so that development-induced changes to open space ratios could be compared to the future without the Proposed Actions.

INVENTORY OF OPEN SPACE RESOURCES

All publicly accessible open spaces and recreational facilities located within the study areas were inventoried to determine their size, character, and condition. Public spaces that do not offer useable recreational areas were excluded from the survey, as were open spaces that are not open to the general public. The information used for this analysis was gathered through field studies conducted in July 2004, November 2005, January 2006, and May 2007; from the DPR and from *Privately Owned Public Space: The New York City Experience* (2000), a collaboration of DCP, Jerold S. Kayden, and the Municipal Art Society. Surveys were conducted on weekday and weekend afternoons, in the summer, autumn, and winter time, in good weather. At each open space, active and passive recreational spaces were noted. Active facilities are intended for vigorous activities, such as jogging, field sports, and children's active play. Such facilities might include basketball courts, softball fields, and play equipment. Passive facilities encourage such activities as strolling, reading, sunbathing, and people watching. Some spaces, such as lawns, public esplanades, and dog runs, can be both active and passive recreation areas. Designated



open spaces with no useable amenities were excluded from the calculations. The open space inventory also notes any changes planned for existing facilities and whether any new spaces will be added to the area. Figures 5-2 and 5-3, and Tables 5-2 and 5-3 provide the inventory of useable public open space resources within the two study areas.

ADEQUACY OF OPEN SPACE RESOURCES

The adequacy of open space in the study area was then quantitatively assessed. In the quantitative approach, the ratio of useable open space acreage to the study area population—referred to as the open space ratio—is compared with guidelines established by DCP. To determine the adequacy of open space resources for the working (daytime) population of a given area, DCP has established 0.15 acres of passive open space per 1,000 workers as a reasonable amount of open space. For the residential population, two sets of guidelines are used. The first guideline is a citywide median open space ratio of 1.5 acres per 1,000 residents. The second is an optimal planning goal established by DCP of 2.5 acres per 1,000 residents—2.0 acres of active and 0.5 acres of passive open space per 1,000 residents—for large-scale plans and proposals. Impacts are based on how a project would change the open space ratios in the study area. According to the *CEQR Technical Manual*, if a decrease between the existing and build total open space ratios would approach or exceed 5 percent, it is generally considered to be a substantial change, warranting a detailed analysis. In addition, if a study area exhibits a low open space ratio (e.g., below 1.5 acres per 1,000 residents or 0.15 acres of passive space per 1,000 non-residential users), indicating a shortfall of open space, even a small decrease in that ratio as a result of the action may have an adverse impact. The existing open space ratio may be so low that even an open space ratio change of less than 1 percent may result in significant adverse open space impacts.

In addition to the quantitative factors cited above, the *CEQR Technical Manual* also recommends consideration of more qualitative factors in assessing the potential for open space impacts. The analysis therefore evaluates whether the on-site open space resources introduced by the Proposed Actions, in conjunction with existing open space resources, would be of a sufficient quality to serve the needs of its users, and whether the Proposed Actions are likely to have potential significant shadow, air quality/odor, or noise effects on existing open space resources.

D. EXISTING CONDITIONS

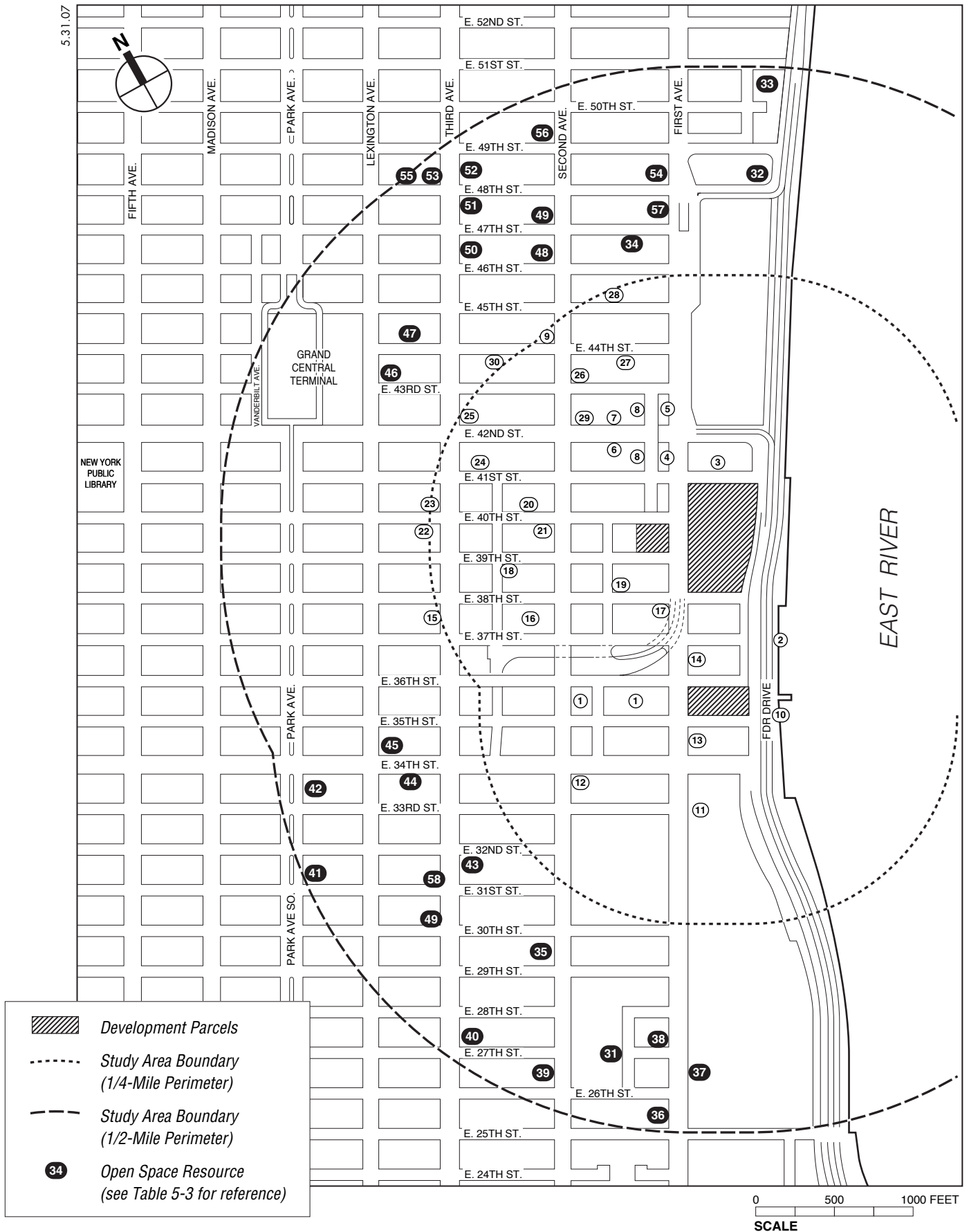
OPEN SPACE STUDY AREA POPULATIONS

DEVELOPMENT PARCELS

The development parcels are currently vacant, and contain no residential or worker populations.



1/4-Mile Study Area
Public Open Space Resources
Figure 5-2



1/2-Mile Study Area
Public Open Space Resources
Figure 5-3

First Avenue Properties Rezoning Final SEIS

Table 5-2
¼-Mile Open Space Resources

Map	Name	Location	Owner	Acres	Passive	Active	Amenities	Condition	Use Level
1	St. Vartan Park	First-Second Aves. between 35th-36th Sts.	DPR	2.76	1.10	1.66	Seating, basketball and handball courts, paved ballfields, seasonal water element (sprinkler), active play area	Good	Moderate
2	Glick Esplanade (East River Esplanade Park)	East River between 36th-38th Sts.	DPR	0.62	0.50	0.12	Seating, fountain, flowers, parcourse exercise station, paved areas	Excellent	Heavy
3	Robert Moses Playground	East side of First Ave. between 41st-42nd Sts.	DPR	1.34	0.13	1.21	Basketball courts, handball courts, multi-use court, dog run, open play area, playground, benches, trees	Good	Moderate
4	Trygve Lie Plaza	West side of First Ave. between 41st and 42nd Sts.	DPR	0.95	0.95	0.00	Benches	Good	Light
5	Ralph J. Bunche Park	West side of First Ave. between 42nd and 43rd Sts.	DPR	0.23	0.23	0.00	Benches, sculpture, plantings	Excellent	Heavy
6	Tudor Grove Playground	South side of 42nd St. between First and Second Aves.	DPR	0.23	0.05	0.18	Tot lots, trees, benches	Excellent	Heavy
7	Mary O'Connor Playground	North side of 42nd between First and Second Aves.	DPR	0.19	0.04	0.15	Tot lots, trees, benches	Excellent	Heavy
8	Tudor City Greens	Tudor City Place—North & South of 42nd St.	Tudor City Greens	0.68	0.68	0.00	Trees, benches	Excellent	Heavy
9	245 East 44th Street	North side of 44th between Second and Third Aves.	Farbod Realty	0.07	0.07	0.00	Decorative fountain, light post, benches, planting	Good	Light
10	East River Esplanade	Paved area along River from 34th-38th Sts.	Various City agencies	0.60	0.30	0.30	Pavement, benches, planters	Fair	Moderate
11	NYU Hospital Courtyard	31st St. and First Ave.	NYU	0.23	0.23	0.00	Seating, landscaping	Good	Moderate
12	330 East 34th Str.	East side of Second Ave. between 33rd and 34th Sts.	HKAL 34th St. LP	0.24	0.24	0.00	Sunken plaza with minimal seating	Good	Light
13	Rivergate—Joseph Slifka Park	East side of First Ave. between 34th and 35th Sts.	Rivergate LP	0.54	0.22	0.32	Basketball, playground and seating areas	Excellent	Heavy
14	Manhattan Place—630 First Ave.	East side of First Ave. between 36th and 37th Sts.	Condominium	0.38	0.38	0.00	Fountain, benches, seatwall, flowers	Excellent	Light
15	Murray Hill Mews—560 Third Ave.	West side of Third Ave. between 37th and 38th Sts.	Murray Hill Mews Owners Corp.	0.15	0.15	0.00	Tables, chairs, planters, cafe	Good	Light
16	240 East 38th St.	240 East 38th St.	Bell Atlantic	0.33	0.33	0.00	Paved, paths, planted walls	Good	Light
17	Corinthian—330 East 38th St.	West side of First Ave. between 37th and 38th Sts.	Condominium	0.62	0.62	0.00	Trees, plants, seating	Excellent	Heavy
18	Eastgate Tower—222 East 39th St.	South side of 39th St. between Second and Third Aves.	Patrick Denihan et al.	0.09	0.09	0.00	Circular drive & outdoor restaurant in plaza	Good	Light
19	New York Tower—330 East 39th St.	Corner of Tunnel Approach Street and 38th Street	Jennifer Tower Apts.	0.19	0.19	0.00	Landscaping, courtyard	Poor	Light

Table 5-2 (cont'd)
1/4-Mile Open Space Resources

Map	Name	Location	Owner	Acres	Passive	Active	Amenities	Condition	Use Level
20	Vanderbilt—235 East 40th St.	North side of 40th St. between Second and Third Aves.	Condominium	0.20	0.20	0.00	Landscaping and seating	Good	Light
21	Highpoint—250 East 40nd St.	South side of 40th St. between Second and Third Aves.	Condominium	0.15	0.15	0.00	Benches, flowers, waterfall	Excellent	Moderate
22	600 Third Avenue	At 40th St.	600 Third Ave. Assoc.	0.20	0.20	0.00	Moveable chairs, tables, planters, trees	Good	Moderate
23	Grand Central Plaza—622 Third Ave.	West side of Third Ave. between 40th and 41st Sts.	622 Building Company LLC	0.34	0.34	0.00	Plaza, Arcade landscaping, seating	Excellent	Moderate
24	Helmsley Hotel—212 East 42nd St.	North side of 41st, east of Third Ave.	214 E. 42 Company	0.07	0.07	0.00	Benches, planters	Good	Light
25	Plaza at 201 East 42nd St.	NEC of 42nd St. and Third Ave.	DOLP 645 Properties LLC	0.03	0.03	0.00	A few benches, sparse planting	Good	Light
26	International Plaza—303 East 43rd St.	NEC of Second Ave. at 43rd St.	Condominium	0.08	0.08	0.00	Benches and plants	Excellent	Moderate
27	3 United Nations Plaza	South side of 44th between First and Second Aves.	United Nations Development Cp.	0.12	0.12	0.00	Movable chairs and tables, planted trees	Excellent	Moderate
28	Belmont—320 East 46th St.	North side of 45th between First and Second Aves.	E. 46th Realty LLC	0.17	0.17	0.00	Planters, trees, benches	Good	Light
29	Ford Foundation Atrium	North side of 42nd Street between First and Second Aves.	Ford Foundation	0.33	0.33	0.00	Indoor atrium, open to public weekdays 10am-4pm	Excellent	
Total One-Quarter Mile Open Spaces				12.13	8.19	3.94			
Notes:	Status of amenities, including identifications of temporary closings, are based on AKRF Field work conducted in February 2006. The following open space resources that were included in the FGEIS have been omitted from this analysis: <i>United Nations Park.</i> (This resource is closed to the public due to security concerns. While the FGEIS assumed that this closure would be temporary and the park would eventually be reopened, this document conservatively assumes that the closure will be permanent.) <i>Whitney-311 West 38th Street.</i> (This plaza is surrounded by a masonry wall and a closed gate, and does not display a plaque indicating that it is open to the public.) <i>Churchill—728 Second Avenue.</i> (According to <i>Privately Owned Public Space</i> , this resource is “visually accessible, but physically inaccessible” due to heavy landscaping.)								
Sources:	AKRF, Inc. survey; <i>Privately Owned Public Space: The New York City Experience</i> (2000), a collaboration of the New York City Department of City Planning (DCP), Jerold S. Kayden, the Municipal Art Society.								

First Avenue Properties Rezoning Final SEIS

Table 5-3
1/2-Mile Open Space Resources*

Map	Name	Location	Owner	Acres	Passive	Active	Amenities	Condition	Use Level
30	685 Third Avenue	South side of East 44th Street between First and Second Aves.	685 Acquisition LLC	0.09	0.09	0.00	Closed-renovation		
31	Bellevue South Playground	First-Second between 26th and 28th Sts.	DPR	1.60	0.80	0.80	Basketball, tot lot, benches	Average	Heavy
32	MacArthur Park	East River Drive, 48th and 49th Sts.	DPR	0.33	0.07	0.26	Tot lots, swings, slides	Good	Heavy
33	Peter Detmold Park	East River Drive, 49th through 53rd Sts.	DPR	1.34	1.21	0.13	Dog run, pavilion, chess tables, benches, open area	Good	Moderate
34	Dag Hammarskjold Plaza	47th Street between First and Second Aves.	DPR	1.60	1.60	0.00	Benches, pavilions, fountains, garden	Excellent	Heavy
35	Vincent Albano Playground	Second Ave. at 29th St.	DPR	0.35	0.21	0.14	Playground, trees, benches, open paved area	Good	Moderate
36	Hunter College Plaza	25th St. between First and Second Avenues	Hunter College	0.60	0.6	0.00	Trees, seating, fountain, plaza, tables	Poor	Moderate
37	Bellevue Courtyard	First Ave. between 26th and 27th Sts.	NYU	0.99	0.99	0.00	Benches, fountain, trees	Fair	Light
38	Phipps Houses	27 Street between First and Second Avenues	Henry Phipps Plaza Assoc.	0.36	0.18	0.18	Benches, paved pedestrian street	Poor	Light
39	Parc East Tower Apartments—240 East 27 St.	North side of 26th Street between Second and Third Avenues	Wards Construction Co.	0.30	0.30	0.00	Water feature, stepped seating, mature trees	Good	Moderate
40	Nathan Strauss Houses	27th Street between Second and Third Aves.	NYCHA	0.10	0.05	0.05	Playground, benches, trees	Fair	Moderate
41	475 Park Ave. South	East side of Park at 32nd St.	Allan Howard Goldman, et al.	0.18	0.18	0.00	Elevated, planters, no seating, sculpture	Good	Light
42	3 Park Ave.	East side of Park between 33rd and 34th Sts.	3 Park Ave. Building Co.	0.13	0.13	0.00	Sculpture, stairs, benches, planter	Good	Heavy
43	200 East 32nd Street	Southeast corner of Third Ave. at 32nd St.	Condominium	0.13	0.13	0.00	Benches, planting, elevated plaza, flowers	Excellent	Heavy
44	Dumont Plaza—150 East 34th St.	South side of 34th St. between Third and Lexington Aves.	Denihan Company	0.08	0.08	0.00	Seating, plantings, wall mural, water feature	Excellent	Heavy
45	243 Lexington Ave.	Northeast Corner of Lexington Ave. and 34th Street	National Center Foundation	0.03	0.03	0.00	Benches, plantings	Good	Moderate
46	425 Lexington Ave.	North side of East 43rd St. east of Lexington Ave.	SLR LP	0.10	0.10	0.00	Planters, trees, seatwalls	Good	Moderate
47	Two Grand Central Tower—140 E. 45th St.	Between Lexington and Third Aves. from 44th and 45th Sts.	Grand Regent LLC	0.14	0.14	0.00	Planter with seatwall, widened sidewalk	Good	Light
48	Dag Hammarskjold Tower	240 East 47th Street, corner of Second Ave.	Dag Hammarskjold Tower	0.24	0.24	0.00	Closed for Construction		
49	1 Dag Hammarskjold Plaza—885 Second Ave.	Northwest corner of 47th St. and Second Ave.	Duit Realty Group	0.38	0.38	0.00	Elevated seating, waterfall, flowers	Excellent	Heavy
50	747 Third Ave.	East side of Third Ave. between 46th and 47th Sts.	4 Third Ave. Fee LLC	0.10	0.10	0.00	Playful seating, trees, shade structures	Good	Heavy
51	767 Third Ave.	Southeast corner of Third Ave. and 48th St.	767 Third LLC	0.16	0.16	0.00	Public art on wall, tables, seating	Good	Moderate

Table 5-3 (cont'd)
1/2-Mile Open Space Resources

Map	Name	Location	Owner	Acres	Passive	Active	Amenities	Condition	Use Level
52	777 Third Ave.	East side of Third Ave between 48th and 49th Sts.	Third Ave. Fee LLC	0.27	0.27	0.00	Benches, widened sidewalk, sculptures, planters	Good	Heavy
53	780 Third Ave.	Northwest corner of Third Ave. at 48th St. & southwest corner of 49th St.	Teachers Insurance & Annuity Association of America	0.15	0.15	0.00	Seating, trees	Good	Moderate
54	100 United Nations Plaza	Northwest corner of First Ave. and 48th St.	Condominium; Federal Republic of Germany	0.28	0.28	0.00	Water features, lush planting, seating walls	Excellent	Heavy
55	Cosmopolitan—141 East 48th St.	North side of 48th St. between Lexington and Third Aves.	Condominium	0.06	0.06	0.00	Seatwalls, ivy, trees	Good	Light
56	Sterling Plaza—255 East 49th St.	Northwest corner of 49th St. and Second Ave.	Condominium	0.11	0.11	0.00	Trees, benches, sculpture	Good	Heavy
57	Trump World Tower Plaza	First Avenue and East 47th Street	Trump World Tower Condominium Assn.	0.92	0.92	0.00	Seating, drinking fountain, bike rack, planting	Excellent	Heavy
58	Windsor Court	155 East 31st Street at northwest corner of Third Avenue	MHP Land Associates	0.14	0.14	0.00	Trees, seating, bicycle parking, drinking fountain	Good	Moderate
Total One-Half Mile Open Spaces				11.26	9.70	1.56			
Total One-Quarter Mile Open Spaces				12.13	8.19	3.94			
Total One-Half Mile Radius				23.39	17.89	5.50			
Notes:	* Open space acreage in the ½-mile study area includes all of the open spaces in the ¼-mile study area (see Table 5-2) plus the above. The following open space resources that were included in the FGEIS have been omitted from this analysis: 166 East 34th Street. (Food-service establishments at the ground-floor of this building have seized usufruct over the plaza, rendering it effectively unusable to the general public.) Libya House—309 East 48th Street. (There are no amenities in the publicly-accessible portion of the plaza.)								
Sources:	AKRF, Inc. survey; Privately Owned Public Space: The New York City Experience (2000), a collaboration of the New York City Department of City Planning (DCP), Jerold S. Kayden, the Municipal Art Society.								

¼-MILE STUDY AREA

Four census tracts (70, 78, 86, and 88) were included within the ¼-mile study area (see Figure 5-1). In 2000 the residential population within these census tracts was 29,846, as shown in Table 5-4. The non-residential (worker) population in the ¼-mile area was 38,290 in 2000. Although the analysis conservatively assumes that residents and employees are separate populations, it is likely that some of the residents live near their workplace. As a result, the analysis double-counts the daily user population in cases where residential and worker populations overlap.

Table 5-4
Year 2000 Population in the ¼-Mile Study Area

Census Tract	2000 Residential Population	2000 Worker Population	Total Population ¹
Residents in Census Tract 70	7,763	2,830	10,593
Residents in Census Tract 78	7,471	5,840	13,311
Residents in Census Tract 86	7,267	4,955	12,222
Residents in Census Tract 88	7,345	24,665	32,010
Total Population	29,846	38,290	68,136
Note: ¹ This analysis conservatively assumes that the residential and worker populations are entirely distinct. Source: U.S. Department of Commerce, Bureau of the Census, 2000 Census of Population and Housing.			

½-MILE STUDY AREA

Population estimates for the ½-mile study area were based on data from 11 census tracts—62, 66, 70, 72, 78, 80, 82, 86, 88, 90, and 92. The 2000 Census data show the residential population of this study area to be 68,990 (Table 5-5).

Table 5-5
Year 2000 Population in the ½-Mile Study Area

Census Tract	2000 Residential Population	2000 Worker Population	Total Population
Residents in Census Tract 62	2,103	14,250	16,353
Residents in Census Tract 66	11,841	2,590	14,431
Residents in Census Tract 70	7,763	2,830	10,593
Residents in Census Tract 72	8,111	13,150	21,261
Residents in Census Tract 78	7,741	5,840	13,311
Residents in Census Tract 80	5,392	25,070	30,462
Residents in Census Tract 82	2,764	38,990	41,754
Residents in Census Tract 86	7,267	4,955	12,222
Residents in Census Tract 88	7,345	24,665	32,010
Residents in Census Tract 90	7,599	25,390	32,989
Residents in Census Tract 92	1,334	61,715	63,049
Total Population	68,990	219,445	288,435
Sources: U.S. Department of Commerce, Bureau of the Census, 2000 Census of Population and Housing.			

There are more than three times as many workers as residents in the ½-mile radius—219,445 workers based on the 2000 Census data. Again, although the analysis conservatively assumes that residents and employees are separate populations, some percentage of residents also work within the study area.

AGE OF OPEN SPACE USER POPULATIONS

1/4-MILE STUDY AREA

Table 5-6 contains 2000 Census data showing the ages of residents within the four census tracts included in the 1/4-mile study area. In 2000 the vast majority of the 1/4-mile study area population (over 80 percent) was between 20 and 64 years old. For Manhattan as a whole, approximately 69 percent of the residential population was between the ages of 20 and 64 years old in 2000.

Table 5-6
Age Distribution of 1/4-Mile Study Area Residential
Population in 2000

	Residential Population	
	Number of Residents	Percentage of Total Residential Population
Under 5	889	3.0
5–9	463	1.6
10–13	456	1.5
14–19	425	1.4
20–64	24,037	80.5
65+	3,576	12.0
Total	29,846	100.0
Source: U.S. Department of Commerce, Bureau of the Census, <i>2000 Census of Population and Housing</i> .		

Children and teenagers (ages 0 to 19) accounted for only approximately 7.5 percent of the entire residential population in 2000, compared to almost 19 and 27 percent of the Manhattan and New York City residential populations, respectively. The median age of the study area population was 37.5. Therefore, it is not expected that young children or the elderly—two populations that typically would not travel beyond a 1/4-mile radius of their residences—would place a disproportionately heavy burden on the 1/4-mile study area.

1/2-MILE STUDY AREA

Within the 11 census tracts that comprise the 1/2-mile study area, persons between the ages of 20 and 64 again constituted the highest percentage (80.6 percent) of the residential population (see Table 5-7). Among residents, the number of children and teenagers was only approximately 7.5 percent of the combined age groups, and the median age of the population was 36.6 years.

INVENTORY OF OPEN SPACE RESOURCES

DEVELOPMENT PARCELS

The development parcels currently contain no publicly accessible open space.

Table 5-7

Age Distribution of ½-Mile Study Area Residential Population in 2000

	Residential Population	
	Number of Residents	Percentage of Total Residential Population
Under 5	1,887	2.7
5–9	1,059	1.5
10–13	1,024	1.5
14–19	1,407	2.0
20–64	55,584	80.6
65+	8,029	11.6
Total	68,990	100.0
Source: U.S. Department of Commerce, Bureau of the Census, <i>2000 Census of Population and Housing</i> .		

¼-MILE STUDY AREA

Twenty-nine publicly accessible open space and recreational resources lie within the ¼-mile open space study area. Since the primary purpose of the ¼-mile study area is to assess the amount of open space available for passive recreation that would be used by workers within the area, when open space resources contain both active and passive open space, only the passive portion of the open space resource has been included in quantitative analyses of the ¼-mile open space conditions. Arcades that are associated with outdoor plazas have been included in this inventory as well. Altogether, the passive open space resources in the study area total approximately 8.19 acres (see Figure 5-2 and Table 5-2). Seven mapped city parks are located within the ¼-mile study area. Together, these parks are almost evenly divided in terms of active and passive recreation. The largest city park is St. Vartan Park, a majority of which is devoted to active recreation. St. Vartan Park occupies an entire city block between First and Second Avenues, from East 35th Street to East 36th Street, across from the 616 First Avenue site. Passive areas included within this large park include numerous benches bordered by mature trees and an attractively landscaped lawn with flowers along First Avenue.

East of St. Vartan Park, along the East River, is East River Esplanade Park. Passive recreation features in this two-block park include a fountain, flowers, seating, and unobstructed views of the East River and Queens. Adjacent to this park is a paved esplanade running from approximately East 32nd Street to East 30th Street along the East River. While not actually a city park, this esplanade includes benches and planters and is used by walkers, bikers, in-line skaters, and joggers. For analysis purposes, this area is treated as providing 50 percent passive and 50 percent active recreational uses in accordance with *CEQR Technical Manual* guidelines.

The other mapped city parks within the ¼-mile study area are concentrated around East 42nd Street near the United Nations. On the west side of First Avenue just north and south of East 42nd Street are two sitting areas: Trygve Lie Plaza between East 42nd and East 43rd Streets and Ralph J. Bunche Park between East 41st and East 42nd Streets. Both parks contain mature trees as well as benches. Ralph J. Bunche Park includes a prominent sculpture.

Directly west of both of these parks are two steep sets of stairs. These stairs lead to two playgrounds—Mary O'Connor Playground on the north side of East 42nd Street, and Tudor Grove Playground on the south. Both parks contain trees and seating areas.

The seventh city park within the ¼-mile study area is the Robert Moses Playground, just north of the 708 First Avenue site. As with St. Vartan Park, this park occupies an entire city block between First Avenue and the FDR Drive from East 41st to East 42nd Street; a portion of the park within the center is not useable because of a building containing the Queens Midtown Tunnel (QMT) ventilation shaft. Robert Moses Playground is primarily dedicated to active recreation, including basketball courts, handball courts, and a multi-use court; however, some seating around the perimeter is available for passive recreation, as well as a dog run and trees.

An important non-mapped city park within the ¼-mile study area is Tudor City Greens, located between First and Second Avenues to the north and south of East 42nd Street. It is operated by a non-profit foundation and devoted entirely to passive recreation. Tucked away within the Tudor City development, it offers quiet relaxation amidst mature trees. Another significant open space that was included in the FGEIS analysis is the United Nations Park, which contains formal gardens, sculptures, pathways, and open views of the river. Since the park is no longer publicly accessible, it is not included in the SEIS analysis.

Within the ¼-mile study area, there are also numerous public plazas, arcades, and open spaces associated with residential and commercial buildings. These plazas vary considerably in terms of attractiveness, scale, and amenities. However, all are accessible to the public, and all are generally well-maintained and litter-free. Most plazas are suited to the needs of workers seeking space for outdoor lunches or breaks, containing amenities for passive recreational use, such as benches, trees and other plantings, steps, and water features. Among the largest and best-used of these are Joseph Slifka Park at Rivergate (east side of First Avenue between East 34th and East 35th Streets) and the open space at the Corinthian at 330 East 38th Street. Rivergate is one of the rare public plazas with active recreation facilities, and includes lawns, seatwalls and benches, landscaping, brick paths, and play equipment. At over half an acre, the Corinthian's open space occupies a prominent corner site on the west side of First Avenue between East 37th and East 38th Streets, and features many plants and trees and extensive seating opportunities. Another large public plaza is Grand Central Plaza at 622 Third Avenue between East 40th and East 41st Streets. The plaza, arcade, and landscaped terrace occupy over a third of an acre and serve many local workers in this densely developed corridor of commercial office buildings.

½-MILE STUDY AREA

Within the ½-mile study area, CEQR methodology calls for an assessment of both passive and active open space, as parks, plazas, and arcades would be used by residents as well as workers. Again, designated open spaces with no useable public amenities were excluded from the acreage calculations. Including all of the public parks and open spaces listed in the ¼-mile study area, the ½-mile study area contains a total of approximately 23.39 acres of public open spaces (see Figure 5-3 and Table 5-3). This area includes more passive open space than it does active open space; overall, the ½-mile study area encompasses approximately 17.89 acres of passive recreational areas and approximately 5.50 acres of active open space. Nearly 4 of these 5.50 acres are within the ¼-mile portion of the ½-mile study area.

In addition to the open spaces identified within the ¼-mile study area, the ½-mile area includes five mapped city parks and 23 other public open spaces.

On the southern edge of the study area are Bellevue South Playground and Vincent Albano Playground. Both of these city parks have passive areas with benches and tot lots. Bellevue South Park also includes a paved walkway, an expanse of lawn and trees, and a basketball court. A pedestrian pathway with benches connects the park with First Avenue. Vincent Albano

Playground has an area with chess tables and benches and an open paved area for unprogrammed active recreation.

On the northern periphery of the ½-mile study area lie Peter Detmold Park and MacArthur Park. Both are located along East River Drive. MacArthur Park runs from East 48th to East 49th Street. Devoted primarily to active recreation, it features tot lots, swings, slides, and other play equipment, as well as court space and a handball wall. Just to the north, Peter Detmold Park extends from East 49th to East 53rd Street and includes a small pavilion, chess tables, a landscaped open area, and a heavily used dog run. For analysis purposes, the dog run has been assessed as passive recreation space.

Other open space resources are associated with institutional uses in the study area. A courtyard with benches and lawn on New York University Hospital's campus is accessed through the main entrance to the hospital at East 31st Street and First Avenue. The courtyard is used largely by hospital staff and guests. The courtyard can be viewed through large glass windows in the hospital lobby. Outside the entrance to Hunter College on East 25th Street is a plaza with tables and benches. South of the main entrance to Bellevue Hospital at East 27th Street and First Avenue is Bellevue Courtyard, which contains lawns, benches, fountains, and trees. As part of the development of the ambulatory care facility on the Bellevue Hospital campus, since the publication of the FGEIS the park on the campus has been reduced in size by approximately 10 percent, or 0.1 acres.

As in the ¼-mile study area, there are a number of plazas associated with residential and commercial buildings in the study area. With the exception of Rivergate's Joseph Slifka Park described above, such public plazas are oriented towards passive recreation. A number of the largest public open spaces within the ½-mile area are located near the United Nations. These include 1 Dag Hammarskjold Plaza at 885 Second Avenue, 100 United Nations Plaza at First Avenue and East 48th Street and the Trump World Tower located at the northwest corner of First Avenue and East 47th Street, which provides a public plaza totaling approximately 0.92 acres. Plazas to the south include Henry Phipps Plaza located on East 27th Street between First and Second Avenues. Phipps Plaza contains play equipment in addition to passive open space. Another public open space with a fountain, benches, and chess tables is located south of the Nathan Strauss Houses. Generally, public plazas within the area are in good to excellent condition and are well-used on both weekends and weekdays.

OTHER NEARBY OPEN SPACES

Just outside the ½-mile radius of the development parcels are several additional parks that offer passive and active recreational opportunities for people living and working in the study area, especially those at its periphery. Immediately outside of the study area is the Stuyvesant Cove Park, an approximately 2-acre park that features a waterfront promenade and bicycle path along the East River from East 18th to East 23rd Street. The park, which opened in January 2002, houses a solar-powered classroom, and there are plans to develop within the park a state-of-the-art environmental education center that would be run by the Community Environmental Center, a non-profit environmental group. Other open spaces in the vicinity of the study area include: the 9.6-acre Bryant Park, located between Fifth and Sixth Avenues, from West 40th to West 42nd Street; the 6.2-acre Madison Square Park between Madison Avenue and Broadway, from East 23rd to East 26th Street; Asser Levy Playground, a 1.8-acre park on FDR Drive between East 23rd and East 25th Streets; and Waterside Plaza, a 1.8-acre open plaza with benches and planters along FDR Drive at East 25th Street. To the north are the five Sutton Place Parks—passive

sitting areas totaling approximately 0.8 acres along FDR Drive from East 53rd to East 58th Street. Recreation Center Fifty-Four, a gymnasium and public pool, is located at 342 East 54th Street between First and Second Avenues. Finally, while not located near the study area boundaries, many residents are likely to use Central Park as a recreational resource, as Central Park attracts regional park users as well as local residents.

ANALYSIS OF THE ADEQUACY OF OPEN SPACE RESOURCES

¼-MILE STUDY AREA

As described above, the analysis of the ¼-mile study area focuses on passive open spaces that may be used by workers in the area. To assess the adequacy of the open spaces in the area, a combined ratio that takes into account the 0.15 acres of passive open space considered to be adequate for every 1,000 workers and the 0.5 acres of passive open space considered to be adequate for every 1,000 residents is calculated. This combined ratio can range from 0.15 to 0.5 acres of passive open space per 1,000 non-residents and residents combined, depending on the number of non-residents and residents in a given study area. The ¼-mile study area includes a total of 12.13 acres of open space, of which 8.19 acres are passive space. A total of 29,846 residents and 38,290 workers are located within the ¼-mile site boundary. The combined residential and worker population is 68,136.

The area has a passive open space ratio of 0.214 acres of passive open space per 1,000 workers; this is well above the city's guideline of 0.15 (see Table 5-8). However, this same area falls short of the assessed combined open space ratio of 0.303 acres per 1,000 residents and workers. In this case, the combined passive open space ratio is 0.120 per 1,000 residents and workers, which is 0.183 acres below the assessed combined ratio for the study area. Thus, while the ¼-mile study area has enough open space to serve its worker population alone, there is a shortage of open spaces for the combined worker and residential population.

Table 5-8
Open Space Ratios: Existing Conditions

	Total Population	Open Space Acreage			Open Space Ratios Per 1,000 People		
		Total	Active	Passive	Total	Active	Passive
¼-Mile Study Area							
Workers	38,290	N/A	N/A	8.19	N/A	N/A	0.214
Combined Workers and Residents	68,136	N/A	N/A	8.19	N/A	N/A	0.120
½-Mile Study Area							
Residents	68,990	23.39	5.50	17.89	0.339	0.080	0.259
Combined Workers and Residents	288,435	N/A	N/A	17.89	N/A	N/A	0.062
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so within the ¼-mile area only passive open space ratios are calculated. Within the ½-mile area, both active and total park space ratios are calculated. Source: AKRF, Inc.							

Although the majority of the open spaces within the ¼-mile study area are bonus plazas, these open spaces serve the needs of the worker population. With the closing of the United Nations Park to the public following the events of September 11, 2001, the amenities of the park, including seating, lawns, gardens, sculptures, and trees were no longer accessible to the public (although they are still accessible to workers at the UN Complex). The 8.7 acres of open space

was a focal open space in the ¼-mile study area. Without it, the ¼-mile study area now lacks an expansive publicly accessible open space in which one feels removed from the urban environment. The exceptions include 3 United Nations Plaza, the Ford Foundation, and to an extent, Tudor City Greens, although these spaces are limited in terms of their overall size. As a whole, the study area does not take full advantage of its proximity to the East River; Glick Esplanade is one of the only waterfront parks in the ¼-mile study area.

½-MILE STUDY AREA

As described earlier, two guidelines are used to evaluate residential open space ratios. The first guideline, used for comparative purposes, is the existing citywide median of 1.5 acres of parkland per 1,000 residents. The second is DCP's optimal planning goal of 2.5 acres per 1,000 residents. Of the 2.5 acres, 80 percent, or 2.0 acres, is recommended for active open space, and 20 percent, or 0.5 acres, is recommended for passive recreational space.

With a total of 23.39 acres of open space, of which 5.50 are for active use and 17.89 are for passive use, and a total residential population of 68,990 from the 2000 census data, the ½-mile study area has a total open space ratio of 0.339 acres per 1,000 residents (see Table 5-8). This is over 1.0 acre less than the citywide median of 1.5 acres per 1,000 residents, and over 2 acres less than the city's optimal planning goal of 2.5 acres of combined active and passive open space ratio per 1,000 residents. The area currently has a shortage of open space typical of a number of neighborhoods in Manhattan.

The shortage in active open space is even more pronounced, as the ½-mile study area's active open space ratio is only 0.08, or 1.92 acres (96 percent) less than the planning goal of 2.0 acres per 1,000 residents. The area's passive open space ratio is somewhat better—approximately 0.26 acres per 1,000 residents—though this is still approximately 50 percent less than the city's planning goal of 0.5 acres per 1,000 residents.

When the employees who work within the ½-mile study area are added to the population, the passive open space ratio is much lower. As described earlier, workers typically use passive open spaces during the workday, so the passive open space ratio is the relevant ratio for consideration. With the combined worker and residential population of 288,435, the passive open space ratio in the ½-mile study area is 0.062, approximately 74 percent less than the assessed combined passive open space ratio of 0.234 calculated for the study area.

The ½-mile study area, which includes the area within ¼-mile of the development parcels, generally lacks expansive, buffered open space sought after by many residents. Only three parks—St. Vartan Park, Robert Moses Playground, and Peter Detmold—provide public open spaces in excess of one acre. Few of the open spaces provide much in the way of separation from street noise; most are located directly adjacent to busy midtown streets and do not provide enough trees, walls, or other elements to serve as a buffer. Similar to the ¼-mile study area, the broader study area offers little in the way of waterfront views and waterfront parks; beyond the ¼-mile buffer, only MacArthur Park and Peter Detmold Park provide waterfront views or access to the waterfront.

As noted earlier, several large open spaces are located just outside the ½-mile study area. These include: Stuyvesant Cove Park, an approximately 2-acre park that features a waterfront promenade and bicycle path along the East River from East 18th to East 23rd Street; the 9.6-acre Bryant Park (entirely passive); the 6.2-acre Madison Square Park (90 percent passive); the 1.8-acre Asser Levy Playground (active); the five Sutton Place Parks totaling approximately 0.8

acres (passive); the 1.8-acre Waterside Plaza (passive); and Recreation Center Fifty-Four, a 0.17-acre pool (active). Totalling 20.37 acres, these parks offer substantial open space opportunities for the residential population, although given the distance from the development parcels, they are likely to be more frequented by residents on the periphery of the study area (i.e., those within ½-mile of these open space resources).

E. FUTURE WITHOUT THE PROPOSED ACTIONS

OPEN SPACE STUDY AREA POPULATIONS

DEVELOPMENT PARCELS

In the future without the Proposed Actions, it is anticipated that the parking lot at 685 First Avenue will remain in its current condition. The Waterside Station has been decommissioned and demolished, remediation at 700 First Avenue is underway, and it is anticipated that all of the development parcels would remain vacant in the future without the Proposed Actions. For the purposes of this analysis, it is assumed that no residential or worker populations would be present at the sites in the future without the Proposed Actions.

¼-MILE STUDY AREA

Residential and worker populations within the ¼-mile study area are expected to increase by 2014. One significant new residential project has been identified within the ¼-mile study area: the Perl binder site, on Second Avenue between East 36th and East 37th Streets, is a mixed-use development that will include approximately 480 units, or an estimated 747 residents. Along with this mixed-use project, five other new commercial/institutional projects are anticipated to be complete by 2014: a New York University School of Medicine research building at East 31st Street and the FDR Drive; the U.S. Mission to the U.N. at 779 United Nations Plaza; an office building on the west side of First Avenue between East 34th and East 35th Streets; and two mixed-use buildings on East 34th Street that include residential uses totaling 324 units. The office/retail/institutional space within these projects, combined with the employment associated with the Perl binder site, would add an estimated 1,182 workers to the ¼-mile study area's worker population, bringing total employment within the ¼-mile radius to 39,472 by 2014. The combined residential and worker population in the ¼-mile study area is projected at 70,568.

½-MILE STUDY AREA

Residential and worker populations within the ½-mile study area are also expected to increase by 2014. Significant new residential projects within the ½-mile study area (but outside the ¼-mile study area) include: a 342-unit residential building at 400 Park Avenue South; a 105-unit building at 45 Park Avenue South (site of the former Sheraton Russell Hotel); a 285-unit building on First Avenue between East 46th and East 47th Streets; and a 330-unit building at 250 East 49th Street (between Second and Third Avenues). Together, these buildings could generate an estimated 1,861 new residents by 2014. Adjusting for additional residential growth expected to occur within the ¼-mile study area, the ½-mile residential population in the future without the Proposed Actions is projected at 72,102.

The most significant new commercial/institutional project within the ½-mile study area (but outside the ¼-mile study area) is the East River Science Park biotech research facility, to be located east of First Avenue between East 28th and East 30th Streets. This project, along with

the workforce associated with the new residential buildings, would generate an estimated 1,574 additional employees within the study area by 2014. Together with the new worker population in the ¼-mile study area, the total number of new workers in the ½-mile study area would be an estimated 2,755 persons, or a total of 222,200 workers in the ½-mile study area in the future without the Proposed Actions by 2014. Total working and residential populations within this ½-mile study area are projected at 294,302.

AGE OF OPEN SPACE USER POPULATIONS

Residential development anticipated in the study areas by 2014 is expected to create primarily market-rate dwelling units that would not result in substantial changes to neighborhood demographics. As such, it is anticipated that both study areas would continue to have fewer children and teenagers as a percentage of the total population when compared to Manhattan and New York City as a whole. The median age of the population is expected to remain in the mid-to late-thirties. Therefore, populations of children and seniors would not be expected to place an excessive burden on open space resources in the study area in the future without the Proposed Actions. Tables 5-9 and 5-10 show the projected age distribution of the residential populations in the future without the Proposed Actions for the ¼-mile and ½-mile study areas.

Table 5-9

Age Distribution of ¼-Mile Study Area Residential Population in Future Without the Proposed Actions: 2014

	Residential Population	
	Number of Residents	Percentage of Total Residential Population
Under 5	926	3.0
5–9	482	1.5
10–13	475	1.5
14–19	443	1.4
20–64	25,046	80.5
65+	3,726	12.0
Total	31,098	100.0
Source: AKRF, Inc. based on age distributions as reported in U.S. Department of Commerce, Bureau of the Census, <i>2000 Census of Population and Housing</i> .		

Table 5-10

Age Distribution of ½-Mile Study Area Residential Population in Future Without the Proposed Actions: 2014

	Residential Population	
	Number of Residents	Percentage of Total Residential Population
Under 5	<u>1,947</u>	2.7
5–9	<u>1,082</u>	1.5
10–13	<u>1,082</u>	1.5
14–19	<u>1,442</u>	2.0
20–64	<u>58,114</u>	80.6
65+	<u>8,364</u>	11.6
Total	<u>72,102</u>	100.0
Note: The distribution of residents by age cohort does not sum to the total residential population due to rounding.		
Source: AKRF, Inc. based on age distributions as reported in U.S. Department of Commerce, Bureau of the Census, <i>2000 Census of Population and Housing</i> .		

INVENTORY OF OPEN SPACE RESOURCES

DEVELOPMENT PARCELS

In the future without the Proposed Actions, there would continue to be no publicly accessible open space on the development parcels.

¼-MILE STUDY AREA

Within the ¼-mile study area, there are no known projects proposed that would increase the amount of public open space by 2014. Absent UNDC development on the site of Robert Moses Playground (evaluated as part of a separate scenario in Section I, below), there would be no changes to the quantity of open space in the ¼-mile study area.

½-MILE STUDY AREA

In the future without the Proposed Actions, one open space resource totaling approximately 1.07 acres would be constructed as part of the East River Science Park (see Table 5-11). The open space would be accessible to the public, and would provide plantings and seating areas, as well as improved views of the East River. In addition, the New York State Department of Transportation (NYSDOT) is developing conceptual plans to construct a multi-use pathway between East 24th Street and East 42nd Street along the FDR Drive. Part of the plan includes reconstruction of a portion of the FDR Drive south of East 34th Street that would facilitate pedestrian access from East River Science Park to the East River Esplanade. Given that NYSDOT's plans are not yet finalized, any possible additional open space that would result from the plan has not been included in the quantitative open space analyses.

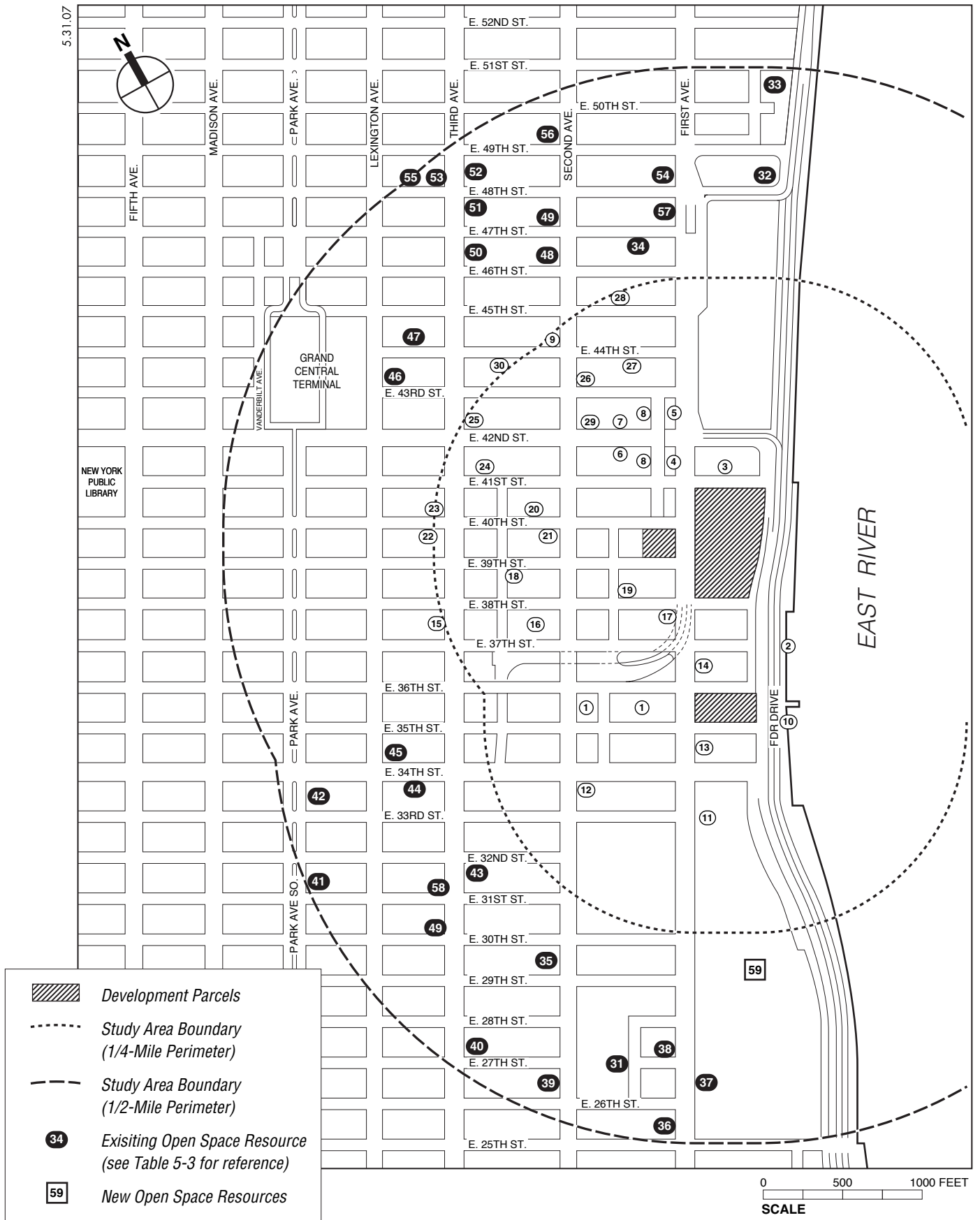
As a result of the East River Science Park, the total amount of open space acreage in the study area will increase by just over 1 acre to approximately 24.46 acres (see Figure 5-4 and Table 5-11). The new open space is expected to be devoted to passive recreation; consequently, there will be approximately 18.96 acres of passive open space within the ½-mile study area. The amount of active recreation acreage would not change from its existing level of approximately 5.50 acres.

Table 5-11
No Action Open Space Resources Changes in ½-Mile Study Area

Map	Name	Location	Acres	Passive	Active	Planned Amenities
59	East River Science Park Open Space	Between FDR Drive and First Avenue, between East 28th and East 30th Streets	1.07	1.07	0.00	Plantings, seating areas.
No Action Public Open Spaces Changes:			1.07	1.07	0.00	
Existing ½-Mile Public Open Spaces:			23.39	17.89	5.50	
Total ½-Mile Public Open Spaces:			24.46	18.96	5.50	

OTHER NEARBY OPEN SPACES

No changes are anticipated to the parks and other publicly-accessible open spaces just outside the ½-mile study area by 2014.



2014 No Action Open Space Resource Changes
in 1/2-Mile Study Area
Figure 5-4

ANALYSIS OF THE ADEQUACY OF OPEN SPACE RESOURCES

¼-MILE STUDY AREA

In 2014, without the Proposed Actions, the number of workers in the ¼-mile area is expected to increase to 39,472, and the amount of park space is expected to remain as under current conditions. As shown in Table 5-12, the worker passive open space ratio would be 0.207 acres per 1,000 workers. For the worker population alone, the amount of passive open space would exceed DCP recommendations. For the combination of workers and residents, the passive open space ratio would be approximately 0.116, below the assessed combined open space ratio of 0.303 for the combined workers and residents in the ¼-mile study area.

With no new public open spaces planned for the ¼-mile study area in the future without the Proposed Actions, there would continue to be a shortage of expansive, publicly accessible open spaces, with St. Vartan Park and Robert Moses Playground being the only public open spaces in excess of one acre. Furthermore, only St. Vartan Park would provide passive open space in excess of one acre. The area would be dominated by public plazas, which serve the needs of the worker population but generally do not provide the tranquil environment sought by residents.

½-MILE STUDY AREA

As shown in Table 5-12, in the future without the Proposed Actions the residential passive open space ratio in the ½-mile study area would be 0.263 acres per 1,000 residents, the active open space ratio would be 0.076 acres per 1,000 residents, and the total residential open space ratio would be 0.339 acres per 1,000 residents. The combined worker and residential passive open space ratio would be 0.064 acres per 1,000 workers and residents. The 1.07 acres of passive open space from the East River Science Park in the study area would offset demand for passive open space from residential and worker populations. According to city planning guidelines, all populations would be underserved by the available active and passive open space resources in the future without the Proposed Actions. While nearby open spaces outside the study area would help to alleviate the problem, an open space deficiency would persist, especially in the active open space category.

Table 5-12
Open Space Ratios: Future Without the Proposed Actions: 2014

	Total Population	Open Space Acreage			Open Space Ratios Per 1,000 People		
		Total	Active	Passive	Total	Active	Passive
¼-Mile Study Area							
Workers	39,472	N/A	N/A	8.19	N/A	N/A	0.207
Combined Workers and Residents	70,568	N/A	N/A	8.19	N/A	N/A	0.116
½-Mile Study Area							
Residents	<u>72,102</u>	24.46	5.50	18.96	<u>0.339</u>	<u>0.076</u>	<u>0.263</u>
Combined Workers and Residents	<u>294,102</u>	N/A	N/A	18.96	N/A	N/A	<u>0.064</u>
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so within the ¼-mile area only passive open space ratios are calculated. Within the ½-mile area, both active and total park space ratios are calculated. Source: AKRF, Inc.							

F. PROBABLE IMPACTS OF THE PROPOSED DEVELOPMENT PROGRAM

OPEN SPACE STUDY AREA POPULATIONS

DEVELOPMENT PARCELS

The proposed development program would introduce an estimated 6,499 new residents and 6,985 new workers to the development parcels by 2014.

¼-MILE STUDY AREA

With the additional residents and workers introduced by the proposed development program, the ¼-mile study area would contain an estimated total of 37,596 residents and 46,457 workers in the future with the Proposed Actions in 2014.

½-MILE STUDY AREA

With the additional residents and workers introduced by the proposed development program, the ½-mile study area would contain an estimated total of 78,601 residents and 229,185 workers in the future with the Proposed Actions in 2014.

AGE OF OPEN SPACE USER POPULATIONS

The residential portion of the proposed development program would consist entirely of market-rate dwelling units that would be expected to attract a population that is demographically similar to existing residents in the study areas. The new residential populations would not be expected to include an unusually large number of seniors, children, or teenagers, and therefore would not place an excessive burden on passive or active open spaces in the study areas. Tables 5-13 and 5-14 present the projected age distribution of the residential populations in the ¼-mile and ½-mile study areas in the future with the Proposed Actions.

Table 5-13
Age Distribution of ¼-Mile Study Area Residential
Population in Future With the Proposed Actions

	Residential Population	
	Number of Residents	Percentage of Total Residential Population
Under 5	1,120	3.0
5-9	583	1.6
10-13	574	1.5
14-19	535	1.4
20-64	30,279	80.5
65+	4,505	12.0
Total	37,596	100.0
Source: AKRF, Inc. based on age distributions as reported in U.S. Department of Commerce, Bureau of the Census, <i>2000 Census of Population and Housing</i> .		

Table 5-14

**Age Distribution of ½-Mile Study Area Residential Population in
Future With the Proposed Actions**

	Residential Population	
	Number of Residents	Percentage of Total Residential Population
Under 5	<u>2,122</u>	2.7
5–9	<u>1,179</u>	1.5
10–13	<u>1,179</u>	1.5
14–19	<u>1,572</u>	2.0
20–64	<u>63,352</u>	80.6
65+	<u>9,118</u>	11.6
Total	<u>78,601</u>	100.0
Note: The distribution of residents by age cohort does not sum to the total residential population due to rounding.		
Source: AKRF, Inc. based on age distributions as reported in U.S. Department of Commerce, Bureau of the Census, <i>2000 Census of Population and Housing</i> .		

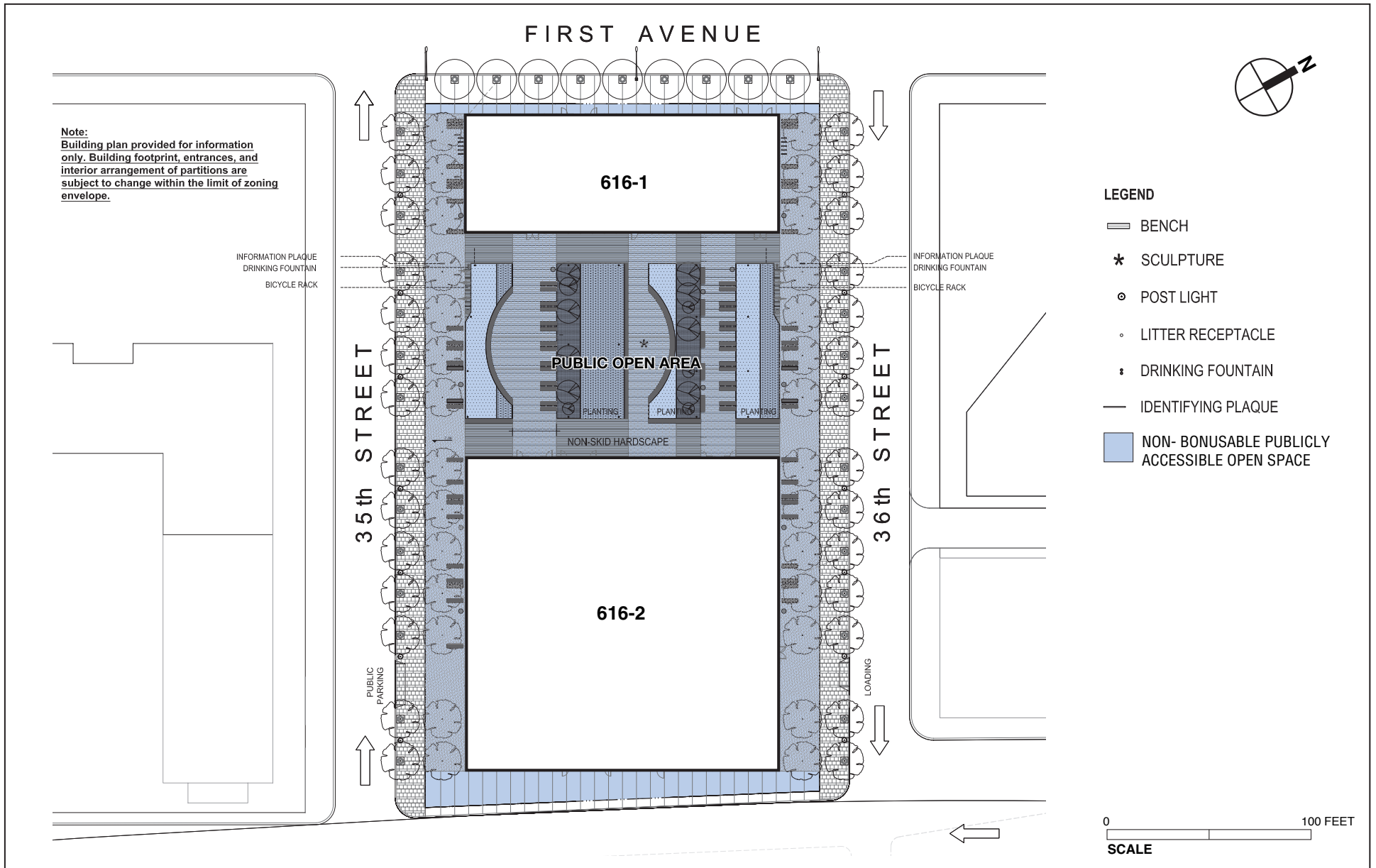
INVENTORY OF OPEN SPACE RESOURCES

DEVELOPMENT PARCELS

By 2014, a total of 4.84 acres of publicly accessible open space would be created on the development parcels. The open space would include 2.82 acres of bonusable public open spaces in the form of public plazas and an additional 2.02 acres of non-bonusable, publicly accessible, passive open space. Following *CEQR Technical Manual* guidelines, the amounts of publicly accessible open space allocated to active uses (0.88 acres) and passive uses (2.63 acres) is estimated based on the facility type and amenities planned. In some instances there are unprogrammed areas that could be used for both active and passive recreational activities. For purposes of the quantified analysis, such space is assumed to be evenly divided between active and passive uses. The proportion of publicly accessible open space allocated to active versus passive recreation is different than the proportions assumed for the FGEIS illustrative scenarios because there is now a specific open space program being advanced that allows for an estimate based on the planned amenities.

By parcel, the proposed publicly accessible open space programming as currently envisioned would be as follows:

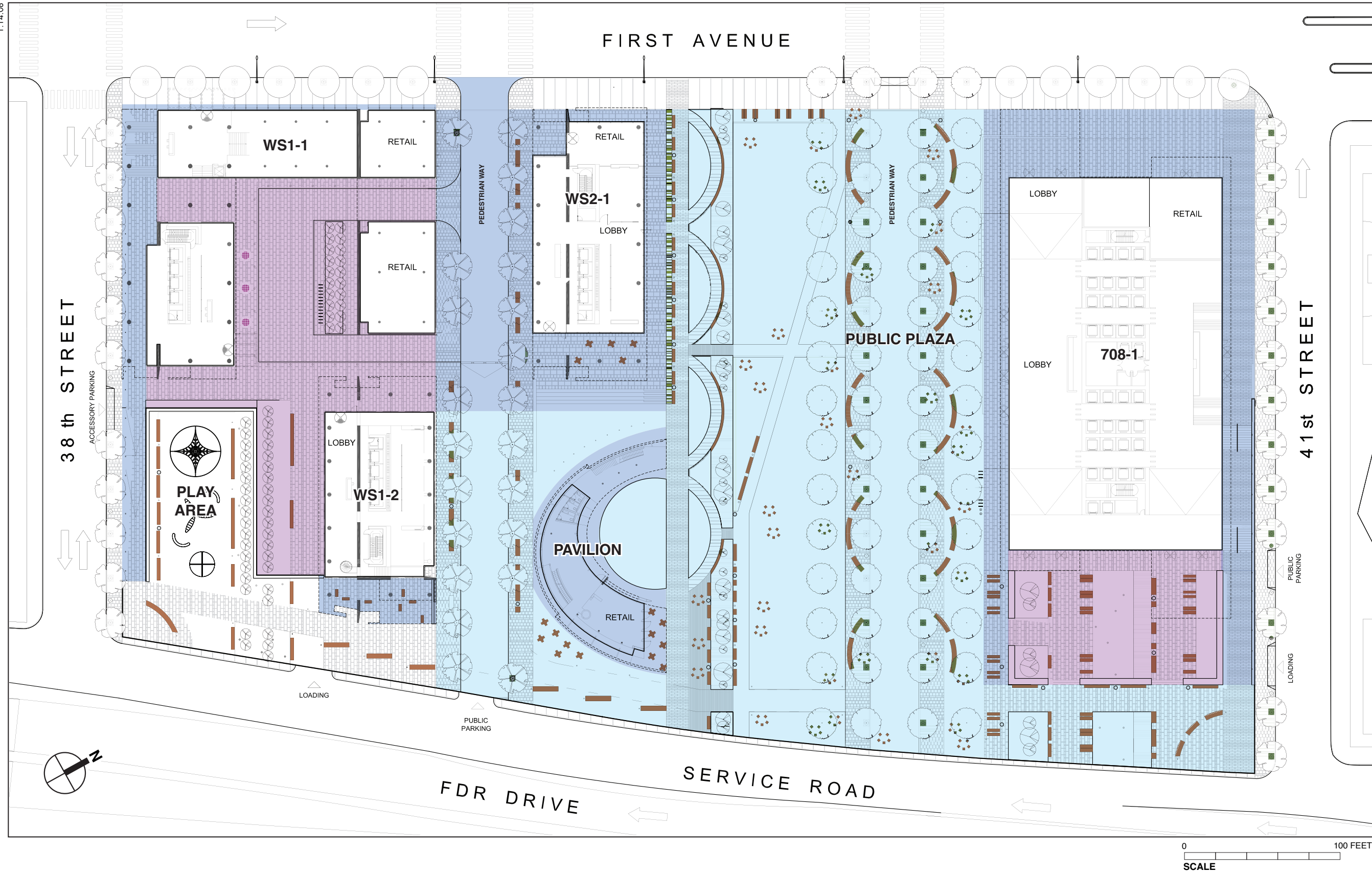
- 616 First Avenue:** The site at 616 First Avenue would include 34,507 square feet (0.80 acres) of non-bonusable publicly accessible open space. The primary area of the open space would be in excess of 100 feet wide, and would link East 35th and East 36th Streets through the center of the development parcel. This open space area would include a 7,023-square-foot public garden area with ground cover and plantings (see Figure 5-5). Additional amenities would include: 916 linear feet of seating; 37 trees; 60 bicycle parking spaces; 2 drinking fountains; a sculpture (to be approved by the Art Commission); trash receptacles; non-skid unit pavers; entry plaques identifying the space as being open to the public; a lighting scheme intended to bring a distinctive identity to the place while also providing safety during evening hours; and planting beds with perennial plantings. The remaining space, which would include trees and seating, would be provided along the length of the



- parcel's East 35th Street and East 36th Street frontages. For purposes of the quantified analysis, half of the 7,404-square-foot grass area (approximately 0.08 acres) is allocated to active recreational activities, while the remaining publicly accessible open space on the 616 First Avenue parcel (approximately 0.44 acres) is allocated to passive recreational activities.
- **700 and 708 First Avenue:** The parcels at 700 and 708 First Avenue would include a total of 122,932 square feet (2.82 acres) of bonusable publicly accessible open space and 45,727 square feet (1.05 acres) of non-bonusable publicly accessible open space. As shown in Figure 5-6, the largest portion of the publicly accessible open space would be the public plaza space occupying the full east-west width of the parcel from approximately East 40th Street to a line north of East 39th Street, creating unobstructed view corridors toward the East River. This portion of the open space would consist of a promenade flanked by a colonnade of trees and an open lawn which would provide opportunities for passive recreation and limited active recreational activities (e.g., ball-playing, Tai Chi, Frisbee). The entrance to the promenade and lawn at First Avenue would serve as the principal entrance to the open space. The promenade and lawn areas are illustrated in Figures 8-23 and 8-24 of Chapter 8, "Urban Design and Visual Resources." While the promenade would be intended for use by pedestrians and cyclists, its design would accommodate access for police and emergency vehicles. At the eastern edge of the site, the proposed open space would extend the full north-south length of the 700 and 708 First Avenue parcels (illustrated in Figure 8-26 of Chapter 8, "Urban Design and Visual Resources"). This area along the eastern perimeter, which would vary in width from approximately 30 to 52 feet, would be raised to a level of 36 feet, providing views of the East River and United Nations Secretariat building, and allowing for a possible future connection to the waterfront esplanade beyond the adjacent FDR Drive.

The Zoning Resolution requires certain amenities for public plazas, and amenities provided as part of the proposed development program would include: 41 street trees; a drinking fountain; three sculptures (to be approved by the Art Commission); 31,104 square feet of grass or other ground cover; a water feature; 24 bicycle parking spaces; children's play equipment; non-skid unit pavers; entry plaques identifying the space as being open to the public; a lighting scheme intended to bring a distinctive identity to each area of the site while also providing safety during evening hours; 2,759 linear feet of fixed seating and an additional 224 movable seats; and 27 trash receptacles.. Since the issuance of the Draft SEIS, some of the amenities associated for the publicly accessible open space have changed to reflect recent amendments to the zoning resolution regarding privately owned public open spaces (Privately Owned Public Spaces (POPS) regulations [ZR Section 37-70]). Where the amenities vary from the POPS regulations, the applicant is seeking a Special Permit from the City Planning Commission. The hours of public accessibility (6:00 AM to midnight) and elevation of the proposed open space would not be in conformance with the POPS requirements.

The open space would provide a number of amenities not required by the Zoning Resolution, including: planting beds with perennial plantings; a variety of seating arrangements for many types of social interactions; and flexible spaces that would permit a wide range of recreational activities, such as strolling, picnicking, sunning, children's play, and small community events. The 700/708 First Avenue parcels also would contain an indoor/outdoor pavilion that would provide public restrooms, a café, and a viewing area on its second level with views to the East River and its bridges (as illustrated in Figure 8-25 of Chapter 8, "Urban Design and Visual Resources"). The pavilion would serve as an attraction to draw



FURNISHING LEGEND (ALL SYMBOLS ARE TYPICAL AS SHOWN)

- 8" FIXED SEATING WITH BACK
- VAR, LENGTH FIXED SEATING WITH BACK
- SEMICIRCULAR FIXED SEATING WITH BACK
- DOUBLE SIDED CIRCULAR FIXED SEATING NO BACK
- 4"6" FIXED SEATING NO BACK
- 16" DOUBLE SIDED FIXED SEATING NO BACK
- VAR, LENGTH DOUBLE SIDED FIXED SEATING NO BACK
- INDIVIDUAL MOVABLE CHAIRS
- MOVABLE TABLE AND CHAIRS
- POST LIGHT TYPE 1
- POST LIGHT TYPE 2
- LITTER RECEPTACLE
- DRINKING FOUNTAIN
- BICYCLE PARKING
- INFORMATION PLAQUE
- ENTRY PLAQUE
- METAL GRATE
- TREE GRATE
- RETRACTABLE BOLLARD
- SCULPTURE

TREE LEGEND (ALL SYMBOLS ARE TYPICAL AS SHOWN)

- QUERCUS PALUSTRIS, Pin Oak
- TILIA AMERICANA, American Linden
- LIRIODENDRON TULIPIFERA, Tulip Tree
- PLATANUS OCCIDENTALIS, Sycamore
- CORNUS FLORIDA 'BICOLOR', Flowering Dogwood
- AMELANCHIER CANADENSIS, Serviceberry

- BONUSABLE PUBLICLY ACCESSIBLE OPEN SPACE
- NON- BONUSABLE PUBLICLY ACCESSIBLE OPEN SPACE
- PRIVATE OPEN SPACE

pedestrians to the open space. The amenities on the publicly accessible, non-bonusable open space would complement those present on the public plazas, and would include seating, trash receptacles, bicycle racks, and lighting. For purposes of the quantified analysis, approximately 0.8 acres of the publicly accessible open space on the 700/708 First Avenue parcels—consisting of the playground space and half of the open lawn and area along the easternmost edge of the parcels—is allocated to active recreational activities, while the remaining publicly accessible open space (approximately 2.02 acres) is allocated to passive recreational activities.

- **685 First Avenue:** The site at 685 First Avenue would include 7,605 square feet (0.17 acres) of non-bonusable, publicly accessible open space. The open space would include a grassy area with trees and plantings along East 40th Street, a paved walkway on the east side of the building fronting a vehicular drive, and a paved area with benches fronting First Avenue as well as benches at the corner of First Avenue and East 40th Street (see Figure 5-7). For purposes of the quantified analysis, the 0.17 acres of publicly accessible open space are allocated to passive recreational activities.

The building owner would be responsible for the maintenance and operation of the above-described publicly accessible open spaces. The accessibility and appropriate maintenance of the publicly accessible open spaces would be ensured through the recording of a restrictive declaration against the property for both the bonusable and non-bonusable open spaces. In either case, this requirement would be binding on all future property owners.

In addition to the publicly accessible open space, the proposed development program would provide approximately 0.78 acres of private open space on the 700/708 First Avenue parcels (shown in Figure 5-6).

1/4-MILE STUDY AREA

With the proposed development program's additional 4.84 acres of publicly accessible open space, the total amount of publicly accessible open space in the 1/4-mile study area would increase from 12.13 acres in the No Action condition to 16.97 acres. The total amount of passive open space would increase to 12.14 acres, an approximately 48 percent increase over the No Action amount of 8.19 acres.

1/2-MILE STUDY AREA

The 4.84 new acres of publicly accessible open space with the Proposed Actions would increase the total amount of publicly accessible open space within the 1/2-mile area to 29.30 acres from the previous No Action total of 24.46 acres. The amount of passive open space in the 1/2-mile radius would improve to 22.92 acres compared to 18.96 acres in the No Action condition, and the amount of active open space would increase from 5.50 acres to 6.38 acres.

ANALYSIS OF THE ADEQUACY OF OPEN SPACE RESOURCES

1/4-MILE STUDY AREA

The Proposed Actions would improve the worker passive open space ratio by approximately 26 percent, to 0.261 acres per 1,000 workers (see Table 5-15). As shown in the Existing and No Action conditions, the 1/4-mile study area would continue to exceed the city's planning guideline of 0.15 acres per 1,000 workers with the Proposed Actions.

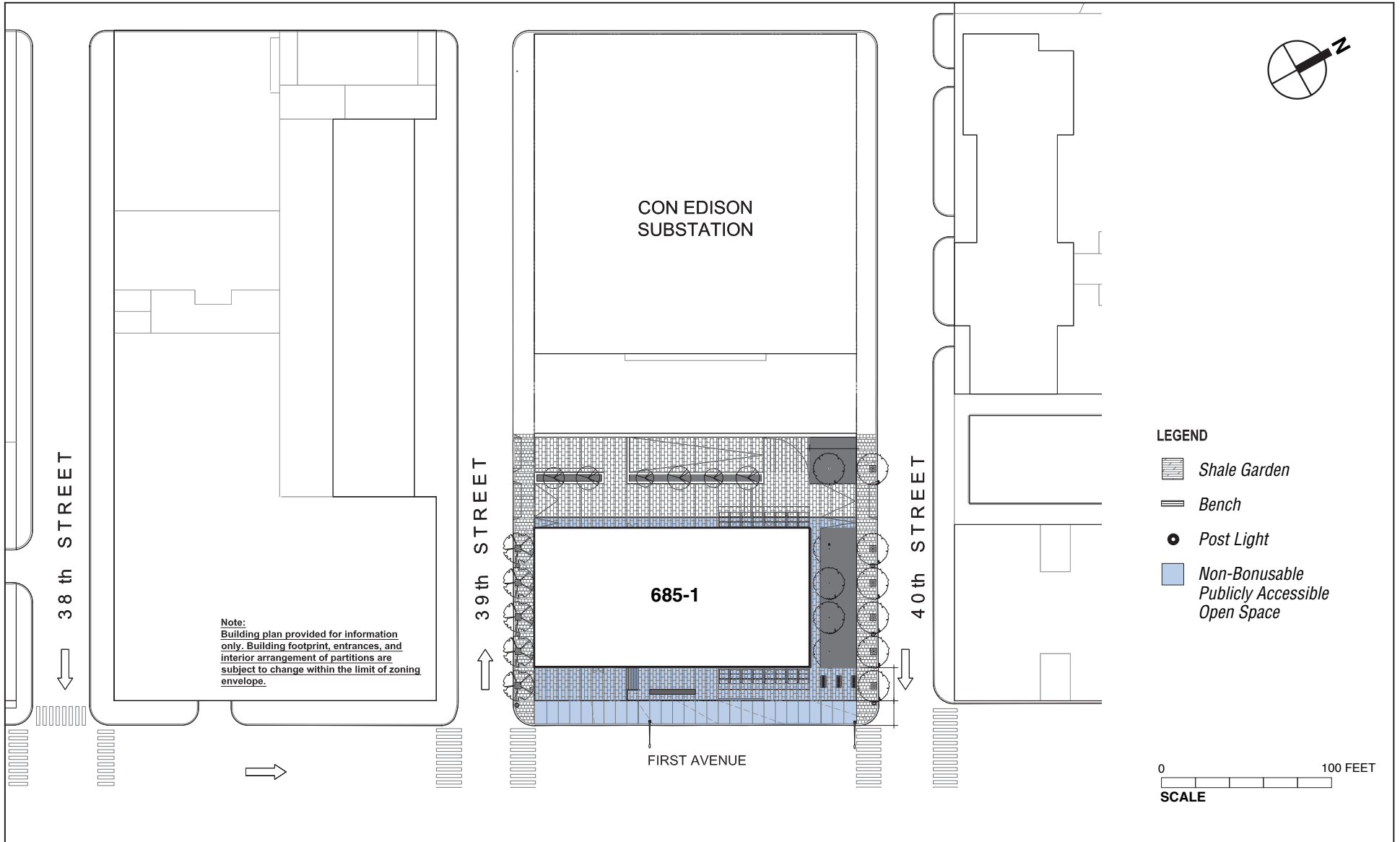


Table 5-15

**Comparison of Open Space Ratios:
No Action and Proposed Actions Conditions in the ¼-Mile Study Area**

Population	No Action Population	No Action Passive Open Space Acreage	No Action Passive Open Space Ratios	Proposed Actions Population	Proposed Actions Passive Open Space Acreage	Proposed Actions Passive Open Space Ratios	Change in Passive Ratios (Percent)
Workers	39,472	8.19	0.207	46,457	12.14	0.261	25.98
Combined Workers and Residents	70,568	8.19	0.116	84,053	12.14	0.144	24.49
Notes: Workers typically use only passive spaces, so only passive open space ratios are relevant to the worker population.							

The Proposed Actions also would increase the combined ratio of passive open space per 1,000 total residents and workers by approximately 24.49 percent compared to the No Action condition, from 0.116 acres per 1,000 residents and workers to 0.144 acres per 1,000 residents and workers (see Table 5-15). Despite the improvements in conditions, the area would still fall short of the calculated combined ratio of 0.303 for the ¼-mile study area.

As detailed in Chapter 17, “Air Quality,” concentrations of pollutants from motor vehicles were analyzed at intersections near the project site and were found to be below applicable significant impact criteria. Concentrations of pollutants from motor vehicles at open spaces would be lower than at the intersections analyzed in the SEIS. Stationary sources of emissions from the Proposed Actions were analyzed for their potential effect on air quality at ground level locations, including open spaces. The analysis determined there would be no violations of National Ambient Air Quality Standards or exceedance of the PM_{2.5} interim guidance criteria from the Proposed Actions’ boilers at any open space location (see Tables 17-7 and 17-8). Noise levels within the new open space areas created on-site as part of the proposed project would be above the 55 dBA L₁₀₍₁₎, as described in Chapter 18, “Noise.” This exceeds the noise level for outdoor areas requiring serenity and quiet contained in the *CEQR Technical Manual* noise exposure guidelines (see Table 18-5). Maximum L₁₀₍₁₎ noise levels would be approximately 75 dBA at the center of the proposed open space located on 616 First Avenue between East 35th and East 36th Streets, approximately 76 dBA at the center of the proposed playground on the corner of 38th Street and FDR Drive Service Road, and approximately 75 dBA at the center of the proposed public plaza on 709 Waterside. These predicted noise levels would result principally from the noise generated by traffic on the nearby streets and roadways. There are no practical measures that could be implemented to reduce noise levels to below 55 dBA L₁₀₍₁₎. However, the noise levels in these new open spaces would be comparable to noise levels in other open space areas that are also located adjacent to heavily trafficked roadways, including East River Park, Hudson River Park, Riverside Park, Bryant Park, and Central Park. Although 55 dBA L₁₀₍₁₎ is a worthwhile goal for outdoor areas requiring serenity and quiet, this relatively low noise level is typically not achieved in parks and open space areas in many parts of New York City. The planned open spaces would provide elements that would buffer the interior of the open spaces from traffic noise generated on First Avenue. The open spaces would contain trees along or close to the perimeter.

As detailed in Chapter 6, “Shadows,” the proposed development program would result in significant adverse shadow impacts on Manhattan Place Plaza and Tudor City open spaces during winter months. At Manhattan Place Plaza, the buildings on the 616 First Avenue development parcel would cast incremental shadows from 9:15 AM to 12:30 PM and 1:15 PM to 2:53 PM on the December analysis day. AKRF field surveys found that Manhattan Place Plaza is

lightly utilized during the winter months. At the Tudor City open spaces, significant adverse impacts would occur on the already partially shadowed open spaces in the winter (December analysis day) when there would be incremental shadows from 8:51 AM to 1:15 PM from the buildings on the 685 and 708 First Avenue parcels. Tudor City open spaces are well-utilized on pleasant days during the winter months.

1/2-MILE STUDY AREA

Within the 1/2-mile study area, the open space provided by the proposed development program would improve all open space ratios compared to the future without the Proposed Actions. As shown in Table 5-16, the project-generated open space would improve the combined worker/residential passive open space ratio by 15.6 percent, from 0.064 acres per 1,000 workers and residents to 0.074 acres per 1,000 workers and residents. The total residential open space ratio would increase by 9.9 percent, from 0.339 acres per 1,000 residents to 0.373 acres per 1,000 residents. The residential passive open space ratio would increase by 10.9 percent, from 0.264 acres per 1,000 residents to 0.292 acres per 1,000 residents. The residential active open space ratio would increase by 6.5 percent, from 0.076 acres per 1,000 residents to 0.081 acres per 1,000 residents.

The proposed development program would not result in any significant adverse physical impacts to existing open spaces with respect to noise, air pollution emissions, or odors within the 1/2-mile study area. Similar to the 1/4-mile study area, the proposed development program would not result in any significant adverse physical impacts to existing open spaces with respect to noise, air pollution emissions, or odors within the 1/2-mile study area. The proposed development program would not result in any significant adverse shadow impacts to open space resources within the 1/2-mile study area, apart from the significant adverse impacts to Manhattan Place Plaza and Tudor City open spaces (described above for the 1/4-mile study area).

Table 5-16
Comparison of Open Space Ratios:
No Action and Proposed Actions Conditions in the ½-Mile Study Area

Population	No action Population	No Action Open Space Acreage			No Action Open Space Ratios			Proposed Actions Population	Proposed Actions Open Space Acreage			Proposed Actions Open Space Ratios			Change in Ratios (Percent)		
		Total	Active	Passive	Total	Active	Passive		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	<u>72,102</u>	24.46	5.50	18.96	<u>0.339</u>	<u>0.076</u>	<u>0.263</u>	<u>78,601</u>	29.30	6.38	22.92	<u>0.373</u>	<u>0.081</u>	<u>0.292</u>	<u>9.9</u>	<u>6.5</u>	<u>10.9</u>
Combined Workers and Residents	<u>294,102</u>	N/A	N/A	18.96	N/A	N/A	<u>0.064</u>	<u>307,786</u>	N/A	N/A	22.92	N/A	N/A	<u>0.074</u>	N/A	N/A	<u>15.6</u>
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so only passive open space ratios are relevant to the worker population. Source: AKRF, Inc.																	

DETERMINATION OF IMPACT SIGNIFICANCE

QUANTITATIVE ASSESSMENT

The *CEQR Technical Manual* indicates that a significant quantitative impact to open space may occur if a proposed action would directly displace or alter existing open spaces within the study area or if the action would reduce the open space ratio, thus overburdening existing facilities or further exacerbating a deficiency in open space.

The proposed development program would not result in the direct displacement or alteration of any open spaces. By introducing 4.84 acres of publicly accessible open space to the development parcels, the proposed development program would improve all of the open space ratios in the ¼- and ½-mile study areas. Within the ¼-mile study area, the worker passive open space ratio would improve by approximately 26 percent over conditions in the future without the Proposed Actions (from 0.207 to 0.261 acres per 1,000 workers), and the combined ratio of passive open space per 1,000 total residents and workers would improve by over 24 percent (from 0.116 to 0.144). While this combined ratio would still fall short of the calculated combined ratio of 0.303 for the ¼-mile study area, the project-generated open space would lessen the deficiency that would exist in the future without the Proposed Actions.

Within the ½-mile study area the Proposed Actions would improve the total open space ratio by almost 10 percent over conditions in the future without the Proposed Actions (from 0.339 to 0.373 acres per 1,000 residents). The active open space ratio would improve by over 6 percent, from 0.076 to 0.081 acres per 1,000 residents; the passive open space ratio for residents would improve by over 10 percent, from 0.076 to 0.081 acres per 1,000 residents; and the combined ratio of passive open space per 1,000 total residents and workers would improve by over 15 percent, from 0.064 to 0.074. While these ratios would fall short of DCP's recommended guidelines, the project-generated open space would lessen the deficiencies that would exist in the future without the Proposed Actions.

The Proposed Actions would improve all open space ratios in the ¼-mile and ½-mile study areas, and therefore would not result in a significant adverse quantitative open space impact.

QUALITATIVE ASSESSMENT

The proposed development program includes building forms which allow for flexibility in open space programming on the development parcels, particularly on the 700 and 708 First Avenue sites. The development program envisions tall buildings with relatively small footprints that minimize lot coverage and offer opportunities for maximizing on-site open spaces. On the 700 and 708 First Avenue sites, proposed buildings are oriented east-west, which helps to concentrate open space along First Avenue, create a more visible and inviting open space presence, and create additional visual connections from First Avenue to the East River waterfront. While the development parcels are not located directly adjacent to the East River, the open space planned for the 700/708 First Avenue parcels would provide views of the East River waterfront (as illustrated in Figures 8-26 and 8-27 of Chapter 8, "Urban Design and Visual Resources"), and could provide new access points to the East River Esplanade depending on the location of future public walkways.

The minimization of building footprints permits larger overall on-site open spaces and numerous neighborhood amenities, some of which would be unique to the study areas. For example, the open spaces would include a water feature, a large unprogrammed expanse of lawn, an indoor/outdoor pavilion with a cafe and public restrooms, numerous benches, movable chairs, and tree-lined pedestrian promenades. The grassy lawn area adjacent to the water feature at 700 First Avenue would

be the largest publicly accessible lawn in the study areas, and the overall open space on that parcel alone would be second only to St. Vartan Park in the total amount of publicly accessible open space in the study area. In addition, the hours of operation for the project-generated publicly accessible open spaces (6:00 AM to midnight) would be longer than most parks in the study areas, which would improve the study areas' overall open space usability.

The proposed development program would introduce a residential population that is demographically similar to those already present in the study areas, and the project-generated passive and active recreational opportunities, including a children's playground, would meet the needs of the new residential and worker populations. The project's residents and workers also would have access to approximately 0.78 acres of private open space, which would help alleviate their demands on publicly accessible open space resources.

The planned open spaces would provide elements that would buffer the interior of the open spaces from traffic noise generated on First Avenue. The open spaces would contain trees along or close to the perimeter. At 616 First Avenue, the open space would have entranceways along First Avenue, but the bulk of the space would be positioned between the two residential buildings on the parcel, shielding it from wind and First Avenue traffic noise.

The taller buildings, while providing for greater on-site open space, would result in a significant adverse shadow impact at Tudor City open spaces in the winter. As detailed in Chapter 6, "Shadows," the loss of sunlight between the start of the analysis day and 1:30 PM due to the proposed buildings is a significant adverse impact, because the incremental shadows remove all or part of the small amount of remaining sunlight in Tudor City's and Mary O'Connor Playground's areas of passive recreation for significant portions of the analysis period. The proposed development program also would result in significant adverse shadow impacts at seating areas within Manhattan Place Plaza in the winter; as detailed in Chapter 6, "Shadows," during the December analysis period, large areas and long durations of incremental shadow cast by the proposed buildings, coupled with a lack of nearby alternative sunlit open spaces, would result in a significant adverse impact on any users who might wish to sit in the plaza in the sun. As described in Chapter 23, "Mitigation," the significant adverse shadow impacts would be partially mitigated by the measures described in that chapter. The significant shadow impacts on both Tudor City open spaces and Manhattan Place Plaza could not be fully mitigated, and therefore, these two open spaces would have reduced utility for users during the winter. As described in Chapter 6, "Shadows," the proposed buildings would also cast shadows on the project open spaces, but these shadows are not considered impacts, because the open spaces would not exist absent the project.

Despite the unmitigated significant adverse shadow impacts that would result, the Proposed Actions would, on balance, have a positive qualitative effect on open space resources within both the ¼- and ½-mile study areas. The proposed development program would benefit the study area populations as a whole by introducing substantial new open spaces to an area that is deficient in open space resources, particularly with respect to playground areas as well as larger, unprogrammed passive space. In the future without the Proposed Actions, only Peter Detmold Park and St. Vartan Park would offer passive open space in excess of one acre within a ½-mile radius of the development parcels; the vast majority of the open spaces in the area would continue to be plazas in front of residential buildings, which primarily serve the needs of the worker population but do not provide the more expansive passive and active spaces sought by residents. The open space planned under the Proposed Actions would provide for such space, would create new view corridors from First Avenue to the East River, would provide views of the East River waterfront, and could provide new access points to the East River Esplanade depending on the location of

future public walkways. Overall, the proposed development program would not have a significant adverse qualitative impact on open space resources in the study areas.

Quantitatively and qualitatively, the proposed development program would not result in significant adverse open space impacts.

G. PROBABLE IMPACTS OF THE AFFORDABLE HOUSING SCENARIO

This section examines potential for significant adverse impacts under the Affordable Housing Scenario, in which 833 of the project's 4,166 dwelling units are dedicated to low- to moderate-income households.

OPEN SPACE STUDY AREA POPULATIONS

The Affordable Housing Scenario would introduce a greater number of residents than the proposed development program, but the number of workers introduced would be the same under both scenarios.

DEVELOPMENT PARCELS

The Affordable Housing Scenario would introduce an estimated 7,267 new residents and 6,985 new workers to the development parcels by 2014.

¼-MILE STUDY AREA

With the additional residents and workers introduced by the Affordable Housing Scenario, the ¼-mile study area would contain an estimated total of 38,379 residents and 46,457 workers in the future with the Proposed Actions in 2014.

½-MILE STUDY AREA

With the additional residents and workers introduced by the Affordable Housing Scenario, the ½-mile study area would contain an estimated total of 79,384 residents and 229,185 workers in the future with the Proposed Actions in 2014.

AGE OF OPEN SPACE USER POPULATION

The market-rate dwelling units in the Affordable Housing Scenario would introduce a population that is demographically similar to the existing population in the study areas. The 20 percent of dwelling units reserved for low- to moderate-income households would introduce a population with slightly higher percentages of children, teenagers, and seniors. Tables 5-17 and 5-18 present the projected age distribution of the residential populations in the ¼- and ½-mile study areas in the future with the Proposed Actions under the Affordable Housing Scenario. Children and teenagers (ages 0 to 19) would comprise approximately 7.6 percent of the ¼-mile study area population, compared to 7.5 percent with the proposed development program. The small percentage difference (in ages 0-19 and 65+) between the proposed development program and the Affordable Housing Scenario is due to the relatively large study area populations compared to the incremental difference in age cohorts between programs.

Table 5-17

Age Distribution of ¼-Mile Study Area Residential Population in Future With the Proposed Actions (Affordable Housing Scenario)

	Residential Population	
	Number of Residents	Percentage of Total Residential Population
Under 5	1,156	3.0
5–9	602	1.6
10–13	593	1.5
14–19	552	1.4
20–64	30,828	80.3
65+	4,648	12.1
Total	38,379	100.0
Source: AKRF, Inc. based on age distributions as reported in U.S. Department of Commerce, Bureau of the Census, <i>2000 Census of Population and Housing</i> . Age distribution under the Affordable Housing Scenario was adjusted based on rates of public school students generated by low- to moderate-income units compared to high-income units as reported in Table 3C-2 of the <i>CEQR Technical Manual</i> .		

Table 5-18

Age Distribution of ½-Mile Study Area Residential Population in Future With the Proposed Actions (Affordable Housing Scenario)

	Residential Population	
	Number of Residents	Percentage of Total Residential Population
Under 5	<u>2,223</u>	2.8
5–9	<u>1,191</u>	1.5
10–13	<u>1,191</u>	1.5
14–19	<u>1,588</u>	2.0
20–64	<u>63,904</u>	80.5
65+	<u>9,288</u>	11.7
Total	<u>79,384</u>	100.0
Note: <u>The distribution of residents by age cohort does not sum to the total residential population due to rounding.</u>		
Source: AKRF, Inc. based on age distributions as reported in U.S. Department of Commerce, Bureau of the Census, <i>2000 Census of Population and Housing</i> . Census distribution under the Affordable Housing Scenario was adjusted based on difference between the rates of public school students generated by low- to moderate-income units compared to high-income units as reported in Table 3C-2 of the <i>CEQR Technical Manual</i> .		

INVENTORY OF OPEN SPACE RESOURCES

The open space program and the associated amenities provided under the Affordable Housing Scenario would be the same as the proposed development program. The Affordable Housing Scenario would create 4.84 acres of publicly accessible open space on the development parcels (3.95 acres of passive space and 0.88 acres of active space), increasing the total amount of open space in the ¼-mile and ½-mile study areas to 16.97 acres and 29.30 acres, respectively.

ANALYSIS OF THE ADEQUACY OF OPEN SPACE RESOURCES

¼-MILE STUDY AREA

The Affordable Housing Scenario would result in the same improvement to the worker passive open space ratio as the proposed development program, as there would be no difference in the worker population.

Like the proposed development program, the Affordable Housing Scenario would increase the combined ratio of passive open space per 1,000 total residents and workers compared to the No Action condition. However, as Table 5-19 shows, the magnitude of improvement would be smaller than with the proposed development program; the combined ratio would increase by approximately 23.34 percent to 0.143 acres per 1000 residents and workers (compared to a 24.49 percent increase with the proposed development program). As with the proposed development program, the area would still fall short of the calculated combined ratio of 0.303 for the ¼-mile study area.

Table 5-19
Affordable Housing Scenario Comparison of Impacts

Population	No Action Condition Open Space Ratio	Affordable Housing Scenario Open Space Ratio	Percent Change: No Action to Affordable Housing Scenario
¼-Mile Study Area			
Passive Open Space, Workers Only	0.207	0.261	25.98%
Passive Open Space, Combined Workers and Residents	0.116	0.143	23.34%
½-Mile Study Area			
Total Open Space Ratio, Residents Only	<u>0.339</u>	<u>0.369</u>	<u>8.85%</u>
Active Open Space, Residents Only	<u>0.076</u>	<u>0.080</u>	<u>5.26%</u>
Passive Open Space, Residents Only	0.263	<u>0.289</u>	<u>9.89%</u>
Passive Open Space, Combined Residents and Workers	<u>0.064</u>	0.074	<u>15.63%</u>

The Affordable Housing Scenario would provide the ¼-mile study area with the same qualitative benefits as the proposed development program, as both scenarios would include the same open space amenities, with only a slightly higher percentage of children and teenagers under the Affordable Housing Scenario.

1/2-MILE STUDY AREA

As with the proposed development program, within the ½-mile study area the open space provided by the Affordable Housing Scenario would improve all open space ratios compared to the future without the Proposed Actions. The project-generated open space would improve the combined worker/residential passive open space ratio by 15.63 percent, the total residential open space ratio by 8.85 percent, and the residential passive open space ratio by 9.89 percent (see Table 5-19). The residential active open space ratio would increase by 5.26 percent.

As in the ¼-mile study area, the affordable housing scenario would provide the ½-mile study area with the same qualitative open space benefits as the proposed development program, as both scenarios would include the same open space program, with only a slightly higher percentage of children and teenagers under the Affordable Housing Scenario.

H. PROBABLE IMPACTS OF THE PROPOSED ACTIONS PRIOR TO 2014 BUILD YEAR

As described in Sections F and G above, the Proposed Actions would not result in any significant adverse open space impacts by the 2014 analysis year. The following section considers whether any temporary adverse open space impacts could result due to the phased introduction of the development program's various elements (i.e., individual buildings and the open spaces on separate development parcels).

The analysis considered the potential effects of the project-generated populations (residents and workers) and open spaces on the study areas' open space ratios for each year between 2010 (the first year in which a project building would be occupied) and 2014, based on the construction phasing schedule outlined in Figure 20-2 of Chapter 20, "Construction Impacts." For example, open space ratios for the future with the Proposed Actions in 2010 were calculated based on the assumption that by 2010 the 685 First Avenue building, the 708 First Avenue building, and the new open space on Waterside/708 First Avenue would be operational. As shown in Tables 5-20 through 5-25, for each year prior to and including the 2014 analysis year, the Proposed Actions would result in open space ratios that are higher than the future conditions without the Proposed Actions. Therefore, the Proposed Actions would not result in any significant adverse impacts prior to the 2014 analysis year.

Table 5-20

Open Space Ratios: Future Without the Proposed Actions: 2014

	Total Population	Open Space Acreage			Open Space Ratios Per 1,000 People		
		Total	Active	Passive	Total	Active	Passive
¼-Mile Study Area							
Workers	39,472	N/A	N/A	8.19	N/A	N/A	0.207
Combined Workers and Residents	70,568	N/A	N/A	8.19	N/A	N/A	0.116
½-Mile Study Area							
Residents	72,102	24.46	5.50	18.96	0.339	0.076	0.263
Combined Workers and Residents	294,102	N/A	N/A	18.96	N/A	N/A	0.064
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so within the ¼-mile area only passive open space ratios are calculated. Within the ½-mile area, both active and total park space ratios are calculated.							

Table 5-21

Open Space Ratios: Future With the Proposed Actions (2010)

	Total Population ¹	Open Space Acreage			Open Space Ratios Per 1,000 People		
		Total	Active	Passive	Total	Active	Passive
¼-Mile Study Area							
Workers	45,697	N/A	N/A	11.26	N/A	N/A	0.246
Combined Workers and Residents	78,457	N/A	N/A	11.26	N/A	N/A	0.144
½-Mile Study Area							
Residents	<u>73,765</u>	28.33	6.30	22.03	<u>0.384</u>	<u>0.085</u>	<u>0.299</u>
Combined Workers and Residents	<u>301,991</u>	N/A	N/A	22.03	N/A	N/A	0.073
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so within the ¼-mile area only passive open space ratios are calculated. Within the ½-mile area, both active and total park space ratios are calculated. ¹ . Total population estimates based on background projects planned by 2014 and the residential and worker populations generated by the proposed development program by 2010 (i.e., development of the 685 First Avenue and 708 First Avenue parcels).							

Table 5-22

Open Space Ratios: Future With the Proposed Actions (2011)

	Total Population ¹	Open Space Acreage			Open Space Ratios Per 1,000 People		
		Total	Active	Passive	Total	Active	Passive
¼-Mile Study Area							
Workers	45,697	N/A	N/A	11.26	N/A	N/A	0.246
Combined Workers and Residents	78,457	N/A	N/A	11.26	N/A	N/A	0.144
½-Mile Study Area							
Residents	<u>73,765</u>	28.33	6.30	22.03	<u>0.384</u>	<u>0.085</u>	<u>0.299</u>
Combined Workers and Residents	<u>301,991</u>	N/A	N/A	22.03	N/A	N/A	0.073
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so within the ¼-mile area only passive open space ratios are calculated. Within the ½-mile area, both active and total park space ratios are calculated. ¹ Total population estimates based on background projects planned by 2014 and the residential and worker populations generated by the proposed development program by 2011 (i.e., development of the 685 First Avenue and 708 First Avenue parcels).							

Table 5-23

Open Space Ratios: Future With the Proposed Actions (2012)

	Total Population ¹	Open Space Acreage			Open Space Ratios Per 1,000 People		
		Total	Active	Passive	Total	Active	Passive
¼-Mile Study Area							
Workers	45,933	N/A	N/A	11.44	N/A	N/A	0.249
Combined Workers and Residents	82,229	N/A	N/A	11.44	N/A	N/A	0.139
½-Mile Study Area							
Residents	<u>77,301</u>	28.51	6.30	22.21	<u>0.366</u>	0.082	<u>0.285</u>
Combined Workers and Residents	<u>305,763</u>	N/A	N/A	22.21	N/A	N/A	<u>0.072</u>
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so within the ¼-mile area only passive open space ratios are calculated. Within the ½-mile area, both active and total park space ratios are calculated. ¹ . Total population estimates based on background projects planned by 2014 and the residential and worker populations generated by the proposed development program by 2012 (i.e., development of the 685 First Avenue, Waterside, and 708 First Avenue parcels).							

Table 5-24

Open Space Ratios: Future With the Proposed Actions (2013)

	Total Population ¹	Open Space Acreage			Open Space Ratios Per 1,000 People		
		Total	Active	Passive	Total	Active	Passive
¼-Mile Study Area							
Workers	45,977	N/A	N/A	11.44	N/A	N/A	0.249
Combined Workers and Residents	83,041	N/A	N/A	11.44	N/A	N/A	0.138
½-Mile Study Area							
Residents	<u>78,069</u>	28.51	6.30	22.21	<u>0.363</u>	0.081	<u>0.282</u>
Combined Workers and Residents	<u>306,575</u>	N/A	N/A	22.21	N/A	N/A	<u>0.072</u>
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so within the ¼-mile area only passive open space ratios are calculated. Within the ½-mile area, both active and total park space ratios are calculated. ¹ Total population estimates based on background projects planned by 2014 and the residential and worker populations generated by the proposed development program by 2013 (i.e., full development of the 685 First Avenue, Waterside, and 708 First Avenue parcels, and one residential building on the 616 First Avenue parcel).							

Table 5-25

Open Space Ratios: Future With the Proposed Actions (2014)

	Total Population ¹	Open Space Acreage			Open Space Ratios Per 1,000 People		
		Total	Active	Passive	Total	Active	Passive
¼-Mile Study Area							
Workers	46,457	N/A	N/A	12.14	N/A	N/A	0.261
Combined Workers and Residents	84,053	N/A	N/A	12.14	N/A	N/A	0.144
½-Mile Study Area							
Residents	<u>78,601</u>	29.30	6.38	22.92	<u>0.373</u>	<u>0.081</u>	<u>0.292</u>
Combined Workers and Residents	<u>307,786</u>	N/A	N/A	22.92	N/A	N/A	<u>0.074</u>
Notes: N/A = not applicable. Per <i>CEQR Technical Manual</i> methodology, workers typically use only passive spaces, so within the ¼-mile area only passive open space ratios are calculated. Within the ½-mile area, both active and total park space ratios are calculated. ¹ . Total population estimates based on background projects planned by 2014 and the residential and worker populations generated by the completed proposed development program.							

I. FUTURE CONDITIONS WITH THE UNDC PROJECT

The future baseline condition used in the analysis above did not include the UNDC project, and it was assumed that Robert Moses Playground will be retained. However, as described in Chapter 1, “Project Description,” there is the potential for the UNDC project at East 41st Street and First Avenue to be constructed by the project’s 2014 analysis year. Because the UNDC project, if completed, would affect background open space conditions in both the ¼-mile and ½-mile study areas, the following section considers the potential effects of the Proposed Actions were the UNDC project completed prior to 2014.

If comparable replacement space were to be provided for Robert Moses Playground within the ¼-mile study area, the analysis would not differ substantially from that presented above. However, if adequate open space replacement(s) were not provided, the open space conditions in the future without the Proposed Actions would worsen. Absent mitigation by UNDC to provide replacement open space, the overall lack of open space resources would be even more pronounced, and the Proposed Actions’ open space ratios would be less than conditions with UNDC impacts mitigated (see Table 5-26). With UNDC impacts unmitigated, the passive open space worker ratio in the future with the Proposed Actions would be 0.239 acres per 1,000 workers. The combined passive open space ratio for residents and workers in the ¼-mile study area would be 0.137 acres per 1,000 residents and workers. The total open space ratio for residents within the ½-mile study area would be 0.358 acres per 1,000 residents. The active open space ratio for residents within the ½-mile study area would be 0.066 acres per 1,000 residents. The passive open space ratio for residents within the ½-mile study area would be 0.290 acres per 1,000 residents, and the combined passive open space ratio for residents and workers within the ½-mile study area would be 0.073 acres per 1,000 residents and workers.

The UNDC project would displace one of the largest publicly accessible open spaces in the study areas. This loss would result in lower open space ratios, particularly with respect to active open space. The Proposed Actions would improve the open space ratios by creating substantial new publicly accessible passive and active open spaces. If UNDC impacts were unmitigated, the

Table 5-26
Summary Table
Comparison of Impacts between Mitigated and Unmitigated UNDC Project

Population	UNDC Mitigated			UNDC Unmitigated		
	No Action Condition	Proposed Actions	% Change	No Action Condition	Proposed Actions	% Change
¼-Mile Study Area						
Passive Open Space Workers Ratio	0.207	0.261	25.98	0.186	0.239	28.34
Combined Passive Open Space Ratio for Residents & Workers	0.116	0.144	24.49	0.110	0.137	26.17
½-Mile Study Area						
Total Open Space Ratio for Residents	<u>0.339</u>	<u>0.373</u>	<u>10.03</u>	<u>0.321</u>	<u>0.356</u>	<u>10.90</u>
Active Open Space Ratio for Residents	<u>0.076</u>	<u>0.081</u>	<u>6.58</u>	<u>0.059</u>	0.066	<u>11.68</u>
Passive Open Space Ratio for Residents	<u>0.263</u>	<u>0.292</u>	<u>11.03</u>	<u>0.261</u>	<u>0.290</u>	<u>11.11</u>
Combined Passive Open Space Ratio for Residents & Workers	<u>0.064</u>	<u>0.074</u>	<u>15.63</u>	0.063	0.073	<u>15.87</u>

4.84 acres of new publicly accessible open space provided by the Proposed Actions would represent a greater percentage of the total active and passive open space in the study area, thereby resulting in larger percentage improvements in open space ratios compared to conditions when UNDC impacts are mitigated.

Overall, the inclusion of the UNDC building as a background project would not alter the conclusion that the Proposed Actions would not result in significant adverse open space impacts; under either scenario, both active and passive open space ratios would improve with the Proposed Actions.

J. CONCLUSION

The area within the vicinity of the development parcels is currently underserved by open space according to the city's planning guidelines. Only in the case of passive open space within a ¼-mile radius of the parcels is open space of a sufficient quantity to satisfy the needs of local workers according to established DCP open space ratios. In all other open space categories, under the existing, No Action, and the Proposed Actions conditions there is a shortage of public open space. Due to the wide gulf between the presence of open space in the area and the city's guidelines for the area, this is a situation that would persist with or without the Proposed Actions.

As shown in Table 5-27, although the ratios would continue to be below DCP guidelines, the Proposed Actions would improve all worker and residential open space ratios compared to No Action conditions. The passive worker open space ratio in the ¼-mile study area would increase by more than 25 percent, and the combined worker/residential open space ratios in the ¼-mile and ½-mile study areas also would increase significantly.

Table 5-27

Summary Table: Comparison of Impacts

Population	Existing Condition Open Space Ratio	No Action Condition Open Space Ratio	Proposed Actions Open Space Ratio	Percent Change: No Action to Proposed Actions
¼-Mile Study Area				
Passive Open Space, Workers Only	0.214	0.207	0.261	25.98%
Passive Open Space, Combined Workers and Residents	0.120	0.116	0.144	24.49%
½-Mile Study Area				
Total Open Space Ratio, Residents Only	0.339	<u>0.339</u>	<u>0.373</u>	<u>10.03%</u>
Active Open Space, Residents Only	0.080	<u>0.076</u>	<u>0.081</u>	<u>6.58%</u>
Passive Open Space, Residents Only	0.259	<u>0.263</u>	<u>0.292</u>	<u>11.02%</u>
Passive Open Space, Combined Residents and Workers	0.062	<u>0.064</u>	<u>0.074</u>	<u>15.63%</u>
Note: Ratios displayed in this summary table are based on the proposed development program.				

Given that the Proposed Actions would provide open space of a quantity and quality that would improve overall conditions in the study areas, the Proposed Actions would not result in significant adverse open space impacts. To the contrary, the Proposed Actions would provide much-needed open space, with unique features and amenities that are currently lacking in the study areas.

The proposed development program includes several buildings and open spaces, all of which would not be developed at the same time. Under the construction phasing plan described in Chapter 20, "Construction Impacts," the Proposed Actions would improve open space conditions over No Build conditions in each of the interim years of operation prior to 2014. Therefore, the Proposed Actions would not result in any significant adverse open space impacts prior to the 2014 analysis year.

Since the publication of the FGEIS, there has been little additional information or changes in the status of the UNDC project on the site of Robert Moses Playground. It is still unclear as to whether this project would be started and/or completed by the 2014 analysis year, if at all. Nevertheless, the conclusions with respect to the Proposed Actions' impacts on the study areas when incorporating the UNDC project into the analysis have not changed since the FGEIS. If this project were to occur prior to 2014, and comparable replacement open space were provided as part of the mitigation for that project, the analysis of the Proposed Actions would not differ substantially from that presented in Sections E, F, and G above. If adequate open space replacements were not provided, the open space conditions in the future without the Proposed Actions would worsen, and the study area's deficiencies with respect to open space resources would be even more pronounced. Irrespective of UNDC mitigation, the Proposed Actions would improve the open space ratios in the study areas by creating substantial new publicly accessible passive and active open spaces. With or without the UNDC project, the Proposed Actions would not result in significant adverse open space impacts. *